STARS

University of Central Florida
STARS

Retrospective Theses and Dissertations

Summer 1980

The Effect of Race of the Administrator and Requesting Categorical Demographic Data on Response Bias in a Group Administered Job Attitude Survey

Glenn Russell Weinger University of Central Florida

Part of the Industrial and Organizational Psychology Commons Find similar works at: https://stars.library.ucf.edu/rtd University of Central Florida Libraries http://library.ucf.edu

This Masters Thesis (Open Access) is brought to you for free and open access by STARS. It has been accepted for inclusion in Retrospective Theses and Dissertations by an authorized administrator of STARS. For more information, please contact STARS@ucf.edu.

STARS Citation

Weinger, Glenn Russell, "The Effect of Race of the Administrator and Requesting Categorical Demographic Data on Response Bias in a Group Administered Job Attitude Survey" (1980). *Retrospective Theses and Dissertations.* 528.

https://stars.library.ucf.edu/rtd/528



THE EFFECT OF RACE OF THE ADMINISTRATOR AND REQUESTING CATEGORICAL DEMOGRAPHIC DATA ON RESPONSE BIAS IN A GROUP ADMINISTERED JOB ATTITUDE SURVEY

by

GLENN RUSSELL WEINGER B.S., State University of New York at Oswego

THESIS

Submitted in partial fulfillment of the requirements for the degree of Master of Science: Industrial Psychology in the Graduate Studies Program of the College of Social Sciences at the University of Central Florida; Orlando, Florida.

> Summer Quarter 1980

ACKNOWLEDGMENTS

I would like to express a sincere debt of gratitude to Dr. Wayne Burroughs, Dr. Edwin Shirkey, and Dr. Ruth Wienclaw for their assistance and guidance in the preparation of this research. I would also like to thank Dr. Wayne Burroughs and Dr. Edwin Shirkey for the knowledge they have imparted to me throughout my graduate career.

In addition, I would like to express a special thanks to all of the people at Sunland Center, especially Don Pittman, without whose cooperation this research would not have been possible. Special thanks are also extended to Bob Adams and Tony Noble for serving as administrators.

Finally, I would like to thank my friends and family, especially my parents, Philip and Sheila, for their support and encouragement over the years. Without them, none of this would have been possible.

iii

TABLE OF CONTENTS

	Page
ACKNOWLEDGMENTS	iii
TABLE OF CONTENTS	iv
LIST OF TABLES	v
INTRODUCTION	1
метнор	15
RESULTS	18
DISCUSSION	24
APPENDIX A	31
APPENDIX B	34
APPENDIX C	35
BIBLIOGRAPHY	41

LIST OF TABLES

PAGE

TABLE

Number of Subjects per Group..... 1. 20 2. Analysis of Variance for JDI Work Scale 20 3. Analysis of Variance for JDI Supervision Scale 21 4. Analysis of Variance for JDI Co-workers Scale 21 5. Analysis of Variance for JDI Pay Scale 22 6. Analysis of Variance for JDI Promotions Scale 22 7. Means and Standard Deviations for Levels of Independent Variables for Each JDI Scale 23 8. Demographic Data Expressed in Percentages..... 31

INTRODUCTION

In the past 30 years extensive investigations of employee attitudes in the workplace have been conducted. Today the employee attitude survey remains a widely used tool available to managers and social scientists for evaluating aspects of a company's operation and for studying the interaction of individuals and organizations. A variety of employee attitude surveys, through many years of refinement, have been developed into reliable and valid instruments for measuring employees' attitudes toward their work and a variety of organizational problems (Dunham, Smith, & Blackburn, 1977).

It is obvious that data collected in a job attitude survey should be unbiased and as accurate as possible, so as to represent the "true" attitudes of employees. This is especially critical when utilizing standardized surveys in which the results may be compared and evaluated in terms of the normative data provided with these instruments. Potential sources of bias in survey research are numerous. Phillips (1971) has cited anywhere from 13 to 18 different sources of potential bias in survey research and suggests that a substantial proportion of the findings resulting from such methods are probably invalid. Summers (1969) discusses several sources of potential bias and defines respondent bias as a distorted or inaccurate response on the part of the respondent whether deliberate or undeliberate. He states "respondent bias is a potent force in diminishing the validity of results from survey research" (p. 116). He concludes that considerable work remains to be done on the problem of error control, especially biasing error, at all stages of the research between instrumentation and statistical analysis.

In contrast to the quantity of research and attention directed towards the refinement of the content of job attitude surveys, there has been relatively little attention surrounding the administration of job attitude surveys and factors that may bias responses to them (Hinrichs & Gatewood, 1967).

The purpose of this study was to investigate two factors that may be related to biased responses in a job attitude survey. The two factors being investigated in this study are:

(1) the effect of requesting demographic information from respondents in an anonymous group administered survey, and

(2) the effect of the race of the administrator on responses from a Black population.

Anonymity Studies

A major source of potential bias that has been investigated is the effect of anonymity (or lack of it) on individuals' responses to surveys. The empirical evidence in the literature on the effect of anonymity in attitude studies is mixed. For example, Corey (1937) found no significant differences between signed and unsigned questionnaires in an investigation dealing with attitudes toward cheating among college students. Gerberich and Mason (1948) investigated whether or not the signing of a college student's own name to a questionnaire affected his responses to the items on the questionnaire. The areas covered by the questionnaire were: previous training in biological science and related sciences, study habits, purposes in taking a course, and general reactions to the course. An examination of the results revealed no significant differences in the signed versus the unsigned conditions. Ash and Abramson (1952) found no significant differences between an anonymous and identified group of college students in responses to a questionnaire containing an ethnocentrism scale, a political-economic conservatism scale, and a Negro prejudice scale.

Hamel and Reif (1952) found no significant differences between identified and anonymous department store employees responses to a group administered job attitude survey. Pelz (1959) found practically no differences in survey data collected under conditions of full anonymity versus identification with assurances that replies would be confidential among the researchers who came from an outside survey organization. Pelz termed both of these conditions as relatively unthreatening due to the special nature of the organization tested and the relationship established between the respondents and the researchers through months of previous spadework. Rosen (1960) found that an identified group of college students expressed more positive attitudes toward a particular course in which they were enrolled than did an anonymous group. No differences were found between identified and anonymous groups in attitudes toward reading in general. Pelz (1959) and Rosen (1960) both arrived at the conclusion that there is not apt to be serious response distortion as a result of respondent

identification where the survey is conducted under less than threatening circumstances.

More recently, King (1970) found no differences in admission of drug use, or in response to attitudinal items in a mail survey of college students, half of whom received questionnaires with identifying numbers, half of whom did not. Butler (1973) assessed the effects of signing and not signing questionnaires on items that were rated as sensitive and not sensitive. The subjects were military cadets who responded to a questionnaire distributed and collected by their company commander, covering a variety of different areas. No significant differences were found on responses to any items. Wildman (1977) investigated the effects of anonymity by placing an identifying number on half of the questionnaires in a mail survey designed to elicit reactions from teachers concerning teacher unions. No significant differences were found in expressed attitudes toward unions. However, the researcher did find some mutilation of the identifying number in some cases, indicating that the possibility of being identified represented a threat to some respondents.

In contrast to the previously cited mild and insignificant effects of anonymous versus identified conditions on responses to surveys, a number of studies have found significant differences between the two conditions. For example, Maller (1930) found large differences in the ratings given to themselves and others by children asked to rate group members for cooperativeness, when the questionnaires were signed versus unsigned. The results suggested that when questionnaires were unsigned the responses represented more "genuine" responses.

Olson (1936) and Fischer (1946) both found significant differences in responses to personal questions when questionnaires were signed versus unsigned. Fischer concluded that the use of signatures on personal questionnaires had an inhibiting effect on the "honesty and frankness" of the subjects.

Kulik, Stein, and Sarbin (1966) investigated the disclosure of delinquent behavior under conditions of anonymity and identification using a delinquency checklist. They found that adolescents showed significantly more disclosure under anonymous administrations of the checklist. Benson (1941) reported a study in which identified subjects gave significantly more "undecided" answers than anonymous subjects. This study was concerned with voting preferences in a small predominantly Republican community.

Ellinson and Haines (1950) reported a study of enlisted military personnel where statistically significant differences were found between an anonymous and an identified group on several scales measuring attitudes toward the military. They reported a significantly greater tendency for subjects in the identified condition to express favorable attitudes toward their officers and greater job satisfaction. A similar trend, although not significant, was found in five other attitude areas. In another study among military personnel, Fuller (1974) found mixed effects of anonymity on response bias in a mail survey. She found that among enlisted Navy personnel the assignment to an anonymous versus identified condition had no significant effect on responses to the Navy Personnel Survey. However, it was found that among officers there was a significant difference between anonymous and identified subjects in response to the same survey. Pro-Navy statements were endorsed by a significantly greater proportion of officers in the identified condition, and negative statements were endorsed by a significantly greater proportion of officers in the anonymous condition.

Festinger (1950) found that the conditions of anonymity versus identification have different effects on different subgroups. He studied the voting behavior of Jewish and Catholic college girls in electing officers in an artificially created club under conditions of anonymity and identification. The Jewish girls expressed preferences for Jewish officers only when they themselves were not identified by name or religion, whereas Catholic girls expressed their preferences for Catholic officers even under conditions of identification. Becker and Bakal (1970) found that anonymous-identified conditions had less effect on the responses of subjects who were low in defensiveness than subjects who were high in defensiveness.

In a job attitude survey, respondents usually need not be identified. It is the purpose of management to measure the group feeling. It is common practice to emphasize that employees should not sign their names to the questionnaire (Dunnette & Heneman; 1956). However, several researchers have suggested that an identification bias may exist as demographic information is often requested of respondents. Hyman, Cobb, Feldman, Hart, and Stember (1954) have called attention to the necessity for distinguishing between "literal" and "psychological" anonymity in a survey. For example, questionnaire studies in industry frequently ask for such items of information as department

number, length of work experience, age, sex, etc.. Requirements for this type of information could easily suggest to an employee that special efforts are being taken to secure identifying information. Goode and Hatt (1952) have noted that despite assurance of anonymity, some researchers ask for such detailed demographic information that respondents perceive that their anonymity cannot be preserved. Fuller (1974) has stated, "If subjects in the anonymous group are not confident that their answers are anonymous, then there is no real difference in the conditions for response between an anonymous and an identified group" (p. 296). Wilson and Rosen (1975) feel that demographic data gathered on anonymous surveys should be greatly reduced or eliminated to ensure that respondents will truly feel that they are anonymous.

Giles and Feild (1978), in empirically investigating Wilson and Rosens' (1975) suggestions, manipulated three characteristics of demographic questionnaire items on a job attitude survey mailed to college faculty members. Demographic factors analyzed were Amount (number of demographic items), Format (questionnaires with all categorical answers versus those with a combination of categorical and continuous answers), and Location (demographic questionnaires placed before versus being placed after attitudinal items). They found significant differences for the format manipulation, in that responses indicating greater satisfaction were obtained when the survey instrument contained questions which required both categorical and continuous responses. They found that this format induced bias occurred most frequently among sensitive job satisfaction items (items dealing with pay, promotions, and supervision). No significant response bias was found for either the number

of demographic questions asked or the location of them. It is interesting to note that the response bias appeared to result not from the number of demographic questions, but rather from the way in which they were asked. The researchers caution as to the generalizability of their results due to the specific population and setting of the study.

Dunnette and Heneman (1956) investigated the notion of perceived threat of identification as a determinant of whether employees will distort their responses in a favorable direction in a group administered job attitude survey. In this study all subjects were "literally" anonymous but "psychological" anonymity was varied. In one condition the personnel manager of the respondents' company administered the questionnaire, in the second condition the questionnaire was administered by a member of a research team from a university. The researchers found that:

(1) where employees' feelings of anonymity were threatened by the presence of a company official, responses to the questionnaire were significantly more favorable;

(2) differential amounts of response distortion were obtained depending upon the content of the items, with the greatest amount of response distortion occurring on items whose content involved various types of supervisory behavior and the spirit of fair play in the workplace; and

(3) employees experiencing a threat to their anonymity gave fewer and shorter written comments to three open ended questions. They stated: "the employees' perception of the testing situation could have an important effect on his view to which the attitude survey

results may be put" (p. 73). Additionally, they suggest that the extent to which rapport is established between the employees and the administrator, as well as the actual identity of the administrator, could effect the general climate of psychological anonymity.

Klein, Maher, and Dunnington (1967) compared job attitude survey responses of identified and anonymous employees under two conditions of identification. One condition involved a face to face designation by the respondees' manager as to which group he would be in (high threat), and the other condition involved a random allocation as the respondee entered the testing room (low threat). All subjects were assured confidentiality of their responses, and non-identified subjects were assured anonymity. The researchers found that significant positive distortion took place under both identified conditions, with significantly greater distortion under the condition of high threat. They also found that the items themselves produced variable distortion. Items dealing with salary and top management produced consistent positive distortions, whereas items dealing with work pressure, and employees' managers produced little or no distortion even under conditions of high threat.

It may be observed from the review of the literature that the empirical evidence on the effects of anonymity is mixed with several conflicting results. A number of studies reported an absence of response distortion by identified subjects (Ash & Abramson, 1952; Butler, 1973; Corey, 1937; Gerberich & Mason, 1948; Hamel & Reif, 1952; King, 1970; Pelz, 1959; Wildman, 1977), and several researchers suggested that under less than threatening circumstances the effects

of identification is minimal. (Pelz, 1959; Rosen, 1968). It appears that the content of the survey, as well as personal, cultural, and situational factors, are all variables that may influence the effects of identification in survey research (e.g. Becker & Bakal, 1970; Festinger, 1950; Klein et al., 1967; Rosen, 1960).

There has been research in industrial settings that suggests significant response distortion can occur under different opinion survey administration conditions (Dunnette & Heneman, 1956; Hinrichs & Gatewood, 1967; Klein et al., 1967). These studies support the notion that the completion of a job attitude survey may be a threatening experience for some employees, causing them to bias their responses, especially if doubt exists in their minds as to: (a) their actual anonymity, (b) who will have access to the results, and (c) how the results will be used. This may be interpreted as a general distrust regarding the potential uses of the survey and may in part explain the distorted expression of job satisfaction in several of the studies.

Racial Studies

During the 1970's, a number of studies investigated job satisfaction among Blacks (e.g., Feldman, 1973; O'Reily & Roberts, 1973; Weaver, 1974). However, no study to date has investigated the potential sources of bias in a job attitude survey administered to a Black population. The review of the literature on anonymity also indicates that no study has evaluated the effects of anonymity, or lack of it, specifically on a Black population. This is interesting in light of the findings that anonymity has different effects on different

subgroups, and the existence of research on the cultural and perceptual differences between Blacks and Whites.

Browne (1973) discusses the cultural and experiential differences between Blacks and Whites and finds that as a result the Black person, in general, possesses a different map of reality than a White person could ever have and hence perceptions vary. Rainwater (1966) found that in lower class Black culture human nature is believed to be essentially bad, destructive, and immoral. Some social scientists question the validity of such conclusions (Billingsly, 1968; Katz, 1974). However, there is some evidence that Blacks possess negative attitudes about human nature. Wrightsman (1974) cites a previous study of his utilizing the Philosophies of Human Nature scale (PHN), in which he concluded that the most unusual aspect of Blacks philosophies of human nature is a strong component of distrust. Investigating this phenomenon further, Johnson (cited in Wrightsman, 1974) found that when Blacks respond to statements about "most people", as is required on the PHN scale, they are thinking primarily about Whites (p.85).

Wendland (cited in Baughman, 1971) analyzed MMPI scale scores from groups of Black and White adolescents in the South. An analysis of the cynicism scale scores revealed that the Black groups scored significantly higher on this scale, reflecting an orientation of mistrust and unfavorable attitudes toward other people. In a study investigating Black sterotypes of White communicators, Rich (1974) found that the Blacks tested held predominantly negative preconceptions of White communicators. Approximately 40% agreed that Whites are "evasive", and 20% agreed that Whites are "concealing" (p. 38).

These findings led Rich (1974) to conclude that the Blacks in her study lacked profound trust in White communicators. These studies, considered together, point to the existence of distrust of others, especially Whites, among the Black population.

Sattler (1971), in an extensive review of the literature on racial experimenter effects, cites a number of studies that demonstrate significant racial experimenter bias. He concluded:

> The studies show that subjects are influenced by the experimenters' race. However, the extent and direction of the influence depends on many factors including (a) the task content, (b) instructional set, (c) reinforcement conditions, (d) geographical location of study, (e) subject variables such as age, race, sex, family background, socioeconomic level, and attitudes, (f) experimenter variables such as race of experimenter team, attitudes, residence, and socioeconomic level, and (g) dependent measures. Future research studies must consider some of the variables in a systematic way. Instead of asking "Does the experimenters race influence behavior?" we should be asking, "What are the conditions in which the experimenters' race affects subjects performance?" (p. 155).

Sattler (1971) found that when one views the data globally, a direction

emerges. He stated:

The overall trend in personality, attitude and preference, interviewing, and psychotherapy studies indicates that Negro subjects tend to perform more adequately and to be less inhibited with Negro experimenters than with White experimenters, whereas in task performance and intelligence test studies no overall trend is evident. (p. 156).

In summary the preceeding literature review indicates:

 The effect of anonymous vs. identified conditions is mixed as to whether it biases the results of a survey. Generally it seems dependent on a number of factors such as: (a) the type of subjects,
 (b) the nature of the survey, (c) the extent to which subjects perceive themselves as actually being anonymous, (d) the threat associated with the perceived consequences of being identified, and (e) the actual identity of the administrator.

2. The inclusion of demographic questionnaires in surveys may eliminate feelings of anonymity and cause respondents to respond to survey questions as if they were being identified.

3. The completion of a job attitude survey may be a threatening experience for some workers, and that significant response distortion can occur under different survey administration conditions.

4. There is reason to believe that many Blacks have negative views of human nature, and may react negatively to a job attitude survey situation with a White administrator, or where a threat to their perceived anonymity exists. Racial experimenter effects have been observed in a variety of studies.

The purpose of this present study is to investigate the following hypotheses:

 Black subjects will report greater job satisfaction on a group administered job attitude survey when requested to provide demographic data as opposed to when no demographic data is requested.

2. Black subjects will report greater job satisfaction on a group administered job attitude survey when the administrator is White rather than Black.

In accordance with the findings of Dunnette and Heneman (1956) and Giles and Feild (1978) concerning differential amounts of response distortion depending on the content of the questions, it is believed that response distortion will occur in response to scales measuring three areas of job satisfaction; pay, promotions, and supervision, and not in response to scales measuring satisfaction with co-workers, or the work itself.

METHOD

<u>Subjects</u>. The subjects consisted of 76 Black Resident Life Assistants (RLA's) employed at a state facility for mentally retarded clients located in Florida. RLA's represent the lowest paid client care personnel in this organization with a salary range of approximately \$7,000 to \$9,000 per year. RLA's as a group, tend to be female and have low levels of education. Full demographic data is provided for the two groups from which it was obtained (see Appendix A, Table 8).

Subjects were selected by random from a master list of all Black RLA's employed on the 7 a.m. to 3 p.m. shift. Subjects were randomly assigned to one of four experimental conditions, with the stipulation that no more than four employees from any one work unit was to be assigned to any one experimental condition. If more than four employees from any work unit were assigned to any one experimental condition, they were reassigned to one of the three remaining conditions at random. This was a necessary manipulation to ensure that the work process on any unit would not be disrupted due to participation in the survey.

<u>Materials</u>. The Job Descriptive Index (JDI) developed by Smith, Kendall, and Hulin (1969) was used to assess employees' attitudes toward their jobs. The JDI identifies five areas of job satisfaction: work, supervision, co-workers, pay, and promotions. The JDI is found to have corrected split-half internal consistency coefficients exceeding .80 for each of the scales. The validity of the JDI has been demonstrated utilizing the multitrait-multimethod technique. The JDI was selected for use in this study because of the low reading level required to understand and respond to the items, and to provide the organization with comparable data to that obtained in a previous job attitude survey.

A demographic information questionnaire consisting of the following items was utilized: age, sex, race, number of years of education, number of years employed by the organization, number of years employed in present job, present job title, shift, and work section. The questionnaire was of the categorical type, requiring only the checking of responses by the respondents (see Appendix B). This questionnaire was modified from one used in the previous job attitude survey conducted at the organization.

<u>Procedure</u>. The independent variables manipulated in this study were: (a) the use of the demographic questionnaire and (b) the race of the administrator. The dependent variables in this study were the respondents' scale scores on the five scales of the JDI. Two male Industrial Psychology graduate students from the University of Central Florida (one White and one Black), served as administrators. Each administrator presented the survey to two groups of employees. The first group in both cases received the JDI with the demographic questionnaire attached. The second group in each case received only

the JDI. This was a necessary manipulation to control for the possibility that employees in the later groups would be aware of the content of the surveys. Requesting the completion of the demographic questionnaire in the later administrations may have alerted employees to the true nature of the research. This situation could possibly result in biased responses to the surveys.

The administrators were trained to administer the survey and answer questions that may have arisen in the course of the administration. Separate, but similar, instructions were developed for the demographic/no demographic conditions, and these instructions were read to the groups by the administrators (see Appendix C for copies of the instructions). All other administrative procedures were identical except for the time of day the surveys were administered. The groups receiving the demographic questionnaires were surveyed between 10:00 and 11:00 a.m. and the groups receiving only the JDI were surveyed between 1:00 and 2:00 p.m.. Subjects were not aware of the independent variables under investigation, anonymity was assured, and subjects were instructed to place their completed surveys in a ballot box marked "Property of the University of Central Florida".

RESULTS

A 2 x 2 fixed effects analysis of variance for an unequal number of subjects was performed using the least squares solution for each of the five scales of the JDI (Winer, 1971). Sample sizes for employees participating in each of the four experimental conditions are presented in Table 1. Two employees' responses to the JDI had to be discarded in the demographic/White administrator condition due to a failure to respond to the items in a proper manner. (These employees responded by placing check marks next to the adjectives on the JDI, whereas the proper method to respond is by placing a \underline{Y} , \underline{N} or $\underline{?}$ in the space provided). One employee in the demographic/Black administrator condition failed to respond to the supervision scale and one employee in the no demographic/Black administrator condition failed to respond to the co-worker scale. Due to these omissions and other problems in responding, these data were eliminated from the analyses.

The source tables for each of the five analyses of variance are presened in Tables 2 through 6. Inspection of the source tables indicated that only one <u>F</u> ratio was significant at the <u>p</u> < .05 level. The analysis of variance for the supervision scale indicated a significant demographic/no demographic effect, <u>F</u> (1, 69) = 4.71, <u>p</u> = .033.

The means and standard deviations for the levels of the independent variables for each of the JDI scales are presented in Table 7. A comparison of the means in the demographic/no demographic conditions on the supervision scale indicates that the direction of the difference was opposite to that hypothesized. The combined mean for the two groups receiving the demographic questionnaire was 25.36 and the mean for the groups in the no demographic condition was 31.13. This indicated that persons not completing a demographic questionnaire reported greater satisfaction with supervision than persons who completed the demographic questionnaire.

No significant \underline{F} values were found due to the race of the administrator manipulation, and no significant interactions between the variables were observed.

1. .

Number of Subjects per Group

Group	Number of Subjects
Demographics	
White administrator	13
Black administrator	18
No Demographics	
White administrator	25
Black administrator	20

Table 2

Analysis of Variance for JDI Work Scale

Source	SS	df	MS	<u>F</u>	
	1.				
Demographics	48.26	1	48.26	.41	
Race of Administrator	98.40	1	98.40	.85	
Interaction	24.21	1	24.21	.21	
Error	8153.44	70	116.48		

Ta	h1	0	3
Ta	בט	Le	2

Source	<u>SS</u>	df	MS	<u>F</u>	
Demographics	735.71	1	735.71	4.71*	
Race of Administrator	290.92	1	290.92	1.86	
Interaction	216.67	1	216.67	1.39	
Error	10778.25	69	156.21		

Analysis of Variance for JDI Supervision Scale

*p < .05

Table 4

Analysis of Variance for JDI Co-workers Scale

Source	SS	df	MS	<u>F</u>	
Demographics	163.26	1	163.26	1.03	
Race of Administrator	7.65	1	7.65	.05	
Interaction	172.79	1	172.79	1.09	
Error	10936.69	69	158.50		

Analysis of Variance for JDI Pay Scale

		and the second second			
Source	SS	df	MS	F	
Demographics	56.62	1	56.62	.83	
Race of Administrator	.90	1	.90	.01	
Interaction	19.94	1	19.94	.29	
Error	4731.53	69	68.57		

Table 6

Analysis of Variance for JDI Promotions Scale

Source	SS	df	MS	F
Demographics	215.92	1	215.92	1.11
Race of Administrator	17.84	1	17.84	.09
Interaction	34.36	1	34.36	.18
Error	3610.73	70	194.43	

Table 7

Means and Standard Deviations for Levels of Independent Variables for Each JDI Scale

Levels	Work	Supervision	Co-Workers	Pay	Promotions	
Demographics	23.48	25.36	33.31	6.29	11.93	X
	10.41	11.78	12.64	7.02	11.65	SD
No Demographics	21.47	31.13	36.14	8.22	15.78	X
	11.02	12.91	12.56	8.96	15.21	SD
White Administrator	20.72	27.75	35.31	7.61	14.94	X
	10.52	12.19	11.98	7.10	14.79	SD
Black Administrator	23.68	30.05	34.73	7.35	13.63	X
	11.05	12.79	13.16	9.28	13.10	SD

JDI SCALE

Notes. Maximum score = 54. Higher scores indicate greater satisfaction. \overline{X} = Mean.

SD = Standard Deviation.

DISCUSSION

In this study it was hypothesized that Black employees would distort their responses, indicating greater satisfaction, on three scales of the JDI when categorical demographic information was requested and when the administrator was White rather than Black. Neither of the hypotheses were supported by the results.

Effects of requesting demographic data

The only significant difference observed between the demographic/ no demographic conditions was in response to the supervision scale, and this difference was in the opposite direction to that hypothesized. The reasons for this are unclear. This finding may have been a random occurrence or it may have been due to the differing sample sizes of the groups participating in the study. Inspection of Table 1 indicates that each group in the demographic condition was smaller than the corresponding group in the no demographic condition. Differing group sizes dictated differential seating arrangements for each sample, forcing employees to be seated closer together in the larger groups. The possibility exists that different peer pressures or group norms were operating, causing employees to respond in a more favorable manner when they were seated closer together. However, if differing group size and seating arrangements produced response distortion to the supervision scale, it appears logical that such distortion would also occur in response to the co-workers scale. Since this did not occur in the present study, future research should focus on the effects of different seating arrangements and different group sizes on response bias in a group administered job attitude survey.

Dunham and Smith (1979) have suggested that when conducting a group administered employee attitude survey an attempt should be made to include a minimum of twenty-five employees whenever possible. They suggested that this may help to encourage a feeling of anonymity that might be lost in a smaller meeting. The possibility exists that the varying sample sizes interacted with the independent variables to confound the results of this study.

Thirty-two employees were initially assigned to each of the four experimental conditions. Due to a combination of absenteeism, turnover, poor organizational communication, and employee apathy, some of the groups did not attain the suggested sample size of 25. It was not possible to replicate this experiment with sufficient sized groups as the organization's Black population was not large enough to provide another independent sample. It was believed that replication under these conditions would have been met with employee resistance and increased apathy.

The literature on response distortion in job attitude surveys (e.g., Dunnette & Heneman, 1956; Giles & Feild, 1978; Klein, Maher, & Dunnington, 1967) indicates that the fear of being identified and the fear of the possible consequences associated with being identified could cause employees to respond to a job attitude survey in a more favorable manner. In the present study, however, the results did not

support this conclusion. Several possible explanations exist that may account for this:

(1) Employees may have felt that the completion of a categorical demographic questionnaire did not present a threat to their anonymity. This is consistent with the findings of Giles and Feild (1978) that the inclusion of a categorical demographic questionnaire did not cause employees to inflate their responses, whereas the inclusion of a continuous type demographic questionnaire did. The results of this study and the study conducted by Giles and Feild (1978) indicate that a categorical demographic questionnaire may be utilized with a job attitude survey without causing employees to inflate their responses to the attitude scales.

(2) The organization where this study was conducted is a division of a state organization. As such, an employee may perceive a greater amount of job security and less fear of possible retribution than a contemporary in private industry. Related to employees' feelings of job security is the fact that employees on the 7 a.m. to 3 p.m. shift are generally long term employees. Inspection of Table 8 (Appendix A) indicates that approximately 80% of the employees sampled had been employed in their present position for three or more years. Newer employees (employees on the other shifts) may not have felt as secure with their jobs as employees on the 7 a.m. to 3 p.m. shift and response distortion may have occurred had these shorter term employees been sampled. In this study the perception of potential identification may have existed among employees, but the fear of potential retribution may not have manifested itself. Future studies that

examine the effects of requesting demographic information in private industry and with shorter term employees is suggested.

(3) The organization in which this study was conducted has had previous experience with the use of an employee attitude survey. Employees may have been cognizant of the fact that no negative consequences had occurred with respect to the usage of the results of the previous survey. As a result, they may have deduced that the potential uses of the results from the present survey presented no threat to them.

(4) Measures had been taken to promote employees' feelings of anonymity. These measures included the use of survey administrators from a local university, carefully written instructions which stressed the anonymity of employees and the confidentiality of individual responses, and the manner of collection of the surveys themselves.

Effects of the race of the administrator

The results indicated that the race of the administrator did not have a significant effect on the responses of Black employees to a group administered job attitude survey. It was expected that response bias may occur due to an inhibition to reveal negative attitudes to a White administrator, due to a general distrust of White communicators (Rich, 1974; Sattler, 1971). If this distrust of White communicators did exist for the Blacks surveyed in this study, it did not manifest itself in response distortion to the job attitude scales.

One possible explanation for this finding involves the race of the supervisors of RLA's. The immediate supervisors of the RLA's are Behavorial Program Associates (BPA's). As a group, BPA's are predominantly Black females who have been promoted from RLA positions. Upper level managerial positions in this organization, on the other hand, are filled predominantly by White employees. The RLA's in this study may have felt no need to inhibit their responses to a White administrator as they may have felt the information collected in the survey would be passed on to immediate supervision that was predominantly Black.

In this study, the factors discussed by Sattler (1971) relating to racial experimenter effects did not combine in a manner to produce response distortion among Black employees. The results of this portion of the study may be interpreted as follows: response bias did not occur due to the race of the administrator when Black employees were either totally anonymous or had completed a categorical demographic questionnaire and when the administrators were from outside the organization. These findings imply that an organization that employs a large number of Black employees and utilizes a job attitude survey need not be concerned with the possibility of the race of the administrator biasing employees responses to the attitude scales under the conditions present in this study.

These findings, however, may be sample specific. The organization where this study was conducted is unique in the respect that it employs a majority of Black workers. Black RLA's comprise approximately 80% of the RLA population on the 7 a.m. to 3 p.m. shift. It would be interesting to examine the effects of the race of the administrator and requesting demographic information where the employee population is predominantly White.

This study neither examined the effects of the race of the administrator under the condition of identification, nor when the administrators were from within the organization. The generalization of the findings of this study to the above conditions is not recommended. Future research to investigate the possible interaction between the race of the administrator and the aforementioned variables is suggested.

Several additional comments as to the limitations of the study, generalizability of the results, and suggestions for future research follow:

(1) The varying sample sizes of the groups may have interacted with the independent variables to confound the results of this present study. A replication of this study is suggested with greater controls to equalize the sizes of the groups participating in the survey. The use of confederates by the experimenter to control for the size of the groups participating in the survey is a possibility that should be considered.

(2) The JDI is an adjective checklist type scale and, therefore, the results of this study should not be generalized to other types of employee attitude scales. Future research should investigate the effects of the independent variables used in this study with different types of scales measuring employee attitudes.

(3) The use of only one male administrator of each race represents a limitation of this study. Future studies of racial experimenter effects should strive to utilize a pool of administrators of each race and sex so that individual biasing effects other than race are controlled for.

(4) The use of administrators from outside the organization only, represents another limitation of this study. It would be of interest to assess the effects of the independent variables used in this study with both inhouse and outside administrators.

(5) It should be noted that approximately 97% of the RLA's in the demographic condition were Black females (see Appendix A). This percentage was approximately the same in the no demographic condition. As such, the generalizability of the results of this study to a predominantly Black male population is cautioned against.

As can be observed from the above cautions, the generalizability of the results from this study to other situations is questionable. The specific sample and the nature of the organization tested are also among the variables that may have interacted to influence the results. Replication of these results in other settings would lend support to the generalizability of the findings of this research.

Appendix A

Demographic Data Expressed in Percentages

Table 8

Demographic Data Expressed

in Percentages

		Group			
Demographics	1	2	3		
Age					
19 - 24	15.38%	5.26%	9.38%		
24 - 34	38.48%	57.89%	50.00%		
35 - 44	15.38%	21.05%	18.75%		
45 - 54	15.38%	10.52%	12.50%		
55 or more	15.38%	5.26%	9.38%		
Sex					
Male	0.00%	5.26%	3.12%		
Female	100.00%	94.73%	96.87%		
Race					
Black	100.00%	100.00%	100.00%		
Years of Education					
6 or less	15.38%	0.00%	6.25%		
7 - 11	38.46%	10.52%	21.87%		
High School Degree	38.46%	84.21%	65.62%		
Associate Degree	7.69%	5.26%	6.25%		

Table 8 (Continued)

	Group			
Demographics	1	2	3	
Years Employed by HRS ^a				
1 - 3 years	7.69%	21.05%	15.62%	
3 - 5 years	30.77%	31.57%	31.25%	
5 - 10 years	38.46%	42.10%	40.62%	
10 - 15 years	7.69%	5.26%	6.25%	
16 or more	15.38%	0.00%	6.25%	
Years Employed in Present Jo	ob			
1 - 3 years	7.69%	31.57%	21.87%	
3 - 5 years	30.77%	31.57%	31.25%	
5 - 10 years	38.46%	31.57%	34.37%	
10 - 15 years	7.69%	5.26%	6.25%	
16 or more	15.38%	0.00%	6.25%	
Present Job Title				
RLA	100.00%	100.00%	100.00%	
Shift				
7 - 3	100.00%	100.00%	100.00%	
Present Work Section				
Section 1	23.07%	15.78%	18.75%	
Section 2	38.46%	31.57%	34.37%	
Section 3	15.38%	36.84%	28.12%	
Section 4	23.07%	15.78%	18.75%	

Notes for Table 8:

1

Group 1 is the White administrator-demographic data group. Group 2 is the Black administrator-demographic data group. Group 3 is the combination of demographics obtained from Groups 1 and 2.

^aHRS is the parent organization of the one where this study was conducted.

Appendix B

Demographic Questionnaire

DIRECTIONS

Please select the appropriate response for each question and place a check in the space provided.

Demographics:

1.	Age:	6.	Years Employed in Present Job:	
	18 or under 19 - 24 25 - 34 35 - 44 45 - 54 55 or more		1 year or less 1 - 3 years 3 - 5 years 5 - 10 years 10- 15 years 16 or more	
2.	Sex:	7.	Present Job Title:	
3.	Male Female Race/Ethnic Identification:		RLA RTI BPA	
	American Indian or		BPS RLUS	
	Alaskan Native Asian or Pacific Islander Black	 8.	Shift:	
	Hispanic White Other		7 - 3 3 - 11 11- 7	
4.	Years of Education:	9.	Present Work Section	n:
	6 or less 7 - 11 High School Degree Associate Degree College Degree		Section 1 Section 2 Section 3 Section 4	
5.	Years Employed by HRS:			
	1 year or less 1 - 3 years 3 - 5 years 5 - 10 years 10- 15 years 16 or more			

Appendix C

Instructions That Were Read To Employees

Instructions Read to the Groups Receiving Both the JDI and the Demographic Questionnaire

I'd like to welcome all of you and explain what this meeting is all about. My name is ______ and I am a graduate student from the University of Central Florida. You have been asked to come to this meeting today to participate in a job attitude survey by filling out a questionnaire. Since it is important that people in each group receive the same instructions, I would like to read them to you. Sunland considers this survey important and I hope you will give your full cooperation by being completely frank in filling it out.

As many of you know, our research team from the university is administering attitude surveys. As some of you may remember, a similar survey was conducted last year. These surveys are for the purpose of finding out how you feel about your job. This will allow you to express your attitudes toward your job while remaining anonymous.

No one at Sunland will ever see your individual answers, so please feel free to express yourself frankly. All of the information obtained in this questionnaire will be compiled and analyzed, by our research team, in terms of broad employee groups. The results will be presented to both the management and the employee committee in summary form. So again let me assure you that all of the information obtained in this questionnaire will be strictly confidential. As soon as possible a report of the findings will be presented to management, the employee committee, and a copy of the report will be posted outside the cafeteria so that you may have access to it. Before I explain how to complete the questionnaire does anybody need a pencil? (Hand out pencils at this point).

Before we discuss how to fill out the job attitude questionnaire, you are asked to supply some additional information. This information, like your answers to the questionnaire itself, will be kept completely confidential. This information will allow us to more meaningfully analyze and interpret the data obtained in the questionnaire.

You will notice that the first two pages of the questionnaire consist of demographic questions. We are asking for information about you, such as your age, sex, race, education, and so forth. The directions read, "Please select the appropriate response for each question and place a check in the space provided". All you need to do is find the category that pertains to you and place a check in the space next to that category. For example, if you are 22 years old, you will place a check in the space next to the category "19 - 24". Please do this for all of the items on the demographic questionnaire. When you have completed this, turn the pages and continue on to the attitude questionnaire.

Now let me explain how to fill out the attitude questionnaire. The attitude questionnaire itself, consists of five scales, and is designed to measure attitudes toward work pay, promotions, supervision, and co-workers. At the top of each page there is a statement. On the first page the statement reads, "Think of your present work, what is it like most of the time? In the blank beside each word given below, write

Y for 'Yes' if it describes your work

N for 'No' if it does NOT describe it and place a

? if you cannot decide".

Each scale is completed in the same manner as this one, by placing a Y, N, or question mark in the space next to the words. An example of this is on the blackboard.

Before you begin filling out the questionnaire, there are a few additional comments I would like to make. Be sure to read the statements at the top of each page before you complete the scales. Remember to read the items carefully, but do not spend a great deal of time on any one item. In surveys such as this, your first reaction to an item is usually best. You will find that on some of the scales you will have to make generalizations, such as what is your work like "most" of the time, or how you feel about the "majority" of the people you work with. Be certain not to skip any pages or items. In marking your answers, write them clearly and legibly in the space provided for them. As you leave the room, please place your completed questionnaires in this box.

Does anyone have any questions at all? (Allow time for

questions).

All right, please begin and thank you for your cooperation.

Instructions Read to the Groups Receiving Only the JDI

I'd like to welcome all of you and explain what this meeting is all about. My name is ______ and I am a graduate student from the University of Central Florida. You have been asked to come to this meeting today to participate in a job attitude survey by filling out a questionnaire. Since it is important that people in each group receive the same instructions, I would like to read them to you. Sunland considers this survey important and I hope you will give your full cooperation by being completely frank in filling it out.

As many of you know, our research team from the university is administering attitude surveys. As some of you may remember, a similar survey was conducted last year. These surveys are for the purpose of finding out how you feel about your job. This will allow you to express your attitudes toward your job while remaining anonymous.

No one at Sunland will ever see your individual answers, so please feel free to express yourself frankly. All of the information obtained in this questionnaire will be compiled and analyzed, by our research team, in terms of broad employee groups. The results will be presented to both the management and the employee committee in summary form. So again, let me assure you that all of the information obtained in this questionnaire will be strictly confidential. As soon as possible a report of the findings will be presented to management, the employee committee, and a copy of the report will be posted outside the cafeteria so that you may have access to it. Before I explain how to complete the questionnaire does anybody need a pencil? (Hand out pencils at this point).

Now let me explain how to fill out the attitude questionnaire. The attitude questionnaire itself, consists of five scales, and is designed to measure attitudes towards work, pay, promotions, supervision, and co-workers. At the top of each page there is a statement. On the first page the statement reads, "Think of your present work. What is it like most of the time? In the blank beside each word given below, write

Y for 'Yes' if it describes your work

N for 'No' if it does NOT describe it, and place a

? if you cannot decide".

Each scale is completed in the same manner as this one, by placing a Y, N, or question mark in the space next to the words. An example of this is on the blackboard.

Before you begin filling out the questionnaire, there are a few additional comments I would like to make. Be sure to read the statements at the top of each page before you complete the scales. Remember to read the items carefully, but do not spend a great deal of time on any one item. In surveys such as this, your first reaction to an item is usually best. You will find that on some of the scales you will have to make generalizations such as what is your work like "most" of the time, or how you feel about the "majority" of the people you work with. Be certain not to skip any pages or items. In marking your answers, write them clearly and legibly in the space provided for them. As you leave the room, please place your completed questionnaires in this box.

Does anyone have any questions at all? (Allow time for questions.)

All right, please begin and thank you for your cooperation.

BIBLIOGRAPHY

- Ash, P., & Abramson, E. The effect of anonymity on attitude questionnaire response. Journal of Abnormal and Social Psychology, 1952, 47, 722-723.
- Baughman, E. E. (Ed.). <u>Black Americans</u>. New York: Academic Press, 1971.
- Becker, G. & Bakal, D. A. Subject anonymity and motivational distortion in self report data. Journal of Clinical Psychology, 1970, 26, 207-209.
- Benson, L. E. Studies in secret ballot techniques. <u>Public Opinion</u> <u>Quarterly</u>, 1941, <u>5</u>, 79-82.
- Billingsly, A. <u>Black Families in White America</u>. Englewood Cliffs, N.J.: Prentice-Hall, 1968.
- Browne, I. C. Understanding Race Relations. Englewood Cliffs, N. J.: Prentice-Hall, 1973.
- Butler, R. P. Effects of signed and unsigned questionnaires for both sensitive and nonsensitive items. Journal of Applied Psychology, 1973, 57, 348-349.
- Corey, S. M. Signed versus unsigned attitude questionnaires. Journal of Educational Psychology, 1937, 28, 144-148.
- Dunham, R. B., & Smith, F. J., Organizational Surveys. Glenview, Ill.: Scott, Foresman and Company, 1979.
- Dumham, R. B., Smith, F. J., & Blackburn, R. S. Validation of the Index of Organizational Reactions with the JDI, the MSQ and Faces Scales. Academy of Management Journal, 1977, 20, 420-432.
- Dunnette, M. D., & Heneman, H. G., Jr. Influence of scale administrator on employee attitude responses. Journal of Applied Psychology, 1956, 40, 152-160.
- Ellinson, J., & Haines, V. T. Role of anonymity in attitude surveys. American Psychologist, 1950, 5, 315.
- Feldman, J. M. Race, employment, and the evaluation of work. <u>Journal</u> of Applied Psychology, 1973, 58, 10-15.
- Festinger, L. The role of group belongingness. In J. G. Miller (Ed.), Experiments in Social Progress. New York: McGraw-Hill, 1950.
- Fischer, R. P. Signed versus unsigned personal questionnaires. Journal of Applied Psychology, 1946, 30, 220-225.

- Fuller, C. Effect of anonymity on return rate and response bias in a mail survey. Journal of Applied Psychology, 1974, 59, 292-296.
- Gerberich, J. B., & Mason, J. M. Signed versus unsigned personal questionnaires. Journal of Educational Research, 1948, <u>42</u>, 122-126.
- Giles, W. F., & Feild, H. S. Effects of amount, format, and location of demographic information on questionnaire return rate and response bias of sensitive and nonsensitive items. <u>Personnel</u> <u>Psychology</u>, 1978, 31, 549-559.
- Goode, W. J. & Hatt, P. K. <u>Methods in Social Research</u>. New York: McGraw-Hill, 1952.
- Hamel, L., & Reif, H. G. Should attitude questionnaires be signed?. Personnel Psychology, 1952, 5, 87-91.
- Hinrichs, J. R., & Gatewood, R. D. Differences in opinion-survey response patterns as a function of different methods of survey administration. Journal of Applied Psychology, 1967, <u>51</u>, 497-502.
- Hyman, H. H., Cobb, W. J., Feldman, J. J., Hart, C. W., & Stember, C. H. <u>Interviewing in Social Research</u>. Chicago: University of Chicago Press, 1954.
- Katz, I. Cultural and personality factors in minority group behavior: A critical review. In H. L. Fromkin & J. J. Sherwood (Eds.), <u>Integrating the Organization: A social psychological analysis</u>. New York: Basic Books, 1974.
- Klein, S. M., Maher, J. R., & Dunnington, R. A. Differences between identified and anonymous subjects in responding to an industrial opinion survey. Journal of Applied Psychology, 1967, 51, 152-160.
- King, F. W. Anonymous versus identifiable questionnaires in drug usage surveys. American Psychologist, 1970, 25, 982-985.
- Kulik, J. A., Stein, K. B., & Sarbin, T. R. Disclosure of delinquent behavior under conditions of anonymity and non-anonymity. American Psychologist, 1966, 21, 651.
- Maller, J. B. The effect of signing ones name. <u>School and Society</u>, 1930, 31, 88.
- Olson, W. C. The waiver of signature in personal reports. Journal of Applied Psychology, 20, 442-450.

O'Reily, C. A., III., & Roberts, K. H. Job satisfaction among Whites and non Whites: A cross cultural approach. Journal of Applied Psychology, 1973, 57, 295-299.

- Phillips, D. L. Knowledge from what. Chicago: Rand McNally, 1971.
- Pelz, D. C. The influence of anonymity on expressed attitudes. <u>Human</u> Organization, 1959, 18, 88-91.
- Rainwater, L. Crucible of Identity: The Negro lower-class family. Daedalus, 1966, 95, 172-216.
- Rich, A. L. Interracial communication. New York: Harper & Row, 1974.
- Rosen, N. A. Anonymity and attitude measurement. Public Opinion Quarterly, 1960, 24, 675-679.
- Sattler, J. M. Racial "experimenter effects" in experimentation, testing, interviewing, and psychotherapy. <u>Psychological Bulletin</u>, 1971, 73, 137-160.
- Smith, P. C., Kendall, L. M., & Hulin. The Measurement of Satisfaction in Work and Retirement. Chicago: Rand McNally, 1969.
- Weaver, C. N. Negro-White differences in job satisfaction. Business Horizons, 1974, 17(1), 67-72.
- Wildman, R. C. Effects of anonymity and social setting on survey responses. Public Opinion Quarterly, 1977, 41, 74-79.
- Wilson, T. R., & Rosen, T. H. Self-disclosure on army surveys: Survey procedures and respondent beliefs related to candidness. (HumRRO Tech. Rep. 75-2), Alexandria, Va.: Human Resources Research Organization, April 1975.
- Winer, B. J. <u>Statistical Principles in Experimental Design</u> (2nd ed.). New York: McGraw-Hill, 1971.
- Wrightsman, L. S. <u>Assumptions about human nature: A social psycho-</u>logical approach. Monterey, Calif.: Brooks/Cole, 1974.