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Big Fish in Small Ponds: A Social Hierarchy Analysis of Intergroup Bias

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High- and low-self-esteem group members received feedback about their individual performance as well as that of their own group and an out-group. They then evaluated both groups. Yoked-control observer individuals also provided group evaluations. In the in-group success/out-group failure condition, in-group enhancement tendencies were attenuated by individual failure feedback and augmented by individual success feedback. Low-self-esteem group members who received individual failure feedback showed favoritism toward the unsuccessful out-group over their own successful in-group. In the in-group failure/out-group success condition, in-group enhancement tendencies were attenuated by individual success feedback and augmented by individual failure feedback. Thus individuals' position in a social hierarchy mediates upward and downward social mobility strategies.

Social identity theory has had a major impact on psychologists' understanding of group processes (e.g., Tajfel, 1974, 1978; Tajfel, Flament, Billig, & Bundy, 1971; Tajfel & Turner, 1979, 1986; Turner, 1975, 1981, 1982, 1985). In this view, it is assumed that individuals structure their self-perceptions in terms of the social categories with which they identify. The internalizations of these categories represent a component of their self-concept (i.e., their social identity) and contribute to the course and nature of group behavior. Specifically, individuals are motivated to attain/maintain a positive social identity, with *social identity* defined as "that part of an individual's self-concept which derives from his knowledge of his membership in a social group (or groups) together with the value or emotional significance attached to that membership" (Tajfel, 1978, p. 63). From this perspective, a positive social identity is obtained through membership in groups that compare favorably with other groups. When group boundaries are permeable, individuals should disidentify with low-status groups and seek membership in groups of higher status (e.g., van Knippenberg & Ellemers, 1990). Thus membership in relatively advantaged groups provides a basis for defining and evaluating the self in terms of a positive social category.

Intergroup comparisons are central processes within this theory. Through intergroup comparisons, individuals differentiate their own group from out-groups in ways that make their group more favorable on relevant comparison dimensions. The attempt to achieve a superior intergroup position is the key factor that leads to discriminatory intergroup behavior; members of advantaged groups tend to differentiate between their group and less advantaged out-groups in ways that maximize their favored position (e.g., Brewer, 1979; Messick & Mackie, 1989). In contrast, individuals who are members of disadvantaged groups would be expected to minimize the dimensions of comparison that are unfavorable to their social position. These patterns of intergroup evaluations are related to self-protective motivation (Brewer, 1991). The internalization of a disadvantaged or advantaged group categorization should lead to strategic intergroup comparisons designed to protect or maintain the group member's social identity (e.g., Turner, 1975).

These predictions have been upheld in a number of studies that have manipulated relative group status or group outcomes. Conditions under which one group receives outcomes that are different from another represent situations in which social categorizations are very salient. In these settings, group membership conveys relative advantages or disadvantages in terms of a shared fate. Factors that increase the salience of common fate and social categorization tend to produce intergroup biases (Brewer, 1979; van Knippenberg & Ellemers, 1990). In studies that have manipulated the relative outcomes of groups, members of advantaged or successful social groups tend to maximize intergroup differentiations in ways that favor their own group, whereas members of disadvantaged or unsuccessful groups minimize intergroup differences that are unfavorable to their group's social position (e.g., Crocker, Thompson, McGraw, & Ingerman, 1987; C. E. Seta & Seta, 1992).

Overview of the Present Research

Intragroup Comparisons

Although there is little disagreement that favorable intergroup comparisons can enhance one's positive sense of social identity, little attention has been directed toward understanding the role that intragroup comparisons may play in this process. It is most likely the case that this dimension has not been investigated because social identity theory presumes that in any particular context, individuals function at either the personal or social level (e.g., Turner & Oakes, 1989, pp. 240-241).

According to social identity theory, intragroup comparisons

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are individualistic default strategies that are adopted only when exit from a disadvantaged group is not possible and when disadvantaged group members do not see alternatives to their present intergroup positions (Smith, 1985, p. 171; Taylor & Moghaddam, 1994, p. 85). An individual may compare him- or herself with other group members as a way to minimize the negative implications of membership in a disadvantaged group, but favorable or unfavorable intragroup comparisons should not influence a person's social identity and should not influence intergroup evaluations or behavior.

An alternative perspective based on a social hierarchy analysis suggests that intragroup comparisons play an important role in intergroup behavior. In this view, there are two important dimensions of comparison available within a social hierarchy. Intragroup interpersonal comparisons inform an individual about his or her social position vis-à-vis other group members, and intergroup comparisons inform a person about the status of his or her group in relation to other groups in the social setting. The two types of comparisons should join to influence an individual's self-evaluation as well as his or her evaluation of in-groups and out-groups.

According to this analysis, favorable intra- and intergroup comparisons contribute to positive self and group evaluations and would be the optimal social position. However, intra- and intergroup comparisons are not always both favorable. Although individuals may benefit from their association with a successful group, unfavorable intragroup comparisons can dampen these benefits. Conversely, unfavorable intergroup comparisons can mitigate the positive feelings associated with favorable intragroup comparisons.

In particular, the social hierarchy analysis leads to the unique prediction that under certain conditions, members of high-status groups may demonstrate patterns of intergroup evaluation that do not take advantage of their relatively advantaged intergroup status. Rather, individuals minimize perceived differences between in-groups and out-groups. This pattern would be expected when the outcomes of intragroup comparisons are unfavorable, for example, when an individual is an unsuccessful member of a successful group. The reasoning that underlies this prediction is that although membership in a group of successful others offers the potential benefit of basking in the reflected glory of the group's accomplishments, it also sets the occasion for deflating upward social comparisons when one's own performance does not measure up to that of other group members. Being categorized as a member of such a group, even when the basis of categorization is unrelated to the dimension under evaluation, can force individuals to compare themselves with other group members. The outcomes of this forced social comparison can be demoralizing (J. J. Seta, Seta, & Donaldson, 1991; Wood, 1989). Research has shown that although comparisons with a superior coactor can facilitate performance when individuals expect to meet the coactor's performance standard, forced comparisons with coactors of superior ability or performance can lead to negative affective reactions and deflated performance, especially when the performance dimension is of high value and individuals do not expect to match the achievements of the superior coactors (e.g., J. J. Seta et al., 1991). Forced comparisons with superior others may also lead individuals to attempt to reduce their closeness with these persons (e.g., Tesser, 1986). Being a relatively unsuccessful member of a successful group thus imposes unfavorable social comparisons with superior others that may prevent the individual from taking advantage of the potential benefits of membership in an advantaged group. If this is the case, relatively inferior members could not be expected to engage in patterns of intergroup bias that are typically found for members of advantaged groups. Instead, these persons may show a tendency to be relatively more attracted to groups with less performance ability and therefore may minimize, rather than maximize, differences between successful out-groups and failing in-groups.

That is, the psychological discomfort associated with being a small fish in a big pond may produce downward mobility pressures that increase the attractiveness of groups of lower status. Consequently we would expect that when the in-group is successful and the out-group unsuccessful, group members experiencing personal failure may have a less positive evaluation of the successful in-group (relative to the unsuccessful outgroup) than persons experiencing personal success. In fact, the negative implications of unfavorable intragroup comparisons can be so strong that unsuccessful members of a successful group can evaluate a failing out-group over their own successful in-group.

On the other hand, favorable intragroup comparisons may be instrumental in producing pressure for upward social mobility. That is, being a big fish in a small pond may generate the confidence needed to seek membership in more successful groups, when group boundaries are perceived as permeable. In fact, this type of favorable intragroup position may engender perceptions of boundary permeability under some circumstances. (Lewin, 1948, pointed to this type of effect when he discussed his observation that leaders within the Jewish community sometimes sought affiliations with the "higher status" Germans.) Therefore, group members experiencing personal success may evaluate their failing in-group less positively, relative to a successful out-group, than those experiencing personal failure. These individuals may seek favorable intergroup comparisons under conditions in which unfavorable intragroup comparisons are not anticipated.

In summary, a person's social position in a group should be an important determinant of group attraction, esteem, and social identification. Upward mobility tendencies may be seen when the person is a very good member of a poor group, whereas downward mobility tendencies may be seen when the person is a poor member of a very good group.

In the present study, we investigated the influence of intragroup comparisons on intergroup bias and assessed the viability of a social hierarchy analysis of such influence. We manipulated the favorability of intragroup comparisons by providing subjects with performance feedback (success or failure) on a task along with feedback about the relative performance levels of assigned in-groups and out-groups. In addition, we investigated whether subjects' level of self-esteem played a role in moderating these effects.

Self-Esteem

The pattern of intergroup bias that has typically been found in studies that have manipulated relative group outcomes supports social identity theory's assumption that intergroup com-

parisons are made in ways that optimize self-enhancing social comparisons (e.g., Crocker et al., 1987; C. E. Seta & Seta, 1992; Taylor & Moghaddam, 1994; van Knippenberg & Ellemers, 1990). It would seem to follow that individuals with low self-esteem are more likely than those with high self-esteem to exhibit these forms of intergroup bias, because, like persons receiving failure feedback, they are in need of self-enhancement (Wills, 1981). Correlational research has in fact shown that low self-esteem is associated with prejudice (Wills, 1981). However, laboratory studies have shown that persons with low self-esteem show no evidence of self-enhancing intergroup comparisons (e.g., Crocker & Schwartz, 1985; Crocker et al., 1987). It has been suggested that low-self-esteem individuals are not confident in their abilities and are unable to engage in self-enhancing social comparisons. In contrast, high-self-esteem individuals are able to use this strategy as a mechanism for maintaining their positive self-concepts (e.g., Crocker & Schwartz, 1985).

Although it has been suggested that high- and low-self-esteem individuals may not engage in similar processes in intergroup settings, other research suggests that they do not differ in their discriminatory abilities but do differ in terms of the inferences they make about their relative positions within successful and unsuccessful groups (C. E. Seta & Seta, 1992). Persons with low self-esteem may perceive themselves to be in a disadvantaged position within groups of relatively high status or ability and may therefore be unable to derive a positive sense of social identity from these group affiliations. In support of this reasoning, in an earlier study we found that low-self-esteem individuals who were assigned to relatively successful groups evaluated relatively unsuccessful out-groups higher and successful in-groups lower than did comparable control individuals (C. E. Seta & Seta, 1992). In addition, these individuals did not appear to benefit from their affiliation with successful in-groups in terms of their self-ratings and showed significant positive bias toward those who had scored poorly on the experimental task.

In our earlier study, individuals did not receive feedback about their individual performance level on the task. Therefore, their relative position within their assigned in-group was open to inference. Given that we described the experimental task as measuring social cognitive aptitudes, it is likely that low-self-esteem individuals inferred that their performance levels were rather low within successful groups; low-self-esteem individuals are more likely than others to accept negative feedback about their performance in these domains (see Watson & Clark, 1984, for a review).

In the present study, we expected that manipulations that raised low-self-esteem individuals' inferred status levels within successful groups would reduce the likelihood that they would display a reverse form of intergroup bias, that is, showing favoritism toward less successful groups. On the other hand, feedback that confirmed low-self-esteem individuals' negative self-view would accentuate these individuals' tendency to favor failing out-groups over succeeding in-groups. In contrast to low-self-esteem persons, high-self-esteem individuals tend to view themselves positively and see themselves as adequate members of successful groups. Therefore, feedback about personal failure would not be sufficient to induce them to see themselves in an unfavorable intragroup position within a successful group. Thus, we did not expect to observe a tendency for high-self-esteem individuals to show favoritism toward less successful out-groups under these conditions. If obtained, these results would suggest that intragroup comparisons play an important role in determining how high- and low-self-esteem individuals respond to membership in groups with different status levels.

Observer Controls

A final feature of this study requires comment. In this study we included yoked control conditions that corresponded to each one of our manipulations of individual and group feedback. The purpose of these conditions was to address an important issue Messick and Mackie (1989) pointed out in their review of intergroup relations research. As they noted, nearly all investigations of intergroup bias have involved the categorization of individuals into two or more groups. This procedure is problematic in that it makes it impossible to determine whether bias emanates from individuals who have been categorized into a common group or whether intergroup bias is directed toward those who have been categorized into an out-group (or both). This problem is compounded in studies that manipulate group status by varying the relative performance levels of groups. In these cases, reward allocations and evaluations can be based on real performance distinctions (e.g., one group really did perform better than another group), rather than on group discrimination.

One technique for teasing apart the influence of performance feedback per se from the influences of categorization, individual performance feedback, and the shared fate of receiving feedback as a part of a group is to give a separate group of observer individuals information about relative performance levels and then obtain their group evaluations. These individuals' responses can then be used as a baseline for assessing the extent to which shared fate influences patterns of intergroup evaluation. The use of this control group along with a design that controls for the relative success of an in-group (placing some individuals in a failing in-group/succeeding out-group situation and others in a succeeding in-group/failing out-group context) alleviates many of the procedural problems identified by Messick and Mackie (1989).

Method

Participants and Design

Two hundred seventy-one female students participated in the study in partial fulfillment of introductory psychology research requirements. We enlisted only women because they composed the majority of the available participant pool and we wanted to maintain a homogeneous (gender) quasi-minimal group composition. We tested 12–16 individuals in each session.

The study included participant group members who received feedback about their own performance (success or failure), their group's performance (success or failure), and the out-group's performance (success or failure). Control observer individuals were also included who received the same feedback that participant individuals did except that they were not members of either the in-group or the out-group and they evaluated groups who were not visibly present in the setting. We yoked these observer individuals' own success and failure, own group success and failure, and other group success and failure feedback assignments to the feedback given to participant group members. Thus the

factorial design included group members and observer individuals, two levels of individual feedback (success or failure), two levels of in-group feedback (success or failure), two levels of out-group feedback, and two levels of self-esteem (as determined by a median split on Rosenberg's (1965) Self-Esteem Inventory).

Procedure

We informed individuals that the study concerned social and intellectual competencies and that its purpose was to investigate how individual perceptions are related to group behavior. We explained that the first part of the study would involve measures of their self-perceptions but would also require them to make judgments about others. To establish a random intergroup situation, we passed around a box containing slips of paper marked with the letter *A* or *B*.[1] Upon choosing their slips of paper, all individuals were told that this procedure represented a random group assignment and were asked to move to the set of tables labeled with their letter. Individuals' placement at a seat within each row was based on the order in which they had chosen a letter from the box. On the basis of whether the individual sat at the back or front (counterbalanced across sessions) of the two rows defining each group, the experimenter designated the individual a group member or observer.

Individuals completed the Rosenberg (1965) Self-Esteem Inventory (among other personality measures not reported on here). Then they received a booklet with a cover sheet explaining that they had been given a copy of the Social Cognitive Aptitude Test (SCAT), which "has been shown to be a reliable indicator of an individual's ability to process and integrate information and to make deductive inferences." In fact, this is a bogus test developed by Crocker and her colleagues (e.g., Crocker et al., 1987). Briefly, it requires individuals to read character descriptions of 10 couples, purportedly drawn from clinical case observations, and judge whether each couple remained in a relationship for 1 year. Previous research has found that women consider task performance on this test to be important and we used this task in our earlier research investigating intergroup bias (C. E. Seta & Seta, 1991, 1992). Therefore, we expected feedback on this task to be relevant to our participants' self-definitions.

We gave individuals a copy of the SCAT and instructed them to fill out an answer sheet that asked for their evaluation of each couple's relationship. We told them they would receive feedback about their performance. We gave observer individuals a copy of the SCAT with instructions to read over the booklet in order to become familiar with the test. We told them not to take the test themselves. Instead, they would be evaluating the scores of others who had taken the test in a similar setting (designated Groups C and D). We then gave observer individuals feedback about the performance of a member of one of the groups (C or D) and the average relative performance of the two groups separately and asked them to evaluate the characteristics of each group.

After participants had completed their task (observer and group member participants finished their tasks in approximately the same amount of time), we collected their booklets and gave them to an assistant. We told participant group members that we would score their SCAT tests and give them feedback on their performance; observer individuals were led to believe that another task would follow. After a delay of several minutes, observer individuals received another booklet containing the SCAT test and an answer sheet. We directed them to take the test, but this was done solely as a filler task. Group member participants received individual and group performance feedback and completed their dependent measure set at this time. They received feedback about their own group's average score, the other group's average score, and their individual score.

Both group member and observer conditions were represented in each session, and the feedback variables were randomized across experimental sessions. Individuals read one of the following feedback messages about group performance: that the average performance of both groups was 3 (FF condition), that the average performance of both groups was 9 (SS condition), that the average performance of Group A (or C) was 9 and that of Group B (or D) was 3 (the in-group success/out-group failure feedback condition), or that the average performance of Group A (or C) was 3 and that of Group B (or D) was 9 (the in-group failure/out-group success feedback condition). The key with which subjects interpreted these SCAT scores contained the following relevant categories: (a) A score of 3–4 (30–40%) correct indicated a lack of social sensitivity, intellectual immaturity, and difficulty in processing and responding to social and cognitive information, and (b) a score of 8–10 (80–100%) correct indicated maturity, receptivity, superior ability in social and intellectual situations, and good responses to personal and cognitive challenges. In terms of individual feedback, group member participants read that they had scored 3 or 9, whereas observer individuals read that a person in one of the two groups had scored either 3 or 9.

After receiving the feedback, observer and group member participants rated on a 7-point scale how descriptive each of 16 traits was of members of Group A (or C) and Group B (or D). There were 8 negative traits and 8 positive traits. The negative traits were *boring, rude, stupid, self-centered, insensitive, apathetic, uninformed,* and *incompetent.* The positive traits were *motivated, ambitious, creative, friendly, sincere, trustworthy, considerate,* and *intelligent.* We obtained an evaluative rating for each individual by assigning positive values to positive traits and negative values to negative traits, weighted by each individual's rating, and subtracting the negative traits from the positive. In the rare case that an individual failed to mark a trait, we entered an average value corresponding to her ratings of similarly evaluative traits into the composite score.

We administered manipulation checks to all group member participants. We asked individuals to indicate (on an anchored 7-point scale) how satisfied they were with their performance and whether the statement that their "performance score was lower than average" was true or false. We did not include manipulation checks concerning the effectiveness of group feedback because of ample evidence of the feedback's effectiveness (e.g., Crocker et al., 1987; C. E. Seta & Seta, 1992).

Results

Manipulation Checks

Our manipulation check data indicated that group member participants were more satisfied with their performance after receiving individual success ($M = 6.31$) than failure ($M = 3.41$) feedback. This difference was significant, $F(1, 134) = 143.7$, $p < .05$. Furthermore, 88% of group member participants in the individual failure feedback condition indicated that their score was below average; 3% of group members in the success feedback condition indicated that their score was below average.

[1] In actuality, we changed the labels Group A and Group B across sessions, such that in half of the sessions the groups were labeled Group C and Group D and in the other half they were labeled Group A and Group B. Thus, we asked observer subjects who were assigned to Group A or B to make judgments about members of Group C and Group D, and vice versa. Correspondingly, we asked participant subjects to make judgments about their own group and other groups depending on the appropriate labels that were assigned to their session. For simplicity's sake, we describe the labels as if A and B represent the assigned participant labels and C and D, the assigned observer labels.

Group Evaluations

We were interested primarily in how individual performance feedback affected group members' evaluation of assigned in-groups and out-groups—in particular, how participants' relative intragroup status affected tendencies to engage in intergroup bias. There are a number of different statistical approaches that can be used to address this question. First, we used the error term of an analysis of covariance (ANCOVA) to make relevant a priori contrasts. In this analysis, we used observer individuals' group evaluations as covariates for participant group members' responses. A related analysis would be to examine participant group members' uncorrected evaluations of their assigned in-group and out-group. Our hypothesis involved the evaluation of participant group members in the in-group success/out-group failure and in-group failure/out-group success conditions. Therefore, in a second analysis, we performed a repeated measures analysis of variance (ANOVA) on participant group members' uncorrected evaluations of in-groups and out-groups in these two conditions. In addition, the analysis included individual feedback and self-esteem conditions. We also performed a third analysis. This analysis was identical to the first analysis with one exception. It included the in-group success/out-group success and the in-group failure/out-group failure conditions. Although these two conditions were not central to our primary interests, we thought they might provide useful information. Finally, in the Appendix we report a related analysis that we performed on the uncorrected evaluations of group member and observer individuals. In addition, it included two levels of individual feedback, two levels of in-group feedback, two levels of out-group feedback, and two levels of self-esteem.[2]

Contrast analysis. We matched group member participants and observer individuals within each of the feedback conditions on their self-esteem scores and used observer individuals' group evaluations as covariates for group members' responses.[3] This procedure allowed us to control statistically for the effects of feedback per se on group evaluations. Any differences between in-group and out-group evaluations could be interpreted as resulting from the influence of receiving individual and group feedback versus mere exposure to feedback about performance levels. Because we made specific predictions concerning the patterns of evaluation expected in this study, and because a number of the full factorial conditions did not bear directly on our hypotheses, we began by performing a number of relevant a priori contrasts using the error term of the ANCOVA. This analysis included two levels of individual feedback (success or failure), two levels of in-group feedback (success or failure), two levels of out-group feedback (success or failure), and two levels of self-esteem (high or low). Table 1 presents the means for the full experimental design.

First, we assessed whether individual feedback had a different influence on group members' evaluations depending on whether group members were in the in-group failure/out-group success condition or in-group success/out-group failure condition. From a social hierarchy viewpoint, group members who experienced personal success in the in-group success/out-group failure condition should have had a more positive evaluation of their in-group than of the out-group, whereas an opposite pattern would be expected in the in-group failure/out-group success condition. We compared the difference between group members' evaluations of the in-group relative to the out-group after individual success and failure feedback in the in-group failure/out-group success condition with the difference between group members' participants' evaluations in the in-group success/out-group failure condition. The result of this contrast was significant, $F(1, 92) = 20.43, p < .05$.[4]

As may be seen from Table 1, this effect was due to the fact that in the in-group success/out-group failure condition, group members who experienced personal success had a more positive evaluation of their successful in-group (in relation to the unsuccessful out-group) than did group members who experienced personal failure, $F(1, 92) = 8.75, p < .05$, whereas an opposite pattern emerged in the in-group failure/out-group success condition. In this condition, group members who experienced personal success had a less positive evaluation of their unsuccessful in-group, $F(1, 92) = 2.31, p < .15$.

This pattern of data is consistent with a social hierarchy analysis. In the in-group success/out-group failure condition, being an unsuccessful member of a successful group imposed unfavorable intragroup social comparisons that prevented group members from taking full advantage of the favorable intergroup comparisons that are associated with a successful in-group. Therefore, group members who experienced personal failure had a less positive evaluation of their successful in-group than did those who experienced personal success. Furthermore, low-self-esteem group members evaluated their successful in-group less favorably than did high-self-esteem group members in this condition, $F(1, 92) = 12.24, p < .05$. In fact, low-self-esteem group members who received personal failure feedback showed a reverse form of intergroup bias: They favored the less successful out-group. This difference in group evaluations tended to

[2] All of the analyses yielded similar results concerning the issues considered in this article. However, on an issue that is not central to our primary interests, the ANCOVA yielded an interpretation that was different from that of the ANOVA. The ANCOVA on difference scores indicated that participants in the in-group success/out-group failure condition showed more bias than those in the in-group failure/out-group success condition. An opposite conclusion would have been reached from the ANOVAs, which used unadjusted scores. Nevertheless, each analysis supports our social hierarchy analysis in that in-group enhancement tendencies were attenuated by individual failure feedback and maximized by individual success feedback in the in-group success/out-group failure condition and were attenuated by individual success and augmented by individual failure in the in-group failure/out-group success condition.

[3] We matched participants using the criterion that their self-esteem scores were within 5 points of one another. Individuals who did not meet this criterion were eliminated from this analysis (but see the Appendix for analysis including all 271 participants). In actuality, only 5 participants in our final sample differed in self-esteem by as many as 4 or 5 points. The remainder were matched within 3 points on Rosenberg's scale.

[4] These planned contrasts used the error term of the omnibus test. In addition, they used the degree of freedom associated with this error term, which was 92 in this case. They did *not* use the degree of freedom that would be used if multiple *t* tests were performed (see Keppel, 1973). See Rosnow and Rosenthal (1988) for a discussion of the appropriateness of this type of contrast analysis.

Table 1
Adjusted Mean Difference Between In-Group and Out-Group Evaluations as a Function of Individual Feedback, In-Group Feedback, Out-Group Feedback, and Self-Esteem

	Individual success feedback				Individual failure feedback			
	In-group success feedback		In-group failure feedback		In-group success feedback		In-group failure feedback	
Out-group feedback	High self-esteem	Low self-esteem	High self-esteem	Low self-esteem	High self-esteem	Low self-esteem	High self-esteem	Low self-esteem
Out-group success feedback	−.77	.19	−3.54	−6.60	−2.35	2.56	6.13	−2.90
Out-group failure feedback	16.49	4.85	1.45	2.31	5.08	−11.24	6.75	−.22

Note. Positive numbers indicate more positive evaluations of the in-group over the out-group; negative numbers indicate more positive evaluation of the out-group over the in-group.

differ from zero, $F(1, 92) = 3.59$, $p < .06$. Because the successful in-group offered these group members unfavorable targets for intragroup comparisons, they found an out-group of lower status to be more attractive than their own successful in-group. This finding is particularly compelling given the out-group was the objectively inferior group.

Individual feedback had an opposite influence in the in-group failure/out-group success condition. In this situation, group members who experienced personal success tended to evaluate their failing in-group less positively than did those who experienced personal failure. According to our social hierarchy analysis, this was because the successful out-group afforded the successful person favorable inter- and intragroup comparisons. In this case, the individual would have been a very unsuccessful member of the more successful out-group.

Taylor and McKirnan's (1984) five-stage model of intergroup behavior is also applicable to our findings in the in-group failure/out-group success condition. In stage III of their model, individual members of disadvantaged groups are assumed to engage in individual social mobility strategies that are aimed toward movement into the advantaged group. Consistent with social identity theory, the five-stage model assumes that the motivation for this social mobility strategy is the need for positive social identity (Taylor & Moghaddam, 1994, p. 145). If one assumes that attraction to advantaged groups is a precursor for social mobility, our finding of increased attraction to successful out-groups might also be expected from their model.

Thus although individuals strive to become associated with the most successful group, the potential for unfavorable intragroup comparisons can lessen this tendency. In fact, the negative implications of unfavorable intragroup comparisons can be so strong that unsuccessful members of a successful in-group can evaluate a failing out-group over their own successful in-group, as was the case for low-self-esteem group members in our experiment. Furthermore, when individuals expect favorable evaluations from a successful out-group, they tend to evaluate the successful out-group over their own unsuccessful in-group.

ANOVA of group member participants' group evaluations. We used difference scores in the foregoing analyses because of the necessity of obtaining a single index of the evaluative spread between in-group and out-group evaluations for the ANCOVA. Although this procedure was appropriate, we were also interested in examining the uncorrected evaluations of group members' evaluations in the two conditions that related directly to our hypothesis: the in-group success/out-group failure and in-group failure/out-group success conditions. Therefore, we performed a repeated measures ANOVA on group members' evaluations of in-groups and out-groups as a function of these two conditions. The analysis also included individual feedback (success or failure) and self-esteem (high or low). Table 2 presents the means from the eight experimental conditions.[5] Our analysis of the group members' responses indicated a significant main effect of self-esteem, $F(1, 61) = 7.69$, $p < .05$, in which high-self-esteem individuals rated both groups more positively than did low-self-esteem individuals. We also found a Condition × Group Rating interaction, $F(1, 61) = 9.62$, $p < .05$: Individuals in the in-group success/out-group failure condition rated their in-group ($M = 21.4$) more positively than the out-group ($M = 14.3$); in the in-group failure/out-group success condition, individuals evaluated the out-group ($M = 21.2$) more positively than the in-group ($M = 17.0$).

We also found a Self-Esteem × Group Rating interaction, $F(1, 61) = 5.01$, $p < .05$. Across feedback conditions, high-self-esteem group members tended to evaluate out-groups ($M = 19.0$) more negatively than in-groups ($M = 24.6$), whereas low-self-esteem individuals tended to evaluate out-groups ($M = 16.4$) more positively than in-groups ($M = 13.9$). These effects were qualified by a significant interaction among condition, individual feedback, and in-group/out-group evaluation, $F(1, 61) = 6.35$, $p < .05$. The form of this interaction was identical to the pattern of outcomes we obtained in our contrast analysis. Specifically, group members who received individual success feedback within the in-group success/out-group failure condi-

[5] An alternative and equally appropriate analysis would be to include both observer and participant subjects in a repeated measures ANOVA, including two participant conditions (observer or participant), two levels of individual feedback (success or failure), two levels of in-group feedback (success or failure), two levels of out-group feedback (success or failure), two levels of self-esteem (high or low), and in-group/out-group evaluation. This design has the advantage of using all participants, but has the disadvantage of being very cumbersome. We analyzed the data using both strategies, and they revealed similar findings concerning participants' reactions. See the Appendix for the means and standard deviations from the full factorial design and the results of the six-factor repeated measures ANOVA.

Table 2
Participant Group Members' Mean Evaluation and Standard Deviations of Minimal In-Groups and Out-Groups as a Function of Individual Feedback, Personal Self-Esteem, and Condition

	Individual success feedback				Individual failure feedback			
	In-group		Out-group		In-group		Out-group	
Condition	*M*	*SD*	*M*	*SD*	*M*	*SD*	*M*	*SD*
In-group success/out-group failure								
Low self-esteem	16.8	8.8	9.6	9.5	12.7	16.5	18.3	13.3
High self-esteem	30.3	5.8	10.2	21.9	25.9	9.1	19.0	13.5
In-group failure/out-group success								
Low self-esteem	13.9	13.5	22.1	10.1	12.1	10.7	15.6	8.2
High self-esteem	17.6	15.4	22.9	12.5	24.4	8.8	23.9	9.4

tion evaluated their successful in-group (M = 23.5) more positively than the unsuccessful out-group (M = 9.9). In contrast, group members who received personal failure feedback minimized the difference between trait ratings of their successful in-group (M = 19.3) and the out-group (M = 18.7). Group members who received personal failure feedback within the in-group failure/out-group success condition evaluated their in-group (M = 18.3) and the out-group (M = 19.8) similarly, whereas those who received personal success feedback evaluated the out-group (M = 22.5) more positively than the in-group (M = 15.7).

These results suggest strongly that individuals' relative status within groups affects patterns of intergroup bias and attraction. The pattern of intergroup bias found when individuals were members of relatively successful groups differed as a function of their intragroup status: Successful members of these groups demonstrated the typical finding of enhancing their in-group in relation to the out-group, whereas unsuccessful members minimized the difference between their in-group and the out-group. In addition, successful members of relatively low-status groups tended to evaluate successful out-groups more positively than their own group; this pattern was not demonstrated by unsuccessful members of the low-status groups.

Omnibus ANCOVA matching yoked observer individuals to group member participants. The ANCOVA we performed on the full factorial design included two levels of individual feedback (success or failure), two levels of in-group feedback (success or failure), two levels of out-group feedback (success or failure), and two levels of self-esteem (high or low). The results of this analysis revealed several interesting and important outcomes.

As other researchers (e.g., Crocker et al., 1987) have found, we discovered that high- and low-self-esteem individuals differed in their overall evaluations of in-groups and out-groups, as indicated by a significant main effect of self-esteem, $F(1, 92) = 4.50$, $p < .05$. High-self-esteem persons showed significantly more in-group favoritism than did low-self-esteem persons (M_{diff} = +3.7 vs. −1.40). More interestingly, self-esteem entered into a significant interaction with in-group feedback and out-group feedback, $F(1, 92) = 4.39$, $p < .05$. Table 3 presents the means associated with this interaction. As may be seen, this interaction stemmed primarily from a difference in the patterns of high- and low-self-esteem individuals' evaluations in the in-group success/out-group failure condition, $F(1, 92) = 8.2$, $p < .01$. When high-self-esteem individuals were assigned to be members of relatively successful groups, they favored their in-group, consistent with prior research findings of maximization of in-group/out-group differences under conditions of relative superiority (see Brewer, 1979, for a review). In contrast, low-self-esteem group members showed the reverse pattern of evaluative spread, favoring the relatively unsuccessful out-group. We found no other significant differences between the evaluations of high- and low-self-esteem individuals within any of the other experimental conditions.

The differences obtained in the in-group success/out-group failure condition are interesting. In contrast to group members with high self-esteem, group members with a relatively poor self-image did not appear to benefit from membership in the relatively high-status group (in the sense that they did not maximize their assigned group's relative superiority in group evaluations). This finding supports the conclusion that low self-esteem per se does not promote intergroup discrimination (e.g., Abrams & Hogg, 1988, 1990; Hogg & Sunderland, 1991). In addition, this finding replicates our earlier findings (C. E. Seta & Seta, 1992) and supports our reasoning that low-self-esteem group members may not identify with their own superior group (because of their poor self-perceptions) but may instead seek alternative, less successful groups for social identification.

Table 3
Adjusted Mean Difference Between In-Group and Out-Group Evaluations as a Function of In-Group Feedback, Out-Group Feedback, and Self-Esteem

	Out-group feedback	
In-group feedback	Success	Failure
Success		
Low self-esteem	+1.4	−3.2
High self-esteem	−1.6	10.8
Failure		
Low self-esteem	−4.8	1.1
High self-esteem	1.3	4.1

Table 4
Adjusted Mean Difference Between In-Group and Out-Group Evaluations as a Function of Individual Feedback and In-Group Feedback

	Individual feedback	
In-group feedback	Success	Failure
Success	5.2	−1.5
Failure	−1.6	2.4

Further support for the hypothesis that one's relative position within an assigned in-group hierarchy influences intergroup attitudes appeared in significant interactions between individual feedback and in-group feedback, $F(1, 92) = 5.04$, $p < .05$, and between individual feedback and out-group feedback, $F(1, 92) = 4.19$, $p < .05$. The adjusted means associated with these interactions are contained in Tables 4 and 5. As may be seen in Table 4, participants responded to assigned membership in successful in-groups quite differently depending on whether they received individual success feedback or failure feedback, $F(1, 92) = 4.49$, $p < .05$. Participants who received individual success feedback tended to favor their successful in-group ($M_{diff} = +5.2$); whereas individuals who received individual failure feedback showed no such tendency and, in fact, showed a slight bias toward out-groups ($M_{diff} = -1.5$). Similarly, as may be seen in Table 5, individual success and failure feedback influenced participants' response to feedback that out-groups had performed poorly on the task. Participants who received individual success feedback showed intergroup bias in favor of their in-group under these conditions ($M_{diff} = +6.3$), whereas individuals who received individual failure feedback showed no bias toward their in-group ($M_{diff} = +.09$).

Although the results of this study support the social hierarchy analysis, there is a potential alternative explanation for these effects. It may have been the case that participants did not consider themselves to be members of assigned in-groups at all; rather, they may have identified with whichever group provided the best match to their individual feedback. For example, group members who received personal failure feedback may have identified with failing groups, regardless of the experimenter's assignment of in-group membership. And successful group members may have identified with succeeding groups regardless of whether they were assigned to a successful or an unsuccessful in-group. If this was the case, our finding that individual feedback altered patterns of intergroup evaluation would reflect group identifications based simply on similarity rather than on one's intragroup standing.

This reasoning is consistent with Turner's metacontrast assumptions concerning the role of perceived similarities in group identifications (for further discussion, see Turner, Hogg, Oakes, Reicher, & Wetherell, 1987) and provides a viable explanation for these data. It should also be noted that such an explanation does not negate the importance of considering the role of personal feedback in intergroup bias. However, several of these results suggest that participants in our study were not disregarding their ascribed group memberships and identifying with whichever group best matched their task performance. Had this been the case, we should not have found any influence of ascribed group membership on participants' group evaluations; rather, group members should have shown favoritism toward the group that was most similar to their personal feedback performance and patterns of intergroup bias that followed from enhancement tendencies vis-à-vis this alternative group categorization. For example, unsuccessful participants should have shown a tendency to minimize the evaluative spread between successful and unsuccessful groups regardless of whether the experimenter assigned them to a successful or an unsuccessful in-group. As may be seen in Table 1, this did not happen. The group evaluations of unsuccessful high-self-esteem individuals differed depending on whether they were assigned membership in a relatively successful or unsuccessful in-group. These participants favored their failing in-group when they were assigned membership in this group ($M_{diff} = +6.13$) but did not favor the failing out-group when they were assigned to a successful in-group; in fact, they showed favoritism toward the more successful assigned in-group ($M_{diff} = +5.08$). Although this difference in how participants evaluated a failing group did not reach conventional levels of significance, it was opposite in direction to that predicted by a similarity hypothesis, $F(1, 92) = 1.78$, $p < .20$. The unsuccessful low-self-esteem individuals' evaluations also differed as a function of their ascribed group membership, $F(1, 92) = 5.69$, $p < .05$, a difference that is especially interesting. These participants showed more favoritism toward unsuccessful groups when they were assigned membership in successful in-groups than when they were assigned membership in the failing group; they showed a reverse intergroup bias in the form of favoring a relatively unsuccessful group ($M_{diff} = +11.24$) in the in-group success/out-group failure condition. However, they did not show this magnitude of favoritism toward unsuccessful groups when they were assigned membership in the unsuccessful in-group ($M_{diff} = -2.9$ in the in-group failure/out-group success condition). This result suggests that unfavorable intragroup comparisons (i.e., being a relatively unsuccessful member of a successful group) was especially uncomfortable for group members with a poor self-image and this unfavorable comparison may have made membership in a less successful group much more attractive to these individuals.

The results from the individual success conditions are also counter to an explanation of these findings based on a pure similarity hypothesis. As was the case with participants who received failure feedback, group evaluations made by individuals who received personal success feedback varied as a function of assigned in-group/out-group membership. As can be seen in Table 1, high-self-esteem persons who received personal success

Table 5
Adjusted Mean Difference Between Evaluations of In-Group and Out-Group as a Function of Individual Feedback and Out-Group Feedback

	Individual feedback	
Out-group feedback	Success	Failure
Success	−2.7	.86
Failure	6.3	.09

feedback showed more favoritism to successful groups when these groups were described as their ascribed in-group (M_{diff} = +16.49) than when the successful group was the ascribed out-group (M_{diff} = −3.54), $F(1, 92) = 9.28$, $p < .05$. The only pattern of data that can be accounted for by a pure similarity approach is that obtained from successful low-self-esteem individuals. When these persons were assigned to a failing in-group, they favored the successful out-group about as much as they favored the successful in-group ($F < 1$). These results, however, are also consistent with a social hierarchy account. According to this view, successful group members favored their own successful in-group over a failing out-group because personal success feedback indicated that they were competent members of the successful group. Consequently, their group afforded them favorable inter- and intragroup comparisons. And when they were an assigned member of a failing in-group, they favored the successful out-group over their own failing in-group. In this case, membership in a successful out-group afforded successful persons favorable inter- and intragroup comparisons, whereas membership in a failing in-group afforded only favorable intragroup comparisons.

Discussion

Research generated by social identity theory (e.g., Tajfel & Turner, 1979) has focused on the implications of intergroup relations on intergroup attitudes and behaviors. Individuals' beliefs about the relative status of their in-group, the permeability of group boundaries, and the legitimacy of in-group/out-group status differences influence both inter- and intragroup behavior and attitudes via their impact on social identity. Membership in a relatively high-status group is thought to be preferable to membership in a low-status group because it provides a basis for defining and evaluating the self in terms of a positive social category.

The results of the present study suggest that individuals' inferred position within high-status groups mediates their ability to benefit from advantaged social groups. Providing participants with individual feedback that communicated their relative ability status within successful groups altered patterns of intergroup evaluation; individuals responded to assigned membership in successful in-groups quite differently depending on whether they received individual success or individual failure feedback. For example, participants who received individual success feedback tended to maximize differences between their successful in-group and the unsuccessful out-group along dimensions that favored their in-group (i.e., they showed intergroup bias). Group members who received individual failure feedback showed no such in-group bias. In fact, they showed reverse bias. If group evaluation measures, such as those used in this study, are interpreted as indexes of social identification (e.g., Abrams & Hogg, 1990), we can infer that these results reflect tendencies both to identify (in individual success conditions) and to disidentify (in individual failure conditions) with socially advantaged groups.

From both motivated interdependence and social categorization approaches, it has been assumed that affiliation with high-status groups is preferable, either because of the group's instrumentality in facilitating goal achievement or because of its role in contributing to a positive sense of social identity. The present research suggests, however, that affiliations with high-status groups are not always beneficial or preferable. Defining oneself in terms of a social category entails the acceptance of the group's attributes or behavioral prescriptions as standards for behavior (e.g., Turner & Oakes, 1989). Comparisons of one's ability in relation to these standards provides information about one's efficacy within the group. When people perceive that they are unlikely to meet the group's standards, affiliation with the group can set the stage for deflating upward comparisons, and membership in an alternative group may become preferable. To put it simply, individuals may prefer to be a bigger fish in a smaller pond. On the other hand, when these comparisons indicate probable success within a group of higher status, individuals may disidentify with a lower status group and seek membership in a higher status group (i.e., they may use upward mobility strategies).

This type of analysis also helps us understand patterns of intergroup bias that appear to differ across individuals. For example, researchers have failed to find evidence that persons with low self-esteem demonstrate intergroup bias and have concluded that they may be incapable of this motivated form of bias (e.g., Crocker et al., 1987). Alternatively, we have suggested that low-self-esteem individuals may not show intergroup discrimination in the form of maximizing favorable intergroup comparisons because they feel relatively inferior within the social hierarchy of a successful group (C. E. Seta & Seta, 1992). Consistent with this reasoning, individual failure feedback in the present study produced favoritism toward relatively unsuccessful out-groups, whereas individual success feedback attenuated this effect. These findings suggest that low-self-esteem individuals may not readily identify with successful groups and may instead identify with less successful groups when they perceive themselves to have a relatively inferior position within an elevated social hierarchy.

The Weighting of Comparison Dimensions

Although inter- and intragroup comparisons jointly influence a person's reactions, the context may influence the weight of each of these comparison dimensions (C. E. Seta & Seta, 1992). In the present study, low-self-esteem participants favored an unsuccessful out-group because of the negative consequences associated with unfavorable intragroup comparisons. Different results may have been obtained, however, if these individuals had been maximally concerned about intergroup comparisons. Had they been, they may have favored their own successful in-group.

Personality factors, such as personal and social identity (e.g., Cheek, 1989), should also influence the weight of inter- and intragroup comparisons. Individuals with a high level of personal identity may be most influenced by intragroup comparisons, whereas those with a high level of social identity may be most influenced by intergroup comparisons. Several recent studies support these assertions. Context (e.g., Brewer & Weber, 1994) and personality type (McFarland & Buehler, 1995) have both been shown to influence the weight of inter- and intragroup comparisons.

It follows from our analysis that when intragroup compari-

sons are weighted heavily, interpersonal processes will have a pronounced influence on a person's reaction. For example, when the task has implications for a person's self-image, the person's self-view should suffer from an association with a superior group member. This is consistent with Tesser's (1986) self-evaluation maintenance model. However, when intergroup comparisons are heavily weighted, a person's self-image may benefit from this type of association. In this case, the superior group member's performance raises the status of the group. This conclusion is consistent with data reported by Brewer and Weber (1994) and is in accord with Farsides's (1995) suggestion of conditions that are likely to support Tesser's self-evaluation maintenance model and those that are likely to support Tajfel and Turner's (1986) social identity theory.

Comparisons of Social Hierarchy and Self-Categorization Theory

The assumptions of our social hierarchy analysis are consistent with Turner's self-categorization theory (e.g., Turner, 1985; Turner & Oakes, 1989). Both approaches assume that group preferences are determined by within-group and between-groups differences. However, from a social hierarchy approach, it is the motivational implications that emerge from an assessment of these differences, rather than metacontrast per se, that determine group preferences. For example, our social hierarchy approach allows us to make predictions about which one of the various dimensions of relative similarity will be important for group identification; an individual should choose to identify with a group that affords him or her the best possible intergroup social position, while maintaining a relatively positive position within that social group (Conner, Seta, & Seta, 1996). Thus the social hierarchy approach assumes that an individual can choose relatively less similar groups for social identification, as long as the individual perceives that he or she is in a relatively advantaged position within this dissimilar group. Thus it is the motivational implications of relative similarities and differences that are assumed to play the major role in group identification from this perspective.

Although self-categorization theory and social hierarchy analysis make different assumptions about the roles of between-group and within-group differences in determining group identification and intergroup bias, these analyses share some metatheoretical assumptions. Both analyses assume that individuals are sensitive to their relative position within a social group. Like self-categorization theory, the social hierarchy analysis adopts a Brunerian perspective. Because the readiness to access and fit certain types of information into cognitive structures is influenced by the functional utility of information (Bruner, 1957), it should be the case that persons are perceptually ready to attend to their positions in relation to other group members. They should also be perceptually ready to perceive a group's position in relation to other groups. Given the important role that a dominant or subordinate social hierarchy position has in people's everyday interactions, as well as its important role in the evolutionary history of our species, it is reasonable to assume that individuals are prepared to notice and react emotionally to both their own relative social position and the relative position of their group in the larger social hierarchy.

From a social hierarchy analysis, an individual's opportunity to compare with fellow group members should influence his or her personal and social identity. Therefore, in addition to intergroup comparisons, intragroup comparisons should also influence the positivity of a person's social identity and his or her ultimate attraction to and identification with groups. In considering the implications of intra- and intergroup comparisons, the social hierarchy analysis allows new insights into the processes involved in group selection, social identity, and intergroup bias. For example, not only are people perceptually ready to notice and react to their own relative intra- and intergroup social positions, but the social implications of intragroup comparisons are often sufficiently intense to outweigh the favorable external consequences associated with membership in an advantaged group. The implications of these comparisons can lead a person to prefer a disadvantaged out-group over an advantaged in-group.

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Appendix

Omnibus ANOVA

Between-subjects effects: For self-esteem, $F(1, 239) = 5.55$, $p < .05$; for in-group feedback, $F(1, 239) = 36.96$, $p < .01$; for out-group feedback, $F(1, 239) = 60.96$, $p < .01$; for condition, $F(1, 239) = 20.23$, $p < .01$; for In-Group Feedback × Condition, $F(1, 239) = 18.18$, $p < .01$; for Out-Group Feedback × Condition, $F(1, 239) = 25.20$, $p < .01$; and for Self-Esteem × In-Group Feedback × Out-Group Feedback × Condition, $F(1, 239) = 3.17$, $p < .08$.

Within-subject effects: For Target of Evaluation × In-Group Feedback, $F(1, 239) = 87.50$, $p < .01$; for Target of Evaluation × Personal Feedback × In-Group Feedback, $F(1, 239) = 3.41$, $p < .07$; for Target of Evaluation × Out-Group Feedback, $F(1, 239) = 104.85$, $p < .01$; for Target of Evaluation × Self-Esteem × Out-Group Feedback, $F(1, 239) = 3.81$, $p < .07$; for Target of Evaluation × Personal Feedback × Out-Group Feedback, $F(1, 239) = 3.61$, $p < .07$; for Target of Evaluation × In-Group Feedback × Condition, $F(1, 239) = 46.83$, $p < .01$; for Target of Evaluation × Out-Group Feedback × Condition, $F(1, 239) = 43.55$, $p < .01$.

Table A1
Mean Evaluation and Standard Deviations of Minimal In-Groups and Out-Groups as a Function of Personal Self-Esteem, Personal Feedback, In-Group Feedback, and Out-Group Feedback

Out-group feedback	In-group success				In-group failure			
	High self-esteem		Low self-esteem		High self-esteem		Low self-esteem	
	M	*SD*	*M*	*SD*	*M*	*SD*	*M*	*SD*
Participants' personal success								
Out-group success								
In-group	22.3	12.3	22.0	4.9	17.6	15.4	13.9	13.5
Out-group	24.6	12.6	21.8	8.2	22.9	12.5	22.1	10.1
Out-group failure								
In-group	30.3	5.8	16.8	8.8	15.0	15.5	15.0	12.6
Out-group	10.2	21.9	9.6	9.5	13.2	15.4	12.7	14.8
Participants' personal failure								
Out-group success								
In-group	18.0	11.3	21.8	9.4	24.4	8.8	12.1	10.7
Out-group	20.4	12.9	19.4	9.2	23.9	9.4	15.6	8.2
Out-group failure								
In-group	25.9	9.1	12.7	16.5	19.3	10.8	15.9	6.9
Out-group	19.0	13.5	18.3	13.3	16.0	11.5	17.1	6.4
Observers' personal success								
Out-group success								
In-group	31.0	6.8	26.0	4.7	−2.8	18.8	−4.9	15.5
Out-group	32.1	5.2	25.8	5.7	28.8	13.3	27.9	10.4
Out-group failure								
In-group	29.4	13.2	21.3	24.7	10.2	10.4	−3.7	14.0
Out-group	−11.0	20.0	−3.6	12.7	−7.2	13.3	−.40	14.9
Observers' personal failure								
Out-group success								
In-group	29.8	7.5	27.3	9.8	−4.8	13.1	−.50	6.3
Out-group	31.1	7.5	28.9	7.5	33.4	3.4	24.1	11.1
Out-group failure								
In-group	21.3	9.9	23.2	13.1	−6.1	16.0	.30	10.9
Out-group	−1.3	10.6	−2.9	14.9	−4.3	17.3	−2.7	10.1

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