

1987

Perceptions of occupational discrimination among college students: 1970, 1986 cohort comparison.

Judith Ann Burnett
University of Massachusetts Amherst

Follow this and additional works at: <https://scholarworks.umass.edu/theses>

Burnett, Judith Ann, "Perceptions of occupational discrimination among college students: 1970, 1986 cohort comparison." (1987). *Masters Theses 1911 - February 2014*. 2118.
<https://doi.org/10.7275/7675781>

This thesis is brought to you for free and open access by ScholarWorks@UMass Amherst. It has been accepted for inclusion in Masters Theses 1911 - February 2014 by an authorized administrator of ScholarWorks@UMass Amherst. For more information, please contact scholarworks@library.umass.edu.



312066014648820

PERCEPTIONS OF OCCUPATIONAL DISCRIMINATION

AMONG COLLEGE STUDENTS:

1970, 1986 COHORT COMPARISON

A Thesis Presented by

by

JUDITH A. BURNETT

Submitted to the Graduate School of the
University of Massachusetts in partial fulfillment
of the requirements for the degree of

MASTER OF SCIENCE

May 1987

Psychology

PERCEPTIONS OF OCCUPATIONAL DISCRIMINATION

AMONG COLLEGE STUDENTS:

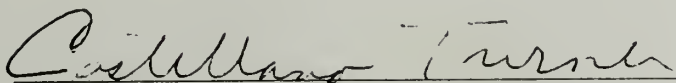
1970, 1986 COHORT COMPARISON

A Thesis Presented

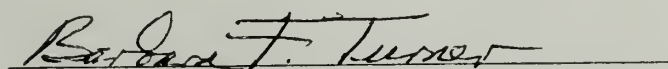
by

JUDITH A. BURNETT

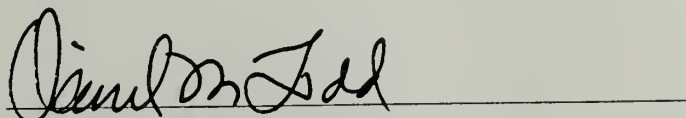
Approved as to style and content by:



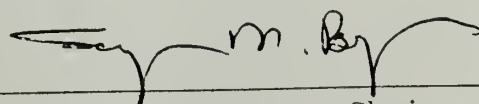
Castellano B. Turner, Chairperson



Barbara F. Turner, Member



David M. Todd, Member



Seymour M. Berger, Chair
Department of Psychology

TABLE OF CONTENTS

CHAPTER

I.	INTRODUCTION	1
II.	METHOD	17
	Subjects	17
	Procedure.	19
	Instruments.	21
III.	RESULTS.	23
	Description of Sample.	23
	Comparability of Sample.	24
	Time Hypothesis.	38
	Race Hypothesis.	41
	Gender Hypothesis.	44
	Time by Race	
	Interaction Hypothesis	47
	Time by Gender	
	Interaction Hypothesis	50
IV.	DISCUSSION	51
	Time Hypothesis.	51
	Race Hypothesis.	55
	Gender Hypothesis.	57
	Time by Race	
	Interaction Hypothesis	60
	Time by Gender	
	Interaction Hypothesis	62
	Implications of Findings	64
	Limitations of this Study	66
	Summary and Conclusions.	67
	REFERENCES	71
	APPENDIX	75

LIST OF TABLES

1.	Summary of Parental Occupational Status by Time	25
2.	Summary of Parental Educational Status by Time	26
3.	Summary of Student Educational Aspirations and Expectations by Time.	28
4.	Summary of Student Occupational Aspirations and Expectations by Time	29
5.	Means and Standard Deviations on Black Discrimination Scale Items and Total Score by Time, Race and Gender	32
6.	Means and Standard Deviations on Women Discrimination Scale Items and Total Score by Time, Race and Gender	35
7.	Analyses of Variance on Black Discrimination Total Score.	39
8.	Analyses of Variance on Women Discrimination Total Score.	40
9.	Summary of t-Tests on Black Discrimination Total Score by Time - Race Group	48

LIST OF FIGURES

- Fig. 1 Mean responses to Discrimination Against
 Blacks Scale by Race, Time and Gender. 42
- Fig. 2 Mean responses to Discrimination Against
 Women Scale by Race, Time and Gender 45

C H A P T E R I

INTRODUCTION

Occupational opportunities in the American labor force have been unequally distributed throughout this nation's history. Occupational opportunity refers to the availability or openness of various occupations to people possessing certain characteristics, e.g. race, sex. The disadvantaged position of women and blacks has been discussed and documented by many social scientists (Rytina, 1982; Snyder & Hudis, 1976). Women and blacks have experienced similar disadvantages in the labor market. These groups have been historically excluded from equal participation and access to higher status and higher paying occupations and instead, have been limited to lower status and lower paying occupations.

Unfortunately elimination of the inequalities and injustices of the past and present has been slow and difficult. Not only the social structure of this country but also the socialization processes which individuals experience can operate to delay advancement. Blacks and

whites alike are taught by mainstream socialization agents, e.g. school systems, media, to believe in the "American way", liberty, justice and equality for all. However, blacks are also exposed to a system of socialization taught by the black community (Valentine, 1971). This system teaches blacks about the disadvantages and difficulties that they are likely to experience in the working world. Society sends the message to blacks that their color is undesirable and a hindrance. There are few positive black images for black children. Blacks are confronted with media portrayal of blacks in typically low status roles or as "amusingly ignorant." They are also confronted with the dehumanizing treatment of blacks by groups like the Klu Klux Klan or even law enforcement officials. This communicates to black children the negative value society places on them.

Black children may also receive messages from their own families and friends that they are lower status human beings. They may hear stories about various types of racial discrimination from parents, relatives and friends. This socializes the black person into the role

of one who is discriminated against. This could result in blacks being encouraged to pursue lower status and lower paying occupations, because these are areas in which they would be most likely to succeed (Rosenthal & Jacobsen, 1968). At a young age, black children may know of racial discrimination although they may not have yet been directly exposed to it. By young adulthood, black children have probably been exposed to race discrimination, directly as well as indirectly. It has been found at the high school level that blacks tend to be lower in their aspirations, feel that the choice of occupations is largely beyond their control and more often aspire to human service jobs, e.g., social work, teaching (Kirkpatrick, 1973; Curtis, 1968). Those black youth who do have high vocational aspirations have been assessed by some researchers as having unrealistically high goals (Katz, 1969; Cosby, et al., 1976).

There is a disparity between the vocational-social aspirations of young black adults and occupational attainment (Thomas, 1979). It is difficult to say how much perceived race discrimination has affected the hopes

of blacks and affected their motivation to strive for higher level positions. However, given their socialization into the role of a victim, one could expect that young blacks would be more sensitive to various types of race discrimination.

Socialization processes have also affected gender differences in aspirations. Historically, gender roles which separate work and family in large part were created during the industrial and post-industrial period (Huber, 1982). This separation may have resulted in psychological and attitudinal differences among men and women (Chodorow, 1978; Gilligan, 1982). Over the years women have been socialized to assume the roles of wives and mothers as a primary goal (Bird, 1968). Women's choices for traditional mothering roles may reflect both an externally-imposed social and an internally motivated striving. This also impacts on men.

In contemporary times, women who work outside the home are expected to manage dual roles. They have managed to accomplish this by delaying marriage and children, working part-time, placing children in daycare, etc. The

burden for this responsibility lies with the woman. Society is just beginning to address the multiple and conflicting demands the social system places on women.

While mothering has been a primary goal for women over the years, a secondary goal has been that of aspiring toward occupations that are "fitting" for women -- e.g. nursing, elementary school teachers, stenographers, and typists. The result of this type of socialization would be a concentration of women in occupations geared toward clerical and care-taking work. In fact according to the U.S. Department of Labor (1983), 36.4% of all working women are employed in only ten occupations: secretary, bookkeeper, sales clerk, cashier, waitress, registered nurse, nursing aide, elementary school teacher, private household worker and typist. Women may have opted for these type of positions because they required little training and allowed them more flexible schedules enabling them to maintain their family responsibilities. This self-segregation may affect womens' aspirations and in turn their perception of discrimination in the workplace. For both blacks and women, there is a complex relationship

between career aspirations and perception of opportunities in the workplace.

There is evidence that racial and sexual discrimination has contributed to the disparity found in the job market. Blacks and women have been proportionally underrepresented in high status occupations and overrepresented in lower status occupations (Benokraitis & Feagin, 1978; Blau, 1978). In the private as well as the public sector, employers have often limited promotion and advancement of black and women employees (Benokraitis & Feagin, 1978). Inequity in wages account for a great deal of blacks and womens' lower socioeconomic status. In the case of women, between 1970 and 1980, there was no decrease in the earning differential between men and women (U.S. Department of Labor, 1983). In fact the gap has increased. In 1981 the median earnings of men employed full time was \$20,260. Womens' median earnings were only \$12,001 for the same year. Factors such as experience, education, tenure, etc. may affect these earnings but the U.S. Department of Labor Women's Bureau found that even when the above-mentioned variables are taken into account,

gender is the main factor influencing the differences in mens' and womens' earnings.

There is a similar differential in the case of blacks. Black unemployment now is typically two times that of whites. Black pay scales are consistently lower than those of whites. For example, college educated blacks still earn only a little more than high school educated whites. Like the gap between men and women, the gap between whites' and blacks' incomes is not narrowing (Turner, Singleton, & Musick, 1984). Blacks have lost ground to whites in terms of their relative earning power. For whites between 1977 and 1978 the total number of unemployed whites dropped from 5.5 million to 4.7 million. There has not been a decline for blacks (Turner, Singleton, & Musick, 1984).

Government legislation has limited employers' ability to overtly discriminate against women and minorities. However, even if this discrimination were to be removed immediately, it would take a number of generations before the disparity in socioeconomic status created from past discrimination would be eliminated (Lieberson & Fuguitt,

1970).

In spite of these discouraging data, there have been some changes in occupational trends over recent years. Women are more involved in the work force now than in previous years (Betz, 1984; Harkess, 1985). They also hold higher status positions than in the past. The percentage of females employed as professionals and technical workers has increased slightly from 14.5% in 1972 to 17% in 1981. There has also been an increase in the proportion of female administrators from 4.6% to 7.4% (U.S. Department of Labor, 1983).

These changes could be a function of the impact of the Women's Movement since the 1960's. Although this movement has been in existence for approximately 150 years in the United States, the most recent activity began in the 1960's (Firestone, 1971). The primary purpose of this movement has been to provide equal opportunities for women. It has aimed at changing attitudes and stereotypes about the role of women in our society. Some of these stereotypes are that women should function primarily or solely as wives and mothers, and that they should be

limited to traditionally feminine occupations, such as teachers or secretaries.

There is some indication that the Women's Movement has had an effect on gender role attitudes. It is attitudes such as these that inform our perceptions of the world around us. In a study comparing gender role attitudes of college students in 1934 and 1974, Roper and Labeff (1977) found that females were more liberal than males in both 1934 and 1974 and 1974 students were more liberal than 1934 students. Cook, West & Hammer (1982) found that women in 1979 desire fewer children, are more accepting of non-parenting as a decision and expressed more uncertainty about desire to be a parent as an element in spouse selection. Also DeFant (1985) found gender differences between 1984 and 1973 students with females being more liberal both times. Both genders were more liberal in 1984 than in 1973. These results suggest a period or socialization effect at work.

Occupational opportunities for blacks have changed as well. Though there is still an overrepresentation of blacks in lower status occupations, there are more blacks

in higher status occupations than at any other point in history (Benokraitis & Feagin, 1978; Hout, 1984). As in the case of women, these changes could be a function of a movement: the Civil Rights Movement. This Movement also worked on providing equal opportunities as well as seeking to change negative attitudes about black people.

A common function shared by the Women's Movement and the Civil Rights Movement has been to increase individuals' sensitivity to discrimination as well as to implement actual changes in the level of discrimination in the job market. Both movements sought to have government legislation implemented to ensure that equality for all people became a reality. Token efforts were made in the 1940's to prohibit employment discrimination. In the 1940's and 1950's court decisions were made that lessened discrimination in education. In the early 1960's these decisions sought to "establish passive nondiscrimination." (Benokraitis & Feagin, 1978). It was the middle and late 1960's that the controversial affirmative action policies were developed. Affirmative action means that "various organizations must act positively, affirmatively,

aggressively to remove all barriers, however informal or subtle, that prevent access by minorities and women to their rightful places in the employment and educational institutions of the United States." (Benokraitis & Feagin, 1978, p. 1). With impetus from the Civil Rights Movement and the Womens Movement, government has become progressively more forceful in its attempts to eradicate racial and sexual discrimination. Government policies call for aggressive action by employers to eliminate the disparity in the job market. The action required by employers includes "'underutilization analyses', an examination of 'availability pools,' the establishment of specific 'goals and timetables,' and the validation of 'job-related' tessts and other screening devices."

(Benokraitis & Feagin, 1978, p. 2). This emphasis on action and results has also resulted in a backlash from the white community concerning reverse discrimination and the filling of quotas. The concern is that "unqualified" women and minorities are taking over most jobs. The changes made by government can be viewed as a reaction to the Civil Rights Movement and the Womens Movement. It is

the changes that have resulted from these movements that have served to improve the position of blacks and women in this country's occupational structure.

It has been found that over time attitudes about discrimination have changed. The American public has become more liberal in their attitudes about equal opportunity (Kluegel & Smith, 1986). This historical transformation in the participation of blacks and women involved in the labor force should affect how people perceive the degree of occupation discrimination at various points in time. Over time more attention has been paid to the disadvantaged position of women and blacks. Changes in public policy have resulted when there have been changes in public attitudes. These changes in public attitudes should facilitate or lead to a greater public awareness and sensitivity to the discriminatory practices of society.

One means of studying secular changes or trends in perceptions would be to use a longitudinal study. For the purpose of this discussion, a longitudinal study will be considered one which follows a single cohort of subjects

over time. This type of research, however, confounds aging and period effects -- social and historical changes that influence all people alive at a given point in time (Huyck & Hoyer, 1982). This type of research provides information on the developmental changes that people experience. For example, Harmon (1981) conducted a longitudinal study of college women who started college in 1968. It was found that as of 1974, 49% had completed college, 41% were no longer pursuing a college degree, and 45% were working in their chosen careers. Comparisons of career plans between 1968 and 1974 when the subjects were freshmen did not find a significant difference. This indicated a weak tendency for women to become more oriented towards work involvement with time. Betz (1984) did a ten-year follow-up of 1968 college graduates. She found that women in traditionally feminine careers when compared to women in "pioneer" careers were less likely to change careers over the ten year period and were more likely to move in a horizontal or downward career direction. She found that in 1979 most women fell into the high career commitment category. There were 36% in

the high commitment traditional career category and 24% in the high commitment pioneer career category. Sixty percent of the women had been continuously employed since college. This suggests that these women have been relatively career-committed over time.

To assess the effects of social and historical changes on attitudes or perceptions, a time-lag design which utilizes two groups of subjects which are the same age at two different times would be best. This design eliminates the aging confound but a new confound would be introduced: the effects of cohort differences in socialization. This type of research provides information on societal trends and changes. There are few studies available in the literature on time-lag comparisons. In a study of female college freshmen (1969 - 1973), Parelius (1974) found that interest in motherhood was high in both cohorts. DeFant (1985) found that white college seniors in 1984 perceived less gender discrimination than similar students in 1973. Although not statistically significant, she also found that 1973 males appeared to be more aware of discrimination than their female counterparts while the

1984 males appeared to be less aware of discrimination. While neither the time-lag nor the longitudinal design is completely trouble-free, both do add to the general knowledge of how these time changes interact. The current study proposes to examine changes in the perception of occupational discrimination in college freshmen by utilizing the time-lag comparison method.

Turner & Turner (1975) studied race, sex, and the perception of the occupational opportunity structure among college students. In this study it was found that black subjects perceived significantly more occupational discrimination against black people than did the white subjects. There was no significant sex difference in the perception of racial discrimination. It was also found that both black females and white males perceived significantly more occupational discrimination against women than did white females. There was no significant race difference in the perception of occupational discrimination against women. The current study compares and contrasts these data with data that were collected in 1986.

Given the findings in the literature and the historical and secular changes that have occurred in the last sixteen years, the following hypotheses were made.

TIME: There will be less occupational discrimination perceived against women and blacks in 1986 than was perceived by students in 1970.

RACE: Blacks will perceive more occupational discrimination against blacks than whites.

GENDER: Women (black as well as white) will perceive more discrimination against women than will men.

The possible interaction effects were difficult to predict; however, the author was inclined to believe that there would be more gender discrimination perceived by women in 1986 than was perceived by women in 1970 due to an increased awareness of women to gender discrimination. However, it is also quite possible that due to women's increased participation in the labor force, women will understand this to mean that there is less occupational discrimination against women. It was also expected that blacks in 1986 would perceive less racial discrimination against blacks than was perceived in 1970.

CHAPTER II

METHOD

Subjects

Subjects were members of one of two cohort groups of undergraduate freshmen at the University of Massachusetts at Amherst. These students filled out a survey on student career opinions and decisions in 1970 and 1986.

1970 Cohort. Subjects were participants in orientation sessions for all freshmen in the summer of 1969. During this time, subjects were participants in a study which examined the relationship between race, sex, socioeconomic status, career aspirations and perceptions of occupational discrimination in the United States. There were 70 black females, 75 black males, 1,457 white females and 1,429 white male university freshmen. The black freshmen were taken from a special admission program for minority students from lower income families. Therefore, there were proportionately fewer black subjects

than white subjects who could be characterized as middle or upper status.

1986 Cohort. Subjects were recruited from introductory undergraduate psychology courses and the Committee for Collegiate Education of Black and other Minority Students summer and fall programs (CCEBMS) for freshmen at the University of Massachusetts at Amherst. The black subjects were recruited from the CCEBMS programs because there are few black students that enroll in psychology courses. In exchange for access to the CCEBMS program students, the researcher agreed to work with CCEBMS on evaluations of their summer program. The CCEBMS summer program was July 7, 1986 through August 16, 1986. There were 48 freshmen enrolled in this program. These students represented the lowest cut of the academic profile for minority students and attended the program to receive educational help, particularly in math and English, as well as social support. Approximately 160 black freshmen were participants in the CCEBMS fall program. The fall program also includes the students from the summer program. On September 4, 1986, an orientation

meeting was held for these students and their counselors. Each student was assigned an advisor and was required to meet with him or her during the first six weeks of the semester.

Those subjects recruited from psychology courses were informed of the study by the sign-up board located in the psychology department building (Tobin Hall), the researcher visiting large introductory psychology courses and announcements made to students by the professors of introductory psychology courses. Subjects from psychology courses were offered one experimental credit for their participation. The black subjects, all of whom were recruited from the CCEBMS program, were informed of the study through CCEBMS counselors and the researcher.

Procedure

1970 Cohort. A questionnaire was administered to students as part of the orientation and testing sessions for all entering college freshmen at the University of Massachusetts.

1986 Cohort. Questionnaires were administered during the summer and fall of 1986. Those questionnaires given to CCEBMS students during the summer were administered in one large group session. All students received these questionnaires. Questionnaires administered to CCEBMS students in the fall were delivered by the following methods. The first method entailed administering the surveys to students during the large group orientation meeting which took place September 4, 1986. The questionnaires were given to those students who had not been given the survey during the summer program at the close of this meeting. To catch those students who did not get the questionnaires during the large group orientation meeting, the Assistant Director of CCEBMS distributed questionnaires to students when they came for their individual counseling meetings during the first six weeks of school. Subjects recruited from introductory psychology courses received their questionnaires in 7 small group sessions over a 3 week period. Questionnaires took approximately 20-40 minutes to complete.

Instruments

1970 Cohort. Data were collected from self-administered questionnaires. Warner's 7 point scale for father's occupation was utilized as part of the questionnaire packet to obtain demographic information on social class. Subjects were then divided into two social class levels. All subjects whose fathers' occupations were scored 1-3 on the Warner scale were classified as higher status. However, black subjects whose fathers' occupations were scored as 4 and had at least some college as well as mothers or fathers having completed college were designated as higher status. This subdivision resulted in 30% of the black subjects and 52% of the white subjects being placed in the higher social class category and 70% of the black and 48% of the white subjects in the lower social class category.

Additional items included scales measuring perceptions of racial and sexual occupational discrimination. Twenty-one occupations were listed and subjects were asked to rate each on the availability or

openness of each field to blacks and women. Finally questions on educational expectations, aspirations, encouragement, discouragement for higher education from significant others and "value orientations presumably related to education and occupational achievement (Rosen, 1956)" were included (Turner & Turner, 1975).

1986 Cohort. Data were again collected from self-administered questionnaires. Subjects were administered that portion of the original questionnaire that included the scales measuring perceptions of racial and sexual occupational discrimination, questions on the parental educational and occupational status and educational and occupational expectations and aspirations. In addition to the discrimination scales, CCEBMS summer students had included with their questionnaires an evaluation survey for the CCEBMS summer program.

CHAPTER III

RESULTS

Description of Sample

1970 Cohort. This group consisted of 177 students. There were 55 males, 28 blacks and 27 whites. There were 122 females, 29 blacks and 93 whites. This group was randomly selected from a larger sample of 70 black females, 75 black males, 1,457 white females and 1,429 white males. These students were administered the questionnaire in the summer of 1969 and again in 1970. All were university freshmen. This subsample was chosen for comparison with the 1986 sample for two reasons: the relative size made the groups more comparable and there was a great deal more information available on this smaller sample as opposed to the larger group.

1986 Cohort. This group consisted of 221 students. There were 66 males, 24 blacks and 42 whites. There were 155 females, 44 blacks and 111 whites. All of these students were freshmen or sophomores at the university.

The majority of the black students were recruited through the CCEBMS program at the University while all of the white students were recruited through introductory psychology courses and the volunteer sign-up board located in the psychology department.

Comparability of Sample

A comparison of parental occupational status and educational status was used to assess the social class background of the time cohorts. Warner's (1960) Revised Scale of Occupational Status was utilized to rate occupational status. Table 1 summarizes the information on parental occupational status and Table 2 summarizes the information on parental educational status.

A chi-square analysis of parental occupational and educational status revealed a significant difference between the cohorts (see Tables 1 and 2). Students in 1986 were from a higher socioeconomic background than the students in 1970. There are more professional or executive level mothers in the 1986 group than there were

Table 1
Summary of Parental Occupational Status by Time

Occupational Status	Mother		Father	
	1970 (N=177)	1986 (N=221)	1970 (N=177)	1986 (N=221)
Executive or Professional	.6%	20.5%	2.3%	27.2%
Business Managers	1.2%	11.9%	24.4%	23.0%
Administrative Personnel	11.6%	17.8%	16.9%	21.1%
Clerical and Sales Workers	12.8%	19.2%	15.1%	2.8%
Skilled Manual	7.6%	5.5%	17.4%	12.7%
Semi-skilled Manual	4.7%	3.7%	7.0%	6.6%
Unskilled Manual	14.0%	8.2%	16.3%	3.8%
Other	45.3%	13.2%	.6%	2.8%
No response	2.3%			
	$\chi^2 = 61.25$		$\chi^2 = 29.16$	
	df = 2		df = 1	
	p < .000		p < .000	

Table 2
Summary of Parental Educational Status by Time

Educational Status	Mother		Father	
	1970 (N=177)	1986 (N=221)	1970 (N=177)	1986 (N=221)
No Formal Education	1.2%	.5%	8.8%	.5%
Some Elementary Education	15.2%	1.4%	15.3%	2.3%
Some Secondary Education	15.2%	4.5%	21.8%	4.6%
Graduation from High School	46.2%	22.3%	27.6%	11.0%
Technical training without college	15.2%	11.4%	18.8%	7.3%
Some College	7.0%	14.5%	7.6%	13.8%
Graduation from College		28.2%		33.9%
Professional Training after College		17.3%		26.6%
<hr/>				
	$\chi^2 = 90.98$		$\chi^2 = 116.75$	
	df = 1		df = 1	
	p < .000		p < .000	

in the 1970 group [$\chi^2(2, N = 398) = 61.25, p < .000$]. The same is true for fathers [$\chi^2(1, N = 398) = 29.16, p < .000$]. There is also a marked decline from 1970 to 1986 in the percentage of parents employed in the area of unskilled manual labor. Parental educational status has also increased from 1970 to 1986. In 1970 for the majority of the parents the highest level of education achieved was graduation from high school. For the 1986 group, more of the parents fell into the college graduate group. This is true for both mothers [$\chi^2(1, N = 398) = 90.98, p < .000$] and fathers [$\chi^2(1, N = 398) = 116.75, p < .000$]. The annual ACE survey conducted nationwide with college freshmen (Timko, 1984) corroborates the finding that parental educational levels have increased over the past decade.

It appears that there is also a difference in educational and occupational expectations and aspirations between the two cohort groups. Students in 1986 seem to have higher degree expectations and aspirations than did students in 1970, as shown in Tables 3 and 4. There are more students in the 1986 group who aspire to have and

Table 3
Summary of Student Educational Aspirations
and Expectations by Time

Education Level	Aspirations		Expectations	
	1970 (N=177)	1986 (N=221)	1970 (N=177)	1986 (N=221)
None		.5%		.9%
Bachelor's	19.8%	21.3%	75.7%	32.4%
Master's	42.4%	48.9%	24.3%	44.4%
Professional	37.9%	12.2%		11.6%
Doctorate		17.2%		10.6%

Table 4

Summary of Student Occupational Aspirations
and Expectations by Time

Occupational Level	Aspirations		Expectations	
	1970 (N=177)	1986 (N=221)	1970 (N=177)	1986 (N=221)
Executive or Professional	-	34.2%	6.8%	26.3%
Business Manager	2.5%	40.6%	14.1%	41.9%
Administrative Personnel	20.7%	18.3%	55.9%	19.8%
Clerical and Sales	9.1%	2.7%	6.2%	3.2%
Skilled Manual	24.0%	.9%	9.6%	1.4%
Unskilled manual	31.4%	-	3.4%	-
Housewife, Other	4.1%	-	1.7%	7.4%

expect to receive graduate degrees than in the 1970 group. In 1970 the majority of students aspired to and expected to obtain bachelor's degrees while in 1986 a greater number of students were seeking master's and doctoral degrees.

There is a similar trend in the occupational aspirations and expectations of the two cohort groups. Students in 1986 aspired to and expected to work in more professional and executive-level positions than did students in 1970. In 1970 the majority of students expected to be working as administrative personnel or small business owners while in 1986 more students expected to be working as business managers. According to the ACE survey, there has been little change between 1974 and 1984 in the number of University of Massachusetts freshmen who expect to receive bachelor's degrees. It was also found that, over the last ten years, there has been an increase in the popularity of engineering and business careers while the popularity of careers in agriculture and education has been declining steadily since 1974. This seems to corroborate the findings of this study.

The survey also found that interest in obtaining doctoral degrees has declined since 1974. This is not consistent with this study's findings. However the findings of this study may be misleading because there is not complete information on the numbers of students desiring professional or doctoral degrees for the 1970 cohort. Keeping the aforementioned differences in mind, it appears that the two cohorts are comparable for the practical purposes of this study.

The means and standard deviations on the Black Discrimination Scale Total as well as the means and standard deviations for each item are listed in Table 5. The same is also presented for the Women Discrimination Scale Total and items in Table 6. The Black Discrimination Scale and the Women Discrimination Scale totals are the sums of the perceived discrimination against blacks and women respectively in all 21 occupations.

Analyses of variance were performed to assess the relationship between time, race and sex on the Black Discrimination Scale and the Women Discrimination Scale

Table 5
Means and Standard Deviations on
Black Discrimination Items and Total Score
by Time, Race and Gender

<u>Variable</u>	<u>Time</u>	<u>Male</u>				<u>Female</u>			
		<u>Black</u> n = 28	<u>White</u> n = 27	<u>Black</u> n = 29	<u>White</u> n = 93	<u>Black</u> n = 29	<u>White</u> n = 93	<u>Black</u> n = 29	<u>White</u> n = 93
	1970								
	1986	n = 24	n = 42	n = 44	n = 111				
		<u>Mean</u>	<u>SD</u>	<u>Mean</u>	<u>SD</u>	<u>Mean</u>	<u>SD</u>	<u>Mean</u>	<u>SD</u>
Black Total	1970	36.86	7.43	34.15	8.05	35.34	9.83	32.27	6.04
	1986	36.83	8.91	30.60	7.90	34.93	8.43	28.05	7.40
Accountant	1970	1.71	.46	1.67	.48	1.69	.66	1.41	.56
	1986	1.67	.76	1.26	.50	1.50	.66	1.24	.54
Advertising and Marketing	1970	2.04	.69	1.67	.83	1.69	.47	1.62	.66
	1986	1.83	.83	1.52	.67	1.75	.72	1.35	.60
Business Executive	1970	2.00	.72	1.89	.75	1.79	.68	1.91	.64
	1986	2.00	.83	1.79	.72	2.05	.68	1.57	.64
Career in military service	1970	1.46	.69	1.30	.47	1.55	.69	1.15	.36
	1986	1.46	.83	1.12	.33	1.18	.50	1.14	.42
College Teaching	1970	1.82	.39	1.78	.64	1.66	.72	1.59	.49
	1986	1.87	.69	1.40	.63	1.77	.68	1.25	.51
Creative Artist or Writer	1970	1.79	.63	1.41	.69	1.62	.49	1.20	.41
	1986	1.67	.82	1.26	.54	1.55	.73	1.18	.49

Table 5 continued

Elementary School Teacher	1970	1.64	.83	1.56	.70	1.41	.50	1.49	.62
	1986	1.43	.66	1.55	.74	1.36	.72	1.30	.64
Engineering	1970	2.00	.61	1.78	.80	1.79	.73	1.67	.47
	1986	2.00	.72	1.59	.71	1.91	.78	1.38	.61
Executive in Federal Govt.	1970	2.04	.74	1.96	.52	1.97	.73	1.85	.62
	1986	2.38	.97	2.17	.96	2.48	.90	1.98	.87
Executive in State Govt.	1970	2.04	.69	1.96	.52	1.90	.67	1.81	.64
	1986	2.33	.87	1.83	.74	2.45	.79	1.90	.82
High School Teacher	1970	1.50	.69	1.59	.50	1.62	.68	1.44	.56
	1986	1.48	.67	1.38	.66	1.28	.59	1.26	.60
Law	1970	1.86	.59	1.70	.47	1.83	.71	1.75	.50
	1986	1.83	.48	1.64	.66	1.89	.78	1.45	.62
Medicine	1970	1.71	.46	1.70	.67	1.90	.77	1.68	.47
	1986	1.78	.42	1.55	.55	1.89	.78	1.42	.56
Owner of a small business	1970	1.79	.74	1.33	.48	1.62	.68	1.49	.62
	1986	1.67	.82	1.29	.60	1.56	.88	1.25	.51
Personnel Manager	1970	2.07	.81	1.89	.75	1.86	.74	1.74	.67
	1986	2.09	.90	1.43	.59	1.47	.80	1.33	.61
Postal Worker	1970	1.43	.50	1.22	.42	1.31	.47	1.10	.30
	1986	1.29	.55	1.10	.30	1.07	.33	1.11	.44

Table 5 continued

Research in	1970	1.93	.77	1.70	.67	1.93	.80	1.46	.56
physical or									
biological	1986	1.91	.73	1.45	.55	2.07	.84	1.22	.52
sciences									
Research in	1970	1.57	.50	1.70	.67	1.59	.57	1.46	.56
social									
sciences	1986	1.74	.62	1.39	.63	1.83	.82	1.21	.51
Salesperson	1970	1.61	.69	1.52	.51	1.59	.73	1.53	.62
	1986	1.63	1.01	1.31	.60	1.34	.71	1.21	.55
Skilled	1970	1.57	.57	1.30	.47	1.48	.57	1.45	.62
blue-collar									
trade	1986	1.58	.88	1.40	.66	1.51	.88	1.14	.44
Social Work	1970	1.29	.46	1.52	.70	1.55	.51	1.45	.67
	1986	1.79	1.10	1.31	.60	1.39	.72	1.22	.53

Table 6
Means and Standard Deviations on
Women Discrimination Items and Total Score
by Time, Race and Gender

<u>Variable</u>	<u>Time</u>	<u>Male</u>				<u>Female</u>			
		<u>Black</u>		<u>White</u>		<u>Black</u>		<u>White</u>	
		n =		n =		n =		n =	
	1970	n = 28		n = 27		n = 29		n = 93	
	1986	n = 24		n = 42		n = 44		n = 111	
		<u>Mean</u>	<u>SD</u>	<u>Mean</u>	<u>SD</u>	<u>Mean</u>	<u>SD</u>	<u>Mean</u>	<u>SD</u>
Women Total	1970	35.00	5.98	36.74	7.14	35.55	6.87	33.13	5.05
	1986	31.64	7.31	28.88	6.24	31.18	6.32	27.87	4.10
Accountant	1970	1.71	.60	1.74	.66	1.55	.69	1.56	.60
	1986	1.32	.57	1.36	.49	1.44	.60	1.25	.44
Advertising and Marketing	1970	1.54	.58	1.70	.61	1.72	.70	1.48	.60
	1986	1.36	.66	1.36	.49	1.38	.54	1.28	.45
Business Executive	1970	1.93	.72	2.22	.70	2.03	.73	1.91	.54
	1986	1.82	.39	1.69	.56	1.78	.53	1.64	.54
Career in Military Service	1970	1.82	.67	1.81	.83	2.00	.85	1.75	.76
	1986	1.77	.61	1.81	.63	1.58	.64	1.74	.57
College Teaching	1970	1.54	.58	1.59	.57	1.41	.50	1.52	.54
	1986	1.41	.67	1.19	.45	1.30	.46	1.14	.34

Table 6 continued

Creative Artist or Writer	1970	1.54	.69	1.11	.32	1.38	.49	1.10	.30
	1986	1.27	.55	1.10	.37	1.33	.53	1.05	.21
Elementary School Teacher	1970	1.29	.46	1.11	.42	1.03	.19	1.05	.27
	1986	1.00	0.00	1.02	.15	1.10	.30	1.00	0.00
Engineering	1970	2.18	.67	2.33	.62	2.34	.77	2.04	.59
	1986	1.82	.50	1.62	.58	1.93	.57	1.72	.45
Executive in Federal Govt.	1970	1.96	.74	2.30	.61	2.10	.72	2.15	.57
	1986	2.00	.76	1.95	.62	2.13	.61	2.01	.58
Executive in State Govt.	1970	2.04	.69	2.19	.56	2.07	.70	2.10	.57
	1986	1.82	.73	1.71	.55	2.10	.59	1.81	.53
High School Teacher	1970	1.32	.48	1.26	.53	1.17	.47	1.09	.28
	1986	1.00	0.00	1.05	.22	1.03	.16	1.02	.13
Law	1970	1.82	.55	1.96	.52	1.79	.73	1.74	.46
	1986	1.73	.63	1.48	.55	1.65	.62	1.46	.50
Medicine	1970	1.75	.44	1.85	.53	1.69	.71	1.58	.52
	1986	1.59	.50	1.38	.49	1.50	.55	1.37	.48
Owner of a Small Business	1970	1.50	.58	1.78	.75	1.69	.71	1.58	.58
	1986	1.73	.70	1.45	.59	1.58	.75	1.31	.48
Personnel Manager	1970	1.64	.62	2.11	.64	1.62	.62	1.52	.60
	1986	1.73	.70	1.31	.52	1.33	.57	1.18	.41

Table 6 continued

Postal Worker	1970	1.61	.69	1.74	.81	1.59	.82	1.69	.85
	1986	1.59	.73	1.21	.47	1.30	.56	1.15	.41
Research in physical or biological sciences	1970	1.43	.57	1.41	.50	1.55	.63	1.42	.52
	1986	1.36	.49	1.29	.55	1.69	.66	1.23	.43
Research in social sciences	1970	1.50	.51	1.33	.48	1.59	.63	1.29	.46
	1986	1.45	.51	1.21	.47	1.51	.68	1.09	.29
Salesperson	1970	1.68	.67	1.85	.82	2.00	.89	1.62	.83
	1986	1.14	.47	1.10	.48	1.10	.30	1.05	.21
Skilled blue-collar trade	1970	1.93	.66	2.15	.82	2.03	.87	1.84	.84
	1986	1.50	.80	1.50	.71	1.54	.79	1.41	.62
Social Work	1970	1.29	.46	1.19	.48	1.17	.38	1.10	.30
	1986	1.23	.53	1.10	.48	1.10	.30	1.01	.09

totals. The results of these analyses are listed in Table 7 and Table 8 respectively.

TIME HYPOTHESIS

Time yielded a significant main effect on the Black Discrimination Scale [$(F(1,389) = 13.51, p < .001)$] as well as on the Women Discrimination Scale [$(F(1,384) = 83.86, p < .001)$]. This can be understood by referring to Tables 7 and 8. A comparison of the group means indicates that the 1970 cohort ($M = 34.66$) perceived more discrimination against blacks than the 1986 cohort ($M = 32.60$). This is also true for the Women Discrimination Scale. The 1970 cohort perceived more occupational discrimination against women ($M = 35.11$) than did the 1986 cohort ($M = 29.89$). This supports the hypothesis that students in 1970 perceived significantly more occupational discrimination against black people than did the students in 1986. It is important to note that this difference was due to the change in white students' perceptions. There was almost no change in black students' perceptions from

Table 7

Analyses of Variance on Black Discrimination Total Score

Variable	Df	MS	F
Time	1	784.18	13.51**
Sex	1	288.79	4.97*
Race	1	2070.46	35.66**
Time x Sex	1	6.20	.11
Time x Race	1	277.28	4.78*
Sex x Race	1	4.10	.09
Time x Sex x Race	1	.34	.01

* $p < .05$ ** $p < .001$

Table 8

Analyses of Variance on Women Discrimination Scale Total

Variable	DF	MS	F
Time	1	2637.36	83.86**
Sex	1	118.91	3.78
Race	1	362.23	11.52**
Time x Sex	1	32.31	1.03
Time x Race	1	92.93	2.96
Sex x Race	1	90.65	2.88
Time x Sex x Race	1	59.15	1.88

* $p < .05$ ** $p < .001$

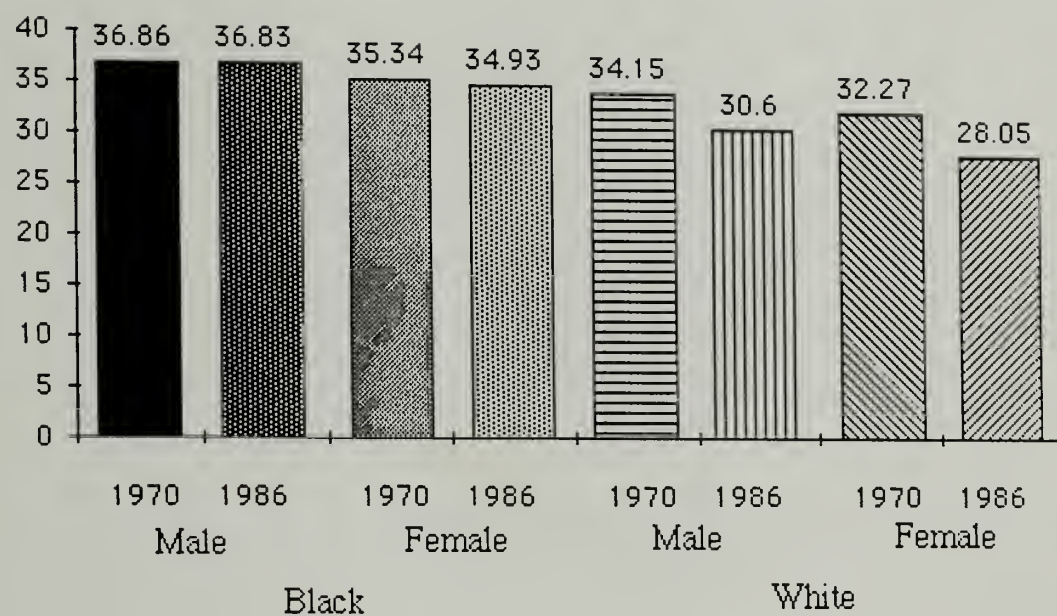
1970 to 1986. Also as predicted, students in 1986 perceived significantly less occupational discrimination against women than did the students in 1970.

RACE HYPOTHESIS

Also as hypothesized, Race was found to be a significant main effect on the Black Discrimination Scale [$F(1,389) = 35.66, p < .001$]. Race also yielded a significant main effect on the Women Discrimination Scale [$F(1,384) = 11.52, p < .001$]. An examination of the means in Table 5 indicates that on the Black Discrimination Scale, blacks ($M = 35.99$) perceived more discrimination against blacks than white students ($M = 31.27$). Figure 1 shows the mean responses to this scale by time, race and gender. This result confirms the hypothesis that black students perceive significantly more occupational discrimination against black people than do white students. Table 6 indicates that the same is true for the Women Discrimination Scale. Black students ($M = 33.34$) perceived more discrimination against women than

Fig. 1. Mean responses to Discrimination Against Blacks
Scale by Race, Gender and Time

Figure 1



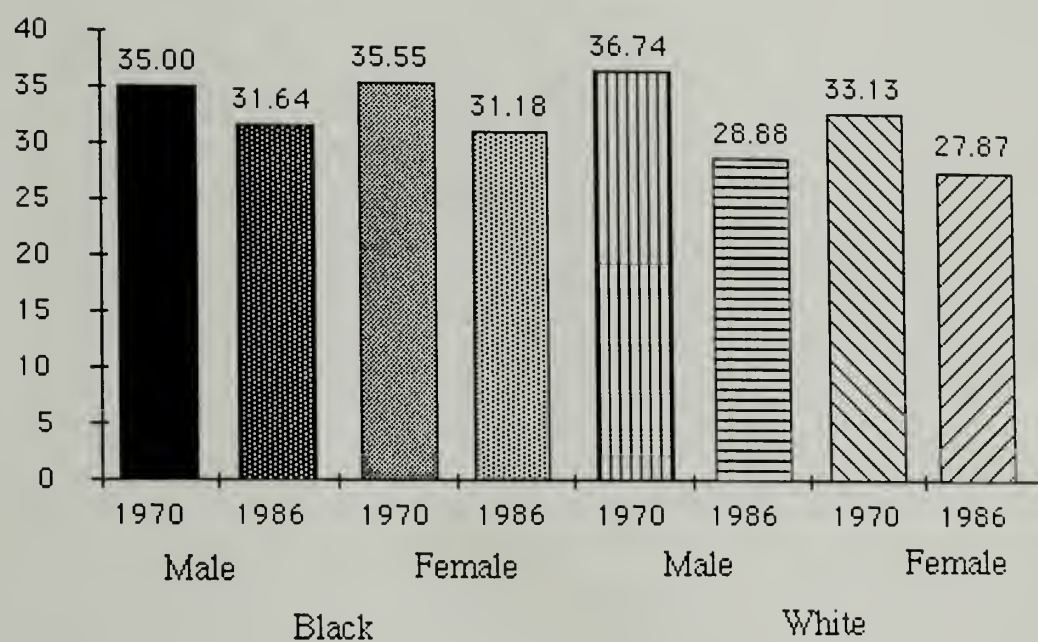
did the white students (\underline{M} = 31.66).

GENDER HYPOTHESIS

The analysis of variance performed on the Women Discrimination Scale did not yield a significant main effect for Gender. The hypothesis that women perceive more occupational discrimination against women than men was not supported. The mean for men was 33.07; for women, it was 31.93. This can be understood by referring to Tables 6 and 8. It is also important to note that there was a Sex by Race interaction tendency [$(F(1,384) = 2.88, p < .090)]$. Examination of the mean scores of each race-sex group indicates that white females perceived the least amount of occupational discrimination against women (\underline{M} = 30.50) whereas black women (\underline{M} = 33.37) perceived the most. There was very little difference between the perceptions of black men (\underline{M} = 33.32) and black women (\underline{M} = 33.37) on the Women Discrimination Scale. Figure 2 shows the mean responses to this scale by time, race and gender. However, white males (\underline{M} = 32.81) perceived a good

Fig. 2. Mean responses to Discrimination Against Women Scale by Race, Gender and Time

Figure 2



deal more occupational discrimination against women than did white females ($\bar{M} = 30.50$). It appears that this interaction tendency and the tendency toward a significant main effect for Gender is the result of the difference between the mean scores of white females and white males.

There was a sex differentiation on the Black Discrimination Scale [$(F(1,389) = 4.97, p < .026)$]. Examination of the means indicates that it is males ($\bar{M} = 34.61$) who perceive more occupational discrimination against black people than women do ($\bar{M} = 32.65$). This can be understood by referring to Tables 5 and 7.

TIME X RACE INTERACTION HYPOTHESIS

The analysis of variance performed on the Black Discrimination Scale revealed a statistically significant Time x Race interaction [$(F(1,389) = 4.78, p < .029)$]. T-test analyses using separate variance estimates were used to assess the direction and meaning of the effects. Table 9 contains this information. T-tests performed on each time-race group on the Black Discrimination Scale Total

Table 9

T-Tests on Black Discrimination Total Score by Time - Race Group

Time	Race	Mean	(2)	(3)	(4)
(1) 1970	Black	36.09	2.62*	.31	5.62**
(2) 1970	White	32.69		-2.42*	4.59**
(3) 1986	Black	35.60			5.66**
(4) 1986	White	28.76			

* $p < .05$

** $p < .001$

indicated that blacks in 1970 perceived significantly more discrimination against blacks than whites in 1970 [$(t = 2.62, p < .010)$] and whites in 1986 [$(t = 5.62, p < .001)$]. These tests also indicate that whites in 1970 perceived significantly less discrimination against blacks than blacks in 1986 [$(t = -2.42, p < .017)$] and significantly more discrimination against blacks than did white students in 1986 [$(t = 4.59, p < .001)$]. There was also a significant finding that 1986 blacks perceived more discrimination against blacks than 1986 whites [$(t = 5.66, p < .001)$]. The mean score of the 1970 blacks did not differ significantly from the means score of the 1986 blacks on the Black Discrimination Scale Total. The highest mean score on the BDST was for the 1970 blacks ($M = 36.10$) with the 1986 blacks ($M = 35.88$) and the 1970 whites ($M = 33.21$) following respectively. The lowest mean score on the BDST was for the 1986 white students ($M = 29.33$).

There was a Time by Race interaction tendency on the Women Discrimination Scale [$(F(1,384) = 2.96, p < .086)$]. This can be understood by referring to Tables 6 and 8.

Although this result was not statistically significant, an inspection of the means seems to indicate that blacks in 1970 tended to perceive more discrimination against women than did blacks in 1986. The same pattern is true for white students. White students in 1970 perceived more occupational discrimination against women than did white students in 1986.

TIME X GENDER INTERACTION HYPOTHESIS

There was no significant interaction finding on the Women Discrimination Scale for Time x Gender. The hypothesis that women in 1986 would perceive more discrimination against women than women in 1970 was not supported by the results.

C H A P T E R I V

DISCUSSION

TIME HYPOTHESIS

The results gave limited support to the hypothesis that time is significantly related to student perceptions of occupational discrimination. A cohort difference (1970 vs. 1986) among whites, but not among blacks, was found for perceived race discrimination. A cohort difference for blacks and whites was found for perceived gender discrimination. The time effect for blacks appeared for perceived gender discrimination only. Generally, there was less discrimination perceived in 1986 than in 1970. This is true for perceived discrimination against blacks and perceived discrimination against women. However, the significant finding on the race discrimination scale is due to the decrease in whites' perceptions of discrimination against blacks over time. Blacks do not see less racial discrimination.

This can be understood by reference to the fact that

in the not too distant past, racial segregation in schools, housing, jobs, and public accommodations was the norm in many areas -- and even legal in others. In the 1960's, legislation was passed making this type of discrimination illegal. Paralleling these changes in public policy, overt attitudes of racial prejudice and sentiment for occupational discrimination seem to have been markedly reduced over time (Taylor, Fiske, Etcoff & Ruderman, 1978). Burstein (1979) found that over time the American public has changed its attitude toward who should receive "first chance" at employment. In the late 1940's approximately one-half of a sample of the American public responded that whites should have first chance at any kind of job. In 1972, only five percent expressed this sentiment. Shifts in public opinion seem to be temporally related to changes in relevant legislation. This has been supported by Page and Shapiro (1982) and Monroe (1983). It is clear that the passage of time has played a role in changing perceptions and attitudes about discrimination. However, what is more important than the passage of time itself are the events (e.g., civil rights demonstrations)

that have taken place over time. These events seem to have informed and shaped public opinion.

However, it could be argued that both cohorts were exposed to many of the same historical and political influences. As a result of policy changes in this sixteen year span of time, there has been an increase in the actual number of blacks in occupations which were virtually closed to blacks previously. Perhaps the recent increases and visibility of blacks in a greater number of professional and executive-level positions has also changed student perceptions. Given these secular changes, it seems reasonable to suggest that the temporal shift in the student perceptions of occupational discrimination can be understood within the framework of these historical changes.

A similar line of reasoning can be used to explain the changes in the perception of discrimination against women over time. The women's movement has been an important political force in its quest for social and economic equality for women. Our society has been moving in the direction of equal opportunities for both sexes.

Women are more involved in the work force presently than in previous years (Betz, 1984, Harkess, 1985). This may help to explain changes in student perceptions of employment over time. Also, the "traditional" attitude that a woman's place is in the home is no longer widely held. Changes in how people are socialized may also play a role in the decrease in perceptions of discrimination. There has been a decrease in traditional sex-role attitudes over the years. According to Kluegel & Smith (1986), the proportion of people approving of women having "an equal role with men in running business, industry and government" has increased from 47% to 56% between 1972 and 1978. It is possible that in more recent times, people have been socialized to believe that women can pursue any type of career, and not be restricted to mothering or traditionally feminine jobs. The temporal change in student perceptions of occupational discrimination against women can be explained by changes in how people are socialized along with the greater participation by women in higher status positions.

It is necessary to note that the difference in the

cohorts could be due to social class differences in the two groups. The 1986 cohort was on the average from a higher socioeconomic background than the 1970 cohort. This could have influenced student perceptions of occupational discrimination.

RACE HYPOTHESIS

The results supported the hypothesis that the race of respondents is significantly related to perceptions of occupational discrimination against blacks. This difference is also true for perceived gender discrimination. In the case of discrimination against blacks, there was more discrimination perceived by black respondents than by white respondents. This makes sense, given that blacks would be more sensitive to this type of discrimination because they are socialized into the role of people who are discriminated against and because they are members of the victimized group (Turner & Turner, 1975). Because of the publicity about Affirmative Action, whites would be more likely to believe that there is no

discrimination in the job market or even that there is reverse discrimination. Most Americans agree that there should be equity in distribution of income. However, it has been found that many people oppose quotas or preferential treatment to achieve black-white economic parity. Interestingly, a substantial number of blacks also oppose this method (Kluegel & Smith, 1986). The difference in attitude may lie in the fact that blacks may doubt that the ideology of equal opportunity works in practice. Blacks are more likely to support programs to intervene directly in the workplace to ensure that fair practice rules are enforced. Whites tend to believe that this intervention is not necessary and that the system is working well. They tend to attribute blacks' lower socioeconomic status to a lack of motivation on the part of blacks (Kluegel & Smith, 1986).

It is more difficult to understand the difference that race makes on the Women Discrimination Scale. It is possible that black people, as the victims of racial discrimination, would be more sensitive to all types of discrimination. This hypothesis is corroborated by

Kluegel and Smith (1986). They found that more discrimination against women is perceived by young people, nonwhites and the more educated. There were no significant effects for region, income or sex.

GENDER HYPOTHESIS

The results indicated that men and women did not differ significantly in their perceptions of discrimination against women. This is contrary to what was hypothesized. It was hypothesized that women would perceive more occupational discrimination than would men. Although the results were not significant, women overall perceived less discrimination than men. It is of interest that black females and white males perceived a good deal more discrimination than did white females. The meaning of these results is difficult to discern. It does not seem that black females have heightened sensitivity to discrimination against women as a function of sensitivity carried over from race discrimination given that white males and black males did not differ greatly in their

perceptions. Turner & Turner (1975), who got similar results, explained the finding as possibly the result of differential socialization into the role of a person who is discriminated against. Those women least aware of sex discrimination may be characterized by high internal locus of control and may hold individualistic attitudes. Given this, women may attribute the significantly lower number of women in higher status occupations to individual choice rather than to structural barriers limiting their opportunities. In this view, women are not more involved in the work force because they chose to pursue other options. It is also possible that white females do not expect to invest themselves in careers. Black females and males would be more motivated to make a realistic assessment of the occupational opportunity structure because involvement in a career is a realistic expectation for these groups. These same possibilities apply to the present finding. Unfortunately, data to these this explanation directly were not available.

The above focuses on possible explanations for why women perceive less discrimination than men. Another

direction to explore is why men perceive more discrimination than women. It seems possible that men as the primary participants in the job market are more aware of sexist practices. They may promote or at least be aware of sexist attitudes in the work place and therefore may be more likely to see women as an oppressed group. However, this does not mean that they see such oppression as wrong.

As college students, these subjects have not yet been directly exposed to obstacles in the work world. If these subjects had been interviewed after exposure to the work world they might have given very different responses. It is also possible that women are aware of the increases in the actual numbers of women in the work force. However, given that the increases are not very large, it seems that women may be overestimating actual participation. Another possibility is that women are socialized to believe that they can pursue any career and that any career will be open to them. All of the above may have affected women's perceptions of occupational discrimination.

Men and women did differ significantly in their

perceptions of discrimination against blacks. This was an unexpected finding. Men perceived more discrimination against blacks than did women. The meaning of this finding is unclear. It could be explained in a similar way as the findings about discrimination against women. Men and black women are traditionally more involved in the work force and therefore may be more sensitive to discrimination because they are exposed to it. The attitude that white women hold regarding themselves may carry over to their perceptions of discrimination against blacks. They may tend to believe that the lower numbers of blacks in higher status positions is a matter of choices made by blacks rather than the result of racial discrimination.

TIME x RACE INTERACTION

The results did not support the hypothesis on the Black Discrimination Scale that blacks in 1986 would perceive less discrimination than blacks in 1970. There was not a significant difference between 1970 and 1986

blacks.

The results indicated that blacks in 1970 perceived more discrimination than 1970 whites. This replicated the Turner and Turner (1975) finding that blacks in 1970 perceived more discrimination than whites in 1970.

It was found that whites in 1970 perceived more racial discrimination than 1986 whites. Whites in 1970 were probably more sensitive to discrimination than 1986 whites as a function of the tone of the 1960's. Civil rights legislation having been passed relatively recently, discussions of discriminatory practices were very much in the news during that time.

It was also found that whites in 1970 perceived less discrimination than 1986 blacks. It would seem that given the attention racist practices were given in the 1960's, whites' perception of discrimination in 1970 might be closer to the perceptions of 1986 blacks. However, the perceptions by blacks of discrimination have not decreased significantly over time and 1970 blacks perceived significantly more race discrimination than 1970 whites. Even though there was recognition of racism by 1970

whites, it is still black people who are the victims of racist behavior. This could explain why 1970 whites were not as aware of the limitations in the job market even when they are compared with blacks who are of a time when in fact there is more availability to blacks in higher level positions.

From the results of this study it appears that over time blacks have not changed significantly in their perception of occupational discrimination against blacks. This could be explained by blacks' continued belief in structural limits to equal opportunity. It has been found by Kluegel and Smith (1986) that when blacks in 1972 and 1976 were asked how much real change there had been in the position of black people in the past 10-20 years they gave a somewhat pessimistic assessment of the improvement in opportunities of blacks over this time.

TIME x GENDER INTERACTION

The results did not support the hypothesis that women in 1986 would perceive more occupational discrimination

than women in 1970. As discussed previously, men perceived more discrimination against women than women and in fact 1970 males perceived more discrimination than any other group. Women in 1986 perceived the least. Women in 1970 perceived more than did 1986 women. This is consistent with DeFant's (1985) finding for a white sample. Fewer females in 1984 regarded women as an oppressed group or felt affected by sexism than females in 1973 (DeFant, 1985). It seems possible that women in 1986 were more aware of recent increases in women's work participation and therefore believe there is less discrimination. There is less discrimination at the level of entrance, but in promotion there is as much as ever. It is also possible that the women in 1986 believed that women can pursue any career and that any lack of participation in the work place is due to choices made by individuals. The women's movement was very much in the public eye in the 1960's as opposed to recent times. This helps to explain 1970 females greater sensitivity to occupational discrimination against women. It would have been difficult in the 1960's to ignore the lack of parity

in the work place with the women's movement doing its best to make the public aware of the discrimination causing the disparity. Nevertheless white females in 1970 perceived less discrimination against females than black females or white males.

IMPLICATIONS OF FINDINGS

The findings have various implications for public policy. From the aforementioned, it is clear that changes in public attitudes inform public policy. The Civil Rights movement and the Women's Movement served to sensitize and force recognition by the public of the injustices suffered by blacks and women. In turn this led to significant changes in legislation. This type of activity should also sensitize the public to the discrimination suffered by other minority groups. This all provided a better understanding of minority groups in this culture. As a result, more opportunities have opened up for oppressed groups. However, it is important to note that with the shift away from displays of overt racism, there has also

been a shift away from the perception of obstacles to minority groups in the opportunity structure. The shift in perceptions of racist attitudes seems to be prevalent among whites. Whites tend to attribute the disparity in job market to blacks' lack of motivation and the practice of prejudicial behavior by a few individuals. The occupational structure itself is not seen as limiting to blacks. In fact many whites believe that the structure is functioning to hinder their progress by favoring minority groups. If this perception continues, it could move public policy further toward a more conservative view of Affirmative Action programs. As noted by Lieberman and Fuguitt (1970), it would take generations before disparity in the job market would be eliminated even if there were no further discrimination. Given that the total elimination of discrimination seems highly unlikely, programs like Affirmation Action are important to make an effort to right previous wrongs. The conservative view which is taking hold in our culture serves to slow this progress. Psychological processes are an important vehicle for understanding social change. Public attitudes

and perceptions are what inform us about our own and others' position in the opportunity structure. These attitudes are sometimes the basis of change in society. However, society can only be available to change when circumstances and people demand change.

This is important not only for public policy but for education as well. Public perceptions could have an impact on student aspirations and expectations. Students of minority groups may have lower aspirations and expectations and therefore be more likely to accept lower level positions. They may feel that they have little control over their circumstances, and therefore avoid putting themselves in a position to be discriminated against.

LIMITATIONS OF THIS STUDY

Unfortunately, it was not possible to have total comparability of the samples. The students were from differing social backgrounds. This may have affected their perceptions of discrimination. However, in spite of this social class difference, the current group (like the

1970 group) is representative of the current group at this state university. Social class has improved for the university population over the years. In order to obtain a completely comparable group controlling for social class, the sample would not be representative of the current population at the University of Massachusetts.

The data were also not collected in exactly the same manner. This could also have affected the results. The white students in 1986 were all students in introductory psychology classes instead of being sampled from all departments at the university. However given the social science requirements of this university, this sample is probably a good representation of the freshmen class.

SUMMARY AND CONCLUSIONS

The results suggest that there has been a change in perceptions of occupational discrimination over time. Students perceive less discrimination now than they did sixteen years ago with the exception of blacks on discrimination against blacks. This could be the result

of increases in actual numbers of workers in various occupations, changes in the public perception of what causes the disparity in the job market, or changes in the socialization patterns.

The results indicate that males perceived more discrimination against women than did women. It is possible that the meaning of the discrimination question is different for men and women. Women may want to believe that there are no limitations in the job market and therefore on some level are practicing denial. Some may reason that the disparity in the job market is the result of the choices women make. Also they may believe that, although society is oppressive and women as a group are discriminated against, they themselves can be the exception. Men, on the other hand, may be more aware of the occupational opportunity structure because it has been more salient for them. Whether they approve of or disapprove of the existing structure is not clear.

Race is a factor in student perceptions of occupational discrimination. Blacks perceive more discrimination than whites. There has been more

recognition and direct experience by blacks of racist and sexist practices in the opportunity structure. The attribution of the causes of occupational difference may also differ between blacks and whites. Blacks tend to see the problem as a structural one while whites see the problem as being the result of individual motivation.

This leaves open many areas for further investigation. Due to the relatively short period of time assessed, it is difficult to interpret the true impact of historical events. Both cohorts were exposed to many of the same political influences and values. It may be useful to follow-up on the 1970 group to assess developmental changes. This would be valuable because these people have been in the work force for a number of years and this would allow the secular trends regarding such things as resistance to Affirmative Action to be evaluated.

It would be useful to see if these findings apply to other populations, e.g. Native Americans, Asians and to do further work to assess causes of the trends that were found -- in particular why women see so little discrimination against women.

Blacks and women will continue to make their presence known in the work force. It will be important to follow trends in participation and perception of opportunities.

REFERENCES

- Benokraitis, N.V. and Feagin, J.R. (1978). Affirmative Action and Equal Opportunity: Action, Inaction Reaction. Boulder, Colorado: Westview Press.
- Betz, E.L. (1984). A Study of Career Patterns of Women College Graduates. Journal of Vocational Behavior, 24, 249-263.
- Bird, C. (1968). Born Female: or the High Cost of Keeping Women Down. New York: McKay.
- Blau, F.D. (1978). The Data of Women Workers, Past, Present and Future. In A. Stromberg and S. Harkess (Eds.), Women Working: Theories and Facts in Perspective. Palo Alto, Calif.: Mayfield Publishing Co.
- Burstein, P. (1979). Public opinion demonstrations, and passage of anti-discrimination legislation. Public Opinion Quarterly, 79, 157-172.
- Chodorow, N. (1978). The Reproduction of Mothering: Psycho-analysis and the Sociology of Gender. Berkeley: University of California Press.
- Cosby, A.G., Thomas, J.K., and Falk, W.W. (1976). Patterns of early adult status attainment and attitudes in the nonmetropolitan South. Sociology of Work and Occupations, 3 (4), 411-428.
- Curtis, B.W. (1968). The effects of segregation on the Vocational Aspirations of Negro Students. Dissertation Abstracts, 29 (3-A), 772 Abstract.
- DeFant, M.A. (1985). A 1973-1984 Cohort Comparison of College Students' Life Plans and Career Aspirations, Unpublished Masters Thesis, University of Massachusetts, Amherst.

- Firestone, S. (1971). On American Feminism. In V. Gornick and B.K. Morat (Eds.), Women in Sexist Society Studies in Power and Powerlessness. New York: Basic Books, Inc.
- Gilligan, C. (1982). In a different voice. Cambridge, Ma: Harvard University Press.
- Harkess, S. (1985). Women's Occupational Experiences in the 1970's: Sociology and Economics. Signs: Journal of Women in Culture and Society, 10 (3), 495-516.
- Harmon, L.W. (1981). The life and career plans of young adult college women: A follow-up study. Journal of Counseling Psychology, 28, 416-427.
- Hout, M. (1984). Occupational Mobility of Black Men: 1962 to 1973. American Sociological Review, 49, 308-322.
- Huber, J. (1982). Towards a sociotechnological theory of the Women's Movement. In R. Kahn-Hut, A.K. Daniels, & R. Calvard (Eds.), Women and work: Problems and perspectives. NY: Oxford University Press.
- Huyck, M.H. and Hoyer, W.J. (1982). Adult Development and Aging. Belmont, CA: Wadsworth, Inc.
- Katz, I. (1969). A Critique of Personality Approaches to Negro Performance, with Research Suggestions. Journal of Social Issues, 25, 13-27.
- Kirkpatrick, J.J. (1973). Occupational Aspirations, Opportunities and Barriers. In K.S. Miller and R.M. Dreger (Eds.), Comparative Studies of Blacks and Whites in the United States. New York: Seminar Press.

- Kluegel, J.R. and Smith E.R. (1986). Beliefs About Inequality, Americans' Views of What Is and What Ought to Be. New York: Aldine De Gruyter.
- Liebertson, S. and Fuguitt, G.V. (1967). Negro-White Occupational Differences in the Absence of Discrimination. American Journal of Sociology, 73, 188-200.
- Monroe, A.D. (1982). American Party Platforms and Public Opinion. American Journal of Political Science, 27, 27-42.
- Page, B.I. and Shapiro, R.Y. (1982). Changes in Americans' Policy Preferences, 1935-1979. Public Opinion Quarterly, 46, 24-42.
- Parelius, A.P. (1975). Emerging sex-role attitudes, expectations and strains among college women. Journal of Marriage and the Family, 37, 531-540.
- Roper, B.S. and Labeff, E. (1977). Sex roles and feminism revisited: An intergenerational attitude comparison. Journal of Marriage and the Family, 39, 113-119.
- Rosenthal, R. and Jacobson, L.F. (1968). Teacher Expectations for the Disadvantaged. Scientific American, 218 (4), 19-23.
- Rytina, N.F. (1982). Earnings of Men and Women: A Look at Specific Occupations. Monthly Labor Review, 105, 25-31.
- Snyder, D. and Hudis, P. (1976). Occupation, Income & Effect of Minority Competition & Segregation. American Sociological Review, 41, 209-304.
- Taylor, S.E., Fiske, S.T., Etcoff, N.L. and Ruderman, A.J. (1978). Categorical and Contextual Bases of Person Memory and Stereotyping. Journal of Personality and Social Psychology, 36, 778-793.

- Thomas, G.E. (1979). Hope in Adult Development Among Afro-Americans. Journal of Black Studies, 10, 167-182.
- Timko, C. (1984, April). The entering class at UMass: ACE survey, fall, 1983. (SAREO Rep. No. 241). Amherst, MA: Student Affairs Research and Evaluation Office, University of Massachusetts.
- Turner, B.F. and Turner, C.B. (1975). Race, Sex, and Perceptions of the Occupational Opportunity Structure Among College Students. Sociological Quarterly, 16 (Summer), 345-360.
- Turner, J.H., Singleton, R.Jr., Musick, D. (1984). Oppression, A Socio-History of Black-White Relations in America. Chicago: Nelson-Hall.
- U.S. Department of Labor, Women's Bureau. (1983). Time of change: 1983 handbook on women workers. Washington, DC: U.S. Government Printing Office, Bulletin 298.
- Valentine, C.A. (1971). Deficit, Difference and Bicultural Models of Afro-American Behavior. Harvard Educational Review, 41, 137-157.
- Warner, W.L., Meeker, M., and Eells, K. (1960). Social Class in America: A Manual of Procedure for the Measurement of Social Status. NY: Harper.

APPENDIX

SURVEY OF STUDENT OPINIONS

Your cooperation in answering this questionnaire will help to achieve a better understanding of how students feel about college and life.

Your answers will be absolutely confidential, and no individual student's answers will ever be revealed.

Thank you for your cooperation. Please answer quickly but carefully.

1. What is your sex? (circle)
 1. Male
 2. Female

2. Your ethnic background is (circle only one answer)
 1. Black/Afro-American (non-Hispanic)
 2. Hispanic
 3. Asian
 4. Native American
 5. Caucasian/White (non-Hispanic)
 6. Cape Verdean
 7. Other (specify _____)

3. What is the highest level of education obtained by your father?
 1. No formal education
 2. Some elementary education
 3. Some secondary education
 4. Graduation from high school
 5. Technical training without college
 6. Some college
 7. Graduation from college
 8. Professional training after college

4. What is the highest level of education obtained by your mother?

1. No formal education
2. Some elementary education
3. Some secondary education
4. Graduation from high school
5. Technical training without college
6. Some college
7. Graduation from college
8. Professional training after college

5. How would you describe your father's usual occupation? (circle one)

1. Executive or Professional (e.g., doctor, lawyer, president of large company)
2. Business Managers (e.g., personnel manager, branch manager, accountant)
3. Administrative Personnel, Small Business Owners (e.g., insurance agents, section heads, etc.)
4. Clerical and Sales Workers (e.g., bookkeepers, stenographers)
5. Skilled Manual (e.g., carpenters, plumbers, mechanics)
6. Semi-skilled Manual (e.g., machine operators, bartenders, truck drivers, etc.)
7. Unskilled manual (e.g., laborers, domestics, on welfare, etc.)
8. Other (specify _____)

6. How would you describe your mother's usual occupation? (circle one)

1. Executive or Professional (e.g., doctor, lawyer, president of large company)
2. Business Managers (e.g., personnel manager, branch manager, accountant)
3. Administrative Personnel, Small business Owners (e.g., insurance agents, section heads, etc.)
4. Clerical and Sales Workers (e.g., bookkeepers, stenographers)
5. Skilled Manual (e.g., carpenters, plumbers, mechanics)
6. Semi-skilled manual (e.g., machine operators, bartenders, truck drivers, etc.)
7. Unskilled manual (e.g., laborers, domestics, on welfare, etc.)
8. Other (specify _____)

7. Which of the following best indicates your religious background?

1. Catholic
2. Protestant
3. Jewish
4. Other (specify _____)
5. None

8. The highest degree you WOULD LIKE to receive is (circle one)

1. None (less than 4 years of college)
2. Bachelor's (undergraduate -- B.A., B.S., B.Eng., etc.)
3. Master's degree (M.A., M.S., M.S.W., M.B.A., etc.)
4. Professional (M.D., D.D.S., D.V.M., L.L.B., etc.)
5. Doctorate (Ph.D., Ed.D., etc.)

9. The highest degree you EXPECT TO RECEIVE eventually is -- (the highest degree that you expect to receive may be the same or different from what you would like to receive). Circle one.

1. None (less than 4 years of college)
2. Bachelor's (undergraduate -- B.A., B.S., B.Eng., etc.)
3. Master's degree (M.A., M.S., M.S.W., M.B.A., etc.)
4. Professional (M.D., D.D.S., D.V.M., L.L.B., etc.)
5. Doctorate (Ph.D., Ed.D., etc.)

10. 15 or 20 years from now, what kind of work would you like most to be doing?

OCCUPATION:

11. Of course, there can be a difference between anybody's dream and what s/he realistically EXPECTS to be doing. In 15-20 years, what kind of work do you really EXPECT to be doing?

OCCUPATION:

SOME QUESTIONS ABOUT CAREERS FOR BLACK PEOPLE

Black people meet discrimination more often in some career fields than in others. Here is a question about discrimination in employment and advancement in some occupations.

DO YOU THINK THIS FIELD IS OPEN TO BLACK PEOPLE. . .

- (A) On the same basis as to whites
- (B) Open only to exceptional black people
- (C) Open to black people only on a segregated basis
- (D) Not open to black people

Please circle only one letter for each occupation. Please given an answer, even if you are not sure of your answer. Your opinion is important.

1.	Accountant	A	B	C	D
2.	Advertising and marketing	A	B	C	D
3.	Business executive	A	B	C	D
4.	Career in military service	A	B	C	D
5.	College teaching	A	B	C	D
6.	Creative artist or writer	A	B	C	D
7.	Elementary school teacher	A	B	C	D
8.	Engineering	A	B	C	D
9.	Executive in federal government	A	B	C	D
10.	Executive in state government	A	B	C	D
11.	High school teacher	A	B	C	D
12.	Law	A	B	C	D
13.	Medicine	A	B	C	D
14.	Owner of a small business	A	B	C	D
15.	Personnel manager	A	B	C	D
16.	Postal worker	A	B	C	D
17.	Research in physical or biological sciences	A	B	C	D
18.	Research in social sciences	A	B	C	D
19.	Salesperson	A	B	C	D
20.	Skilled blue-collar trade	A	B	C	D
21.	Social work	A	B	C	D

SOME QUESTIONS ABOUT WOMEN'S CAREERS

Women meet discrimination more often in some career fields than in others. Here is a question about discrimination in employment and advancement in some occupations.

DO YOU THINK THIS FIELD IS OPEN TO WOMEN . . .

- (A) On the same basis as to men
- (B) Open only to exceptional women
- (C) Not open to women

Please circle only one letter for each occupation. Please given an answer, even if you are not sure of your answer. Your opinion is important.

- | | | | |
|--|---|---|---|
| 1. Accountant | A | B | C |
| 2. Advertising and Marketing | A | B | C |
| 3. Business executive | A | B | C |
| 4. Career in military service | A | B | C |
| 5. College teaching | A | B | C |
| 6. Creative artist or writer | A | B | C |
| 7. Elementary school teacher | A | B | C |
| 8. Engineering | A | B | C |
| 9. Executive in federal
government | A | B | C |
| 10. Executive in state government | A | B | C |
| 11. High school teacher | A | B | C |
| 12. Law | A | B | C |
| 13. Medicine | A | B | C |
| 14. Owner of a small business | A | B | C |
| 15. Personnel Manager | A | B | C |
| 16. Postal worker | A | B | C |
| 17. Research in physical or
biological sciences | A | B | C |
| 18. Research in social sciences | A | B | C |
| 19. Salesperson | A | B | C |
| 20. Skilled blue-collar trade | A | B | C |
| 21. Social work | A | B | C |

