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Response Preferences of Blacks and Roleplaying Whites to Affirmative Action Subscripts in Job Advertisements

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RESPONSE PREFERENCES OF
BLACKS AND ROLEPLAYING WHITES TO
AFFIRMATIVE ACTION SUBSCRIPTS IN JOB ADVERTISEMENTS

by

David Richard MacDonald

A Thesis
Submitted to the
Faculty of The Graduate College
in partial fulfillment
of the
Degree of Master of Arts

Western Michigan University
Kalamazoo, Michigan
December 1976
ACKNOWLEDGEMENTS

In preparing this thesis, I have profited from the sagacious guidance of Doctors Richard H. Schmidt, Eston J. Asher, Jr., and John E. Nangle. Their encouragement and helpful comments are sincerely appreciated. My thanks go to them, as well as to several instructors in the College of Business at Western Michigan University and the students of their classes for making this research possible.

I am especially indebted to the late Dr. Frank A. Fatzinger who died unexpectedly on September 17, 1976. Dr. Fatzinger supplied the original ideas upon which this work is based. It is to his memory that this thesis is dedicated.

This study provided the ideal capstone to a very valuable learning experience at Western.

David Richard MacDonald
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**TABLE OF CONTENTS**

<table>
<thead>
<tr>
<th>CHAPTER</th>
<th>PAGE</th>
</tr>
</thead>
<tbody>
<tr>
<td>I</td>
<td>INTRODUCTION</td>
</tr>
<tr>
<td>II</td>
<td>METHODOLOGY</td>
</tr>
<tr>
<td></td>
<td>Advertisement Design</td>
</tr>
<tr>
<td></td>
<td>Selection of Four Similar Advertisements</td>
</tr>
<tr>
<td></td>
<td>Analysis of Pilot Group Data</td>
</tr>
<tr>
<td></td>
<td>Presentation of the Equated Ads</td>
</tr>
<tr>
<td>III</td>
<td>ANALYSIS OF DATA</td>
</tr>
<tr>
<td></td>
<td>Within-Group Relationships</td>
</tr>
<tr>
<td></td>
<td>Between-Group Relationships</td>
</tr>
<tr>
<td>IV</td>
<td>CONCLUSIONS</td>
</tr>
<tr>
<td>V</td>
<td>RECOMMENDATIONS</td>
</tr>
<tr>
<td>REFERENCES</td>
<td></td>
</tr>
<tr>
<td>APPENDIX A</td>
<td></td>
</tr>
</tbody>
</table>
CHAPTER I

INTRODUCTION

Over recent years companies have had to adjust to increasingly stringent guidelines on employee selection procedures. The federal government has passed a significant amount of new legislation regarding antidiscrimination and many facets of hiring: test validity and use, interviewing, employment agency and employment service practices, and affirmative action.

A prime example of this legislation is situated in Volume 35, #149 of the Federal Register of August 1, 1970. Chapter XIV of this publication was issued by the Equal Employment Opportunity Commission. Part 1607 outlines, in a total of fourteen sections, a fairly wide spectrum of employment-related items. The thematic germ for this thesis is located in Part 1607.14 -- the fourteenth and final section of this chapter of the Federal Register. It reads:

Nothing in these guidelines shall be interpreted as diminishing a person's obligation under both title VII and Executive Order 11246 as amended by Executive Order 11375 to undertake affirmative action to ensure that applicants or employees are treated without regard to race, color, religion, sex, or national origin. Specifically, the use of tests which have been validated pursuant to these guidelines does not relieve employers, unions, or employment agencies of their obligations to take positive action in affording employment and training to members of classes protected by Title VII.

The guidelines in this part are effective upon publication in the Federal Register.

What this section means to the employer is that he must actively strive to insure that the percentages of various minority groups and
sexes in his total employ are congruent to the percentages of minority groups and sexes in the surrounding population. If the employer is unable to achieve the proper percentages of races and sexes in his employ through the more standard procedure of interviewing, testing, etc., he is under pressure to hire according to a quota system whereby the employee group is brought in congruence with the surrounding population.

Pressure is brought upon the organization which fails to comply with affirmative action laws. One method of applying pressure is the withholding of government dollars or contracts. Another method is to simply impose legal consequences upon the non-complier. The booklet, "Judicial Mandates for Affirmative Action" (Bader, 1973), is a guide to court cases on federal equal employment opportunity laws. The author of this guide outlines some specific cases and their outcomes, and clarifies the application of Title VII. Consequences for employers not living up to the EEOC legislation are made very clear.

Typically, it seems that hiring sufficient numbers of white males is not a problem, as the supply of this job-seeker is more than adequate. Recruiting white females poses a problem to some employers and a number of employers actively recruit this type of worker for their organizations.

The big problem facing employers seems to be that of locating and hiring qualified minorities. Some avenues are open to the company which needs more minority employees to satisfy Part 1607.14 of the aforementioned Federal Register. One method is to consult
the guide published by the U.S. Department of Labor, Directory for Reaching Minority Groups (Brennan, 1973). This directory lists names, addresses, and telephone numbers of people and organizations who can reach minority groups to tell them about job opportunities and job training.

Another publication which is likely to assist the employer who is actively seeking to meet affirmative action goals is entitled Equal Employment Opportunity for Minority Group College Graduates: Locating, Recruiting, Employing by Robert Calvert, Jr. (1972). This booklet lists not only names and addresses of minority organizations, but also gives suggestions for an employer to follow when dealing with minority group job-seekers.

A third source of information which can aid in matching minorities with employers is A Guide for Affirmative Action published in 1962 by the U.S. Civil Service Commission. This commission also publishes a wealth of other material on equal opportunity. Much of this material is as valuable to the minority group job-seeker as to the employer.


The booklet, A Directory of Resources for Affirmative Recruitment, published in March, 1975 by the U.S. Equal Employment Opportunity Commission, gives information very similar to that found in A Guide for Affirmative Action. The EEOC recommends that the
Directory be used in conjunction with another publication of their's entitled *Affirmative Action and Equal Employment: A Guidebook for Employers*.

Employers seeking minorities may also send recruiters to college campuses and request to be put into contact with minorities.

Organizations may use variously-worded affirmative action subscripts within their advertisements for job openings hoping to gain two results: (1) to provide published evidence that an employer is actively seeking to meet the goals of affirmative action, and (2) to attract a particular type of applicant.

With respect to (1) above, Melvin Humphrey, Director of the Research Division of the Equal Employment Opportunity Commission in Washington, D.C., stated in a letter to the author, dated November 9, 1976 that:

> Equal employment opportunity designations in help wanted classified advertisements are not per se required by the Equal Employment Opportunity Commission. However, terms of individual conciliation agreements or consent decrees may include affirmative action with regard to recruitment and may specify some form of subscript to publicize the equal employment opportunity policy of the employer.

> It is also possible that compliance agencies working with the Office of Federal Contract Compliance Programs (OFCCP) and regulatory agencies with responsibilities in this area, require this kind of publicity.

> In any case, it could well be that the use of equal employment opportunity or affirmative action subscripts emerged as employers were encouraged or ordered to increase their efforts to be in compliance with Title VII of the Civil Rights Act as amended in 1972, and Executive Orders 11246 and 11375.

> I am not aware of any research projects similar to yours. The Commission is interested in any field of research which can further the objectives of Title VII.
The purpose of this thesis is basically to test the effectiveness of ads in meeting objective (2) as listed on the previous page: to attract particular types of applicants by using variously-worded affirmative action subscripts.

There are those working in this area who feel that the need for research of this nature is questionable. For example, Dr. Robert Calvert, Jr. (1972) said,

"... don't conduct any more studies than you really feel are needed and will be used. Black people, yellow people, red people, and white people are tired of being used as case studies or guinea pigs for statistical analysis. The main focus should be on minimizing problems—not studying them so intently that the very process itself creates friction. (p. 189)"

It was anticipated that no friction would be created during the course of this research. It was also hoped that a study of this nature could be used by employers to supplement their knowledge of hiring practices and policies.

Little prior research has been conducted on the impact of affirmative action subscripts upon readers of job advertisements. A thesis conducted by Milo A. Masura (1976) entitled "Response Preferences to Affirmative Action Statements in Job Advertisements" was an attempt to deal directly with this area. A passage from Masura's abstract states that his study

"... compares the job advertisement response preferences of white males and white females using strongly worded affirmative action statements as the manipulated variable. A simulated classified ad page was used to measure preferred responses in a control group and in two experimental groups that were manipulated with discriminatory affirmative action statements. Findings indicate that prospective employees of either sex had a tendency to prefer ads without the strongly worded affirmative action statements."
Upon examining the experimental design of Masura's research, one can isolate a number of serious design problems. One of these problems was the failure to control for significant sources of variability which, when present, were likely to mask the true effect of the subscripts upon the readers. For example, each of the eight job ads which he presented to his subjects originated from a different company and geographic location. Furthermore, affirmative action studies nearly always imply the word "minority." All of the subjects Masura used to provide data for his analysis were white. As a result, his findings were of limited value. He was unable to make any statements regarding the true effect of affirmative action subscripts upon minority readers or of the accuracy of any predictions whites might make about the way in which minorities would react to these subscripts.

Bearing in mind the previous facts and assumptions, the author attempted to develop a research strategy which would (1) clarify the impact of affirmative action subscripts upon white and minority males and females, (2) test the accuracy of the perceptions of whites roleplaying as blacks compared to blacks responding for themselves when in the process of selecting job advertisements tagged with certain affirmative action subscripts, and (3) test the accuracy of the perceptions of white subjects roleplaying as the opposite sex of their own race compared to members of that opposite sex responding for themselves.

The hypotheses to be tested are listed below.
Hypothesis #1: White males and females roleplaying as white males when selecting two job advertisements from a series of four ads, each with a different affirmative action subscript, will more frequently select the two ads with the "milder" subscripts, i.e., those implying little or no indication of potential reverse discrimination (discrimination toward a white male).

Hypothesis #2: White males roleplaying as white females when selecting two job advertisements from a series of four ads, each with a different affirmative action subscript, will more frequently select the two ads with the more "strongly-worded" subscripts, i.e., those implying moderate or extreme potential reverse discrimination.

Hypothesis #3: White females responding for themselves when selecting two job advertisements from a series of four ads, each with a different affirmative action subscript, will more frequently select the two ads with the "milder" or more "neutral" subscripts.

Hypothesis #4: All subjects, regardless of sex, roleplaying as blacks when selecting two job advertisements from a series of four ads, each with a different affirmative action subscript, will more frequently select the two ads having a greater implication of reverse discrimination.

Hypothesis #5: White subjects roleplaying as blacks when selecting two job advertisements from a series of four, each with a different affirmative action subscript, will choose ads more frequently similar to those chosen by blacks for themselves.

Hypothesis #6: White subjects roleplaying as the opposite sex of their race when selecting two job advertisements from a series of
four ads, each with a different affirmative action subscript, will choose ads more frequently similar to those selected by members of that opposite white sex.
CHAPTER II

METHODOLOGY

The procedures used in this study can be divided into five categories: (1) the design of eight simulated job advertisements presented to subjects of a pilot group, (2) the presentation of those eight ads to the subjects of the pilot group, the objective of which was to obtain a rank-ordering by each subject of the eight ads in terms of their desirability, (3) the analysis of these data to select four ads which were presumed to be of equal desirability and to which four affirmative action subscripts were attached, (4) the presentation of the ad/subscript combination to subjects to determine the preferences of each subject for two of the four ad/subscript combinations, and (5) the analysis of these data to detect significant relationships within groups of subjects and between groups of subjects.

Advertisement Design

A main criticism of the experimental design used by Masura (1976) is that advertisements presented to his subjects contained different kinds of variability to which subjects were likely to react, either consciously or unconsciously. Of the eight ads presented to his subjects, no two represented the same company. As a result, it could be argued that some of his subjects could have
rank-ordered those ads according to their preferences for the advertising companies or locations.

In addition, the eight ads used by Masura were lengthy. It is very possible that the length of the ad served to dampen the subjects' motivation to read each one thoroughly. Subjects may not have read each ad to the end and, therefore, may not have reacted to the subscripts printed at the bottom.

It seems probable that a set of advertisements was needed which would be perceived as "equal" in terms of given criteria and short enough so as not to retard a subject's motivation to carefully read each one.

Two strategies were considered for arriving at a set of "equal" advertisements. The first would have entailed an exhaustive search for ads in newspapers for different job openings at a single company and location. This strategy proved to be fruitless, so the second strategy was chosen.

The second strategy involved designing from scratch a set of eight simulated job advertisements which would satisfy a set of preestablished criteria. The number of ads to be designed was set at eight as this seemed a reasonable number for subjects to read and rank order in a relatively short period of time.

Here are the seven criteria statements which were formulated with the objective in mind of reducing or eliminating certain types of advertisement variability:

(1) All of the advertisements were of the same physical size.
The dimensions of 3 3/8 inches wide and 5 1/16 inches high were
selected for two reasons. First, the ads had to be large enough to accommodate a reasonable amount of ad-copy as printed by an elite-keyed typewriter. Second, this approximate size was fairly popular among advertisements appearing in the classified ad section of area newspapers.

(2) The same company name was used throughout. Masura (1976) summarized findings of Berelson and Steiner that "Perceiving the advertising company as trustworthy, credible, or prestigious has an effect [sic] on the job seeker's tendency to accept the advertising company's intent (Berelson and Steiner, 1964)."

However, Masura failed to incorporate this advice to the fullest in his research. Each of the ads used by Masura originated from a different company and this author doubts that the companies represented in the ads were of equal perceived prestige value. For example, is an ad by National Cash Register Corporation of equal prestige to one of Iowa Beef Processors, Incorporated?

Probably the greatest amount of variability was removed by making all of the simulated ads appear to originate from the same company.

(3) Approximately the same area of white space was incorporated into each ad. White space is an element of concern in professional ad design. Masura (1976) quoted Brink and Kelley (1963) as saying "... an advertisement which has plenty of white space will attract more attention than one that is crowded and cluttered." The eight ads used in this research were designed to be roughly equal in terms of white space.
(4) A fictitious company name was used throughout. Purely the result of brainstorming was the company name of "Chicago Manpower Development." The author felt this title was general enough to cover a wide range of job openings. A fictitious name was chosen to eliminate bias arising from a subject's knowledge of an actual company.

(5) A fictitious company address of "100 N. Gate, Chicago, Illinois 60618" was used throughout. Chicago was selected as the city of location because it is the largest and probably the most varied city in the Midwest. Since the address is fictitious, readers of the ads would have no knowledge of the characteristics of a particular part of the city and, therefore, would not base their selections on this.

(6) Similar styling appeared in each advertisement. The ads utilized by Masura (1976), because they were all from different companies, varied significantly with respect to style. Some readers of those ads may have responded according to their preferences for ad styling. This type of variability was very much reduced by following this criterion statement.

In the ads designed for this research, styling differences were not radical, but sufficient to assure reasonably realistic ads. For example, all corners were square and all borders were 3/16 of an inch wide.

(7) The same sized area was allotted for subscript insertion in each ad. An equal area of 3 inches wide and 5/8 of an inch high was left blank at the bottom of each ad, just above the bottom border.
The intention of this was to reduce perceptual differences caused by unequal areas for affirmative action subscripts.

The eight ads are found on pages 40 through 43 of Appendix A.

Selection of Four Similar Advertisements

In order to test the preferential equality of the eight ads and select four of the eight which would be presumed as relatively equal, the following procedure was employed:

One 5-inch by 7 1/2-inch manila envelope was given to each of 42 junior/senior level students of a marketing class at a midwestern university. Each envelope contained eight ads—one of each of the eight simulated ads—with all ads placed in envelopes in random order by shuffling to eliminate any order effect of presentation. Subjects were given four minutes to read and study the ads. Before opening the envelopes and studying the ads, these instructions were read to the subjects:

This study attempts to measure your response to job advertisements. You will find eight advertisements inside the manila envelope. When I say, "Begin," please remove the advertisements and read and study them carefully for the next few minutes.

Please assume you have all of the necessary education, skills, and experience for all of these jobs. In a few minutes you will be asked to make some judgments about the ads.

After each subject had had four minutes to study the ads, he was given the questionnaire and instructions on page 44 (Figure 9) and asked to supply the requested information.

Of the 42 questionnaires handed out, all were returned in a condition suitable for processing by a computer.
Analysis of Pilot Group Data

Since the students taking part in the first phase of data collection were students in a marketing class, it was thought that they would be more motivated to examine the eight advertisements from a marketing/advertising viewpoint, thus helping to further identify variability inherent in the ads. As was true in all phases of this research, the subjects used were juniors and seniors only. These class levels were chosen because it was thought that students from them might be more interested as well as cognizant of job-seeking procedures.

The rank-orderings of the ads by each student were entered into a computer and a one-way analysis of variance performed on all eight treatments (advertisements) to detect any significant difference among means.

The difference among rank-ordered means with ads 1-8 was significant. The F-obtained was greater than the F-critical at the five percent level of significance: 7.42 vs. 2.01. See analysis of variance summary table (Table 1) below.

Upon examining the means of the rank-ordered responses, four ads were identified which were thought to be quite similar. A one-way analysis of variance was performed on the four ads to confirm that the difference among the four means was non-significant. No significant difference was detected at the five percent level of significance; the F-obtained was less than the F-critical: 1.85 vs. 2.60. Since four ads were to be used for the final research, those
Table 1

One-Way Analysis of Variance Using All Eight Advertisements as Treatments

<table>
<thead>
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<th>Treatment</th>
<th>Size</th>
<th>Mean</th>
<th>Standard Deviation</th>
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<td>42</td>
<td>3.048</td>
<td>2.357630</td>
</tr>
<tr>
<td>2</td>
<td>42</td>
<td>4.024</td>
<td>1.993747</td>
</tr>
<tr>
<td>3</td>
<td>42</td>
<td>4.929</td>
<td>2.433434</td>
</tr>
<tr>
<td>4</td>
<td>42</td>
<td>3.929</td>
<td>1.866167</td>
</tr>
<tr>
<td>5</td>
<td>42</td>
<td>5.024</td>
<td>1.800922</td>
</tr>
<tr>
<td>6</td>
<td>42</td>
<td>6.000</td>
<td>2.585136</td>
</tr>
<tr>
<td>7</td>
<td>42</td>
<td>4.952</td>
<td>1.962482</td>
</tr>
<tr>
<td>8</td>
<td>42</td>
<td>4.095</td>
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Source

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<th>D.F.</th>
<th>Mean Sq.</th>
<th>F-Obtained</th>
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<td>34.44</td>
</tr>
<tr>
<td>Within</td>
<td>1522.952</td>
<td>328</td>
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<tr>
<td>Total</td>
<td>1764.000</td>
<td>335</td>
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four found to be most similar were chosen (numbers 3, 5, 7, and 8).

See analysis of variance summary table (Table 2) below.

Table 2

One-Way Analysis of Variance Using the Four Selected Ads as Treatments

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<td>4.929</td>
<td>2.433434</td>
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<tr>
<td>5</td>
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<td>42</td>
<td>4.952</td>
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Source

<table>
<thead>
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<th>D.F.</th>
<th>Mean Sq.</th>
<th>F-Obtained</th>
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<td>8.071</td>
</tr>
<tr>
<td>Within</td>
<td>715.2857</td>
<td>164</td>
<td>4.361</td>
</tr>
<tr>
<td>Total</td>
<td>739.5000</td>
<td>167</td>
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Presentation of the Equated Ads

The four ads chosen on the basis of relative equality were next given affirmative action subscripts. The four subscripts selected were taken from the list of 22 subscripts, arranged in a continuum from low to high implication of potential reverse discrimination, found on pages 8 and 9 of the thesis of Masura (1976).

A subscript was chosen from each end of the continuum and two from the middle so as to make the distance, in terms of rank-ordered mean values, between any two adjoining subscripts equal. The subscripts selected were Masura's numbers 1, 11, 17, and 22. These subscripts will be referred to as 1, 2, 3, and 4, respectively, in this research. The subscripts originally read as follows:

1. "An equal opportunity employer."
2. "Equal opportunity/affirmative action employer."
3. "An equal opportunity employer—we welcome minority groups."
4. "Special consideration will be extended to minorities and women whose professional credentials and career experience path approximate our indicated opportunity and individual specifications."

It is obvious that subscript 4 is much longer than the others. Because it was so radically different from the others, it was shortened to its essential message:

4. "Special consideration will be extended to women and minorities."

Had the subscript been left at its original length, it would not have been perceptually similar to the others and, therefore, could have introduced some undesirable variability. With this change,
no single subscript was likely to "catch a reader's eye" because of its different length.

Even though the four selected ads were presumed to be equal vehicles for the subscripts, some bias might have been created by consistently pairing an advertisement with the same subscript. To reduce this possibility there were four ways in which the four ads were paired with the four subscripts so that each subscript appeared with each ad an equal number of times:

<table>
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<th>Ad/Subscript Combination #4</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ad</td>
<td>Subscript</td>
<td>Ad</td>
<td>Subscript</td>
</tr>
<tr>
<td>3</td>
<td>with 1</td>
<td>3</td>
<td>with 4</td>
</tr>
<tr>
<td>5</td>
<td>with 2</td>
<td>5</td>
<td>with 1</td>
</tr>
<tr>
<td>7</td>
<td>with 3</td>
<td>7</td>
<td>with 2</td>
</tr>
<tr>
<td>8</td>
<td>with 4</td>
<td>8</td>
<td>with 3</td>
</tr>
</tbody>
</table>

Of course, these do not exhaust all possible ad/subscript permutations but it was felt that since the ads were preferentially similar, the above four combinations would be sufficient.

Five-inch by seven and one-half inch manila envelopes were again used to hold materials to be given to subjects of ten experimental groups for examination.

The procedure of asking subjects to assume a particular role as they read the four ads of a given ad/subscript combination emerged as a means to check the perceptual accuracy of the way in which one race/sex/role-instruction group felt another would respond versus the way in which the other group actually did respond. Four each of sixteen three- by five-inch cards were prepared, each card in a group bearing one of the following role instructions:
Role          Instruction
1.  "Assume you are a white male."
2.  "Assume you are a white female."
3.  "Assume you are a black male."
4.  "Assume you are a black female."

Within each group of sixteen manila envelopes for each ad/subscript combination, four envelopes received one of each of the four different role instruction cards. Therefore, there were 64 finished envelopes: four each of sixteen different ad/subscript/role-instruction combinations.

The subjects used were all upperclassmen, i.e., juniors and seniors, and were enrolled in at least one class at the university's College of Business. Sampling was limited to College of Business students because ad-copy was worded to appeal to business students.

Four types of subjects participated in the research: (1) 64 white males, (2) 64 white females, (3) 16 black males, and (4) 16 black females.

This number 64 was chosen for both white males and females because there were four roles to be assumed and this provided a sufficiently large sample of sixteen in each ad/subscript/role-instruction group. Since blacks of both sexes were scarce, they were asked to only respond for themselves, i.e., not role play.

The four ads within each individual envelope were shuffled to further reduce any order effect of presentation to the subject. In this way subjects did not always see, for example, ad number 3 first.

Each envelope was coded on the back at the lower right-hand corner with a two-digit number to facilitate the researcher in

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distributing the envelopes to subjects. The first digit in the code, a "1," "2," "3," or "4," defined the ad/subscript combination of the ads within the envelope (see ad/subscript combinations on page 17). The second digit was also a "1," "2," "3," or a "4," and referred to the particular role a subject was asked to assume (see role-instructions on page 18).

No subject was required to participate in the research, this being a prime requirement of the university's Human Subjects Review Committee. The author was granted permission on September 29, 1976 to use human subjects in his research which was classified as "Research Gathering Neutral Data." This is "research in which human subjects provide personal, attitudinal or perceptual information which is judged to be nontthreatening to the subject both in the act of responding and in the nature of the response" (Robin, 1971).

As a data gathering session began with a class, the following instructions were read:

Before I pass out any envelopes, allow me to explain the purpose of this visit to your class. This is an attempt to gather data which will later be used in a Master's thesis in Industrial Psychology. If the results of this effort are significant, it could mean advantages for businesses and for you as prospective employees. You need not participate in this survey if you so choose, or you may begin to participate and quit at any time with no sort of penalty or embarrassment. The first thing I will do is pass each of you an envelope and ask you to assume the role of some kind of individual as you examine its contents. Please wait until I give further instructions before opening the envelopes.

The envelopes were then distributed, one to each student. When each subject had one envelope, the following instructions were read aloud:
The purpose of this survey is to measure your response to job advertisements. In your envelope you will find four job advertisements and an additional card instructing you to assume the role of some type of individual as you read the ads. Please assume the role indicated on the card, then read and study the ads for a few minutes. Please assume you have all the necessary education, skills, and experience for all of these jobs. In a few minutes you will be asked to make some judgments about the ads. You may now open the envelopes and examine the contents.

Since four minutes had been allowed for subjects of the pilot group to read eight ads, two minutes were now allowed for these subjects to view the four ads. This seemed to be ample time for each subject to thoroughly read the ads. Then, the following instructions were read aloud:

Next, each of you will receive a questionnaire. You may omit any or all of the information requested, but filling it out completely will be of the greatest value to the survey. You are not asked to print or sign your name and you are not asked for student number. All of the information you give will be given anonymously. When you are finished with the questionnaire, please fold it up and place it inside the manila envelope along with the rest of the materials.

The questionnaires passed out were copies of the questionnaire and instructions (Figure 10) on page 45. After the questionnaires were passed out, the instructions at the top were read aloud to the class, and a brief time period was allowed for subjects to fill out the questionnaires.

Some of the information requested on the form was essential to constitute a usable questionnaire: class standing, advertisements selected, race, and sex. Other information was requested simply to mask the true purpose of the experiment: grade-point average, major, and curriculum.

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The true purpose behind the research was not revealed to subjects participating in the data gathering sessions of this study. The general explanation given to them was that the study attempted to determine if people responded to the differently-worded job advertisements in characteristic ways. By not telling them that the true purpose was to measure the impact of affirmative action subscripts, they were unable to mention this to others. In this way, future subjects probably had no preconceived ideas of what was expected and thus the data supplied by them were assumed to be free from this kind of contamination.
CHAPTER III

ANALYSIS OF DATA

After the envelopes containing the ads, role instruction card, and questionnaire were returned by the subjects, the questionnaires were removed and marked with the same code as the one on the lower right-hand corner of the reverse side of their respective envelopes. This code enabled the author to identify which role a subject had assumed as he read the ads and which ad/subscript combination he had been given.

Because the four ads had been stripped of glaring variability, demonstrated to be preferentially very similar, and subjects were instructed to assume they had all of the necessary education, skills, and experience for all of the jobs, it seemed logical to assume that the only factor causing a subject to select two ads over two others was the wording of the affirmative action subscripts. Therefore, when a questionnaire was returned, the coding for the ad/subscript combination was checked and with that it was determined which sub­scripts had been paired with the two ads that subject selected.

By the end of the data collection effort, a total of 336 questionnaires had been collected. Of these, 65 (19%) had to be rejected for at least one of a number of reasons. With some questionnaires, essential information was omitted (e.g., no sex indicated), or the subject was of the wrong class standing (e.g., a freshman), or the subject did not follow the instructions (e.g., he checked only one
advertisement or perhaps three). The remaining 271 usable ques-
tionnaires were shuffled and placed in a pile and, one at a time, randomly drawn by cell. When an unneeded questionnaire was drawn, it was removed from the pile and another one drawn. Since 160 questionnaires were needed, 111 extras remained.

After the numbers corresponding to the subscripts chosen were posted to the cells of the charts in Appendix A (pages 46 and 47), each of the four subscripts was counted to determine the frequencies at which each was chosen by every race/sex/role-instruction group. These frequencies became the raw data for one-dimensional chi square tests.

Each of the ten different race/sex/role-instruction groups, as described on page 18, chose thirty-two subscripts: sixteen subjects x two subscripts chosen per subject. Since there were four possible subscripts from which subjects could choose, when looking for significant relationships within groups between role-instruction and subscripts chosen, the expected value for the subscripts was eight (thirty-two subscripts chosen divided by four different subscripts equals eight of each kind expected to be chosen). The actual frequencies at which each subscript was chosen within a race/sex/role-instruction group were compared against the expected value of eight using one-dimensional chi square tests. For each group there were four cells containing frequencies—one for each subscript. Thus, there were three degrees of freedom (# of cells - 1) associated with the critical chi square value. The critical chi square figure with three degrees of freedom at the five percent
level of confidence for the upper portion of a single-tailed distribution is 7.815. This became the critical value against which each obtained chi square value was compared.

When searching for relationships between role-instruction and subscripts chosen between selected pairs of race/sex/role-instruction groups, the actual frequencies at which subscripts were chosen in one group were used as the expected values for the other group when performing chi square tests. Each pair of groups was selected to have one group responding for itself, i.e., members "assuming their own role," while the other group assumed the role of that same race and sex but was in actuality a different race and/or sex. In this manner, the accuracy of the perceptions by one group of another group could be evaluated.

Within-Group Relationships

The first group under consideration was that of white males responding for themselves, i.e., assuming their own roles of white males. The chi square value obtained from this first analysis was 15.000. Since this value far exceeded the critical value of 7.815, it can be said that there existed a significant relationship between role-instruction and subscripts chosen. White males heavily favored advertisements tagged with subscripts one and two, with 14 and 12 of each being chosen respectively. It is interesting to note that subscript four "Special consideration will be extended to women and minorities" was not chosen at all.
The second group under consideration was that of white males assuming the role of white females. The obtained chi square value was 3.250. Compared to the critical value, this resulted in a non-significant relationship between role-instruction and subscripts chosen at the five percent level of confidence. White males in this role tended to prefer subscripts one and four, choosing these 11 and 10 times, respectively.

The third group analyzed was that of white males assuming the role of black males. The obtained chi square value of 1.750 indicated there was no relationship between role instruction and subscripts chosen. From observation, white males in this particular role seemed to slightly favor subscript four, as that subscript was selected eleven times versus the expected value of eight.

The final role white males were asked to assume was that of black females. There was no relationship between role assumed and subscripts chosen. Subscript one "An equal opportunity employer" was chosen least often (four times) while subscript four was slightly preferred (chosen eleven times). The actual chi square was 3.250.

The next subjects with which this analysis dealt were white females. The first role white females were asked to assume was that of a white male. The statistical test yielded a chi square value of 2.250 which, when compared with the critical value of 7.815, was insufficiently large to indicate a relationship between role-instruction and subscripts chosen. The data indicated the trend that white females in this role exhibited a mild but non-significant preference for subscript one, choosing it eleven times, and a moderate
avoidance of subscript four, choosing it only five times.

The second role white females assumed was that of their own. There was no within-group relationship, as indicated by the obtained chi square of 6.250. White females responding for themselves did prefer subscript two, "Equal opportunity/affirmative action employer," much more than expected, choosing it fourteen times versus the expected eight times, and avoided subscript four most often, choosing it only five times versus the expected eight times.

The third role white females were asked to assume was that of a black male. In this instance, the obtained chi square value was .7500. Again, it can be said that no significant relationship existed between role-instruction and subscripts chosen.

The final role in which white females were placed was the role of a black female. There was no relationship between role-instruction and subscripts chosen as demonstrated by the obtained chi square value of 2.750. White females in this role assumption avoided subscript one, "An equal opportunity employer," as they chose it exactly half as often as the expected value of eight.

As was mentioned earlier, because of the limited number of blacks enrolled in the university's College of Business, they were asked to assume only their own roles. Therefore, the final two within-group analyses deal with black males and black females responding for themselves.

The chi square value obtained from the analysis of the black males equalled 3.750. Since this value was substantially less than
the critical value, it can be said that no significant relationship existed between role-instruction and subscripts chosen. Black males mildly preferred subscripts three and four, "An equal opportunity employer—We welcome minority groups" and "Special consideration will be extended to women and minorities," choosing these nine and twelve times, respectively.

Regarding black females, the obtained chi square was far smaller than the critical value (.7500 vs. 7.815). No significant relationship existed between role-instruction and subscripts chosen.

**Between-Group Relationships**

By searching for between-group relationships, the accuracy of the perceptions by one race/sex/role-instruction group of another group could be checked. Six such analyses were performed, using the actual frequencies at which subscripts were chosen by one group as the expected values for the other group. The results were as follows:

White males' perceptions of black males were quite accurate. The obtained chi square value of 1.750 was significantly smaller than the critical value of 7.815. Since the obtained value was smaller, no significant relationship existed and thus both groups could be said to have responded similarly. In short, white males were correct in predicting which subscripts black males would choose.
Though not quite as accurate as with the previous group, white males did predict fairly well which subscripts black females would prefer. The obtained chi square value was 3.250 as compared to the critical value of 7.815.

White females' perceptions of black males were quite accurate. The chi square value resulting from this analysis was 1.750, indicating that responses of white females roleplaying as black males were not significantly different from black males responding for themselves.

White females again predicted reasonably well which subscripts black females would select. In this particular analysis the between-group relationship was found to be significant with a chi square value of 2.500.

Last are the analyses of white males predicting the responses of white females and vice-versa.

White males attempting to predict which subscripts white females would tend to choose were grossly inaccurate. The chi square value obtained from the analysis of 15.250 far exceeded the 7.815 critical value. The greatest inaccuracy was with subscript two, "Equal opportunity/affirmative action employer." White males believed that white females would choose this subscript five times when it actually was selected by white females nearly three times as often, or fourteen times.

White females assuming the role of white males could be said to predict fairly accurately which subscripts white males would prefer. The obtained chi square value was 6.750—quite close to
the critical figure of 7.815. The greatest error with the white females' predictions was with respect to subscript four, "Special consideration will be extended to women and minorities." This subscript was not chosen by white males responding for themselves, whereas it was chosen five out of 32 times by white females in this role.
CHAPTER XV

CONCLUSIONS

The actual impact of affirmative action subscripts upon various types of subjects has now been quite clearly shown. Shortening the ads, removing variability by "designing it out," and pre-testing the advertisements were probably the most significant factors contributing to the value of this study.

It can be said that Hypothesis #1 (page 7) was confirmed at the five percent level of confidence. Employers using subscripts having a moderate to extreme implication of potential reverse discrimination in their advertisements for job openings will very likely attract very few whites, particularly white males, to apply for those jobs. However, discriminatory subscripts such as these are only legal when an employer is trying to rectify past deficiencies of minorities and/or women represented in his employee complement with respect to the minorities and/or women in the surrounding population. When this is the case, those subscripts implying discrimination may be used only for the duration of time that the employer is severely lacking certain types of individuals in his organization (Ethridge, 1976). However, if an employer is using subscripts of this nature he probably chose them not by accident but with the objective in mind of adding more minorities to his workforce. Discouraging non-minorities from applying would thus be to the employer's advantage. The workload of his personnel
department would be slightly reduced with fewer job applications to review and file.

Hypothesis #2 (page 7) was not supported at the five percent level of confidence. White males assuming the role of a white female when selecting two of the four job ads, each with a different affirmative action subscript, did not choose subscripts as expected. In this case, subscripts one and four, "An equal opportunity employer" and "Special consideration will be extended to women and minorities," were preferred more often than the others but not to a statistically significant degree. It was expected that subscripts one and two would have been selected most frequently.

Hypothesis #3 (page 7) was not supported. As the previous study by Masura (1976) indicated, white females choosing ads with different affirmative action subscripts tended to prefer those subscripts implying little or no potential reverse discrimination. In this study, white females heavily preferred the subscripts "An equal opportunity employer" and particularly "Equal opportunity/affirmative action employer," choosing them seven and fourteen times, respectively. Perhaps the reason for this is that white females would rather apply for job openings where they feel they will be judged on their own merit and not given special consideration because an employer is under pressure to hire them.

Hypothesis #4 (page 7) was not supported at the five percent level of confidence. Subjects of both sexes and races assuming the role of black males and females exhibited only a very mild preference for the pair of subscripts having the greater implication of
potential reverse discrimination, i.e., subscripts three and four. To cite one example, white females assuming the black female role preferred subscript two, "Equal opportunity/affirmative action employer," more often than any of the others, choosing this ten times. None of the relationships was significant at the five percent level of confidence.

Hypothesis #5 (page 7), which stated that white subjects assuming the role of a black respondent would choose subscripts similarly to blacks responding for themselves, had significant supportive evidence. Though blacks did not choose the subscripts as expected, both white males and females assuming the black role of either sex chose ads similarly to blacks responding for themselves. This essentially indicates that blacks, and whites role-playing as blacks, do not have a differential preference for any subscript.

Hypothesis #6 (page 7) was not supported at the five percent level of confidence by the data gathered here. White subjects did not predict accurately which two of the four advertisements, each with a different affirmative action subscript, the opposite white sex would select. As mentioned earlier at the end of the section "Within-Group Relationships" in Chapter III, the greatest error was in the predictions, by white males in the white female role, of the ad/subscript selection white females would make. White males predicted that subscript two, "Equal opportunity/affirmative action employer," would be selected by white females five times out of thirty-two when, in fact, white females chose it nearly three times.
as often. White females attempting to predict the choices of white males were somewhat more accurate, but not accurate to a statistically significant degree. The greatest error in this instance was that of choosing subscript four, "Special consideration will be extended to women and minorities." White males selecting for themselves did not once choose ads tagged with this subscript whereas white females predicted that white males would select it five times out of thirty-two. No reason for the non-support of Hypothesis #6 can be offered.

One final point which needs to be brought out here is that of the overall interpretation of this study.

It must be remembered that this study dealt with preferences, and many subtle factors are often present which may influence a person's preference for something—in this case, job advertisements tagged with affirmative action subscripts. Alphonse Chapanis, Professor of Psychology at the Johns Hopkins University, dealt with the idiosyncracies of preferences in his book, Research Techniques in Human Engineering (1959). Preferences are influenced by a subject's expectations of what he should say. Dr. Chapanis says of this, "What people say they 'prefer' or 'like' may be what they think the 'correct' or 'expected' answer is" (p. 220).
Recommendations fall into three categories: (1) those to employers, (2) those to job-seekers, (3) those to future researchers contemplating further work on this topic.

To employers, these suggestions are offered:

(1) Prior to inserting a particular affirmative action subscript into an advertisement for a job opening, make certain it is one which may be legally used. If there is a severe lack of minority-group employees within the organization, subscripts having moderate to extreme implication of potential reverse discrimination may be used but only for the duration of the disparity. When the percentages of races and sexes within the organization are congruent to those of the surrounding population, subscripts must revert to the more "neutral" wordings such as "An equal opportunity employer."

(2) Be aware that various individuals may respond differently to changes in wording of affirmative action subscripts as has been demonstrated here. An employer might try manipulating the wording of those subscripts which he is allowed to use to determine which wordings function best for his organization and demographic surroundings.

(3) If job advertisements and/or subscripts are of limited use in attracting minority-group applicants, use at least one of the guides mentioned on pages 2, 3, and 4.
Recommendations to job-seekers are:

(1) In considering whether or not to apply to a particular job which was made known through an advertisement, be aware that an unknown number of companies may be using an affirmative action subscript with the express purpose of attracting certain types of applicants.

It is imagined that this unknown number is rather small and that most companies, since there is little research on the impact of affirmative action subscripts, are more interested in simply attaching something to job advertisements to provide published evidence that they are attempting to comply with affirmative action laws.

(2) If a subscript in an ad is seen which implies any type of discrimination, bear in mind that either that company is using that subscript illegally or it has some assumption and/or company research regarding the impact of variously-worded subscripts and is seeking certain types of applicants. If a company is illegally using a particular subscript, charges may be brought against that company.

Finally, there are these recommendations to researchers contemplating additional studies along these lines:

(1) Use a larger N. Sixteen subjects in a category is just adequate, statistically. The more subjects in an experiment, all else being equal, the greater statistical confidence an experimenter has when drawing conclusions.

(2) Ask blacks to assume the roles of white males and females. Since there was a limited availability of blacks, no black subjects
were asked to assume any role other than their own. No method was available in this study for assessing the accuracy of the perceptions by blacks of whites when selecting ads tagged with various affirmative action subscripts. The lack of blacks playing other roles was the source of imbalance in this research design.

(3) Use subjects other than business students. Generalization of the results of this study is limited. By using other types of students within a university, or subjects outside a university, there should be a larger population to which results can be generalized.
REFERENCES


Figure 1. Job Advertisement #1

"Chicago Manpower"

We are looking for a bright, young individual to serve on our Chicago Manpower Development Board. Duties consist of system evaluation, some application of statistics, management of resources, etc.

This position is a challenging one for any recent college graduate or for the applicant with experience. Salary: $16,000+.

Please send resume to:

CMD - 100 N. GATE
Chicago, Illinois 60618

Figure 2. Job Advertisement #2

CMD is seeking bold, bright people to serve in Customer Correspondent positions. The openings require a knowledge of operations analysis & design, objectives, and scheduling.

College graduates and others with significant experience are gladly considered.

Salary: Negotiable.

Please send a resume to:

CHICAGO MANPOWER DEVELOPMENT
100 N. GATE
CHICAGO, ILLINOIS 60618
Figure 3. Job Advertisement #3

We call ourselves Chicago Manpower because that's our job: to develop individuals into executives. We're oriented toward the goal of better organizations for business.

Applications are now receiving our attention for openings in the area of organizational psychology. All recent college grads and other experienced individuals may apply.

Please send your resume to:

CMD
100 N. GATE
Chicago, Illinois 60618

An equal opportunity employer.

Figure 4. Job Advertisement #4

There is a progressive spirit with our company that we believe has no equal. Anywhere.

Our business is business. We help train career-minded executives. We form the Midwest's prime source of professional individuals.

We have new openings for college grads and experienced applicants. Interested? Please forward your resume to:

CHICAGO MANPOWER DEVELOPMENT
100 N. GATE
CHICAGO, ILLINOIS 60618
"Chicago Manpower"

Chicago Manpower Development.

People aiding people to see that a task is done. People who are concerned. Challenged. Competent. And with that foremost in our minds we proceed to build the ideal service organization.

We have openings for college grads and other experienced individuals. If you think you have an interest, send your resume and salary needs to this address:

C.M.D.
100 N. Gate
Chicago, Illinois 60618

Equal opportunity/affirmative action employer.

Wanted: Capabilities.

While we acknowledge that the so-called "universal man" has passed with DaVinci, we strongly believe that the "capable man" is reality.

Openings for capable graduates and experienced individuals are available at CMD. If you have multiple talents and are business-oriented, consider us! Send a resume to:

C.M.D.
100 N. GATE
Chicago, Illinois 60618

Item used in final research, appearing with subscript #2.
Figure 7. Job Advertisement #7

CHICAGO MANPOWER DEVELOPMENT

C.M.D.: A blend of technology and people. It is the product of our dedication to professional objectives.

We produce trained individuals to serve in countless organizational settings. But we need people, too.

Openings are now available in the areas of market development, data processing, and counseling.

Please send your resume to:

CHICAGO MANPOWER DEVELOPMENT
100 N. GATE
CHICAGO, ILLINOIS 60618

An equal opportunity employer—
We welcome minority groups.

Item used in final research, appearing with subscript #3.

Figure 8. Job Advertisement #8

CHICAGO MANPOWER DEVELOPMENT

We are seeking new talent to aid us in futures planning. You may be the individual who always has an eye on the future with knowledge of planning techniques.

CMD is an organization dedicated to improving the future of corporations both here and abroad.

If you're a college grad or have experience in futures planning, send your qualifications, salary requirements to us at:

100 N. Gate
Chicago, Illinois 60618

Special consideration will be extended to women and minorities.

Item used in final research, appearing with subscript #4.
Figure 9. Questionnaire Given to the Subjects of the Pilot Group.

-INSTRUCTIONS-

Please assume you have ALL of the necessary education, skills, and experience for ALL of these jobs.

Rank-order the ads from 1 to 8 in terms of your preferences. Your first choice will be the ad you would answer first. Your eighth choice will be the ad you would answer only after you had answered all of the others.

FIRST CHOICE________ FIFTH CHOICE________
SECOND CHOICE_______ SIXTH CHOICE_______
THIRD CHOICE________ SEVENTH CHOICE_____
FOURTH CHOICE_______ EIGHTH CHOICE_______

Please check the appropriate boxes:

☐ GRADUATE          ☐ SOPHOMORE
☐ SENIOR            ☐ FRESHMAN
☐ JUNIOR            ☐ MALE     ☐ FEMALE

☐ WHITE     GRAD GPA________
☐ MINORITY  UNDERGRAD GPA________

CURRICULUM____________________
MAJOR__________________________
Figure 10. Questionnaire Given to the Subjects of the Experimental Groups.

- INSTRUCTIONS -

1. Assume you are the person indicated on the card inside the envelope with the job ads.

2. Assume that you have ALL of the necessary education, skills, and experience for ALL of these jobs.

Given that you have only enough time and money to answer two of these four ads, indicate which two you would answer.

Check only TWO of the following

AD #3______ AD #7______
AD #5______ AD #8______

Please check the appropriate boxes. You are not roleplaying now. This is your actual data. You may omit GPA if you choose.

☐ GRADUATE          ☐ WHITE
☐ SENIOR            ☐ MINORITY
☐ JUNIOR            ☐ MALE    ☐ FEMALE
☐ SOPHOMORE         ☐ GRAD GPA_____
☐ FRESHMAN          ☐ UNDERGRAD GPA_____
CURRICULUM
MAJOR
### Individual Subscripts and Their Cumulative Frequencies as Chosen by White Subjects Assuming Various Roles

#### White Males

<table>
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<tr>
<th>Role 1: White Male</th>
<th>Role 2: White Female</th>
<th>Role 3: Black Male</th>
<th>Role 4: Black Female</th>
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- $f_1 = 14$  
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- $f_3 = 6$  
- $f_4 = \emptyset$

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<th>Role 1: White Male</th>
<th>Role 2: White Female</th>
<th>Role 3: Black Male</th>
<th>Role 4: Black Female</th>
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- $f_3 = 8$  
- $f_4 = 5$

#### White Females

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<th>Role 4: Black Female</th>
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- $f_1 = 7$  
- $f_2 = 14$  
- $f_3 = 6$  
- $f_4 = 5$

Each cell entry = the results for one subject
Individual Subscripts and Their Cumulative Frequencies as Chosen by Black Subjects Assuming Their Own Roles

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<thead>
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<th>Black Males</th>
<th>Black Females</th>
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\[ f_1 = 6 \quad f_3 = 9 \]
\[ f_2 = 5 \quad f_4 = 12 \]
\[ f_2 = 7 \quad f_4 = 8 \]
\[ f_2 = 7 \quad f_4 = 10 \]

Each cell entry = the results for one subject