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Low- and high-socioeconomic status students preference for ingroup comparisons and their underpinning ability expectations

Isabelle Régner*
Jean-Marc Monteil**

Abstract

The aim of the present study was to test whether both low- and high-SES students would prefer same-SES comparisons and to examine the level of performance these students might expect in their ingroup comparison target. After receiving either a failure or an average performance feedback on a bogus memory test, low- and high-SES students were asked to select another student on the basis of

his/her SES and to predict his/her test score. Low- and high-SES students both showed a strong preference for an ingroup target and expected this target to get a better score than they did. These upward expectations, however, were lower among low-SES students. The discussion focuses on the role of SES as a performance-related attribute in social comparison.

Key-words

socioeconomic status, ingroup comparison, comparison-level expectations, academic performance

Social comparison has proved pervasive in the school environment (Levine, 1983; Pepitone, 1972; Frey & Ruble, 1985; Ruble, Boggiano, Feldman, & Loebel, 1980) and biased towards similar others on socially defining attributes such as gender, race and age (i.e., ingroup comparisons; Goethals & Darley, 1977; Smith & Arnelsson, 2000; Wheeler, Koestner, & Driver, 1982). Several laboratory and field studies have demonstrated that when students evaluate their own academic abilities they prefer same-

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age (Suls, Gastorf, & Lawhon, 1978), same-sex (Blanton, 2001; Huguet, Dumas, Monteil & Genestoux, 2001; Miller, 1984), and same-race comparison targets (Meisel & Blumberg, 1990). According to Goethals and Darley (1977), people prefer to compare with similar others on basic attributes because this similarity helps them to infer their own ability and that of the comparison other from differences between their respective performances. Indeed, accurate ability appraisals require that performance differences should not be attributed to differences on performance-related attributes recognized as predictive of ability. Therefore, choosing to compare with others that are similar to the self on performance-related attributes ensures that performance differences do reflect differential abilities (Goethals & Darley, 1977; Smith & Arnelsson, 2000).

Surprisingly, the role of SocioEconomic Status (SES) has been quite neglected in the social comparison literature. Yet, SES is another basic attribute of the individuals (e.g., Bourdieu, 1979; Bourdieu & Passeron, 1970, 1985; Rosenberg & Pearlin, 1978), which influences (at least in part) their performances, especially at school. The significant underachievement of low-SES students compared with their high-SES counterparts is well documented in our western societies (e.g., Goux & Maurin, 1997; White, 1982). Related to this achievement gap between low- and high-SES students is a widespread belief that low-SES students are less intelligent than high-SES students (White, 1982). In line with this stereotype, people expect poorer performance in low-SES students, relative to high-SES students (Baron, Albright, & Malloy, 1995 ; Darley & Gross, 1983; McCombs & Gay, 1988). Several findings also suggest that the students themselves have the knowledge of the SES stereotype. For example, low-SES students self-evaluate more negatively than do high-SES students in several scholastic domains (Deschamps, Lorenzi-Cioldi, & Meyer, 1982). Likewise, Régner, Huguet and Monteil (2002) found that students infer higher academic ability in high-SES students than in low-SES students. Moreover, a study conducted in the stereotype threat framework (Croizet & Claire, 1998) showed that when low-SES students perform a task to which the SES stereotype applies (i.e., a test evaluating intelligence), these students experience a fear of confirming the stereotype. This fear (which is

linked to the knowledge that the SES stereotype can provide potential explanations for their poor performance) is self-threatening enough to undermine their actual performance (Steele, 1997). Interestingly, the performance deficit occurred among low-SES students irrespectively of the salience of their SES. As pointed out by Croizet and Claire (1998), simply presenting the test as assessing intelligence was sufficient to trigger the threat of a well-known stereotype.

Taken altogether, the above findings emphasize the (stereotypic) link people perceive between SES and academic ability. They hence suggest that SES is conceived as a performance-related attribute since people (Baron *et al.*, 1995; Darley & Gross, 1983; McCombs & Gay, 1988; Régner *et al.*, 2002) are able to infer others' ability on the basis of SES information, with inferences reflecting the SES stereotype. SES is thus likely to be used in comparison choice to make academic ability inferences. As noted earlier, comparisons with others that are similar to the self on performance-related attributes are likely to be the preferred choice because they ensure accurate ability appraisals (Goethals & Darley, 1977; Smith & Arnelsson, 2000). Applied to SES, this means that SES may contribute to make sure that the level of performance typical of the person with whom students choose to compare (i.e., the comparison-level choice) will not be too high (or too low).

Consistent with this, comparisons in the classroom are generally slightly upward, with positive consequences on students' grades (e.g., Blanton, Buunk, Gibbons, & Kuyper, 1999; Gibbons, Blanton, Gerrard, Buunk, & Eggleston, 2000; Huguet *et al.*, 2001). Furthermore, this upward tendency was found to be compatible with ingroup comparisons since it was associated with same-sex comparisons in those previous studies. According to recent developments in the social comparison theory (Collins, 1996, 2000; Martin, 2000; Martin, Suls, & Wheeler, 2002), similarity on performance-related attributes would promote beliefs that assimilation to the slightly better-off other is possible and, as a result, would prompt individuals to seek self-improvement. However, it is still unclear whether SES is or is not used in target selection (in the sense of a preference for same-SES targets). Likewise, one may wonder whether the preference for same-SES

targets (if any) leads to expectations of slightly upward comparisons.

The present paper was thus aimed at testing the hypothesis that both low- and high-SES students would prefer same-SES comparisons (hypothesis 1). It was also designed to examine the expected direction of comparison underpinning this choice. In line with previous studies demonstrating that students' comparison choice was biased toward an ingroup target performing slightly better than themselves (Blanton *et al.*, 1999; Huguet *et al.*, 2001), we expected to find upward expectations among students making same-SES comparisons. Moreover, given the underachievement (real or perceived) of low-SES students relative to their high-SES counterparts, same-SES comparisons may lead to different academic outcome standards, with lower standards for low-SES students (See Major and Testa, 1989 for similar consequences of ingroup comparisons on judgments of entitlement and satisfaction). Therefore, low-SES students should make lower comparison-level expectations. We thus expected that both low- and high-SES students would make upward expectations when comparing with same-SES targets, but with low-SES students reporting lower comparison-level expectations (hypothesis 2). Finally, the present study was also designed to test whether upward expectations when making same-SES comparisons still occur under threatening circumstances (e.g., when receiving a failure feedback). Contrasting predictions are possible in this case. On the one hand, the classical self-protection hypothesis holds that a threatening feedback should cause students to prefer a worse off comparison target (i.e., to make a downward comparison; Wills, 1981). This leads to anticipate that students in the failure feedback condition would make downward comparison-level expectations. On the other hand, recent research has shown that threatened people still make upward comparisons, lowering their comparison-level choice instead of engaging in true downward comparison (Gibbons *et al.*, 2000; 2002). Following this rationale, students in the failure feedback condition should still make upward expectations, but to a lower extent compared with those in the average feedback condition. It is noteworthy however that both perspectives predict lower expectations in the failure feedback condition. Furthermore, this

decrease in the comparison-level expectations might be even greater among low achievers who are especially likely to engage in self-protective strategies (Crocker, Major, & Steele, 1998). In other words, the difference in the comparison-level expectations between low- and high-SES students might be greater when having a long history of poor academic outcomes (i.e., a low academic achievement level) and when receiving a failure feedback at the test. We thus expected that the low achievers with a low SES who received a failure feedback would make the lowest comparison-level expectations (hypothesis 3).

These hypotheses were tested by having low- and high-SES students taking a bogus memory test. After receiving false performance feedback (failure versus average), participants were asked to select another student on the basis of his/her SES and to predict his/her test score. Since low SES and academic failure are often confounded variables, we also selectively retained participants from high and low SES who were high versus low academic achievers.

Method

Participants and Design

One hundred and eleven French students from five public middle schools (54 boys and 57 girls, ages 13 to 16), were selected on the basis of their SES and academic achievement. Students' SES was assessed on the basis of their parental occupation by using the classification provided by the French National Institute of Economic and Statistical Information. Parents of the low-SES students were employed as manual laborers, low-grade administrators, or were unemployed. Parents of the high-SES students held positions such as manager, researcher, or college professor. Students' achievement level was assessed by their recent grades in their main subjects (i.e., Mathematics, Physics, French, History, and Foreign Language). The average grade was below 8.5 for the low achievers whereas it was above 13 for the high achievers on a scale ranging from 0 (fail) to 20 (excellent). All participants agreed to participate individually to a memory test on a computer. The study took the form of a 2 (participants' SES, low *vs.* high) X 2 (participants' achievement level, high *vs.* low) X 2

(feedback, failure *vs.* average) between-subjects design. Participants were randomly assigned to the feedback conditions.

Procedure and Measures

Participants were met individually by a female experimenter in one of their regular classrooms. They were informed that the session would include a memory test on which they might do well or poorly. The test was explicitly presented as designed to assess memory abilities of students of their age. All participants were told that they would receive a performance feedback (i.e., a score) that would help them evaluate their own memory abilities. It was then explained that most of the previous participants were interested in knowing the score of other students. Participants were therefore informed that they would be given the opportunity to know the score of another anonymous student, who could be chosen on the basis of his/her answers to six questions related to his/her material belongings and cultural activities (e.g., “Do you have a computer connected to the Internet?”; “Do you go skiing?”). This material was derived from economic socialization research demonstrating that adolescents are particularly sensitive to material possessions and cultural activities to identify SES differences (e.g., Dittmar & Pepper, 1994; Rosenberg & Pearlman, 1978; Wiltfang & Scarbecz, 1990). Previous tests had demonstrated that students infer the SES of the respondent on the basis of the number of positive answers to these questions (Régner *et al.*, 2002). Before beginning the test, participants were themselves asked to fill in a questionnaire presenting these 6 same questions. These measures were later used to present individual participants with a target having exactly the same SES as their own (i.e., exactly the same answers to the six questions) as well as targets having a lower (i.e., less positive answers) and a higher SES than their own (i.e., more positive answers). It was explicitly noted that anonymity of all students would be preserved.

Then, participants learned how to start the test on a computer and were left alone in the classroom. All instructions appeared on the computer screen until the end of the test session. Participants had to learn 20 graphic items and were then asked to recognize them among 15 sets of four figures. Upon ending the test, each individual participant was told that the lowest score observed

among previous students was 60 whereas the highest score was 120 on a scale ranging from 0 to 180. Half the participants then received a low score (failure feedback; “70”) whereas the other half received an average score (“90”). A last message appeared on the computer screen, asking them to call the experimenter who was working in the next room.

Target selection. For each participant, the experimenter came in and put a questionnaire as well as four sheets on the table. The participant was told that each sheet presented the answers of a target selected at random from all the previous participants. The four fictitious targets varied in SES from very low to very high. The participants were given a few minutes to read the sheets describing the targets’ answers and to select the target of whom they would like to see the score. While the experimenter was supposed to look for the target’s score, participants filled out the rest of the questionnaire including the assessment of their comparison-level expectations and complementary measures.

Comparison-level expectations. Before discovering the score of their target, participants were asked to predict it by circling one of the seven possible scores (60, 70, 80, 90, 100, 110 or 120). To know whether the preference for same-SES comparison targets (if any) led to expectations of slightly upward comparisons, we computed the relative comparison-level expectations by subtracting the participant’s own score to the score they expected in their target. A positive difference score indicated upward comparison-level expectations, a negative difference score indicated downward expectations, and a difference score equals to zero indicated lateral expectations.

Complementary measures. Finally, participants rated the score they obtained (1 = *very low*, 3 = *average*, and 5 = *very high*), indicated whether they were satisfied with it (1 = *not at all satisfied*, 3 = *moderately satisfied*, and 5 = *very satisfied*) and whether they would improve their score if they could perform the test a second time (1 = *extremely unlikely*, 3 = *moderately likely*, 5 = *extremely likely*). They also rated their own SES and that of their selected target (1 = *very low SES*, 3 = *average*, 5 = *very high SES*). Then the experimenter thanked all participants and proceeded to debrief them about the true purpose of the study.

Results

Preliminary Analyses

A 2 (participants' SES) X 2 (participants' achievement level) X 2 (feedback) analysis of variance (ANOVA) was performed to assess participants' perceptions of their test score as well as their self-ratings of achievement level and SES. The analysis revealed a significant main effect of feedback on the evaluation of the score obtained, $F(1, 103) = 121.31, p < .001 (\eta^2 = .54)$, its associated level of satisfaction, $F(1, 103) = 24.24, p < .001 (\eta^2 = .19)$, and the likelihood of it improving, $F(1, 102) = 10.60, p < .01 (\eta^2 = .09)$. Participants who received a failure feedback evaluated their score as lower ($M = 2.09, SD = .62$) and were less satisfied with it ($M = 2.33, SD = .79$) than those who received an average performance feedback ($M = 3.02, SD = .23$ and $M = 3.00, SD = .57$ respectively). This indicates that the feedback manipulation was successful. Participants who received a failure feedback also thought they were more likely to improve their score if they could perform the test again ($M = 3.43, SD = .86$) compared to those who received an average feedback ($M = 2.89, SD = 1.01$). In addition, low achievers made lower ratings of their achievement level ($M = 2.59, SD = .75$) than did high achievers ($M = 3.75, SD = .65$), $F(1, 103) = 78.77, p < .001 (\eta^2 = .54)$. Likewise, low-SES participants made lower ratings of their SES ($M = 2.98, SD = .44$) than did high-SES participants ($M = 3.43, SD = .54$), $F(1, 103) = 23.44, p < .001 (\eta^2 = .19)$.

Target Selection

Four low-SES participants reported possessing neither SES attributes present in the sheet and two high-SES participants reported possessing all SES attributes. Since these participants were deprived from the possibility to choose, respectively, a lower and a higher SES target, they were deleted from the analyses (leading to a sample of 105 participants). The descriptive analysis of the data indicated that most low-SES participants selected a low-SES target (i.e., same-SES target; 74%), whereas only a minority of them preferred a target with either a lower (7%) or a higher SES (19%). Likewise, most high-SES participants selected a high-SES target (i.e., same SES-target; 92%), whereas only a minority of

them chose a target with a lower SES (8%). None of them selected a higher-SES target. As expected (hypothesis 1), a Chi-Square analysis revealed that both low- (74%) and high-SES (92%) participants showed a strong preference for comparison with same-SES others, $\chi^2(1, N = 105) = 6.48, p < .05$. Neither participants' achievement level, nor the feedback given significantly affected this ingroup comparison preference.

Since only 17% of the participants ($n = 18$) chose a different-SES target, statistical analyses following the complete experimental design could not be performed (from 0 to 6 participants in the experimental conditions defined by students' SES, students' achievement level and the feedback given). These participants were thus deleted from the following analyses. We then assessed to what extent participants perceived their ingroup target to be similar to themselves on the SES dimension. Paired t-tests showed that neither low- nor high-SES participants reported a difference between their own SES ($M = 3.00, SD = .32$ and $M = 3.40, SD = .54$ respectively) and that of their ingroup target ($M = 2.85, SD = .59$ and $M = 3.33, SD = .52$ respectively), $t(38) = 1.53, ns$ and $t(47) = .65, ns$ respectively. This finding is suggestive of high perceived similarity with the target on the SES dimension.

Comparison-Level Expectations

We expected that both low- and high-SES students would make upward expectations when comparing with same-SES targets, but with low-SES students reporting lower comparison-level expectations (hypothesis 2). The 2 X 2 X 2 ANOVA revealed that the corresponding main effect of participants' SES was significant, $F(1, 79) = 5.63, p < .05$ ($\eta^2 = .07$). As expected, low-SES participants made lower comparison-level expectations for their ingroup target ($M = 5.64, SD = 9.95$) than did high-SES participants ($M = 9.58, SD = 9.22$). The positive difference scores for both low- and high-SES participants also suggested an overall upward tendency in the comparison-level expectations. One-sample t-tests performed with zero as the test value indicated that this upward tendency was significant for both high- ($t(47) = 7.21, p < .001$) and low-SES participants ($t(38) = 3.54, p < .001$). These comparison-level expectations were only slightly upward

since the difference scores did not exceed 15 points, indicating that participants expected to be confronted with a target having a score just above their own.

We also expected that the low achievers with a low SES who received a failure feedback would make the lowest comparison-level expectations (hypothesis 3). However, the corresponding three-way interaction did not reach statistical significance, $F < 1$. Finally, the ANOVA revealed a significant main effect of the feedback, $F(1, 79) = 55.83$, $p < .001$ ($\eta^2 = .41$): Participants made higher comparison-level expectations in the failure feedback condition ($M = 13.86$, $SD = 7.22$) than in the average feedback condition ($M = 1.63$, $SD = 7.85$). No other effect reached statistical significance.

Discussion

The aim of the present study was to test whether both low- and high-SES students would prefer same-SES comparisons and to examine the level of performance these students might expect in their ingroup comparison target. As expected, only a minority of students selected either a lower- or a higher-SES target. Same-SES target was the dominant choice for both low- and high-SES students who, in addition, reported perceiving a high similarity between their own SES and that of their target. This similarity bias in comparison choice was affected by neither students' achievement level nor the feedback condition. Thus, the current study extends past findings about performance-related attributes to an under-examined socially defining attribute: SES. Specifically, results suggest that SES can be considered as another basic attribute that may matter for the selection of the comparison other, at least in the school environment. It is noteworthy, however, that this study does not inform about the relative importance of SES compared with other performance-related attributes such as gender, age and race. Future research is thus needed, which could simultaneously propose these criteria for selecting targets and register, for example, the selection order or the time spent on each kind of information.

Our findings also showed that, as expected, both low- and high-SES students made upward expectations when comparing with

same-SES targets, with low-SES students reporting lower comparison-level expectations. First, this result suggests that all students expected to be confronted with a slightly upward ingroup target. This is consistent with Festinger's (1954) unidirectional drive upward hypothesis as well as with recent findings (e.g., Blanton *et al.*, 1999; Huguet *et al.*, 2001). Second, it also supports a core idea of the performance-related attribute hypothesis that social comparison choices are driven by specific expectations concerning the ability level of the target (e.g., Alicke, 2000; Helgeson & Mickelson, 1995; Wood, 1989). However, future research is needed to further examine what kind of information relevant to performance participants infer from the SES data. This would also apply for the other performance-related attributes such as age or gender. Although participants may not have access to all of the factors influencing their behavior, it could be interesting to ask them to explain why they chose the target that they did. Third, the lower comparison-level expectations made by low-SES students relative to high-SES students are suggestive of the huge influence of SES on judgment. This finding may reflect the similarity bias in comparison (Major & Testa, 1989) as well as the use of the SES stereotype in ability inferences (Baron *et al.*, 1995; Darley & Gross, 1983; Régner *et al.*, 2002). Given the underachievement (real or supposed) of low-SES students relative to high-SES students, ingroup comparisons can lead to lower academic outcome standards for low-SES students, hence resulting in lower comparison-level expectations. This finding has implications for the consequences of ingroup comparisons, especially for low-SES students' future academic achievement level. Previous research has shown that the higher the comparison-level choice, the higher the students' performance (Blanton *et al.*, 1999; Huguet *et al.*, 2001). This suggests that because the comparison-level choice of low-SES students is lower than that of high-SES students, low-SES students are likely to continue to obtain lower outcomes. The difference of the comparison-level expectations between low- and high-SES students may thus contribute to maintain the relative underachievement of low-SES students. Future research could therefore examine the consequences of ingroup comparisons on low- and high-SES students' outcomes.

Unexpectedly, the results also indicated that neither the students' achievement level nor the feedback given moderated the influence of students' SES on their reported comparison-level expectations. Interestingly, the upward expectations still occurred (even to a greater extent) in the failure feedback condition, hence supporting recent conclusions that upward comparisons are the "modal behavior" even under threatening circumstances (e.g., Gibbons *et al.*, 2000; 2002). Of course, it could simply be that our participants did not find the test as personally relevant and therefore did not perceive the failure feedback as self-threatening. However, this seems quite unlikely here. Not only the test was explicitly presented as assessing memory abilities of middle school students, but also the students performed the test individually on a computer. These conditions may have contributed to stress the importance and the relevance of the task. Without any measure of the importance our participants attached to the test, we admit that this interpretation remains speculative however. It could also be that our participants did not report downward expectations because they may feel it socially inappropriate to indicate that they believe that the comparison target did worse than they themselves did. However, in the present study, participants were not asked to indicate whether they expected the target to have a lower or a higher score than their own. Instead, they were simply asked to predict the target's score. We reasoned that without any direct reference to self-performance, participants would be more prone to admit downward expectations. In line with this, Gibbons *et al.* (2002) emphasized that even threatened individuals (such as students who have just received a failure feedback) engage in upward comparison when there is no cost associated with such comparisons "such as when there is no disclosure of one's own performance or no face-to-face contact" (p. 877). This was exactly the case in the present study. In addition, past research has demonstrated that upward comparison is more likely 1) when people think that they are similar enough to the target on performance-related attributes so that assimilation is possible (Collins, 1996, 2000) and 2) when they think they can improve their performance (Major, Testa, & Bylsma, 1991). Our findings indicated that both conditions were met. First, both low- and

high-SES students rated similarly their own SES and that of their target (independently of the feedback condition). Such a perceived similarity on a performance-related attribute (SES) may have led students to think that they had the same ability as their target. Second, students in the failure feedback condition were also those who reported being most likely to improve their score if they could perform the test a second time.

In sum, the present findings seem in line with the recent view of the way self-protection may be reached through social comparison (Gibbons *et al.*, 2000; 2002). Downward comparison may not be the main way towards self-protection and upward comparisons with highly similar targets on performance-related attributes are likely to have self-protective properties. This point has important implications for the social comparison literature. Indeed, the direction of the comparison (or the expected direction) is traditionally used as an indication of the motive behind the comparison. Downward comparison is thus typically associated with self-protection and upward comparison with self-improvement. However, admitting that upward comparisons can also serve a self-protective motive contributes to breaking the link between comparison motives and comparison direction (Collins, 2000). If upward comparison can reflect either self-protection or self-improvement, the comparison direction may become insufficient to determine which of the two motives is in play. This raises a new issue that future research may address. One may wonder at what level upward comparison is no more indicative of self-protection but does reflect the self-improvement motive. This issue seems especially critical for correlational field studies. Indeed, in such studies, no performance feedback is manipulated. Therefore, it is not possible to infer whether a decrease in the comparison-level choice reflects a self-protection motive rather than self-improvement.

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