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**RACIAL BIAS IN PEER RATINGS AT ROTC -
ADVANCED SUMMER CAMP,
FORT BRAGG, 1975**

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RACIAL BIAS IN PEER RATINGS AT ROTC ADVANCED SUMMER CAMP, FORT BRAGG, 1975

SUMMARY

✓ Black and white ROTC cadets attending summer camp made positive and negative leader preference ratings. Marked biases occurred based on race of rater and ratee, especially for black cadets. Black raters systematically overselected black cadets as most preferred leaders and, consequently, underselected whites as most preferred leaders. As a corollary, the black raters underselected blacks as least preferred leaders and overselected whites as least preferred leaders. White cadets tended to overselect whites as preferred leaders but did not discriminate on the basis of race for least preferred leader. Black cadets were more biased against whites than were white cadets towards blacks.

RACIAL BIAS IN PEER RATINGS AT ROTC ADVANCED SUMMER CAMP, FORT BRAGG, 1975

INTRODUCTION

Peer ratings have a long tradition of use in the military (for reviews, see Boulger and Coleman, 1964; Hollander, 1954). These ratings are assessment techniques in which each member of a group evaluates all other members of that group along some specified criterion. These evaluations can be made in the form of ratings, ranking, or nominations. The result is that each group member obtains some index of his success or failure along a given dimension as perceived by the other members of the peer group.

Typically, peer ratings assess leadership potential or leadership ability. Operationally, they have been used at the U.S. Military Academy (Haggerty, 1953; Tobin and Macrum 1967), at Officer Candidate School (Parrish and Drucker, 1957), and at Ranger School (Downey, 1976). They are valuable in selecting for promotion, for senior service college, and for duty assignment (Downey, Medland and Yates 1976; Medland, Yates, and Downey, 1974). Besides being predictive of future performance, these evaluations have high interrater reliability (Fiske, 1960; Hollander, 1957) and are valid (Bartlett, 1959; Doll and Longo, 1962).

Bias may influence the rating process, especially in groups including various minority members. One significant factor in peer ratings seems to be race. The rater's race may influence the allocation of choices for high nominations, especially if the rater is black. Most studies show that the black ratee has a higher than expected chance of being rated high by black raters, independent of behavioral attributes (Cox and Krumboltz, 1958; deJung and Kaplan, 1962). These findings are not unequivocal, however, since Schmidt and Johnson (1971) found no effects of race in peer evaluations for a group of black and white industrial managers who had just completed an intensive human relations training program.

The present investigation examines the effects of race on stated preferences for leaders. ROTC cadets selected other cadets they wanted as leaders and cadets they did not want as leaders. These positive and negative preference ratings were made during the 1975 annual summer camp, a six-week simulated military training exercise. Working groups, or squads, of 10 or 11 cadets, randomly chosen from the larger 44-man rating group, or platoon, existed for the duration of the camp. It was in these working groups that cadets trained during camp, and it was on the larger platoon-sized group that they based their choices for leader. Cadets were randomly assigned to the platoon and then to the squad, except that cadets from the same institution could not be assigned to the same platoon.

METHOD

SAMPLE

A total of 482 white and 124 black cadets nominated others as most and least preferred leaders. These cadets comprised 14 different platoon-sized rating groups. Black cadets comprised approximately 20% of the entire sample. This figure ranged from 12% to 32% in individual rating groups. Cadets attending this summer camp came predominately from colleges in the first ROTC region.

PROCEDURES

Peer ratings were made during the fifth week of camp. From a list of all cadets in the platoon, raters made positive and negative preference choices. The instructions stated: "Considering all you know about each of your fellow cadets, select the 10 you would be most willing to serve under if one person from your platoon were placed in charge of your unit; select the 10 cadets you would be least willing to serve under". No cadet could nominate himself, and no cadet could choose the same cadet for both positive and negative preferences.

ANALYSIS

Frequencies of most and least preference ratings were dependent variables. The independent variables were race of the rater and race of the ratee.

RESULTS

Figure 1 presents the percent of positive, or high-preference, choices allocated to blacks by black and by white raters. The percent of positive choices given to whites by black and by white raters equals $1.00 - P$, where P equals the percent of ratings given to blacks by the respective rater group. These ratings indicate those cadets that other cadets preferred as leaders. Closed circles mark the expected percentage of positive choices blacks should have received if raters were unbiased. According to this equal-probability model, the percent of blacks preferred should equal the percent that they represented in each group, and the mean expected rating should reflect the percent of blacks over all rating groups. Deviations from these points indicate rater bias.

¹ The authors would like to thank Clark Bailey for his assistance in the collection of the data. Also, thanks are due Beatrice Farr and Nora Kinzer for valuable comments.

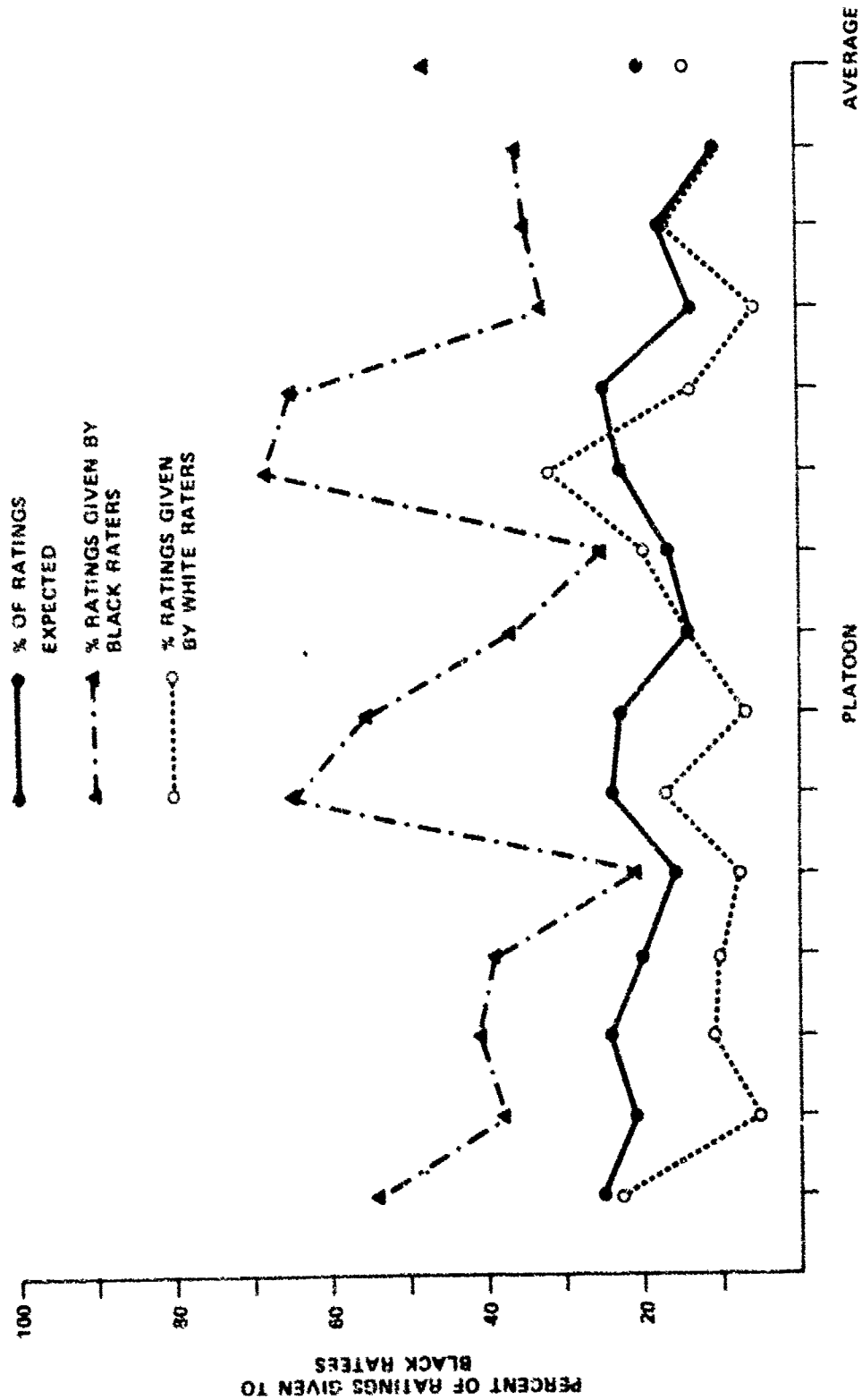


Figure 1. Percent of High Ratings Given to Black Ratees by Black and White Raters

It is clear from Figure 1 that black raters consistently preferred blacks as leaders. Over all rating groups sampled, blacks chose other blacks as leaders 47% of the time, compared to an expected rate of 20%. On the average, whites chose blacks as leaders 14% of the time, compared to an expected rate of 20%. Since $1.00 - P$ indicates the percent of ratings given white cadets by the respective rating group, it is easily seen that blacks chose fewer white cadets for leaders than expected (53% compared to an expected level of 80%), while whites only slightly over-preferred white cadets as leaders (86% compared to a predicted rate of 80%).

Figure 2 presents the percent of negative, or least-preferred, choices of cadets for leader allocated to blacks by black and by white raters. The percent of negative ratings given to whites by black and by white raters equals $1.00 - P$, where P is the percent of ratings given to blacks by the appropriate rater group. These ratings indicate those cadets others did not want as leaders. Closed circles mark the expected percentage of negative choices blacks should have received if raters were unbiased. Deviations from these points indicate rater bias.

Figure 2 illustrates that blacks consistently allocated fewer choices than expected to blacks as least preferred leaders. That is, they infrequently chose a black as someone they would not want as their leader. Across the groups sampled, the average rate of choosing blacks as least preferred leaders was 6%, compared to an expected rate of 20%. The extent to which white raters allocated negative choices for blacks as leaders was close to the predicted rate, 19% compared to the expected rate of 20%. Black raters chose whites as least preferred leaders more frequently than predicted, 9% compared to an expected rate of 80%, and white cadets again approximated the expected rate of negative choices for blacks as leaders, choosing them 81% of the time.

DISCUSSION

The present results indicate that bias influenced ROTC cadets' preferences for leaders. This bias was especially marked for black cadets, who consistently preferred other blacks as their leaders. While white cadets also tended to prefer same-race cadets as their leaders, it was to a lesser extent.

These results support previous work showing bias in peer ratings as a function of race (Cox and Krumboltz, 1958; deJung and Kanlan, 1962) and extends those findings in one important way. Whereas previous work involved assessment of leadership potential, the current work dealt with designating leader preference. Cadets selected other cadets based on instructions emphasizing personal preferences in leader selection (i.e., "...who you would be most willing to serve under..."), rather than an evaluation of leadership potential. Conceptually, preference and potential are independent dimensions. However, under certain conditions, these dimensions may be correlated. Assuming normal distributions for both preference and potential, rating criteria may overlap. In other words, there are some

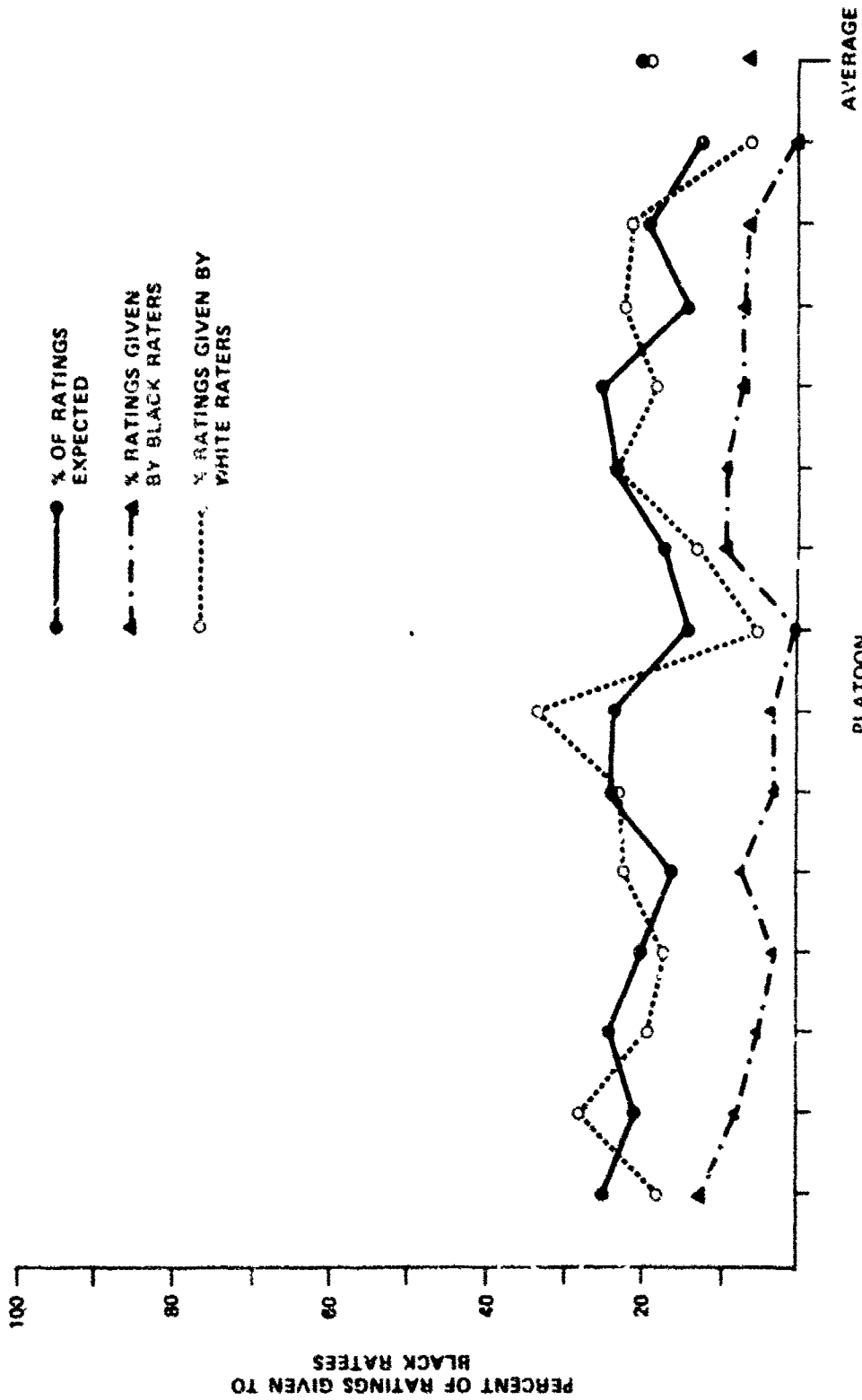


Figure 2. Percent of low Ratings Given to Black Rates by Black and White Rates

circumstances under which a rater may prefer as a leader one who also displays great potential. Conversely, under some circumstances, a preferred leader may not be rated high on leadership potential.

These findings are preliminary. Currently, other research into possible bias of peer ratings is under way. However, present results indicating bias in racially heterogeneous groups calls into question the validity and reliability of peer ratings as assessment techniques in such groups. That peer ratings are valid and reliable for white males has been amply demonstrated in previous work (e.g., Bartlett, 1959; Doll and Longo, 1962; Fiske, 1960; Hollander, 1957). These issues must now be empirically addressed in racially mixed groups as well.

REFERENCES

Bartlett, C. J. The relationship between self-ratings and peer ratings on leadership behavior scale. Personnel Psychology, 1959, 12, 237-246.

Boulger, J. R., and Coleman, J. Research findings with peer ratings. Research Note No. 8. Washington, D.C.: Peace Corps, Division of Research, 1964.

Cox, J. A., and Krumboltz, J. D. Racial bias in peer ratings of basic airmen. Sociometry, 1958, 21, 292-299.

deJung, J. E., and Kaplan, H. Some differential effects of race of rater and ratee on early peer ratings of combat aptitude. Journal of Applied Psychology, 1962, 46, 370-374.

Doll, R. E., and Longo, A. A. Improving the predictive effectiveness of peer ratings. Personnel Psychology, 1962, 15, 215-220.

Downey, R. G. Associate Nominations in the U.S. Army officer training environment: The Ranger Course. ARI Research Problem Review 76-8, September 1976 (in press).

Downey, R. G., Medland, F. F., and Yates, L. G. Evaluation of a peer rating system for predicting subsequent promotion of senior military officers. Journal of Applied Psychology, 1976, 61, 206-209.

Fiske, D. W. Variability among peer ratings in different situations. Educational Psychological Measurement, 1960, 20, 283-290.

Haggerty, H. R. Personnel research for the United States Military Academy, 1942-1953. ARI Technical Research Report 1077. October 1953.

Hollander, E. P. Buddy ratings: Military research and industrial implications. Personnel Psychology, 1954, 7, 385-393.

Hollander, E. P. The reliability of peer nominations under various conditions of administration. Journal of Applied Psychology, 1957, 41, 85-90.

Medland, F. F., Yates, L. G., and Downey, R. G. Associate ratings of senior officer potential. ARI Research Problem Review 74-2, June 1974.

Parrish, J. A., and Drucker, A. J. Personnel research for Officer Candidate School. ARI Research Report 1107. November 1957.

Schmidt, F. L., and Johnson, R. H. Effect of race on peer ratings in an industrial situation. Journal of Applied Psychology, 1971, 57, 237-241.

Tobin, D. J., and Macrum, R. H. Leadership evaluation. Research Report. West Point, New York: U.S. Military Academy, 1967.