

Opponent choices of below average performers

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The present paper examined the preferences of below average performers for opponents. In Experiment 1, subjects solved maze problems and were subsequently given feedback indicating they had below average ability. They were then asked to indicate their preferences for above average, average, or below average others as opponents for a subsequent competitive interaction. Results indicated that below average subjects preferred below average and average persons equally as opponents. Supplementary data suggested that below average subjects may be assuming that they will improve on later trials and thus be able to succeed against average-ability opponents. Experiment 2 offered further evidence in support of this notion. The results suggest that the similarity hypothesis may not apply to those cases where it is in the individual's self interest to believe he will improve. The implications of the results for competition and social comparison are discussed.

The present study considers the selection of opponents for competitive situations. Competition usually involves direct comparisons of ability and as such is likely to be seen as providing particularly informative feedback about one's relative level of ability. According to Festinger's (1954) social comparison theory, only by competing with someone relatively close to oneself in ability can one discern one's own ability level and evaluate the quality of one's trial-by-trial efforts.

Competing with one's own ability level implies a relatively even match that should increase the possibility of an interesting and enjoyable contest. The even matching of abilities should also be nonthreatening to self-esteem because there is a fair probability of victory in such cases. While one could completely assure victory by selection of a very low-ability opponent, the defeat of such an opponent would add very little to one's self-esteem. Competition with a higher ability opponent may lead to higher self-esteem in the case of victory; however, the probability of victory is minimal. Thus the selection of a similar-ability opponent may represent a compromise between possible loss of self-esteem in the case of defeat and the acquisition of self-esteem in the case of victory.

Among the few studies examining competitor choices, Hoffman, Festinger, and Lawrence (1954) found some support for the similarity hypothesis. More recently, Martens and White (1975) performed a study in which subjects competed against others of varying ability on a motor performance task. After five competitive sessions, subjects indicated their preferences for future opponents. The results showed a marked preference for similar-ability others as opponents. However, neither the Hoffman et al. nor the Martens

and White investigation manipulated ability level to determine the extent to which the similarity hypothesis applies to persons of different ability levels (i.e., average, superior, poor).

Miller and Suls (1977, Study 1) reported the results of a study that manipulated the subject's perceived level of ability on a set of maze problems. These investigators found that above average subjects preferred to have above average competitors and average subjects preferred to have average competitors, thus supporting the similarity hypothesis. However, below average subjects preferred average competitors as much as similar below average competitors, a result that suggests that the similarity hypothesis may not apply to below average performers. One possible explanation for the below average subjects' preferences may be that they did not believe that their initial score reflected their true ability. That is, subjects might have thought that since this was their first experience with the task that they needed some practice. With practice they might improve on future trials and thus reach an average level of performance.

The present paper reports the results of two studies that were conducted to determine: (1) if the results for below average performers reported by Miller and Suls (1977) are reliable and, (2) if so, whether beliefs about practice improving performance underlie the effect. In Experiment 1 subjects received feedback that their performance was "below average." One-third of the subjects were told that practice improves performance, one-third were told that practice does not improve performance, and the remaining third were given no information regarding the effects of practice. It was expected that if the belief that practice improves performance mediates competitor choices, then subjects who are told practice helps and subjects told nothing about practice (but may assume practice has a positive effect) should show equal preference for average and below average opponents. In contrast, subjects told

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practice does not help should prefer similar below average opponents.

EXPERIMENT 1

Method

Subjects. Ninety female undergraduates served as subjects in partial fulfillment of their introductory psychology requirement. Of these subjects, seven were deleted from the data analysis due to reported suspiciousness. All subjects were run in groups of six to nine persons.

Procedure. The subjects were told that they would be taking a test of insight in problem solving. The experimenter told the subjects that the ability measured by this test was not related to IQ, age, or education. Subjects received a test booklet and read cover sheet instructions along with the experimenter. They were instructed that they were to solve a series of 16 paper and pencil mazes. Subjects were told that practice helps, that practice does not help, or no mention was made of practice effects. On a blackboard the experimenter worked through two sample mazes with the entire group. Subjects were then escorted to individual cubicles to take the actual test (which lasted 15 min). After the testing period, the experimenter "corrected" the test with a key in the subject's presence. To add credibility to this procedure, the experimenter referred periodically to what appeared to be a scoring key and a set of norms.

After all answer sheets had been "corrected," the experimenter explained that the second half of the experiment was to be one-on-one competition using poster-size mazes. The competition was to follow immediately in a room down the hall with extra experiment-participation time credit as an incentive for success. Subjects were told that before competing they could have their results of the maze test and exercise some choice of the opponent with whom they were to compete. The experimenter told each subject her "score was 14. That is below average compared to other students at this university." If the subject inquired further about the score, the experimenter explained that a "14" represented her score total, that some items were given more weight and that credit was given for partial solutions. Each subject was then given a form containing several 9-point Likert scales to indicate preferences from 9 ("very much prefer") to 1 ("very much not prefer") for an above average, average, and below average opponent, along with manipulation checks. Once all subjects had completed the forms, they were completely debriefed and dismissed.

Results

Manipulation check. Subjects were asked to indicate how well they had performed the maze problems on a 9-point scale with "very poorly" (1) and "very well" (9) as endpoints. Subjects in the three groups indicated that they had performed poorly (practice helps condition, mean = 3.03; practice does not help, mean = 3.43; no mention, mean = 3.84). No difference between groups was found ($F < 1.0$).

Subjects were also asked to indicate the degree to which they thought practice would improve their performance. Analysis of variance indicated no significant effect ($F < 1.0$). Subjects in all three conditions indicated a belief that their performance would improve somewhat (practice helps, mean = 5.04; practice does not help, mean = 5.14; no mention, mean = 4.47). Thus, the practice manipulation appears to have been ineffective. Postexperimental interviews

suggested that the subjects forgot what the experimenter had said in the practice helps and practice does not help conditions. In any case, the ratings suggest that subjects in all three conditions believed that their performance would improve to some extent.

Opponent preferences. Even though the practice manipulation was ineffective, it was still possible to determine whether the opponent-preference pattern found in Miller and Suls (1977) was replicated. Table 1 shows the opponent-preference means for the three conditions. A 3 (practice instructions) by 3 (opponent's ability) analysis of variance was performed on the opponent ratings. The analysis indicated that there was a significant main effect for opponent ability [$F(2,160) = 22.68$, $p < .001$]. The effect of practice instructions was nonsignificant [$F(2,80) = 1.35$]. The opponent ability main effect indicated that the average (mean = 5.60) and below average (mean = 5.39) opponents were equally preferred compared to the above average opponents (mean = 2.92, $ps < .05$). These results replicate the opponent choices made by below average subjects in the study by Miller and Suls (1977). Therefore, it appears that the finding is reliable and that below average performers are as interested in competing with similar-ability opponents as opponents who are one level superior.

Supplementary analyses. As previously noted, subjects in all three groups reported that practice would improve their performance at least to some extent (mean = 4.87). To examine whether this belief was related to preferences for average opponents, three correlations were computed between subjects' responses to the practice question and their preference ratings for above average, average, and below average opponents. The correlation between the belief in practice and interest in a similar (below average) opponent was $-.23$ ($df = 81$, $p < .05$), indicating that the more the subject felt she would improve the less interest she had in a below average opponent. In contrast, the belief that practice would help correlated positively with interest in an average-ability opponent [$r(81) = +.276$, $p < .02$] and with interest in an above average opponent [$r(81) = .230$, $p < .05$]. The small though significant correlations suggest that the belief that one will improve encourages one to choose superior opponents for subsequent competition.

Table 1
Opponent Ratings as a Function of Opponent Ability Level
and Practice Instructions in Experiment 1

Opponent	Practice Helps			Mean
	Yes ($n = 25$)	No ($n = 28$)	No Mention ($n = 30$)	
Above Average	3.12	2.96	2.70	2.92
Average	5.52	5.43	5.83	5.60
Below Average	4.60	5.64	5.83	5.40

Note—Higher numbers represent greater preference.

It should be noted that while the correlations were small their pattern was generally consistent with the preference ratings. Subjects did not show more interest in an average opponent than a below average opponent, but rather approximately equal interest. Responses to the question about practice indicated that it was believed that practice would moderately improve one's performance. In a sense, the below average subjects were "hedging their bets" by indicating equal interest in both a similar-ability opponent and one ranked somewhat better.

EXPERIMENT 2

It has been suggested that poor performers show as much interest in average-ability opponents for future competition as in similar-ability (poor) opponents because they believe that their performance may improve somewhat. If this is the case, then the subject's perceived position within the below average category should be a critical factor for opponent choice. If one believes that one's first performance is near the bottom of the below average category, it seems unlikely that one would choose an average-ability opponent; practice may help but probably not sufficiently. However, if one initially performs near the middle of the below average category, then there is a stronger probability that one's performance will improve sufficiently to challenge an average-ability opponent. Therefore, it is predicted that "middle of the below average" subjects should show more interest in average-ability opponents than should "bottom of the below average" subjects. To test this hypothesis, subjects were given below average feedback and asked to choose opponents for a second set of trials. One half of the subjects were told they had scored near the bottom of the below average category; the other half were told they scored near the middle of the below average category.

Method

Subjects. Forty-five female undergraduates from the same subject pool as the subjects in Experiment 1 were used in Experiment 2. Of these subjects, seven were deleted from the data analysis due to reported suspiciousness. All subjects were run in groups of six to nine persons.

Procedure. The procedure for Experiment 2 was similar to that of Experiment 1 except in two respects. First, none of the subjects in Experiment 2 were told anything about practice effects (the no mention condition in Experiment 1). Second, there was a differential feedback variable in Experiment 2. One half of the subjects were told that their score of 14 was "in the bottom of the below average group compared to other students tested at the university" (BBA condition). The other half was told that their score (14) was "in the middle of the below average group compared to other students tested at the university" (MBA condition).

Results

Manipulation check. The analysis of the improvement ratings indicated no significant difference between the

BBA and MBA groups ($F < 1$). Both groups believed that they would improve to some extent (mean = 5.27 for the BBA condition; mean = 5.47 for the MBA condition). The analysis of the standing ratings indicated that BBA subjects perceived their position to be worse (mean = 1.9) than MBA subjects (mean = 5.6) [$F(1,28) = 48.56, p < .01$].

Opponent preferences. A 2 (BBA vs. MBA group) by 3 (preference for above average, below average, and average opponent) analysis of variance was conducted. A main effect for opponent's ability was significant [$F(2,56) = 4.04, p < .01$], which Duncan's multiple range tests indicated was due to the fact that average and below average opponents were more preferred than above average opponents ($ps < .05$). However, in each feedback condition, different trends were obtained (see Table 2). Orthogonal decomposition revealed a linear trend for BBA feedback subjects; they preferred a below average opponent most, then an average opponent, and least preferred an above average opponent. The linear component was significant [$F(1,28) = 10.69, p < .01$]. The MBA subjects preferred average opponents most with below average and above average opponents preferred less. The quadratic nature of the preference pattern was significant by orthogonal decomposition [$F(1,28) = 14.52, p < .001$].

The results indicated that information of relative standing within the below average feedback condition elicited different opponent preferences from the subjects. The BBA subjects most preferred competing against other subjects who scored in the bottom of the below average group. However, in Experiment 1, below average performers did not make a distinction between preferences for similar below average opponents and average opponents. The most likely reason for the results of Experiment 2 is that the BBA subjects' perception of their being at the bottom led them to think that whatever improvement they would make would not be sufficient to challenge an average opponent.

The preferences of the "middle" performers were highest for average opponents. These results suggest that MBA subjects felt that their performance would improve sufficiently to challenge an average opponent. Since the MBA subjects were closer in ability to average opponents than were BBA subjects, less improvement was probably perceived to be necessary to challenge an average opponent.

Table 2
Opponent Preferences as a Function of Feedback
and Position in Experiment 2

	Bottom (n = 15)	Middle (n = 15)
Above Average	2.933	4.400
Average	4.533	5.867
Below Average	5.600	4.533

Note—Higher numbers represent greater preference.

Correlations for both feedback groups were computed between subjects' opponent preferences and their belief that their performance would improve the next time they took the maze test. The only significant correlation was found for the ratings of the MBA feedback group. The correlation indicated that preferences for the average opponent were positively related to a belief that performance would improve [$r(13) = +.558$]. The correlation suggests that the subjects' expectation that they would improve prompted their interest in competing with an average opponent.

DISCUSSION

The results of Experiments 1 and 2 as well as those of an earlier study (Miller & Suls, 1977) suggest that below average performers show a stronger preference for average opponents than would be predicted by the similarity hypothesis. It has been proposed that this stems from the below average performers' expectation that they will improve sufficiently on later occasions to attain an average level of performance. While it remains to be determined whether this effect generalizes to other tasks or abilities, the implication of the results is that below average individuals may risk competition with people who are currently better than themselves. Common observation suggests that this is frequently the case (e.g., younger children compete with older children; the disadvantaged compete with those who are more advantaged). It is presumed in the present analysis that the tendency to upwardly compete is mediated by the belief that one's performance will improve. This belief may accurately apply to some tasks, but of course not to all.

We speculate, however, that the belief may be held even in the face of disconfirming evidence. If one accepts Festinger's (1954) unidirectional drive upward hypothesis that the individual strives to do better and better, it is probably necessary to believe that improvement is possible. This may be an especially important belief for those who have performed poorly. In such cases, the ability similarity hypothesis may not apply as indicated above.

One interesting aspect of the results is that there was no indication that subjects chose inferior individuals whom they could expect to beat easily as opponents. This occurred despite the fact that there was extra experimental credit offered as reward for success. A simple strategy to assure success would have been to pick someone of inferior ability. It would appear that only competition with similar others or higher ability others is gratifying for the individual.

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