TEST-TAKING ATTITUDE AS A FUNCTION OF MODE OF PRESENTATION

Ву

DOROTHY ANN STASSER

Bachelor of Science

Bethany Nazarene College

Bethany, Oklahoma

1964

Submitted to the faculty of the Graduate School
of the Oklahoma State University
in partial fulfillment of the requirements
for the degree of
MASTER OF SCIENCE
July, 1966

CHLAMOMA STATE UNIVERSITY LIBRARY

TEST-TAKING ATTITUDE AS A FUNCTION

OF MODE OF PRESENTATION

Thesis Adviser

Dean of the Graduate School

Thesis Approved:

627282 ii

PREFACE

The statements in personality inventories can be traced, in most cases, to questions used by psychiatrists in interviews. The purpose of this study was to investigate the difference in interview and grouptesting presentations of the same inventory. This was done to determine whether the items would produce the same responses in an interview situation as in a group-testing situation.

I would like to thank the students who took the inventories and the instructors who helped administer the group tests. I, also, apprethe Testing Bureau's scoring of the tests.

I especially want to thank Dr. Richard J. Rankin, whose advise, assistance, and encouragement in this study, and throughout my master's program, has been invaluable to me. I would also like to express my appreciation to Dr. Julia McHale for serving on my committee.

My appreciation is extended to the committee and administrators of the fellowship program of the National Defense Education Act for the financial assistance and opportunity to be in this master's program.

TABLE OF CONTENTS

Chapte	Pa	ge
I.	THE PROBLEM	1
	Statement of Problem	2 2
II.	REVIEW OF THE LITERATURE	5
III.	METHOD AND PROCEDURE	8
	Design	8 12 12
IV.	RESULTS	15
V.	INTERPRETATION OF RESULTS	19
		19 21
BIBLIO	GRAPHY	22
A PPE ND	ICES	24

LIST OF TABLES

ľable		Pa	ıge
I.	Means, Standard Deviations, and Reliabilities for Scores on Scales of the DS Inventory IV Given in a Group Situation.	٠	15
II.	Means, Standard Deviations, Student's t Values for the DS Inventory IV for the Various Groups	٠	17
III.	Student's t Values for Differences Between Individual and Group Situations for Scales Used in the DS Inventory IV.	•	18
IV.	Correlations Between Situations and Testing Order in Each Sample for the Scales Used in DS Inventory IV	•	18

CHAPTER I

Y 1. 1 . 0

THE PROBLEM

The first personality inventory—Woodworth Personal Data Sheet (WPDS) (Woodworth, 1918) was developed as a screening device to indicate those in need of an interview. Because personal interviews by psychiatrists were much too slow, and there were too few psychiatrists, the large influx of recruits in World War I necessitated such an instrument if psychiatric evaluations were to be made of each person. The WPDS was a compilation of questions used in psychiatric interviews.

The WPDS was the forerunner of the many personality scales, such as the Minnesota Multiphasic Personality Inventory, that were to follow. Some of the items in these later assessment devices can be traced directly to items in the WPDS. Many of these items remain in their original wording; others have been modified somewhat.

Statement of the Problem

It is the purpose of this study to investigate the differential effects of presenting the statements from personality scales in an interview situation or in a paper-and-pencil testing situation. An attempt will be made to answer the following questions: Do the different conditions as a result of the subjects being in the interview

and of being in the group-testing situations influence their responding in any way? What are the reliabilities of the scales used? Is there any basis for assuming that the inventories are measuring the same thing in the two different conditions? This assumption is made whenever group tests, constructed from interview questions, are substituted for the interview.

Limitations of the Study

Four personality scales were used to investigate whether there were differential effects on the scores of the scales because of presentation in a group-testing or an interview situation. The scales were the Barron's Independence of Judgment Scale, the Minnesota Multiphasic Personality Inventory Lie Scale, the Marlowe-Crowne Social Desirability Scale, and the Hanley Sx Scale. The subjects were 187 Oklahoma State University students enrolled in undergraduate psychology courses in the 1965 spring, summer, and fall sessions. There were 80 male and 110 female subjects ranging in age from 17 to 40 years. Due to the scope of the study, it was not feasible to use a greater variety of personality scales or to include a more diverse group of subjects.

Clarification of Terms

Guilford (1954, p. 451) used response bias to refer to the fact "that a response to a test item tends to be altered in such a way that it indicates something other than that which we intend to measure." Cronbach (1946) stated that individuals have a tendency to respond to an item according to the content of the item. His definition (Cronbach,

1946, p. 476) was as follows:

any tendency causing a person consistently to give different responses to test items than he would when the same content is presented in a different form . . "form" includes the form of the statement, the choice of responses offered and the directions since all of these are part of the situation to which he reacts.

Edwards (1957, p. vi) uses the term social desirability in "reference to the tendency of subjects to attribute to themselves, in self-description, personality statements with socially desirable scale values."

Spilka (1961) tried to arrive at an operational definition of social desirability. His procedure was to focus on the method of social desirability rather than change the individual meaning and content style. He correlated scores of three suggested ways of measuring self-concept. The correlations ranged from -.095 to +.971. Since there was a large amount of variation in the agreement of these measures of the same concept, he concluded that the concept of social desirability was unclear operationally.

Fordyce (1956, p. 171) gave the following as a preliminary definition of social desirability: "consensus judgment as to what behave ior, feelings and attitudes win social approval in American society."

Lying is denying traits that are socially undesirable but that are usually not denied by most subjects.

Plus-getting is the tendency of a subject to be unduly critical of himself. He responds in such a way as to make his score indicate more of a socially undesirable characteristic than is the actual case.

Defensiveness is the tendency to respond in a socially desirable

manner even if the response is not personally relevant.

CHAPTER II

REVIEW OF THE LITERATURE

The Woodworth Personal Data Sheet (WPDS) is a test that was used in World War I to differentiate between those who needed psychiatric interviewing and those considered fit for military service without further evaluation. WPDS is considered to be a prototype of personality questionnaires. It was an attempt to standardize the interview and adapt the interview to group testing. The content of the items was gleaned from psychiatric literature as well as from conferences with psychiatrists. From these sources Woodworth was able to arrive at symptoms which indicated potential or manifest neurotic conditions (Anastasi, 1961).

The results from previous studies comparing the questionnaires, or group tests, with interviews are ambiguous. Some studies indicated that the questionnaire is more valid; and some, that the interview is more valid. Others found no differences between data obtained in the two different situations.

Five different studies found the questionnaire to be the more valid instrument. In two studies both using sixty-nine college girls, Ellis (1947, 1948) found the questionnaire to produce less favorable, and he assumed, more self-revelatory responses than did the interview. In the first study (1947) he used catergorized questions about the girls' love-lives and gave the interview first, followed a year later

by a questionnaire to be answered anonymously, getting at the same content without asking exactly the same questions. Metzner and Mann (1952) found that a larger percentage of workers indicated more satisfaction with their work situation when questions were asked in an interview situation rather than on a questionnaire. Huse (1962) found that job success was predicted better by data from various paper—and—pencil tests than from data obtained in interviews or projective tests. A study by Levonian (1963) indicated that the reliability (internal consistency) of short scales computed from the Kuder-Richardson Formula 20 were significantly reduced by using the interview survey method as compared to the questionnaire survey method. He stated that this would raise a question about the adequacy of measures of personality from short scales when the interview technique was used.

The following studies found the interview to be a better instrument than the questionnaires. Jackson and Rothney (1961) interviewed and mailed questionnaires to high school graduates. Considering the more complete data received from interviews, they felt that this justified the extra cost as well as the extra time used to administer the interviews rather than use the more economical questionnaires. According to Greene (1941), an interview makes it possible for the interviewer to secure the confidence of the one interviewed.

The following investigators found essentially no difference in results obtained by the two different methods. Parker, Wright, and Clark (1957) asked students if they would have come to Brigham Young University without scholarships. There did not seem to be a significant difference between what the students said they would do and what

the interviewers thought they would have done after interviewing them, although no test of significance was made. Bennett, Alpert, and Goldstein (1954) reported that responses were more consistent from interview to limited-response questions than could be attributed to chance. Eysenck and Eysenck (1962) gave a thirty-six item question-naire to 367 predominately male subjects in interview form. Most of the items used defined dimensions of extroversion or neuroticism according to previous studies. The factor loadings of each item on neuroticism and extroversion were compared with those obtained when the items were given in inventory form to 300 evening class and university students. They did not find any significant change in an item's factorial composition as a result of being presented as an inventory rather than as an interview.

Ellis (1946) made the statement that it was questionable whether the scores obtained in an individual situation were comparable to those obtained in a group situation.

The results of the few studies in this area are inconclusive. A variety of subjects were used in the studies. Most of the investigations had a relatively large number of subjects. Parker, Wright, and Clark (1957) did not have a statistical analysis of their data. In the study by Metzner and Mann (1952) only three questions were common to both the interview and the questionnaire they used. Greene's (1941) statement was not based on empirical evidence. More of the studies indicate that the questionnaire is more valid than the interview. No clear-cut conclusions can be drawn, however, since this has not been the results found in other studies.

CHAPTER III

METHOD AND PROCEDURE

DS Inventory IV was used as a camouflage title for four scales administered to the subjects—the Barron's Independence of Judgment Scale, the Minnesota Multiphasic Personality Inventory Lie Scale, the Marlowe-Crowne Social Desirability Scale, and the Hanley Sx Scale. A description of each follows; the actual items included in each scale are listed in Appendix A.

Scales

Barron's Independence of Judgment Scale

Barron (1953) collected approximately two hundred items that he thought were representative of traits indicating the personality factor of independence of judgment. Many of the items were written specifically for this scale, however, a few were taken from other sources. Barron and Asch then reduced the list to eighty-four items by a "clearly formulated guess" as to what characteristics represented independence of judgment (Barron, 1953, p. 294). These items were administered to eighty-five subjects--forty-three Independents and forty-two Yielders--to determine which items discriminated between these groups. The two samples were defined by their activity in a social situation in which group pressure was applied to cause them to

conform to an erroneous group opinion. Those who yielded to the group pressure were designated as Yielders; those who did not, Independents. The whole test discriminated between the two samples at a statistically significant level (pe.Cl). An item analysis was performed to find those items which were most effective in discriminating between the samples. Twenty-two items were found which discriminated at the .05 level or less, of these, twenty-one were used in this inventory (Barron, 1953). It would have been desirable to have had a cross-validation of the item pool thought to discriminate between other groups.

Minnesota Multiphasic Personality Inventory Lie Scale

The content of the items of the Lie Scale (Hathaway and McKinley, 1951) is such that, while thought to be socially undesirable, it is not denied by most people. Many subjects attribute most of the traits in this scale to themselves. Only about four per cent of the norming samples of normal Minnesota adults denied ten or more of the fifteen items (Hathaway and McKinley, 1951). Test-retest reliability for college students for this scale found in Appendix K of Hathaway and McKinley's work (1951) ranged from .46 to .79 with a mean of .60. No measure of internal consistency was listed for this scale by Hathaway and McKinley (1951).

Marlowe-Crowne Social Desirability Scale

The Marlowe-Crowne Social Desirability Scale (Crowne and Marlowe, 1960) was developed to avoid the pathological implications found in the Edwards' Social Desirability Scale (1953a). The items of the

Edward's Scale were taken from the item pool of the Minnesota Multiphasic Personality Inventory (MMPI). Due to the clinical nature of the MMPI many of the items are designed to detect pathological symptoms. Crowne and Marlowe (1960) stated that this rendered the interpretation of the responses to such items ambiguous in a college student population. It is not clear whether the subjects are responding in a socially desirable manner or whether they actually do not have the trait in question. The latter is the most probable explaination considering the paucity of pathological characteristics found in most college populations. The items used in this scale, therefore, are drawn from an item pool which has statements which are socially acceptable but which are of improbable occurrence. After finding fifty items that met the criteria of social acceptability and of minimal pathological implications, the items were judged on a social desirability dimension by ten judges, which were faculty and graduate students in the Psychology Department at Ohio State University. In this way the number of items was reduced to forty-seven, thirty-six of which had one hundred per cent agreement and eleven of which had ninty per cent agreement among the judges. This number was administered to seventysix college students. Thirty-three of the items discriminated at the .05 level of significance between those receiving a high total score and those receiving a low total score. No cross-validation was reported. These thirty-three items constituted the Marlowe-Crowne Social Desirability Scale, thirty of which were used in this inventory. Reliability computed from the Kuder-Richardson Formula 20 was .88. Testretest reliability was: .89 after a one month interval. (Crowne and Marlowe, 1960)

Hanley Sx Scale

The Hanley Sx Scale (Hanley, 1957) was constructed to measure defensiveness and plus-getting. There is an indication that on personality inventories there is a high correlation between the social desirability of an item and probability of endorsement. Edwards (1953) found this correlation to be .87. Hanley (1957) constructed a scale in which desirability and probability of endorsement were unrelated when subjects are responding honestly. Defensive subjects receiving a high score and plus-getting subjects, a low score when the scale was keyed for rejection of undesirable and acceptance of desirable items. Intermediate scores are considered to be an indication of honesty in responding.

In order to reduce the correlation between desirability and endorsement, Hanley reduced the variation in endorsement, using only those items endorsed by thirty-six to sixty-four percent of a group of college males and females. The social desirability of these items was determined by computing the median rating score given each item by a group of male and female college students. Ten previously judged items were included and the ratings were comparable to those found in the previous scaling. Eight of the items keyed false were removed from the scale to balance the number of true and false items. This was done to eliminate any contamination of scores by the factor of acquiescence.

The reliability computed by the Kuder-Richardson Formula 20 was .31. When administered to a completely honest group; that is, to a group that is responding on the basis of personal relevance rather

than on social desirability, the internal consistency of the scale should be very low. High internal consistency would indicate either that the scale is measuring other variables besides plus-getting or defensiveness, or that the subjects are not responding honestly.

(Hanley, 1957)

Selection of Subjects

The subjects were volunteers from introductory psychology classes at Oklahoma State University in the 1965-66 fall session and the 1965 summer session and students in undergraduate psychology courses in the spring semester of 1964-65. There were 187 subjects with an approximately equal number of males and females ranging in age from 17 to 40.

Design

The Hanley Sx Scale, the MMPI Lie Scale, the Barron's Independence of Judgment Scale, and the Marlowe-Crowne Social Desirability Scale were included in the inventory which was administered under two conditions--interviewing and group-testing.

The scales were administered once in the paper-and-pencil form to two samples (Group I and Group II) consisting of forty subjects each. Group A, consisting of twenty-five subjects, were first given the inventory in the group situation. The inventory was then given approximately one to two weeks later in an individual interview situation. Group B were first given the individual interviews. After at least a one-week interval; the inventory was given in the group-testing situation. This group consisted of twenty-seven subjects. Group C, thirty subjects, were given the inventory in a group situation twice

with a week interval between the two testings. This was done in order to determine whether there was any significant change in scores of the group test due to re-testing. Group D, twenty-five subjects, were given the inventory as individual interviews twice with at least a week interval between the two interviews. This group was used to determine the effect of re-testing in an interview situation.

The individual interviews were given in an office. A Wollensak tape recorder was used during the interviews as a check if the experimenter failed to mark an answer, and therefore, incorrectly recorded responses to items in the interview. The questions were read to each subject in the interview situation and the responses were recorded by the experimenter. In the group situation the inventory was given in a classroom setting in paper-and-pencil form. The instructions used in both situations are given in Appendix B.

Treatment of Data

The groups to which the inventory was only administered once were used to obtain mean scores, standard deviations, and internal consistency measures. The Kuder-Richardson Formula 20 was used as the measure of internal consistency. Student's t was used to evaluate whether or not there was a difference larger than could be attributed to chance between the various testing situations. This test was made to determine if there was a significant difference between group and individual testing situations in the same sample, and between test and re-test in groups that had two administrations of the inventory in the same situation. A mean and a standard deviation were calculated for the scores of the scales in each situation. For all scales the correlation was

found between group and individual tests when the individual test was given first, between group and individual tests when the group test was given first, between first and second tests when both were group tests, and between first and second tests when both were individual tests. Student's t was used to test whether there was a significant difference between individual tests given first and group tests given first, and between individual given second and group given second.

CHAPTER IV

RESULTS

The reliabilities of each scale were computed on the two group-administration samples by the Kuder-Richardson Formula 20. The reliabilities were found to be as follows: Hanley Sx (Sx), -.27; Lie Scale (L), .50; Barron's Independence of Judgment Scale (BIJ), .32; and the Marlowe-Crowne Social Desirability Scale (M-C SDS), .75. The reliability of the Hanley Sx Scale was found to be .18 when only those subjects' scores were used who also had a Lie score of four or above. These reliabilities as well as means and standard deviations are given in Table I.

TABLE I

MEANS, STANDARD DEVIATIONS, AND RELIABILITIES FOR SCORES ON SCALES
OF DS INVENTORY IV GIVEN IN A GROUP SITUATION
(N=80)

	Sx	<u>I</u> ,	BIJ	M-C SDS	
Mean	7.71	2.15	11.85	12.11	
Standard Deviation	1.79	1.86	2.73	5.08	
Reliability	-0.27	0.50	0.32	0.75	

In Group C, in which the paper-and-pencil inventories were given twice, there was a significant difference (p=.Cl) between first and

second administrations for the Hanley \underline{Sx} and the Independence of Judgment scales but not for the other scales. In the sample that was given the inventory in an interview situation both times (Group D), only the Independence of Judgment Scale showed a significant difference (p=.01). In the sample that was given the group test first and the individual test second (Group B), there was a significant difference (p=.01) between the scores in these situations for only the Social Desirability Scale. In the sample given the group test first and the individual test second (Group A), only the Lie Scale showed a significant difference (p=.01). Table II is the listing of Student's \underline{t} values for the differences between the scores for the situations (either group-individual or first-second testing).

A comparison of individual and group situations was made while holding the order of testing constant; that is, they were compared when both were the first testing situation and when both were the second testing situation. None of the differences were significant except the Independence of Judgment Scale in the second testing situation. Student's <u>t</u> values for the scales of the inventory are given in Table III.

Correlations between test scores for various conditions were computed for the scales used. They are given in Table IV. The raw data are in Appendix C.

TABLE II

MEANS, STANDARD DEVIATIONS, AND STUDENT'S T VALUES FOR THE DS INVENTORY IV FOR THE VARIOUS GROUPS

		Sx	L	BIJ	M-C SDS
Group A. (N=25) Difference Between Group Testing First and Individual Second	Mg Mi SDg SDi Md SDd	8.16 8.20 1.77 1.89 -0.04 1.78	2.88 2.44 1.79 2.16 0.64 1.06 3.05**	12.04 11.84 2.72 2.49 -0.04 2.05 -0.10	13.80 13.36 4.96 5.49 1.00 3.31 1.48
Group B. (N=27) Difference Between Individual Testing First and Group Second	Mg Mi SDg SDi Md SDd	8.37 7.67 2.20 1.71 0.70 1.83	2.37 2.52 1.78 2.01 -0.15 1.18	12.87 12.63 2.71 2.04 -0.19 1.61 -0.63	12.56 13.70 5.03 5.16 1.15 1.76 3.33**
Group C. (N=30) Difference Between First and Second Testing in Group Situation	M1 M2 SD1 SD2 Md SDd	7.63 8.50 2.01 1.63 -0.87 1.50 -3.83**	3.07 3.27 1.84 2.00 -0.20 1.16 -1.02	11.93 11.27 2.92 2.85 0.67 1.69 2.81**	14.87 14.57 6.02 6.73 0.30 3.98 0.82
Group D. (N=25) Difference Between First and Second Testing in Individual Situation	M ₁ M ₂ SD ₁ SD ₂ M _d SD _d	8.08 7.80 2.10 1.71 0.28 1.65 1.09	2.76 2.44 1.54 1.26 0.32 0.90 1.69	13.44 14.20 2.63 2.68 -0.76 1.64 -2.97**	15.64 15.52 4.77 5.32 0.12 2.71 0.36

**Significance level less than .Ol

Note: Mg-mean of group tests; Mi-mean of individual tests; Mi-mean of first test; M2-mean of second test; Md-mean of the differences between scores of different tests; SDg-standard deviation of the group test; SDi-standard deviation of the individual test; SDi-standard deviation of the first test; SD2-standard deviation of the second test; SDd-standard deviation of the differences between scores in different tests; t-Student's t values.

TABLE TII

STUDENT'S T VALUES FOR DIFFERENCES BETWEEN INDIVIDUAL AND GROUP SITUATIONS FOR SCALES USED IN THE DS INVENTORY IV

Differences	Between Individual a	nd Group Situations
	First Testing Seco	nd Testing
		•
L	t= 0.50 t=-0.38	-0.87 -1.11
	t= 1.45 t= 0.53	2 . 83** 0 . 62
Districted with the Control of Principal Control of Con	l level of confidence	

TABLE IV

CORRELATIONS BETWEEN SITUATIONS AND TESTING ORDER IN EACH SAMPLE FOR THE SCALES USED IN DS INVENTORY IV

DOUGH And Assessment of the control	Sx		BIJ	M-C SDS	
Group vs. Individual Group Test First (N=25)	. 53	. 88	. 69	, 80	
Group vs. Individual Individual Test First (N=27)	. 59	.81	.81	.94	
First vs. Second Both Group Tests (N=30)	•68	. 82	. 83	.81	
First vs. Second Both Individual Tests (N=25)	<u>.</u> 64	.81	, . 81	. 86	

CHAPTER V

INTERPRETATION OF RESULTS

Conclusion

In the computation of the internal consistency of the scales, the lowest reliability (-0.27) was found for the Hanley Sx Scale.

This could be expected, however, because of the construction of the scale. The scale was constructed in such a way that if all subjects answered honestly there would be no correlation between items, or no internal consistency. When it is used with a group that responds entirely on the basis of personal relevance, the scale should show zero reliability. If there were a large number of plus-getters or defensive subjects, the reliability of the scale would be much higher (Hanley, 1957). Therefore, the low reliability for this scale could be accounted for on the basis of a great number of subjects responding according to the personal relevance of each item. This is substantiated by the fact that the mean score on the Lie Scale for this group of subjects was 2.15 out of a possible 15.

There did not seem to be any consistent trend in the differences found to be significant when comparing order of testing (first or second) or testing situation (group or individual). For the most part there were no significant differences. It would seem, therefore, that subjects tend to respond consistently from an individual to a group

situation.

The results from Group A and Group B indicate that whether an individual is in a group or interview situation does not change his responding, except for the Lie Scale in one sample and the Social Desirability Scale in the other. The data of Group C and Group D show that the responding does not change significantly as a result of the inventory being repeated in either the group situation or the individual situation, except in the case of the Independence of Judgment Scale. There was no significant difference between the scores for the group and individual situations when both were the first tests given; the scores on only one scale were significantly different when both were the second test given. The correlations between scores from group and interview situations were high enough to indicate that they were measuring similar things.

Individuals did not tend to give more honest, more socially desirable, or more defensive responses as a function of whether they were in a group situation or an interview situation, or whether the inventory was being presented the first or second time.

The questions posed in the first section of this paper can be answered in the following way. The different conditions as a result of the subjects being in the interview situation and of being in the group situation do not significantly influence their responding. It can be assumed that the inventories are measuring the same thing in the two different situations. Therefore, on the basis of the data found in this study, it seems that group tests, constructed from questions used in interview, can be appropriately substituted for the more time consuming interviews.

Suggestions for Further Study

The influence of the sex of the experimenter compared to the sex of the subjects could have some effect on the results. This could be determined by using experimenters of both sexes and dividing the groups according to sex.

A replication of the conditions producing differences which were significant could be made to see if they still produced differences which could not be accounted for by chance alone.

BIBLIOGRAPHY

- Anastasi, Anne. <u>Psychological Testing</u>. (2nd ed.) New York: Macmillan, 1961.
- Barron, F. Some personlaity correlates of independence of judgment. J. Per., 1953, 21, 287-297.
- Bennett, E. M., Alpert, R., & Goldstein, A. C. Communications through limited-response questioning. Publ. Opin. Quart., 1954, 18, 303-308.
- Cronbach, L. J. Response sets and test validity. Educ. psychol. Measmt., 1946, 6, 475-496.
- Crowne, D. P., & Marlowe, D. A new scale of social desirability independent of psychopathology. <u>J. consult. Psychol.</u>, 1960, <u>24</u>, 349-354.
- Edwards, A. L. Manual for the Edwards Personal Preference Schedule.

 New York: Psychological Corp., 1953a.
- Edwards, A. L. The relationship between the judged desirability of a trait and the probability that the trait will be endorsed. J. appl. Psychol., 1953b, 37, 90-93.
- Edwards, A. L. The social desirability variable in personality assessment and research. New York: Dryden, 1957.
- Ellis, A. The validity of personality questionnaires. <u>Psychol. Bull.</u>, 1946, <u>43</u>, 385-440.
- Ellis, A. Questionnaire versus interview methods in the study of human love relationships. Amer. sociol. Rev., 1947, 12, 541-553.
- Ellis, A. Questionnaire versus interview methods in the study of human love relationships II. Uncatergorized responses. Amer. sociol. Rev., 1948, 13, 61-65.
- Eysenck, H. J., & Eysenck, Sybil B. G. A factorial study of an interview-questionnaire. J. clin. Psychol., 1962, 18, 286-290.
- Fordyce, W. E. Social desirability in the Minnesota Multiphasic Personality Inventory. J. consult. Psychol., 1956, 20, 171-175.
- Greene, E. B. Measurement of human behavior. New York: Odyssey, 1941.

- Guilford, J. P. Psychometric methods. (2nd ed.) New York: McGraw-Hill, 1954.
- Hanley, C. Deriving a measure of test-taking defensiveness. J. consult. Psychol., 1957, 21, 391-397.
- Hathaway, S. R., & McKinley, J. C. Minnesota Multiphasic Personality
 Inventory: Manual. (Rev. ed.) New York: Psychological Corp.,

 1951.
- Huse, E. Assessments of higher-level personnel: IV. The validity of assessment techniques based on systematically varied information. Personnel Psychol., 1962, 15, 195-205.
- Jackson, R. M., & Rothney, J. W. M. A comparative study of the mailed questionnaire and the interview in follow-up studies. Personnel guid. J., 1961, 39, 569-571.
- Levenian, E. Reliability of personality measurement by interview survey method. Psychol. Rep., 1963, 13, 467-474.
- Metzner, Helen, & Mann, F. A limited comparison of two methods of data collection: the fixed alternative questionnaire and the open-ended interview. Amer. sociol. Rev., 1952, 17, 486-491.
- Parker, C. A., Wright, E. W., & Clark, S. G. Questions concerning the interview as a research technique. J. educ. Res., 1957, 51, 215-222.
- Spilka, B. Social desirability: A problem of operational definition. Psychol. Rep., 1961, 8, 149-150.
- Woodworth, R. S. Personal Data Sheet. Chicago: Stoelting, 1918.

APPENDIX A

SCALES

The items listed below are those included in the D S Inventory IV.

The numbers refer to the number of the item in the inventory. The

"true" and "false" indicate how each item was keyed.

Barron's Independence of Judgment Scale

- 1. Science should have as much to say about moral values as religion does. (False)
- 2. Perfect balance is the essence of all good composition. (True)
- 3. What the youth needs most is strict discipline, rugged determinism, and the will to work and fight for family and country. (True)
- 4. I must admit that I would find it hard to have for a close friend a person whose manners or appearance made him somewhat repulsive, no matter how brilliant or kind he might be. (True)
- 18. I could cut my mooring -- quit my home, my family and my friends -- without suffering great regrets. (False)
- 19. I have seen some things so sad that I almost felt like crying. (True)
- 20. A person should not probe too deeply into his own and other people's feelings, but take things as they are. (True)
- 22. I believe you should ignore other people's faults and make an effort to get along with almost everyone. (True)
- 26. What this country needs most, more than laws and political programs, is a few courageous, tireless, devoted leaders in whom the people can put their faith. (True)
- 32. I acquired strong interest in intellectual and aesthetic matters from my mother. (True)

- 37. I like to fool around with new ideas, even if they turn out later to be a total waste of time. (False)
- 38. The unfinished and the imperfect often have greater appeal to me than the completed and the polished. (False)
- 40. I prefer team games in which one individual competes against another. (True)
- 47. It is easy for me to take orders and do what I am told. (True)
- 48. I don't understand how men in some European countries can be so demonstrative to one another. (True)
- 51. I would rather have a few intense friendships than a great many friendly but casual relationships. (False)
- 56. Some of my friends think that my ideas are impractical, if not a bit wild. (False)
- 62. Kindness and generosity are the most important qualities for a wife to have. (True)
- 63. The happy person tends to be poised, courteous, outgoing, and emotionally controlled. (True)
- 79. The best theory is the one that has the best practical applications. (True)
- 80. Young people sometimes get rebellious ideas, but as they grow up they ought to get over them and settle down. (True)

Minnesota Multiphasic Personality Inventory Lie Scale

- 10. Once in a while I laugh at a dirty joke. (False)
- 11. I do not always tell the truth. (False)
- 13. Once in a while I put off until tomorrow what I ought to do today. (False)
- 14. My table manners are not quite as good at home as when I am out in company. (False)
- 15. Sometimes when I am not feeling well I am cross. (False)
- 25. I gossip a little at times. (False)
- 28. I do not like everyone I know. (False)
- 31. At times I feel like swearing. (False)

- 44. I would rather win than lose in a game. (False)
- 50. If I could get into a movie without paying and be sure I was not seen I would probably do it. (False)
- 54. I do not read every editorial in the newspaper every day. (False)
- 61. Sometimes at elections I vote for men about whom I know very little. (False)
- 68. I get angry sometimes. (False)
- 69. I like to know some important people because it makes me feel important. (False)
- 70. Once in a while I think of things too bad to talk about. (False)

Marlowe-Crowne Social Desirability

- 5. I have never been irked when people expressed ideas different from my own. (True)
- 6. Before voting I thoroughly investigate the qualifications of all the candidates. (True)
- 7. I am always courteous, even to people who are disagreeable. (True)
- 9. I never make a long trip without checking the safety of my car. (True)
- 17. I sometimes feel resentful when I don't get my way. (False)
- 23. On occasion I have had doubts about my ability to succeed in life. (False)
- 24. I have never intensely disliked anyone. (True)
- 29. I have almost never felt the urge to tell someone off. (True)
- 33. It is sometimes hard for me to go on with my work if I am not encouraged. (False)
- 35. I always try to practice what I preach. (True)
- 36. I sometimes try to get even rather than forgive and forget. (False)
- 39. I never resent being asked to return a favor. (True)
- 43. There have been many occasions when I have felt like smashing

- things. (False)
- 46. At times I have really insisted on having things my own way. (False)
- 49. I have never deliberately said something that hurts someone's feelings. (True)
- 53. There have been occasions when I took advantage of someone. (False)
- 55. I'm always willing to admit it when I make a mistake. (True)
- 57. No matter who I'm talking to I'm always a good listener. (True)
- 58. I sometimes think when people have a misfortune they only got what they deserved. (False)
- 60. There have been times when I have been quite jealous of the good fortune of others. (False)
- 64. I can remember "playing sick" to get out of something. (False)
- 65. I never hesitate to go out of my way to help someone in trouble. (True)
- 67. I would never think of letting someone else be punished for my wrong-doings. (True)
- 71. On a few occasions, I have given up doing something because I thought too little of my ability. (False)
- 72. I am always careful about my manner of dress. (True)
- 75. I am sometimes irritated by people who ask favors of me. (False)
- 76. I have never felt that I was punished without cause. (True)
- 78. I don't find it particularly difficult to get along with loudmouthed obnoxious people. (True)
- 81. There have been times when I have felt like rebelling against people in authority even though I knew they were right. (False)
- 82. When I don't know something I don't mind admitting it. (True)

Hanley Sx Scale

8. At times I feel that I can make up my mind with unusually great ease. (True)

- 12. I think a great many people exaggerate their misfortunes in order to gain the sympathy and help of others. (False)
- 16. I am often sorry because I am so cross and grouchy. (True)
- 21. What others think of me does not bother me. (False)
- 27. I find it hard to set aside a task that I have undertaken, even for a short time. (True)
- 30. Most people will use somewhat unfair means to gain profit or an advantage rather than to lose it. (False)
- 34. My feelings are not easily hurt. (True)
- 41. I have often met people who were supposed to be experts who were no better than I. (False)
- 42. I am apt to hide my feelings in some things, to the point that people may hurt me without their knowing about it. (False)
- 45. I have never done anything dangerous for the thrill of it. (True)
- 52. I have never been in love with anyone. (False)
- 59. It bothers me to have to have someone watch me at work even though I know I can do it well. (False)
- 66. Some people are so bossy that I feel like doing the opposite of what they request, even though I know they are right. (False)
- 73. Sometimes without any reason or even when things are going wrong I feel excitedly happy, "on top of the world." (True)
- 74. I have never felt better in my life than I do now. (True)
- 77. I have periods in which I feel unusually cheerful without any special reason. (True)

APPENDIX B

INSTRUCTIONS

These paragraphs were given to the subjects before the inventory.

The following was given before the inventory in the group situation:

The statements in this booklet represent experiences, ways of doing things, or beliefs or preferences that are true of some people but are not true of others. Read each statement and decide whether or not it is true with respect to yourself. If it is true or mostly true, blacken the answer space in the column 1 on the answer sheet in the row numbered the same as the statement you are answering. If the statement is not usually true or is not true at all, blacken the space in column 2 in the numbered row. Answer the statements as carefully and honestly as you can. There are no correct or wrong answers. We are interested in the way you work and in the things you believe. Sometimes it may be difficult to make a decision, but please answer every item either true or false without skipping any. Are there any questions?

This paragraph was read before the inventory given as an interview:

The statements that will be read to you represent experiences, ways of doing things, or beliefs or preferences that are true of some people but are not true of others. Decide whether or not each statement is true with respect to yourself. If it is true or mostly true, answer true, of course. If it is not true, or is not usually, answer false. Answer the statements as carefully and honestly as you can. There are no correct or wrong answers. We are interested in the way you work and in the things you believe. Sometimes it may be difficult to make a decision, but please answer every item either true or false without skipping any. Are there any questions?

The following paragraph was added for the second administration of the inventory:

You will note that this test is similar to a previous inventory you have taken. We are repeating the inventory because we are interested in studying the caharacteristics of the inventory and appreciate your cooperation.

APPENDIX C RAW SCORES

	Sx		L			BIJ		М	-C SI)S
Subject	G* I*	d* G		đ	G	I	d	G	I	d
Group A 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18	71148079719580958970999887	0 12 1 0 5 3 3 1 6 4 4 4 5 2 6 2 1 3 2 1 4 1 2 1 3 2 1 4 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	252102130642453152012111	001003201002012100011031	7393413198119504474972145	130 112 124 11 7 9 132 123 16 14 11 15 12 13	-1012211003640221122 -10221122	17 17 17 17 17 17 17 19 10 14 19 10 14 12 12 13 17 17 12	17 19 12 16 12 15 16 17 18 10 21 21 21 21 21 21 21 21 21 21 21 21 21	0231153240244251335418206
2	10 7 9 7 8 9 9 9 12 12	3 5 2 2 -1 1 0 1	. 2 . 1	0 1 0 -2	12 12 16 13 15	13 11 15 14 13	1 -1 -1 -2	18 12 13 10 20	19 9 15 13 21	1 -3 2 3

^{*}G--scores in group situation *I--scores in individual situation *d--difference between scores in group and individual situations

Literature Committee (Carlos Alexander Carlos Alexander Carlos Alexander Carlos Alexander Carlos Alexander Car Carlos Alexander (Carlos Alexander Carlos Alexander Carlos Alexander Carlos Alexander Carlos Alexander Carlos Alexander (Carlos Alexander Carlos Alexander Carlos Alexander Carlos Alexander Carlos Alexander Carlos Alexander (Carlos Alexander Carlos Alexander Carlos Alexander Carlos Alexander Carlos Alexander (Carlos Alexander Carlos Alexander Carlos Alexander Carlos Alexander Carlos Alexander (Carlos Alexander Carlos Alexander Carlos Alexander Carlos Alexander Carlos Alexander (Carlos Alexander Carlos Alexander Carlos Alexander Carlos Alexander Carlos Alexander (Carlos Alexander (Carlos Alexander Carlos Alexander (Carlos Alexande	attacktivation (120-14)	Sx	#	negydd Cyfellogol aid ynnigydd Cyfellogol Cyfellogol yn o Arlan oeil allo	Ī		Andrews and the state of the st	BIJ		M	-C S	DS	Carrier and Carrier
Subje	ect G	I	d	G		đ	G					d	
Subje Group 10 11 11 12 12 20 21 21 21 22 21 22 21 22 21 22 21 22 22	B (8 7 5 6 8 7 1 10 4 9 0 11 2 7 7 10 8 16 6 6 6 6 6 6 6 6 6 6 6 6 6 6 6 6 6	I	d nued) -1 0 5 3 -3 0 3 4 2 2 1 0 2 1 1 0 0 2 1 1 1 0 0 0 0 0 0 0		273102120021355023622		12 10 16 15 14 10 17 16 10 17 16 10 12 11 12 11 12 11 12 11 12 11 12 11 12 11 12 11 12 11 12 11 12 11 12 11 12 11 12 12	13 114 152 11 9 3 15 2 14 3 14 3 11 2 16 14 3 6 2	d 1 1 0 1 3 1 4 1 2 1 2 1 2 1 2 0 2 2 2 0	97813913541701345017651	I 10 10 11 10 10 10 10 10 10 10 10 10 10		
DistContrOpilDelanduitDelanderdressTeadin Tolkinco	er tra en	Sx	ed Annual Park State of The Special Control o	Olincanno y propie di la constanti di la const		BECLACIONES SANTANOS	The state of the s	BIJ	Mary Andrew 2004 - Alexandra Communication of the C	M	-C S	DS	E-14-4-CHIMICE PER CUINCE
Subje		2%	· ď*	1	2	d	l	2	d	1	2	d	
Ground State of the state of th	7 11 5 7	11 10 8 9 7 9 6 10 7 10 16 6	1401321221212131 101321221212131	403125141433461212	52311325373345122	120012112300010	13 19 18 10 18 11 11 11 11 16	15 96 9 9 5 7 3 6 2 2 3 1 3 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	2011413223100230	25 17 18 10 11 21 20 20 21 16 65	26 15 6 7 6 4 9 1 3 6 14 18 19 7 7 14	123021102522145242	

^{*1--}scores for first testing
*2--scores for second testing
*d--difference between scores for first and second testing

		Sx	-3-3		Ī			BIJ		M	-CS	DS	
Subject	٦	2 ntin	d	1.	2	d	1	2	d	1.	2	d	
Group C 19 20 21 22 23 24 25 26 27 28 29 30	8699589668	8 8 9 7 9	ued) 0 0 0 0 0 -2 -1 -1 -3 1 -2 0	275346155142	273358145052		13 7 12 5 11 15 9 11 16 11 14	14 60 10 10 13 13 13 15	11212212311	16 23 12 18 25 14 23 11 18 8	17 26 21 8 15 26 6 13 23 10 12	-3937-110163	
Group D 12 34 56 78 90 11 2 34 56 17 18 19 21 2 2 3 2 4 5 2 2 2 2 3 2 4 5	8697827676570986906967888	6 12 9 7 6 11 7 9 7 7 8 7 8	1112021004012111312111312	4354552020414301333234422	4223442131403300323233432		10 14 10 12 8 13 13 14 14 15 12 13 14 14 15 12 13 14 14 15 14 14 15 14 14 14 14 14 14 14 14 14 14 14 14 14	1194944256176556868462862		1566815213113315682706215058	147316661121108223575281428845		

Group Test Only

estate and the		-				st Unity				
	Subject	Sx	L	BIJ	M-C SDS	Subject	Sx	L	BIJ	M-C SDS
terminal terminal	Subject Group I 1 2 3 4 5	5 6 6	0 0 4	17 15 11	10 4 20 10	Group II 2 3 4 5	7 10	1 4 3	14 9 3 13	8 8 10 2
	345678901234567890123456789012333333333333333333333333333333333333	6361777667899747893891967078987710	41333102202435613000011261201013651	10 17 12 13 10 14 13 10 14 13 13 13 11 15 16 12 11 19 10 11 11 11 11 11 11 11 11 11 11 11 11	20 10 96 14 12 38 96 91 14 17 11 13 36 75 81 77 15 98 26 12 22 18	345678901234561890123456789012333333333333333333333333333333333333	7686676695578988907998971808817720	3014221120202110343132035785333241	3309535202162334911142392243855808	10 2 7 6 14 2 13 5 19 6 8 7 0 12 9 7 11 7 10 14 2 19 3 12 2 2 2 0 5 1 1 14 14 10 14 2 19 3 12 2 2 2 15 1 19 14 14 10
	37 38 39 40	8 8 8	1 0 3 2	11 6 14 11	7 6 16 11	37 38 39 40	9 7 8 7	4 0 1 2	14 8 10 12	9 11 12 11

VITA

Dorothy Ann Stasser

Candidate for the Degree of

Master of Science

Thesis: TEST-TAKING ATTITUDE AS A FUNCTION OF MODE OF PRESENTATION

Major Field: Psychology

Biographical:

Personal Data: Born at St. Francis, Kansas, October 13, 1942, the daughter of Marvin and Cora Lou Stasser.

Education: Attended grade school near St. Francis, and Goodland, Kansas; graduated from Goodland High School, Goodland, Kansas, in 1960; received the bachelor of science degree from Bethany Nazarene College, with majors in biology and psychology in May, 1964; completed the requirements for the master of science degree in July, 1966.

Honorary Organization: Member of Phi Delta Lambda, national honor society of the colleges of the Church of the Nazarene.