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Working Paper Series A

Organizational Behavior

Time Series Evaluation of Race Relations
  Improvement

Clayton P. Alderfer

Working Paper # 72

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20. ABSTRACT (Continue on reverse side if necessary and identify by block number)

This report describes the results of observing a variety of measures over an eleven year period to determine whether the race relations improvement program was associated with changes in perceived racism, mobility patterns, and the portrayal of black and white people in corporate publications. The findings indicate that white people perceive more racism, that blacks and white women have experienced notable upward mobility in the corporation, and that no change has occurred in how blacks and whites appear in corporate publications.

TIME SERIES EVALUATION OF RACE RELATIONS IMPROVEMENT

Clayton P. Alderfer

Robert C. Tucker

The corporate race relations improvement program began in 1976 with the hiring of a team of black and white consultants to carry out a diagnosis of race relations in management (Alderfer, Alderfer, Tucker, and Tucker, 1980). In the years following, the diagnosis was fed back to the organization; an action plan for improving race relations was accepted by the corporation; and a series of planned social interventions was undertaken (Alderfer, Tucker, Alderfer, and Tucker, 1985; Alderfer and Tucker, 1985; and Alderfer, Alderfer, Tucker, and Tucker, 1985). As the evaluation is underway, the program itself continues. The corporation cooperated not only with the program but also in this assessment of the processes and outcomes connected with the project.

Assessment begins two years prior to the start of the program and carrys through until 1984 and uses three classes of indicators. First, from the program itself, we have developed a scale for measuring perceived racism (Alderfer, Tucker, Alderfer, and Tucker, 1985; Alderfer, Alderfer, Tucker and Tucker, 1985). This scale was included as part of the original diagnosis, given to individuals who received feedback from the diagnostic study, administered over time to members of the race relations advisory group, and contained in the evaluation questionnaire given to participants after the race relations competence workshops. Second, from the corporate archives, we obtained information about the number and distribution of black and white managers by hierarchical level, functional division, and personnel committee

membership. Third, company records also permitted coding the weekly newspaper and the annual report for how black and white people were represented. In addition, we also include a qualitative discussion of other factors associated with the project that seem essential to understanding the results.

Perceived Racism Comparisons

In constructing the perceived racism scale, we attempted to do what was possible to reduce response bias. Although the items included in the scale were taken from the original diagnostic instrument, they were never included in any written or oral reports about the study. A member of the organization, therefore, did not have an opportunity to recall the "right" or "wrong" answers based on reading or remembering. The first time that the items in the perceived racism scale are being publicly discussed is in this series of reports.

Table 1 presents mean comparisons among the diagnosis, feedback, and workshop for black men, black women, white men, and white women. Each race-gender group shows significant differences among the three conditions. In terms of pairwise comparisons, the diagnosis measures are significantly different from the feedback and the workshop, but the latter two are not significantly different from one another. Omega squared statistics are larger for the white groups than for the black groups, and white women show the largest omega squared of any group.

Table 2 compares only the diagnosis and the workshop by using the same statistics as Table 1. In this instance there are significant differences for black women, white men, and white women but not for black men. Again, white women show the largest omega squared.

Table 3 compares the diagnosis and the workshop for groups defined by race and job level. In this instance, there are no significant differences in the perception of racism for blacks at either of the job levels where there were enough people to make a meaningful comparison. All three white groups, on the other hand, show a significantly higher perception of racism after the workshop than during the diagnosis.

The first question to ask about the material shown in Tables 1, 2, and 3 is whether the observed differences may be reasonably interpretted as evidence of change. Data obtained during the diagnosis were based on a random sample of managers in the corporation, but people decidedly did not attend feedback meetings or workshop sessions on a random basis. In the early phases of the workshop program, the personnel department invited specific persons to attend because of their positions as senior managers or because they played important roles in determining promotions. Later in the sequence, volunteers were accepted into the workshops. We, therefore, do not have experimental comparisons in the data presented above. Perhaps the people—especially the whites—who attended were disproporationately those who already perceived racist dynamics in the organization.

Without a true experimental design, we cannot rule out selection bias as an explanation for the observed differences. On the other hand, there are a number of observations that suggest change was occurring. Figure 1 reproduces material originally contained in the analysis of the race relations advisory group (Alderfer, Tucker, Alderfer, and Tucker, 1985). These results show statistically significant evidence of change over time for white people--and especially for white women. Members of the advisory group most certainly were not selected at random. They were in part volunteers and in part people invited because of their position in the organization or because of their points of view about race. Moreover, the workshop was designed to reproduce for others in an efficient manner the kinds of learning experiences that members of the advisory group had had. We, therefore, believe that it is reasonable--though by no means absolutely certain--to conclude that white women who attended the race relations workshop increased their perception of racism in the organization, that white men also changed somewhat in the same direction, and that black men and black women changed little, if at all.

There are many fewer reasons to conclude that similar change occurred as a result of the feedback sessions. For these events, attendance was completely voluntary, and the activities lasted only two hours. Measurement occurred at the conclusion of the meeting, not four weeks later. The purpose of the sessions was simply to report findings--not to provide learning about the

basic dynamics of race relations. We are inclined to believe that the differences in perceived racism say much more about the participants' perceptions in advance of the meeting than about what they learned from the meetings.

A second question to ask about the findings pertains to underlying mechanisms that might help explain the change. Table 4 shows product moment correlations between the perceived racism scale and a single item, "I am prejudiced." In all cases the associations are positive, and, in five of six instances, the results meet normally acceptable levels of statistical significance. The findings imply that the more a person is likely to perceive systemic racism, the more he or she is able to acknowledge her or his own racial bias. The meaning of these associations is likely to be different for blacks and whites, however. For blacks, the connection between the two forms of perception reflects an awareness of the decision to continue working in a setting that is in some significant measure unfair to one's own racial group. To be prejudiced in this context is to favor one's own racial group in response to the oppression of the system. For whites, the connection between the two forms of perception is to accept that one's own group is causing the racial forces that result in black people being treated unfairly.

Finally, there is the consistent tendency for white women to show more evidence of changing their perception of racism than white men. We suggest that this pattern has at least two components. Within the organization, white women faced similar

biases about their overall value and upward mobility potential as
blacks. From living experience, they had personal knowledge of
collective forces limiting their group. In addition, we believe
that there is also a modal personality component to the apparent
white male-white female differences in the perception of racism.
Spence and Helmreich (1978), pp. 58 ff.) show that women tend to
have higher empathy toward others' emotional states than men.
Since the effects of racism do generate strong feelings, cne
would expect women to perceive these effects more readily than
men. In noting these white male and white female differences,
however, we also want to be clear about what they are not as well
as what they are. Perceiving sexism is <u>not</u> equivalent to
perceiving racism. Throughout the project, our consistent
finding has been that white women perceive racial dynamics far
more similarly to white men than to black women or to black men.
The important difference between white men and white women is
in their receptivity to change--not in their initial condition.
Although white women and white men have similar beginning
attitudes about race, white women seem to be more ready to change
their perceptions of racism than white men.

Patterns of Mobility

Information about mobility among managers was made available
from corporate archives. We were able to obtain records of the
number of black men, black women, white men, white women, and
other groups in various corporate positions from 1974 through

1984. This information is tabulated in a series of paired Tables 5-20. In each pair, the first table contains the actual number of people and the percentage of total managers represented by each group. The second table in each set consists of two indices that measure the ratio of how the group is changing in relation to itself in 1974 and in relation to the total population of managers in each year. More specifically, the first index in each column is the ratio of managers in that group for that year divided by the number of managers in that group in 1974. The second index in each column (shown in parentheses) is the index in the first column divided by the index in the total column. The index in the total column is the ratio of total managers in any year to the total number of managers in 1974. Thus, the second index corrects the first index for the overall change in the size of the corporate pool of managers. We believe that the second index is the best overall indicator of change over the period of observation--provided that one also remains conscious of the total number of people involved and of the proportion of the total group that each race gender group represents. We shall now discuss each of the measures in relation to Tables 5 and 6, which report the annual total distribution of managers for each race-gender group.

In 1974, white men constituted 2274 managers, or 73% of the total pool of 3120 managers in the corporation. In 1984, white men consisted of 2249 managers, or 61% of 3673 managers in the corporation. The index comparing white men in 1984 to white men

in 1974 is 0.99--indicating virtually no change in absolute
number. The index comparing white men in 1984 to white men in
1974, correcting for change in the overall size of the management
population is 0.84--indicating that the white male proportion of
management changed at approximately 16% slower rate than the
total corps of managers. We provide an analogous account of the
change in black women managers from 1974 to 1984. In 1974, black
women constituted 41 managers, or slightly over 1% of the total
pool of 3120 managers in the corporation. In 1984, black women
consisted of 134 managers, or 4% of the 3673 managers in the
corporation. The index comparing black women in 1984 to black
women in 1974 is 3.27--indicating more than a 300% increase. The
index comparing black women in 1984 to black women in 1974,
correcting for change in the overall size of the management
population, is 2.77--indicating that the black female proportion
of management increased at approximately 2.77 times faster than
the total corps of managers.

Figure 2 plots the overall indices of change for the four
race-gender groups over the period from 1974 to 1984. The
general pattern is for black women, black men, and white women to
increase their proportions of total managers more rapidly than
the overall size of the management force and for white men to
decrease their proportion of total managers. The most dramatic
rate of change is for black women. The period from 1974 through
1979, except for 1975, was a period of consistent growth for the
corporation, while the period from 1980 onward was characterized

by a combination of decline and leveling off in the number of
total managers. The rate of increase for black men and white
women seemed to be affected by the overall pattern, while the
pace of change for black women during this period seemed unaf-
fected.

Two additional questions arise in connection with the change
in distribution of management positions among members of the
various race-gender groups. First, how do these patterns relate
to different locations in the management hierarchy? Second, how
are the race-gender groups distributed among functional divisions
in the corporation? If patterns normally expected in pre-
dominantly white organizations were followed, then one would find
blacks and white women primarily at lower management levels and
in staff assignments. If the altered mobility patterns were
affecting the entire corporation, then one would find changes in
the middle and upper levels of the corporation and in all major
functional groupings.

Data relevant to the hierarchical distribution of managers
from the various race and gender groups are found in Tables
7-12. For purposes of these analyses, the hierarchy was divided
into three steps: level 1, levels 2 and 3, and levels 4 and
above. At level 1, the period of most rapid increase for black
men and white women was between 1974 and 1980. After that these
groups did not substantially increase their proportion of first
level managers. Black women showed a consistent increase in
their proportion of first level managers throughout the entire

period of observation, and white men showed a consistent pattern

of decreasing their proportion of first level managers during

this time. Movement into the middle levels of management during

this period also occurred for white women, black men, and black

women. The most dramatic changes occurred between 1974 and 1980

for black men and white women. During 1981 and 1982, these

groups stabilized their proportions of middle management; then in

1983 and 1984, they began to increase their share of middle

management positions. Black women, on the other hand, consis-

tently increased their proportion of middle management positions

throughout the period. Figure 3 shows these results graph-

ically. Evidence also indicates that the pattern of movement

carries upward to levels 4 and above, although here the numbers

are small both for the total cadre and for the subgroups.

Data relevant to the functional distribution of the race and

gender groups are found in Tables 13-20. Because the corporation

underwent several organization changes during the period of

observation, in consultation with key managers, we established

four divisional groups that could be meaningful used to compare

the distribution of race and gender groups over the eleven year

period. The names of these groups are central staff, information

systems, operations staff, and operations field. Central staff

consists of the staff groups located at corporate headquarters

and includes those units, such as personnel and public relations,

where white women and blacks have been traditionally "placed" by

predominantly white corporations. Information systems is the

corporation's computer group. This unit grew substantially over the observation period and might be expected to be a place where innovative practices might be readily found. Operations staff consists of the departments that provide assistance to those engaged in the corporation's primary task in the field. Finally, operations field is the largest unit, which is made up of those people who do the work that directly brings income to the corporation. Within the corporation, this is part of the business reputed to be the hardest for white women and blacks to enter. Observing the degrees of change in mobility across these four divisions, one finds little that is consistent with normal expectations about a predominantly white system. Central staff, for example, has a net reduction in proportion of black men (1984 index = 0.83), and operations field has the highest increase in the proportion of black women (1984 index = 4.73). On balance, the distribution of change among white women and blacks among the divisions seems well-balanced. To the extent that imbalances exist, they go counter to the patterns normally expected of a predominantly white corporation.

The final index of mobility in the corporation is membership on the system of personnel committees. These groups make the final decisions about who is promoted. Table 21 contains the distribution of race and gender group membership of these committees over the eleven years of the study. The pattern of these statistics is different than the overall mobility pat-terns. Among white women, the proportion of membership rises

consistently throughout the period--changing from two percent in 1974 to 33 percent in 1984. The proportion of black men and black women rises more slowly and less consistently--moving from zero in 1974 and 1975, to six percent in 1980, to 13 percent in 1984. During this entire period, the largest change in a single year for black representation on the committees was eight percent from 1983 to 1984. Meanwhile, the white male representation on the committees dropped from 98 percent in 1974 to 53 percent in 1984. Figure 4 shows these trends in graphic form.

Corporate Publications

As a final step in the time series assessment of change, we examined several corporate publications to see how black and white members of the corporation were portrayed. Analysis was a simple form of content coding. From the weekly corporate newspaper, we counted the proportions of pictures of members of the race and gender groups from inside and outside the organization. We also counted the proportion of feature articles devoted to members of each race and gender group. From the annual report, we counted the proportion of pictures from each racial group.

Table 22 shows the proportion of pictures in the corporate newspaper from each race and gender group throughout the period of study. These data show no evidence of significant change. One interesting observation is that the proportions of black men and black women from outside the corporation are consistently

higher than the proportions of those inside the corporation, and the proportions of white men and white women from inside the corporation are correspondingly higher than those from outside. Table 23 shows the proportion of feature articles about individuals from each race and gender group throughout the eleven year period. Here again there is no identifiable pattern of change. Finally, Table 24 shows the proportions of photographs of black and white employees in the annual report during the observation period. Again, no pattern of change can be observed, except for 1984 when the percentage of black people jumped to 23 from the previous year of zero.

Explanatory Conditions

Overall, the assessment shows that two of three classes of indicators show evidence of desirable changes during the period of measurement. Our data suggest that white people in general, and white women in particular, tend to perceive more racism in the corporation as a result of participating in the race relations competence workshop than during the diagnosis. The data also show a consistent pattern of upward mobility for black managers and for white women over the eleven year period of observation. Except for the annual report during the last year of observation, the results show no evidence of changes in how the corporation portrays black and white people in its publications. Now we turn to a discussion of factors that help to explain why change occurred and why it didn't.

Throughout the project, senior management provided an unusually sophisticated and consistent form of support for the work. Beginning with the diagnosis, the chief executive officer provided written support through letters to all managers, oral endorsement by statements to other senior managers, and behavioral endorsement by way of participation in questionnaire sessions and the race relations competence workshop. During the eight year period when the project was underway, the managers assigned direct reponsibility for the undertaking were all people highly regarded by the corporation. At the time of this writing, four of the seven most senior managers in the corporation have played major roles in the project at some point in their careers. Members of the board of directors attended race relations competence workshops, and currently a date has been set for a short term form of the workshop to be conducted for the entire board. This kind of relationship development also allowed for dealing effectively with crises on the two occasions when they occurred in connection with the work (cf. Alderfer, Tucker, Alderfer, and Tucker, 1985).

The program itself had four crucial ingredients: the diagnosis, the race relations advisory group, the race relations competence workshop, and the upward mobility program. Each of these elements was designed and conducted through the cooperation of a race and gender balanced consulting team and the corporation's organization and management development staff. None of the parts was a standard intervention; all were uniquely designed

to reflect the concrete circumstance of the organization, to
engage the participation of members of the system, and to balance
black and white perspectives.

Creating and maintaining the race and gender balanced
consulting team was also a key element of the project. Simply
finding people who have the requisite professional competence and
the personal commitment to this kind of work is not an easy task.
Just assembling the people, however, is not enough. They should
be able to develop their own relationships in order to be able to
deal effectively with both the organizational and racial tensions
that are an inevitable part of the tasks. During the project,
the team changed its membership several times due to life and
career demands of the members. In total, the group had four
different black female members and two different black male
members. The white members of the team did not change. The
first black male member of the team left to become a member of
the organization, where he continued to have a major role in
connection with the project, although not as a consultant. In
retrospect, we believe the movement of a former consultant into
the organization greatly assisted the undertaking, although it
was associated with difficulties at the time of the transition
(Alderfer, Tucker, Alderfer, and Tucker, 1985).

Although our data suggest that attitude changes occurred and
demonstrate that mobility changes took place, they do not show
changes in the company's public documents. As it turns out, the
advisory group invested a very substantial proportion of its time

on this matter. At the time of this writing, a fully developed communications program about race relations is being worked through the organization. The long delays and tedious efforts reflect an underlying ambivalence in the system about how to portray race relations in printed documents. As part of this process, the change in the annual report from 1983 to 1984 is directly traceable to an advisory discussion on the matter and action by a member of the group who had responsibility for producing the report.

We believe that important and desirable changes were associated with project activities. Moreover, the period during which the changes occurred was decidedly not an easy time for the corporation. In addition to the race program, there were also changes in the corporate mission and a complete turnover in the senior leadership of the organization. In the external environment, the period from 1980 onward has not been a time when the federal government has been a force encouraging corporations to emphasize diversity among employees and managers. Thus, one could conclude that the changes we observed not only occurred but also took place in the face of adverse conditions. Nevertheless, these data were taken from intensive work with one organization. One must therefore recognize that without similar data from other systems, our capacity to be certain that this work identifies the major variables that explain the changes remains limited.

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FIGURE 1.

Race Relations Advisory Group Perceptions of Racism:

Race-Gender Subgroups Means by Date of Questionnaire Administration
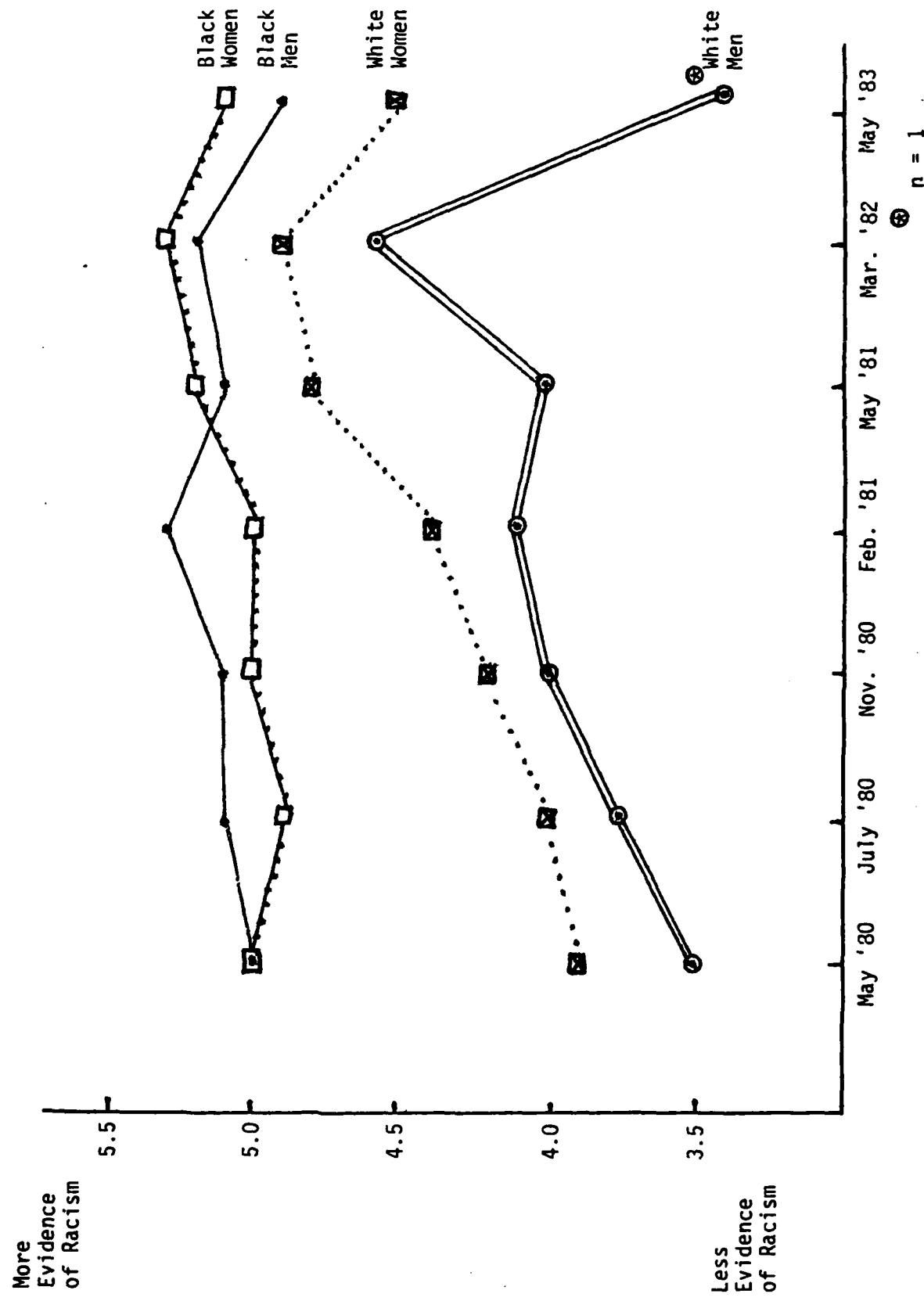
FIGURE 2. Changes in Proportions of Total Managers by Race and Gender
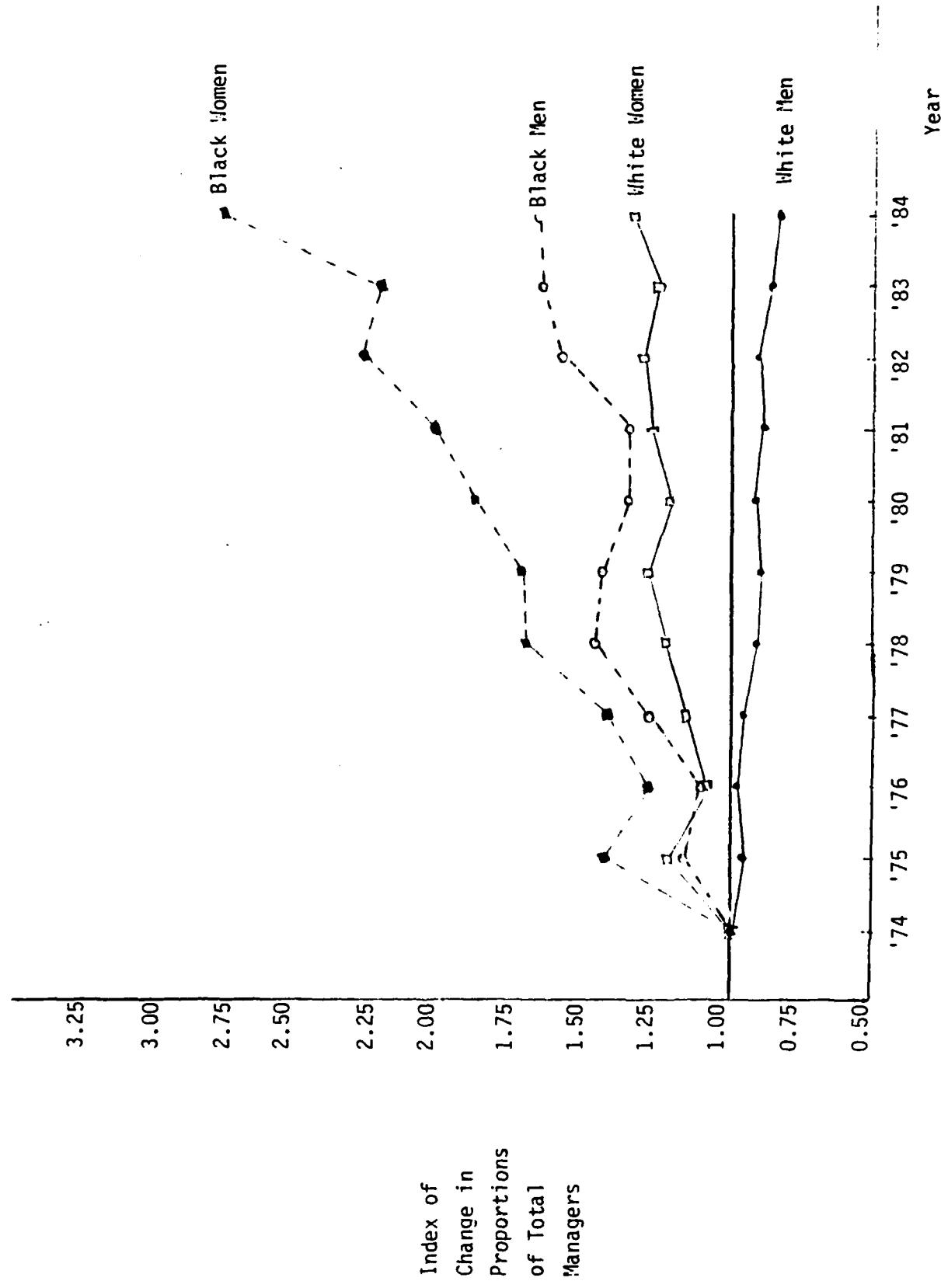
FIGURE 3. Changes in Proportions of Middle Managers by Race and Gender

Index of
Change in
Proportions
of Middle
Managers
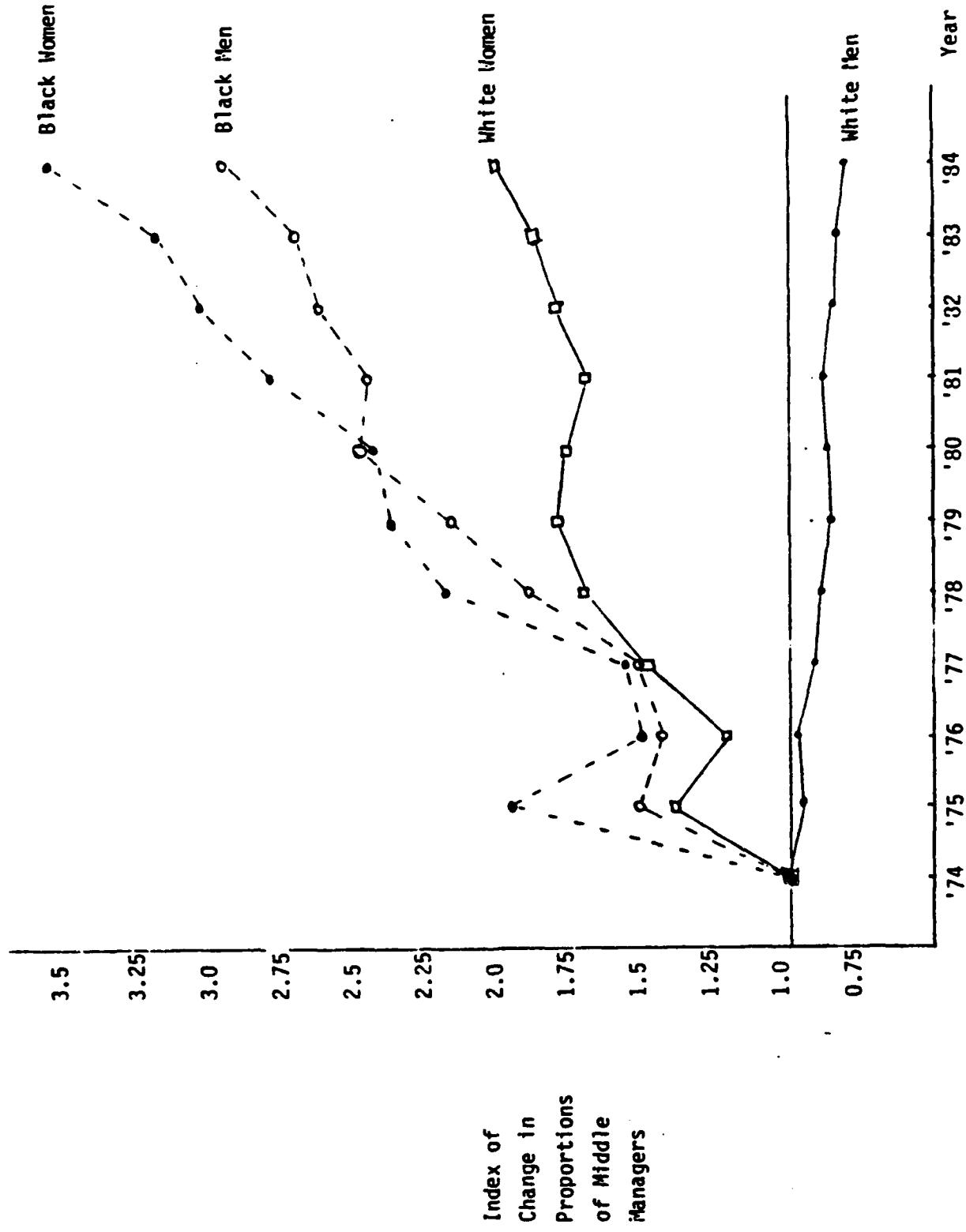
FIGURE 4. Changes in Proportions of Personnel Committee Membership by Race and Gender

White Men

White Women

Black Women
Black Men

Proportion
of
Personnel
Committee
Membership

Year

'74 '75 '76 '77 '78 '79 '80 '81 '82 '83 '84

0 10 20 30 40 50 60 70 80 90 100
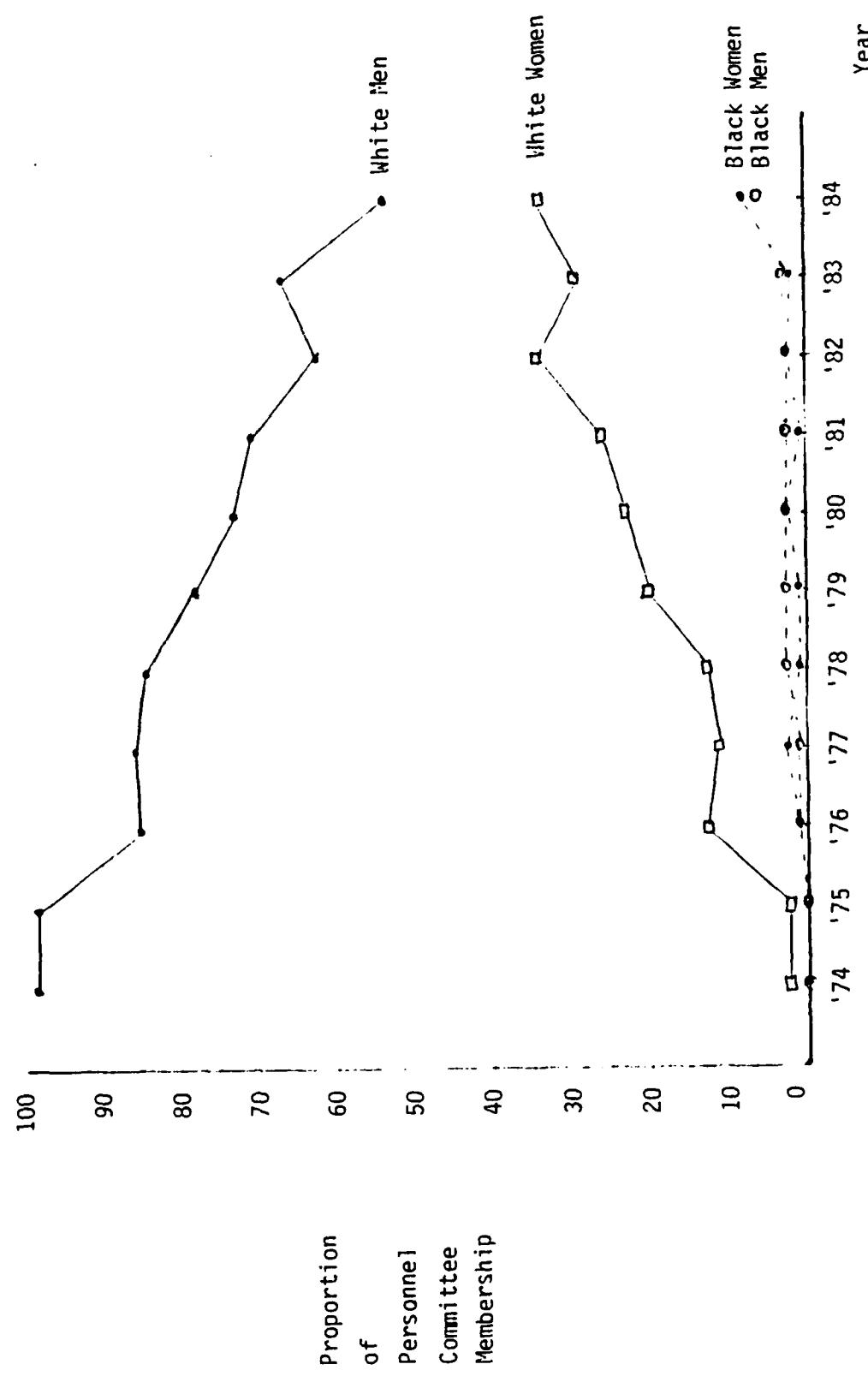
TABLE 1

Perceived Racism: Comparison Among Diagnosis, Feedback, and Workshop

	Diagnosis	Feedback	Workshop	F	p	w^2
Black Men	4.21 (n=61)	4.80 (n=32)	4.31 (n=33)	8.98	.0001	.05
Black Women	4.27 (n=72)	4.61 (n=40)	4.68 (n=34)	7.59	.001	.04
White Men	2.75 (n=335)	3.29 (n=73)	3.21 (n=116)	43.72	.0001	.07
White Women	2.80 (n=161)	3.52 (n=40)	3.40 (n=74)	30.86	.0001	.09

TABLE 2

Perceived Racism: Comparison Between Diagnosis and Workshop

	Diagnosis Mean	(n)	Workshop Mean	(n)	t	p	w^2
Black Men	4.21	(61)	4.31	(33)	0.69	n.s.	-
Black Women	4.28	(72)	4.68	(34)	3.23	.002	.09
White Men	2.75	(335)	3.21	(116)	7.61	.0001	.12
White Women	2.80	(161)	3.41	(74)	6.61	.0001	.17

TABLE 3

Perceived Racism: Comparison Between Diagnosis and Worskhop

	Diagnosis Mean	(n)	Workshop Mean	(n)	t	p	w^2
Blacks Level 1	4.25	(108)	4.38	(41)	1.16	n.s.	-
Blacks Level 2, Above	4.24	(25)	4.56	(19)	1.64	n.s.	-
Whites Level 1	2.73	(173)	3.26	(53)	5.88	.0001	.13
Whites Level 2	2.73	(171)	3.16	(64)	5.15	.0001	.10
Whites Level 3, Above	2.84	(150)	3.42	(53)	5.96	.0001	.15

TABLE 4

Correlations between Perceived Racism and "I am Prejudiced"

for Race Groups in Diagnosis and Feedback

	Diagnosis	Feedback	Workshop
Blacks	$.18$ ⊛ (n=133)	$.20^{n.s.}$ (n=72)	$.44$ ⊛⊛ (n=67)
Whites	$.10$ ⊛ (n=496)	$.31$ ⊛⊛ (n=133)	$.27$ ⊛⊛ (n=189)

⊛ $p < .05$

⊛⊛ $p < .001$

TABLE 5

Annual Distribution of All Managers by Race and Gender

Year	White Men	Black Men	White Women	Black Women	Other	Total
1974	2274 (73%)	45 (1%)	736 (24%)	41 (1%)	24 (.6%)	3120 (100%)
1975	1610 (67%)	40 (2%)	696 (29%)	45 (2%)	20 (.7%)	2411 (100%)
1976	2281 (71%)	51 (2%)	807 (25%)	54 (2%)	24 (1%)	3217 (100%)
1977	2468 (68%)	66 (2%)	979 (25%)	67 (2%)	38 (1%)	3618 (100%)
1978	2510 (66%)	81 (2%)	1077 (28%)	86 (2%)	46 (1%)	3802 (100%)
1979	2656 (64%)	87 (2%)	1233 (30%)	94 (2%)	51 (1%)	4121 (100%)
1980	2393 (66%)	72 (2%)	1055 (29%)	86 (2%)	46 (1%)	3652 (100%)
1981	2466 (64%)	76 (2%)	1141 (30%)	103 (3%)	50 (1%)	3836 (100%)
1982	2155 (64%)	75 (2%)	1002 (30%)	100 (3%)	47 (1%)	3379 (100%)
1983	2302 (64%)	86 (2%)	1066 (30%)	106 (3%)	51 (1%)	3611 (100%)
1984	2249 (61%)	88 (2%)	1143 (31%)	134 (4%)	59 (2%)	3673 (100%)

TABLE 6

Annual Distribution of All Managers by Race and Gender

Reported by Indices

Year	White Men	Black Men	White Women	Black Women	Other	Total
1974	1.0*(1.0)**	1.0 (1.0)	1.0 (1.0)	1.0 (1.0)	1.0 (1.0)	1.0
1975	.71 (.92)	.89 (1.16)	.95 (1.23)	1.1 (1.43)	.85 (1.10)	.77
1976	1.0 (.97)	1.13 (1.10)	1.10 (1.07)	1.32 (1.28)	1.10 (1.07)	1.03
1977	1.08 (.93)	1.47 (1.27)	1.33 (1.15)	1.63 (1.41)	1.80 (1.55)	1.16
1978	1.10 (.90)	1.80 (1.48)	1.46 (1.20)	2.10 (1.72)	2.20 (1.80)	1.22
1979	1.17 (.89)	1.93 (1.46)	1.68 (1.27)	2.29 (1.73)	2.45 (1.85)	1.32
1980	1.05 (.90)	1.60 (1.37)	1.43 (1.22)	2.10 (1.88)	2.20 (1.88)	1.17
1981	1.08 (.88)	1.69 (1.37)	1.55 (1.26)	2.51 (2.04)	2.45 (1.99)	1.23
1982	.95 (.90)	1.67 (1.58)	1.36 (1.28)	2.44 (2.30)	2.35 (2.22)	1.06
1983	1.01 (.87)	1.91 (1.65)	1.45 (1.25)	2.59 (2.23)	2.13 (1.84)	1.16
1984	.99 (.84)	1.96 (1.66)	1.55 (1.31)	3.27 (2.77)	2.46 (2.08)	1.18

*1974 is base year

**Correction for Total Number of Managers

These procedures are used in all subsequent tables that employ indices.

TABLE 7

Annual Distribution of Managers at Level 1 by Race and Gender

Year	White Men	Black Men	White Women	Black Women	Other	Total
1974	1343 (66%)	36 (02%)	615 (30%)	36 (02%)	16 (01%)	2046
1975	953 (59%)	30 (02%)	571 (35%)	38 (02%)	14 (01%)	1606
1976	1341 (64%)	38 (02%)	649 (31%)	46 (02%)	14 (01%)	2088
1977	1505 (62%)	51 (02%)	775 (32%)	58 (02%)	25 (01%)	2414
1978	1552 (61%)	62 (02%)	829 (33%)	73 (03%)	32 (01%)	2548
1979	1644 (59%)	64 (02%)	954 (34%)	79 (03%)	39 (01%)	2780
1980	1475 (60%)	49 (02%)	808 (33%)	72 (03%)	33 (01%)	2437
1981	1503 (59%)	50 (02%)	891 (35%)	86 (03%)	35 (01%)	2565
1982	1280 (58%)	48 (02%)	752 (34%)	82 (04%)	33 (02%)	2195
1983	1363 (58%)	56 (02%)	789 (34%)	86 (04%)	44 (02%)	2338
1984	1348 (56%)	55 (02%)	839 (35%)	110 (05%)	39 (02%)	2391

TABLE 8

Annual Distribution of Managers at Level 1 by Race and Gender

Reported by Indices

Year	White Men	Black Men	White Women	Black Women	Other	Total
1974	1.0 (1.00)	1.0 (1.00)	1.0 (1.00)	1.0 (1.00)	1.0 (1.00)	1.0
1975	.71 (.91)	.83 (1.06)	.93 (1.19)	1.06 (1.36)	.88 (1.13)	.78
1976	1.0 (.98)	1.06 (1.04)	1.06 (1.04)	1.28 (1.25)	.88 (.86)	1.02
1977	1.12 (.95)	1.42 (1.20)	1.26 (1.07)	1.61 (1.36)	1.56 (1.32)	1.18
1978	1.16 (.93)	1.72 (1.38)	1.35 (1.08)	2.03 (1.62)	2.0 (1.60)	1.25
1979	1.22 (.90)	1.78 (1.31)	1.55 (1.14)	2.19 (1.61)	2.44 (1.79)	1.36
1980	1.10 (.92)	1.36 (1.14)	1.31 (1.10)	2.0 (1.68)	2.06 (1.73)	1.19
1981	1.12 (.90)	1.39 (1.11)	1.45 (1.16)	2.39 (1.91)	2.19 (1.75)	1.25
1982	.95 (.89)	1.35 (1.26)	1.22 (1.19)	2.28 (2.13)	2.06 (1.93)	1.07
1983	1.01 (.96)	1.56 (1.37)	1.28 (1.12)	2.39 (2.10)	2.75 (2.41)	1.14
1984	1.00 (.85)	1.53 (1.31)	1.36 (1.16)	3.06 (2.62)	2.44 (2.05)	1.17

TABLE 9

Annual Distribution of Managers
at Levels 2 and 3 by Race and Gender

	White Men		Black Men		White Women		Black Women		Other		TOTAL
	n	%	n	%	n	%	n	%	n	%	
1974	853	(86)	8	(1)	120	(12)	5	(1)	8	(1)	994
1975	581	(80)	9	(1)	123	(17)	7	(1)	6	(1)	726
1976	863	(82)	12	(1)	157	(15)	8	(1)	10	(1)	1050
1977	885	(79)	14	(1)	203	(18)	9	(1)	13	(1)	1124
1978	885	(75)	18	(2)	245	(21)	13	(1)	14	(1)	1175
1979	933	(74)	22	(2)	275	(22)	15	(1)	12	(1)	1257
1980	850	(74)	23	(2)	243	(21)	14	(1)	13	(1)	1143
1981	903	(75)	24	(2)	247	(20)	17	(1)	15	(1)	1206
1982	810	(73)	24	(2)	246	(22)	17	(1)	14	(1)	1111
1983	849	(72)	26	(2)	269	(23)	19	(2)	18	(1)	1181
1984	847	(70)	29	(2)	297	(24)	22	(2)	20	(2)	1215

TABLE 10

Annual Distribution of Managers
at Levels 2 and 3 by Race and Gender
Reported by Indices

	White Men	Black Men	White Women	Black Women	Other	TOTAL
1974	1.00 (1.00)	1.00 (1.00)	1.00 (1.00)	1.00 (1.00)	1.00 (1.00)	1.00
1975	0.68 (0.93)	1.12 (1.53)	1.01 (1.40)	1.40 (1.92)	0.75 (1.03)	0.73
1976	1.01 (0.95)	1.50 (1.41)	1.31 (1.24)	1.60 (1.51)	1.25 (1.18)	1.06
1977	1.04 (0.92)	1.75 (1.55)	1.69 (1.50)	1.80 (1.59)	1.62 (1.43)	1.13
1978	1.04 (0.88)	2.25 (1.91)	2.04 (1.73)	2.60 (2.20)	1.75 (1.48)	1.18
1979	1.09 (0.86)	2.75 (2.18)	2.29 (1.82)	3.00 (2.38)	1.50 (1.19)	1.26
1980	1.00 (0.87)	2.88 (2.50)	2.02 (1.76)	2.80 (2.43)	1.62 (1.41)	1.15
1981	1.06 (0.88)	3.00 (2.48)	2.06 (1.70)	3.40 (2.81)	1.88 (1.55)	1.21
1982	0.95 (0.85)	3.00 (2.68)	2.05 (1.83)	3.40 (3.04)	1.75 (1.56)	1.12
1983	1.00 (0.84)	3.25 (2.73)	2.24 (1.88)	3.80 (3.19)	2.25 (1.89)	1.19
1984	0.99 (0.82)	3.62 (2.96)	2.48 (2.03)	4.40 (3.60)	2.50 (2.05)	1.22

TABLE 11

Annual Distribution of Managers at
Level 4 and Above by Race and Gender

	White Men		Black Men		White Women		Black Women		Other		TOTAL
	n	%	n	%	n	%	n	%	n	%	
1974	81	(98)	1	(01)	1	(01)	0	(0)	0	(0)	83
1975	77	(96)	1	(01)	2	(02)	0	(0)	0	(0)	80
1976	78	(98)	1	(01)	1	(01)	0	(0)	0	(0)	80
1977	78	(96)	1	(01)	1	(01)	0	(0)	0	(0)	81
1978	76	(96)	1	(01)	2	(03)	0	(0)	0	(0)	79
1979	77	(95)	1	(01)	3	(04)	0	(0)	0	(0)	81
1980	65	(96)	1	(01)	2	(03)	0	(0)	0	(0)	68
1981	59	(92)	2	(03)	3	(05)	0	(0)	0	(0)	64
1982	67	(92)	3	(04)	3	(04)	1	(01)	0	(0)	73
1983	66	(88)	3	(04)	5	(07)	1	(01)	0	(0)	75
1984	57	(86)	3	(05)	5	(08)	1	(01)	0	(0)	66

TABLE 12

Annual Distribution of Managers at
Level 4 and Above by Race and Gender
Reported by Indices

	White Men		Black Men		White Women		Black Women		Other		TOTAL
	b	b/t	b	b/t	b	b/t	b	b/t	b	b/t	
1974	1.00	(1.00)	1.00	(1.00)	1.00	(1.00)	0		0		1.00
1975	0.95	(0.98)	1.00	(1.04)	2.00	(2.08)	0		0		0.96
1976	0.96	(1.00)	1.00	(1.04)	1.00	(1.04)	0		0		0.96
1977	0.96	(0.97)	1.00	(1.02)	1.00	(1.02)	0		0		0.98
1978	0.94	(0.99)	1.00	(1.05)	2.00	(2.10)	0		0		0.95
1979	0.95	(0.97)	1.00	(1.02)	3.00	(3.06)	0		0		0.98
1980	0.80	(0.98)	1.00	(1.22)	2.00	(2.44)	0		0		0.82
1981	0.73	(0.95)	2.00	(2.60)	3.00	(3.90)	0		0		0.77
1982	0.83	(0.94)	3.00	(3.41	3.00	(3.41)	1 person		0		0.88
1983	0.81	(0.90)	3.00	(3.33)	5.00	(5.55)	1		0		0.90
1984	0.70	(0.76)	3.00	(3.26)	5.00	(5.43)	1		0		0.92

TABLE 13

Annual Distribution of All Managers in

Central Staff Division by Race and Gender

Year	White Men	Black Men	Black Women	White Women	Other	Total
1974	252 (67%)	11 (3%)	7 (2%)	102 (27%)	6 (2%)	378
1975	186 (62%)	11 (5%)	6 (2%)	93 (31%)	4 (1%)	300
1976	281 (67%)	15 (4%)	6 (1%)	111 (26%)	6 (1%)	419
1977	285 (62%)	17 (4%)	11 (2%)	141 (31%)	6 (1%)	460
1978	312 (54%)	19 (3%)	16 (3%)	224 (39%)	4 (1%)	575
1979	349 (55%)	19 (3%)	15 (2%)	248 (34%)	6 (1%)	637
1980	275 (55%)	12 (2%)	11 (2%)	198 (40%)	5 (1%)	501
1981	291 (52%)	13 (2%)	14 (2%)	240 (42%)	7 (1%)	565
1982	325 (54%)	16 (3%)	20 (3%)	233 (39%)	10 (2%)	604
1983	443 (59%)	22 (3%)	21 (3%)	260 (34%)	11 (1%)	757
1984	599 (60%)	24 (2%)	26 (3%)	336 (34%)	15 (2%)	997

TABLE 14

Annual Distribution of All Managers in

Central Staff Division by Race and Gender

Reported by Indices

Year	White Men	Black Men	Black Women	White Women	Other	Total
1974	1.0 (1.00)	1.0 (1.00)	1.0 (1.00)	1.0 (1.00)	1.0 (1.00)	1.0
1975	.74 (.94)	1.0 (1.27)	.86 (1.09)	.91 (1.15)	.67 (.85)	.79
1976	1.12 (1.01)	1.36 (1.23)	.86 (.77)	1.09 (.98)	1.0 (.90)	1.11
1977	1.13 (.93)	1.55 (1.27)	1.57 (1.29)	1.38 (1.13)	1.0 (.82)	1.22
1978	1.24 (.82)	1.73 (1.14)	2.29 (1.51)	2.20 (1.45)	.67 (.44)	1.52
1979	1.38 (.82)	1.73 (1.02)	2.14 (1.27)	2.43 (1.44)	1.0 (.59)	1.69
1980	1.09 (.82)	1.09 (.82)	1.57 (1.18)	1.94 (1.46)	.83 (.62)	1.33
1981	1.15 (.77)	1.18 (.79)	2.0 (1.34)	2.35 (1.58)	1.17 (.79)	1.49
1982	1.29 (.81)	1.45 (.91)	2.86 (1.79)	2.28 (1.43)	1.67 (1.04)	1.60
1983	1.76 (.88)	2.0 (1.0)	3.0 (1.50)	2.55 (1.28)	1.83 (.92)	2.00
1984	2.38 (.90)	2.18 (.83)	3.71 (1.41)	3.29 (1.25)	2.50 (.95)	2.64

TABLE 15

Annual Distribution of All Managers

in Information Systems Division by Race and Gender

Reported by Indices

Year	White Men	Black Men	Black Women	White Women	Other	Total
1974	205 (62%)	7 (2%)	8 (2%)	107 (32%)	5 (2%)	332
1975	193 (55%)	10 (3%)	8 (2%)	130 (37%)	7 (2%)	348
1976	275 (57%)	11 (2%)	9 (2%)	182 (38%)	7 (2%)	484
1977	327 (52%)	17 (3%)	12 (2%)	260 (41%)	14 (2%)	630
1978	328 (55%)	22 (4%)	13 (2%)	217 (36%)	17 (3%)	597
1979	325 (53%)	22 (4%)	8 (1%)	245 (40%)	14 (2%)	614
1980	265 (52%)	19 (4%)	8 (2%)	207 (41%)	12 (2%)	511
1981	310 (56%)	16 (3%)	15 (3%)	204 (37%)	13 (2%)	558
1982	303 (56%)	18 (3%)	15 (3%)	195 (36%)	13 (2%)	544
1983	324 (57%)	20 (4%)	15 (3%)	193 (34%)	14 (3%)	566
1984	312 (56%)	20 (4%)	20 (4%)	189 (34%)	16 (3%)	557

TABLE 16

Annual Distribution of All Managers

in Information Systems Division by Race and Gender

Reported by Indices

Year	White Men	Black Men	Black Women	White Women	Other	Total
1974	1.0	1.0	1.0	1.0	1.0	1.0
1975	.94 (.90)	1.43 (1.36)	1.0 (.95)	1.21 (1.15)	1.40 (1.33)	1.05
1976	1.34 (.92)	1.57 (1.08)	1.13 (.77)	1.70 (1.16)	1.40 (.96)	1.46
1977	1.60 (.83	2.43 (1.27)	1.50 (.78)	2.43 (1.27)	2.80 (1.46)	1.92
1978	1.60 (.89)	3.14 (1.74)	1.63 (.91)	2.03 (1.13)	3.40 (1.89)	1.80
1979	1.59 (.87)	3.14 (1.73)	1.0 (.55)	2.29 (1.26)	2.80 (1.54)	1.82
1980	1.29 (.84)	2.71 (1.76)	1.0 (.65)	1.93 (1.25)	2.40 (1.56)	1.54
1981	1.51 (.90)	2.29 (1.36)	1.88 (1.12)	1.91 (1.14)	2.60 (1.55)	1.68
1982	1.48 (.90)	2.57 (1.57)	1.88 (1.15)	1.82 (1.11)	2.60 (1.59)	1.64
1983	1.58 (.93)	2.86 (1.60)	1.88 (1.11)	1.80 (1.06)	2.80 (1.65)	1.70
1984	1.52 (.90)	2.86 (1.70)	2.50 (1.49)	1.77 (1.05)	3.20 (1.90)	1.68

TABLE 17

Annual Distribution of All Managers in

Operations Staff Division by Race and Gender

Year	White Men	Black Men	Black Women	White Women	Other	Total
1974	441 (69%)	8 (1%)	10 (2%)	173 (27%)	5 (1%)	637
1975	307 (66%)	6 (1%)	12 (3%)	135 (29%)	3 (1%)	463
1976	439 (73%)	8 (1%)	13 (2%)	133 (22%)	5 (1%)	598
1977	481 (71%)	10 (1%)	13 (2%)	171 (25%)	4 (1%)	679
1978	242 (61%)	9 (2%)	9 (2%)	132 (33%)	5 (1%)	397
1979	473 (63%)	19 (3%)	23 (3%)	218 (29%)	12 (2%)	745
1980	478 (70%)	16 (2%)	17 (2%)	163 (24%)	10 (2%)	684
1981	547 (20%)	18 (2%)	21 (3%)	189 (24%)	9 (1%)	784
1982	207 (73%)	7 (2%)	10 (4%)	57 (20%)	4 (1%)	285
1983	258 (66%)	6 (2%)	10 (3%)	113 (29%)	5 (1%)	392
1984	161 (72%)	6 (3%)	7 (3%)	44 (20%)	6 (3%)	224

TABLE 18

Annual Distribution of All Managers in

Operations Staff Division by Race and Gender

Reported by Indices

Year	White Men	Black Men	White Women	Black Women	Other	Total
1974	1.0 (1.00)	1.0 (1.00)	1.0 (1.00)	1.0 (1.00)	1.0 (1.00)	1.0
1975	.70 (.96)	.75 (1.03)	1.20 (1.64)	.78 (1.07)	.6 (.82)	.73
1976	1.0 (.94)	1.0 (.94)	1.30 (1.38)	.77 (.82)	1.0 (.94)	.94
1977	1.09 (1.02)	1.25 (1.17)	1.30 (1.21)	.99 (.93)	.8 (.75)	1.07
1978	.56 (.90)	1.13 (1.82)	.90 (1.45)	.76 (1.23)	1.0 (1.61)	.62
1979	1.07 (.91)	2.38 (2.03)	2.30 (1.97)	1.26 (1.08)	2.40 (2.05)	1.17
1980	1.08 (1.01)	2.0 (1.87)	1.70 (1.59)	.94 (.88)	2.0 (1.87)	1.07
1981	1.24 (1.01)	2.25 (1.83)	2.10 (1.71)	1.09 (.89)	1.80 (1.46)	1.23
1982	.47 (1.04)	.88 (1.96)	1.0 (2.22)	.33 (.77)	.80 (1.78)	.45
1983	.59 (.95)	.75 (1.21)	1.0 (1.61)	.65 (1.05)	1.0 (1.61)	.62
1984	.37 (1.06)	.75 (2.14)	.70 (2.0)	.25 (.71)	1.20 (3.43)	.35

TABLE 19

Annual Distribution of All Managers in

Operations Field Division by Race and Gender

Reported by Indices

Year	White Men	Black Men	Black Women	White Women	Other	Total
1974	1376 (78%)	19 (1%)	16 (1%)	354 (20%)	8 (.5%)	1773
1975	924 (71%)	13 (1%)	19 (1%)	338 (26%)	6 (.5%)	1300
1976	1286 (75%)	17 (1%)	26 (2%)	381 (22%)	6 (.5%)	1716
1977	1375 (74%)	22 (1%)	31 (2%)	407 (22%)	14 (1%)	1849
1978	1630 (73%)	31 (1%)	48 (2%)	504 (23%)	20 (1%)	2233
1979	1509 (71%)	27 (1%)	48 (2%)	522 (25%)	19 (1%)	2125
1980	1375 (70%)	25 (1%)	50 (3%)	487 (25%)	19 (1%)	1956
1981	1318 (68%)	29 (2%)	53 (3%)	508 (26%)	21 (1%)	1929
1982	1320 (68%)	34 (2%)	55 (3%)	517 (27%)	20 (1%)	1946
1983	1277 (67%)	38 (2%)	60 (3%)	500 (26%)	21 (1%)	1896
1984	1177 (62%)	38 (2%)	81 (4%)	574 (30%)	25 (1%)	1895

TABLE 20

Annual Distribution of All Managers in

Operations Field Division by Race and Gender

Reported by Indices

Year	White Men	Black Men	Black Women	White Women	Other	Total
1974	1.0	1.0	1.0	1.0	1.0	1.0
1975	.67 (.92)	.68 (.93)	1.19 (1.63)	.95 (1.30)	.75 (1.03	.73
1976	.93 (.96)	.89 (.92)	1.63 (1.68)	1.08 (1.11)	.75 (.77)	.97
1977	1.0 (.96)	1.16 (1.12)	1.94 (1.87)	1.15 (1.11)	1.75 (1.68)	1.04
1978	1.18 (.94)	1.63 (1.29)	3.0 (2.38)	1.42 (1.13)	2.5 (1.98)	1.26
1978	1.10 (.92)	1.42 (1.18)	3.0 (2.50)	1.47 (1.23)	2.38 (1.98)	1.20
1980	1.0 (.91)	1.32 (1.20)	3.13 (2.85)	1.38 (1.25)	2.38 (2.16)	1.10
1981	.96 (.88)	1.53 (1.40)	3.31 (3.04)	1.44 (1.32)	2.63 (2.41)	1.09
1982	.96 (.87)	1.79 (1.63)	3.44 (3.13)	1.46 (1.33)	2.5 (2.27)	1.10
1983	.93 (.87)	2.0 (1.87)	3.75 (3.50)	1.41 (1.32)	2.65 (2.48)	1.07
1984	.86 (.80)	2.0 (1.87)	5.06 (4.73)	1.62 (1.51)	3.13 (2.93)	1.07

TABLE 21

Annual Race and Gender Composition of Personnel Committees

	n	%	n	%	n	%	n	%	TOTAL
1974	45	(98)	0	(0)	1	(02)	0	(0)	46
1975	44	(98)	0	(0)	1	(02)	0	(0)	45
1976	114	(85)	1	(01)	17	(13)	2	(01)	134
1977	109	(86)	1	(01)	14	(11)	2	(02)	126
1978	104	(84)	3	(02)	16	(13)	1	(01)	124
1979	156	(77)	4	(02)	40	(20)	3	(01)	203
1980	123	(73)	3	(02)	39	(23)	3	(02)	168
1981	102	(71)	3	(02)	37	(26)	1	(01)	143
1982	70	(62)	2	(02)	38	(34)	2	(02)	112
1983	76	(67)	3	(03)	33	(29)	2	(02)	114
1984	58	(53)	7	(06)	36	(33)	8	(07)	109

TABLE 22

Annual Corporate Newspaper Pictures by Race and Gender

	% Corporation				% NonCorporation			
	White Male	White Female	Black Female	Black Male	White Male	White Female	Black Female	Black Male
1974	55	36	05	04	44	30	10	16
1975	59	33	04	03	46	26	05	23
1976	56	36	04	04	49	28	09	15
1977	58	36	04	02	43	32	06	19
1978	57	34	04	05	48	36	08	08
1979	60	33	03	04	49	29	03	22
1980	58	36	03	03	45	37	07	11
1981	56	31	06	06	47	29	04	20
1982	55	35	05	05	49	34	06	12
1983	58	32	05	05	53	33	09	05
1984	58	33	07	03	32	30	12	26

TABLE 23

Annual Corporate Newspaper Feature Articles by Race and Gender

	% White Male	% White Female	% Black Female	% Black Male
1974	57	26	03	14
1975	85	0	0	15
1976	75	17	8	0
1977	60	20	0	20
1978	50	21	14	14
1979	72	17	0	11
1980	82	05	05	09
1981	67	27	07	0
1982	74	16	05	05
1983	70	19	04	07
1984	68	21	05	05

TABLE 24

Annual Report Photographs by Race Gender Group

	% Corporation White People	% Corporation Black People
1974	90	10
1975	96	04
1976	89	11
1977	88	12
1978	100	0
1979	88	12
1980	94	06
1981	96	04
1982	94	06
1982	100	0
1984	77	23

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