

AN ANALYSIS OF SCORES MADE BY A GROUP OF RADIO ANNOUNCERS IN TEXAS
ON SELECTED PSYCHOLOGICAL TESTS

A Dissertation
Presented to
the Faculty of the College of Education
The University of Houston

In Partial Fulfillment
of the Requirements for the Degree
Doctor of Education

by
Richard Martin Uray
August 1963

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AN ABSTRACT

The purpose of this study was fourfold: (1) to make an analysis with respect to range and other characteristics of scores made by a group of radio announcers on a selected battery of psychological tests; (2) to relate selected personal data, such as age and educational level of the same radio announcers, to their scores on the psychological tests; (3) to describe any tendency for the radio announcers rated "good" by their immediate supervisors to be those making higher scores on the tests; (4) and to correlate these significant data concerning the professional radio announcer into suggestions and recommendations on improving the training procedures and the practices for student announcers.

This study, which was undertaken in 1953, was considered important, for if educators were to gain a greater insight into what makes a radio announcer, they had to know with greater clarity and understanding what special factors were apparent in all radio announcers or in a significant majority of them and the degree of importance of these factors. In this way, it was hoped that improved educational techniques could be developed for training radio announcers. It was also hoped that knowledge of these "special factors" would prove of value to the broadcasting industry by providing additional "yardsticks" for evaluating over-all quality of radio announcers.

The testing group was composed of seventy-six radio

announcers from fifty-eight radio stations in eighteen of the major radio markets in Texas. They were examined on the basis of their scores made on the following psychological tests:

1. American Council on Educational Psychological Examination for College Freshmen
2. Otis Quick-Scoring Mental Ability Test: Gamma
3. Guilford-Martin Personality Profile
4. Kwalwasser Test of Music Information and Appreciation, High School and College Form
5. Cooperative Contemporary Affairs Test, Form 1953
6. Strong Vocational Interest Blank for Men, Revised; and for Women, Revised

The scores made by the radio announcers on these six instruments were analyzed in light of the total scores and compared against the publishers' norms; scores made on the tests were compared against five personal factors (age, education, professional experience in years, number of stations at which the announcers were employed, and the amount of allied skills); scores made on the tests were compared against two occupational factors (professional personality and professional aptitude).

The study revealed the factors in the makeup of the "good" composite announcer and seemed to justify the following detailed conclusions:

1. A battery of tests which could be most helpful in pre-determining probable success as a radio announcer could be composed of: (1) The American Council on Educational Psychological Examination for College Freshmen; (2) The Otis Quick-Scoring Mental Ability Test, Gamma; (3) The latest edition of the Cooperative Contemporary Affairs Test; (4) and the Personnel

Director and Musician sections of the Strong Vocational Interest Blank for Men. This testing battery could be used by schools and college or University departments that train student radio announcers.

2. The courses in which student radio announcers are enrolled should be those that are useable for people who have above-average intelligence, but who are not overly bright or superior in intelligence.
3. Student radio announcers should not be enrolled in too many courses that require Qualitative-Arithmetical thinking, such as Mathematics or the Sciences.
4. Emphasis in the curricular studies of the student radio announcer should be placed in the Social Sciences, Elementary Psychology, Music and Fine Arts Appreciation, Advertising and Salesmanship, Speech and Drama.
5. Extensive "professional" laboratory work, to more readily qualify student radio announcers for successful careers, should be used.
6. Student radio announcers should be encouraged to participate in related fields, so as to acquire the additional skills that seemed valuable for success in the professional field.

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CHAPTER I

INTRODUCTION

Two decisions of great importance to high school and college students involve the choice of a major in college and the related choice of a vocation. Also, there has been an increased effort in our high schools and colleges to counsel and to assist young people, so they might make wiser decisions in these choices.

A great deal of research has been and is being conducted in the area of aptitude testing and job analysis in order that counselors might do a better job in both educational and vocational counseling. In one area particularly, little research of significance has been done--that of aptitudes and abilities needed for success in the field of radio announcing. It was hoped this study would provide answers to very practical questions which arose in this area.

I. THE PROBLEM

The purpose of this study was fourfold: (1) to make an analysis with respect to range and other characteristics of scores made by a group of radio announcers on a selected battery of psychological tests; (2) to relate selected personal data, such as age and educational level of the same

radio announcers, to their scores on the psychological tests; (3) to describe any tendency for the radio announcers rated "good" by their immediate supervisors to be those making higher scores on the tests; (4) and to correlate these significant data concerning the professional radio announcer into suggestions and recommendations on improving the training procedures and the practices for student announcers.

II. IMPORTANCE OF THE STUDY

Educators in the area of radio broadcasting have sought constantly to discover valid means of testing their students with respect to intelligence, personality, aptitude, and other factors which might be related to success in the field. The need for such testing has been especially great in the case of the student radio announcer, the one individual in the radio field with whom the listening public eventually has the closest contact.

There were few American educators, at the time this study was made, who felt qualified to state what specific aspects of intelligence, personality, and aptitude were necessary in the student radio announcer to assure him some measure of professional success, or even what factors determined the below-average, average, or above-average professional radio announcer. Educators had some standards for

technical and vocal proficiency, standards that were in most cases uniformly acceptable. Very little research, however, had been conducted concerning those factors of intelligence, personality, or aptitude which might have been highly desirable in professional radio announcers, hence, in student radio announcers as well.

Moreover, among educators, and especially those who were authors of textbooks in radio announcing, there was a belief there were certain measurable factors which should be considered as vital in the training of radio announcers and which were more or less separate and apart from the announcer's vocal or technical abilities.

Educators in collegiate departments of radio broadcasting constantly have sought to improve their techniques of teaching, as well as, to improve their required standards for students of radio announcing.

In this area of improvement, they were like other educators in other academic departments who also revise and review their teaching techniques, as well as their standards for their students, and who have based their revisions on valid evidence. However, to improve techniques has required valid data on what was required of the professional in the field, so the student could be prepared to meet these professional requirements. To improve standards for the students, the existing standards have had to

be reviewed and re-evaluated whenever significant changes have occurred within the professional field in relation to basic policies and practices.

In 1953, when this study was undertaken, uncertainty existed as to what specific aspects of intelligence, personality, and aptitude characterized a professional radio announcer, or what specific factors determined the makeup of the below-average, average, or above-average professional radio announcer.

III. LIMITATIONS OF THE STUDY

There were five important limitations that had to be imposed on the study. First, only aspects of the intelligence, personality, and aptitude of professional radio announcers were investigated. Technical ability and voice quality were not included in this investigation, as these two factors were considered as intangible items with the possibility of tremendous variables in all radio markets, and their study might have been complex enough to warrant a completely independent investigation. Second, the investigation used radio personnel only, as television personnel might have required the employment of visual elements that could have been a variable factor, and that might have been uncertain in their effect on the investigation. Third, excluded were radio announcers who performed in "talent" productions exclusively, for specialized skills and talents might possibly have been

required of them, and measuring these special skills might have required additional research of a different nature. Fourth, testing was limited to a widely mixed sampling of professional radio announcers in Texas, because this investigator felt there was a sufficient number of announcers in Texas, with enough variables in their makeup and background to give a significantly well-mixed sampling as a basis for the investigation. Lastly, the testing instruments used in this investigation were selected on the basis of three criteria, namely: (1) ease of administration, (2) short length of time necessary for the examination, (3) and, the availability of extensive national norms.

The three criteria listed above were necessary, in the first place, so the testing program could be handled with relative ease by the various educational institutions which assisted in the testing program; secondly, so the announcers who volunteered to take part in the program would not be discouraged by a long testing cycle that could disrupt their working day; and, thirdly, so the nationally acquired norms could be used as a validity control on the test scores.

In attempting to develop an effective test battery, the expert advice and recommendations of the staff of the Counseling and Testing Service of the University of Houston was sought, in addition to a review of the tests in the various editions of the Mental Measurements Yearbook edited

by Oscar K. Buros. The ten tests selected and used are listed in Chapter III.

IV. DEFINITION OF TERMS

There were seven terms which needed to be defined for purposes of clarity in this investigation. They were as follows:

1. Staff Announcer--Any person working at least forty hours a week for a radio station with the primary responsibility of staff radio station announcing duties.

2. Staff Announcing Duties--Those tasks which, at the most, consist of reading commercial announcements, giving station identification, and performing any other duties to which a specific talent has not been assigned.

3. Talent--Radio personnel performing solely such specific tasks as newscasting, news commentaries, and duties generally known as "MC-ing."

4. Intelligence--A combination of both the learned information an individual has acquired, as well as his basic powers of thought and observation.

5. Aptitude--The basic ability of a person to do a specific type of work.

6. Personality--Those traits of an individual which we can readily identify in ourselves or in the people around us; e.g., extroversion, aggressiveness, affability, etc.

7. Radio Markets--The areas served by radio stations in and around a center of population.

CHAPTER II

A REVIEW OF PERTINENT LITERATURE AND RECORDS

In reviewing existing literature in the area of training for the student radio announcer, many generalizations existed, but there seemed to be little in the way of measurable specifics which was the function of this experimental study to discover. The majority of the existing literature was found primarily in textbooks and in professional pamphlets on professional needs that were suggested by educators in the field or required by professional broadcasting organizations.

The material that was reviewed for this study fell into two general categories: (1) skills, traits, and abilities that might have been required of radio announcers; (2) and the tasks that radio announcers were usually required to do as a part of their professional performance. Regarding the first category, the primary qualifications for a radio announcer seemed to include: (1) an intense and pleasant personality emphasized by a sense of humor, good judgment, ease and dignity, tact, and adaptability; (2) mental and intellectual alertness; (3) a college degree, preferably in the Arts and Sciences; and (4) a knowledge of music and current events.

In substantiation of these traits, Floherty said:

Quite as important as the announcer's voice is his

ability to meet a difficult situation with good humor and good judgment. The man behind the microphone must have a pleasant personality, and easy and dignified approach and a store of tact combined with mental alertness. He must have a fair knowledge of music and enough of a familiarity with foreign languages to pronounce correctly names, titles and places that occur in the news. Many of the widely known announcers now on the air have studied several languages besides having an excellent musical background. Here are the requirements of one of the large broadcasting companies: "An announcer is expected to have a college education . . . confidence, initiative and the ability to think quickly."¹

Here was seen the first of many reiterations on the points that authors of educational texts on radio announcing presented as the basic needs for the student announcer. But, in this statement, as in all the statements that had been assembled, the needs were listed only in a general fashion, without any of the specifics that could have pinpointed the traits of the radio-announcer-in-training.

Another example of this generalization was Maulsby's list of the attributes of an announcer as:

A college degree.
An insatiable intellectual curiosity that keeps awake in him a drive for new knowledge.
A keen interest in world affairs, their background, and developments.
A sound basic understanding of the English language and the ability to use reference books and pronouncing dictionaries intelligently.

¹John J. Floherty, Behind the Microphone (Philadelphia: J. B. Lippincott Company, 1944), p. 140.

A quick mind, a good vocabulary, and the ability to use them together.
A natural adaptability.²

The closest approximation to specific academic requirements for radio announcing was listed by Barnhard, who said:

Outside the speech field the following is recommended: English Composition, Literature Surveys, History, Political Science, Economics, Psychology, Basic Science Survey, Advertising and Salesmanship.³

Even the National Broadcasting Company, certainly one of the major employers of radio announcers, listed its requirements in general terms rather than the specific and definite statements that one might have expected of this major radio corporation. Actually, it phrased its needs as:

The pattern of some programs precludes the use of a written script; in these cases the announcer has to carry the program extemporaneously. Such an assignment requires a fine degree of judgment, showmanship, diplomacy and good taste.⁴

A variation on these general themes was stated by Henneke, who brought up the matter of physical well-being as a major factor in successful announcing. He said:

²As quoted by Jo Ranson and Richard Pack, Opportunities in Radio (New York: Vocational Guidance Manuals, Inc., 1946), p. 4.

³Lyle D. Barnhart, Radio and Television Announcing (New York: Prentice-Hall, Inc., 1953), p. 5.

⁴National Broadcasting Company, NBC and YOU (New York: National Broadcasting Company, 1954), p. 25.

Announcing makes great demands on the health . . . and since the voice is the announcer's livelihood, he must be healthy. The nervous strain of announcing is another reason for good health.⁵

Once again, it was hoped that the existing literature that was reviewed would give some specific clues as to what was required of radio announcers, so that these data could be used in establishing a testing program, but the authorities in the field seemed able to supply only generalities and vague suggestions of the traits and capabilities that seemed most important in radio announcers. Thus, the testing program, as described in this study, had to be based somewhat on these rather broad bases that the educators in radio mentioned in their textbooks.

Regarding the tasks that radio announcers were usually required to perform, more detailed information was obtainable from the authors of educational texts in radio announcing. These authors seemed to agree that the skills of radio announcers should include: (1) production-presentation techniques; (2) salesmanship; (3) some writing ability; and (4) some acting ability.

Gilmore and Middleton, who were themselves professional radio announcers, stated the tasks of the radio

⁵Ben G. Henneke, The Radio Announcers Handbook (New York: Harper Brothers, 1948), p. 4.

announcer as:

Your main task as a staff announcer will consist of board duty which is merely the assignment of making station identifications, spot announcements and in some instances play records or transcriptions.⁶

Eubank and Lawton said nearly the same thing:

On small stations, one person will, in all probabilities have various duties. The announcer may serve as part time salesman, write his own continuity, and broadcast the news.⁷

Arnold pointed out in his text that writing and production skills were a part of the required duties of a radio announcer. He said:

In connection with the duties of the announcer, it is not enough that he can broadcast the program in a pleasing manner but he must also be able to write continuity and if necessary take complete charge of a program and in an emergency act as producer, or dramatic director.⁸

Willis pointed out some of the width and depth of the skills required of the radio announcer as he stated:

The job of the radio announcer is a many-sided one. When he announces the station's call letters, he is a mere purveyor of information. As a reader of commercials, he becomes a salesman. On many shows he performs the duties of host, greeting and receiving listeners and guiding them through the program. Sometimes he takes parts in skits, thus becoming an actor. He

⁶Art Gilmore and Glenn Y. Middleton, Radio Announcing (Hollywood, California: Hollywood Radio Publishers, 1947), p. 97.

⁷Henry L. Eubank and Sherman P. Lawton, Broadcasting: Radio and Television (New York: Harper Brothers, 1952) p. 51.

⁸Frank A. Arnold, Do You Want to Get Into Radio (New York: Frederick A. Stokes Company, 1940), p. 54.

may interview interesting personalities or become the eyes of his radio audience as he describes an athletic contest or a special event. Frequently he reads the narration on a dramatic program. Often a number of these functions are performed on the same program.⁹

In summary, the investigator wished to point out that this review of the literature, which was pertaining to what a radio announcer was or to what a radio announcer did, was carried out to determine if any significant mass of evidence existed that could be used in the testing program around which this study was to be built. The material that was uncovered, mostly from educational texts, proved to be somewhat weak and indefinite, and indicated the need for research in this area. The material was interesting, but its values seemed to be doubtful. In truth, little if any, valid information seemed to exist that pointed the way exactly and definitely to the specific and exact traits, characteristics or professional aspects of the American radio announcer. There was more material in evidence on the duties of the professional announcer, but all of this material was also limited in its scope and its exact relationship to the proposed basic theme of this study.

⁹Edgar B. Willis, Foundations in Broadcasting (New York: Oxford University Press, 1951), p. 194.

CHAPTER III

MATERIALS, METHODS AND PROCEDURES

As indicated in Chapter I, the purpose of this study was fourfold: (1) to make an analysis with respect to range and other characteristics of scores made by a group of radio announcers on a selected battery of psychological tests; (2) to relate selected personal data, such as age and educational levels of these same radio announcers, to their scores on the psychological tests; (3) to describe any tendency for the radio announcers rated "good" by their immediate supervisors to be the ones making the higher scores on the tests; (4) and, to correlate these significant data concerning the professional radio announcer into suggestions and recommendations on improving the training procedures and the practices for student radio announcers.

I. THE SAMPLE GROUP

As indicated in Chapter I, the sample group, for practical reasons, did not include: (1) any radio announcers outside of the state of Texas, (2) television announcers, (3) and any radio announcers who performed in "talent" productions exclusively. There were in Texas, however, some two hundred commercial radio stations. Noncommercial stations, all of which were operated by educational institutions

and by municipal governments, were excluded from the list of stations, for their staffs might have lacked the skills required of commercial announcers. Texas also had a number of foreign language stations with entire announcing staffs composed of Spanish-speaking personnel who had little if any knowledge of the English language. These announcers were unable to take any of the standardized tests which were used in this study. For this reason these stations were also excluded from the list.

In summary, the sample was made up of personnel from eight commercial stations in Houston; six commercial stations each in Dallas, San Antonio, Fort Worth, and Lubbock; four stations each in Beaumont, Austin, and Amarillo; two stations each in Galveston, Abilene, Baytown, and Victoria; and one station each in Bay City, Bryan, El Campo, Freeport, Gonzales, and Rosenberg. From these fifty-eight commercial radio stations a total of seventy-six radio announcers participated. In a few instances an announcer did not take all of the tests, or did not complete his personal data form. However, in the computations all available scores were used in each category. This meant the "N" varied slightly from time to time.

II. PERSONAL DATA FACTORS

In the original statement of the fourfold purpose of this study in Chapter I, the second purpose was stated in these terms: (2) to relate selected personal data, such as age and educational levels of these same radio announcers, to their scores on the psychological tests. It seemed important in the analysis of scores on the psychological tests to determine to what extent, if any, certain personal data factors may have affected scores on any of the psychological tests.

The five personal data factors obtained from the sample group were: (a) Age, (b) Educational Level, (c) Years of Experience as Radio Announcers, (d) Numbers of Radio Stations for Which Announcers had Worked, (3) and Amounts of Vocational Experience in Fields Allied to Radio Announcing.

III. TESTS USED

The first major consideration in making this study was the selection of a reasonable number of psychological tests which would prove most helpful in attaining the purposes listed above.

As listed under the limitations of the study in Chapter I, the tests were selected on the basis of three

criteria: (1) ease of administration, (2) short length of time necessary for the test, (3) and the availability of extensive national norms.

The testing instruments finally selected were the following: (1) The American Council on Educational Psychological Examination for College Freshmen, (2) The Otis Quick-Scoring Mental Ability Test: Gamma, (3) The Guilford-Martin Personality Profile, (4) The Cooperative Contemporary Affairs Test, Form 1953, (5) The Kwalwasser Test of Music Information and Appreciation, High School and College Form, (6) and The Strong Vocational Interest Blank for Men, Revised; and the Strong Vocational Interest Blank for Women, Revised.

The criteria used in the selection of the tests were decided upon after consultation with members of the professional staff of the Counseling and Testing Service of the University of Houston and after the procedures for the study had been worked out. A description of the tests in terms of these criteria follows.

Regarding the use of the American Council on Educational Psychological Examination, Cummins, who reviewed this instrument, said that this was, perhaps, the test that one was likely to recommend to anyone who was looking for a "good" intelligence test to give to a group of college freshmen. Cummins continued:

Another feature that is likely to appeal to the general user of tests is to be found in its wide use throughout the country . . . the authors always try beforehand to make the scores experimentally equivalent.¹

Guilford said:

Its predecessors have commonly shown somewhat lower validities for the prediction of overall academic achievement than its chief rival By incorporating a wider variety of functional content, the ACE test covers a somewhat more diverse list of abilities Each of the six parts is separately timed The norms given for these examinations are very extensive, being obtained on a nation-wide scale and covering different types of colleges.²

The comments that were noted about the Otis Quick-Scoring Mental Ability Test: Gamma, were by Kuhlmann, who stated:

The chief objectives of these three Alpha, Beta, and Gamma batteries of tests seems to be economy in administration Judged from inspection only, one would say that the choice of the different test items is ingenious and exceptionally well done, though lacking in variety, resulting in the number of abilities measured by the battery.³

The reviewer for the Guilford-Martin Personality Profile, Factors STDCR, was Eysenck, who said:

. . . it should be pointed out that Guilford's inventory has certain advantages over other well-known test:

¹Oscar Kirsen Buros, The Third Mental Measurements Yearbook (New Brunswick, New Jersey: Rutgers University Press, 1949), p. 297.

²Ibid., pp. 297-298.

³Oscar Kirsen Buros, The Nineteen Forty Mental

(a) the statistical work is of the expected high standard, and in particular the factorial approach to the problem of inventory construction, which is largely due to Guilford's original impetus, promises to result in much more analytical tests than we have known so far, and (b) the inventory is not encumbered, as are the Humm-Wadsworth Temperament Scale and the Minnesota Multi-Phasic Personality Inventory, by reliance on obsolescent psychiatric classifications not even widely accepted in psychiatric circles.⁴

The reviewer for the GAMIN Factors of the Guilford-Martin Personality Profile was also Eysenck. Regarding these factors, he repeated his comments for the STDCR Factors.⁵

The OAgCo Factors of the Guilford-Martin Personality Profile were reviewed by Shimberg, who said:

This is a carefully prepared questionnaire which aims at detecting the potential "trouble-maker" in business or industry The questions are applicable to most industrial and business situations and deal with experiences fairly common to workers.⁶

The Cooperative Contemporary Affairs Test, Form 1953 was reviewed by two men, Bloom and McQuitty. Bloom said:

Part I, the Public Affairs section of this test, is especially good in that at least one half of the questions require the student to recognize relationships among events as well as to determine the immediate

Measurements Yearbook (Highland Park, New Jersey: Mental Measurements Yearbook, 1941), p. 235.

⁴Buros, op. cit., The Third Mental Measurements Yearbook, p. 98.

⁵Ibid., p. 80.

⁶Ibid., p. 81.

cause, effect, or explanation of some happening.⁷

McQuitty said:

The fact that this test is used in national programs furnishes considerable normative and other comparative data which might not otherwise be available. In 1946 the content of the test items were shifted to require ability to comprehend and interpret news rather than to remember headlines. In using items requiring comprehension and interpretation, care must be exercised to prevent the items being so complex that a specialist's understanding of the subject covered by the items is demanded It seems to the reviewer that all 60 items on Public Affairs might be answered through (1) radio commentators; (2) daily newspapers; (3) news magazines . . . the content of the examination is very decidedly American In fact, many of the items are so written that one may assume that they apply to the United States to answer them No information is furnished test purchasers regarding validity and reliability. The test content is probably carefully enough selected and the authors are expert enough in test construction that sufficient reliability can be expected.⁸

The Kwalwasser Test of Music Information and Appreciation, High School and College Form, was reviewed by Drake, who commented:

Although a test of this type is necessarily limited largely to use with special classes who have taken a special course in music information (one is hardly justified in calling it appreciation), this test covers a wide range and, because of this wide sampling, should have a satisfactory validity.⁹

⁷Oscar Kirschen Buros, The Fourth Mental Measurements Yearbook (Highland Park, New Jersey: Gryphon Press, 1953), p. 9.

⁸Ibid., pp. 10-11.

⁹Buros, op. cit., The Nineteen Forty Mental Measurements Yearbook, p. 152.

The Strong Vocational Interest Blank for Men, Revised, and for Women, Revised, was reviewed by Bordin, who said:

A reviewer of this interest inventory suffers from conflicting feelings. On the one hand, he feels that this test stands out among instruments of its type in terms of the thoroughness with which it was developed. From this point of view, criticism seems like perfectionism or unrealistic impractical application of standards. On the other hand, the reviewer feels that its very eminence in the field makes it more imperative that its defects be pinpointed as a vehicle for the general raising of standards in test development The VIB, despite the fact that it is one of the most time consuming and costly inventories to score and despite the shortcomings just described, remains as the interest test whose usefulness has been most carefully and thoroughly demonstrated.¹⁰

IV. ARRANGEMENTS AND PROCEDURES

When the sample was selected and the program of testing was begun in 1953, personal interviews were held with the Program Directors and staff announcers of the radio stations in Houston, Dallas, Fort Worth, and San Antonio, for the purpose of acquainting them with the nature of the study and for seeking their assistance in obtaining volunteers. At the same time, arrangements were made for the administration of the tests to the announcers in their respective areas by the testing services of the University of Houston, Southern

¹⁰Buros, op. cit., The Fourth Mental Measurements Yearbook, pp. 749-750.

Methodist University at Dallas, Texas Christian University at Fort Worth, and Trinity University at San Antonio.

Then, letters were sent to stations in radio markets other than these four original markets. Since the response was weaker than anticipated, a tape recording was prepared and was sent to the various radio stations. Since this tape recording seemed to give more successful results, this technique was used in seeking participation from all the radio stations. In addition to the tape, a covering letter and an acceptance sheet were sent. A letter was sent to colleges and universities from which supervisory aid was being requested. When satisfactory arrangements for testing had been completed with these institutions and the acceptance sheets from the various radio stations had been received, each radio announcer was notified individually by postal card when and where he was to report to begin the testing program. In those circumstances where acceptance sheets were slow in being returned, a standard form letter was sent to the delinquent station. Individual correspondence was also undertaken with the institutions, that were supervising the testing, inquiring about the progress of the testing program. After a reasonable period of time, a second letter was sent to the radio announcers, making discreet inquiries as to their progress. In time, all of the radio announcers completed their tests, the test papers and personal

data forms were all received, and the tests were scored by the investigator and by the Testing Service of Southern Illinois University, Carbondale, Illinois.

When the testing program had been concluded in a city, the additional aid of the management personnel of all radio stations in that area was sought for the purpose of obtaining ratings on the radio announcers by their immediate supervisors. A letter was submitted to them with instructions for rating or for evaluating the personalities and job proficiencies of the announcers taking tests in that area. The personality ratings were evaluated on a simple five-point scale and dealt with basic personality factors. The job proficiency scale was also a five-point one, and it dealt with the evaluation of the way an announcer performed his tasks. These ratings of personality and job proficiency obtained from the various administrative personnel, the raw scores on the various tests, and the information from the announcers' personal data form, constituted the basic data for this study. A tabular summary of these basic data on the seventy-six announcers included in this study can be found in the Appendix.

CHAPTER IV

PRESENTATION AND ANALYSIS OF TEST SCORES AND PERSONAL DATA

I. COMPARISON OF TEST SCORES WITH PUBLISHER'S NORMS

The scores made by the seventy-six radio announcers who comprised the sample group for this study and the data from their personal data forms constituted the total data for presentation and analysis in this chapter.

For presentation and analysis, the total and part scores on several of the tests are arranged on the following basis:

(1) The American Council on Educational Psychological Examination for College Freshmen was divided into three scores: the Q or Quantitative, the L or Linguistic, and the T or Total score.

(2) The Guilford-Martin Personality Profile was subdivided into its thirteen parts: the S or Social Introversion-Extroversion factor, the T or Thought Introversion-Extroversion factor, the D or Depression factor, the C or Cycloid Disposition factor, the R or Rhythymia factor, the G or General Activity factor, the A or Ascendency-Submission factor, the M or Masculinity-Femininity factor, the I or Inferiority factor, the N or Nervousness factor, the O or Objectivity factor, the Ag or Agreeableness factor, and the Co or Cooperativeness factor.

(3) The Cooperative Contemporary Affairs Test was divided into four sub-divisions: Part I covering general current events, and henceforth labeled Coop I; Part II covering medical and scientific current events, and labeled Coop II; Part III covering literature, fine arts and current events, and labeled Coop III; and the T or Total score, labeled as Coop IV.

(4) The Strong Vocational Interest Blank was handled by tallying the total number of men who acquired a B or A rating in each occupational category. Those occupations which contained twenty or more men were then selected. This resulted in twelve occupational groups: Printer, Personnel Director, Public Administrator, Social Science High School Teacher, Social Worker, Musician, Mortician, Sales Manager, Real Estate Agent, Life Insurance Agent, Advertiser, and Lawyer.

(5) The Otis Quick-Scoring Mental Ability Test and the Kwalwasser Music Test scores were the total scores made on each of these tests.

The scores made by the announcers on each of the above mentioned tests were tabulated into frequency distributions and the tenth, twenty-fifth, fiftieth, seventy-fifth, and ninetieth percentiles as well as the arithmetical mean for each distribution were computed and are listed for the several tests and sub-scores in Table I. In

TABLE I
COMPARISON OF SCORES ON TESTS MADE BY RADIO
ANNOUNCERS AND PUBLISHERS' BASIC NORMS

SELECTED VALUES	P ₁₀	P ₂₅	P ₅₀	M	P ₇₅	P ₉₀	N
ACE-Q (Sample)	28.63	35.25	41.50	41.70	48.75	55.03	74
Publishers' Norms	27.50	36.00	43.33	-----	50.66	57.00	
Difference	1.13	-.75	-1.83	-----	-1.91	-1.97	
ACE-L (Sample)	46.90	62.25	72.50	68.95	82.00	89.30	74
Publishers' Norms	41.50	52.00	63.00	-----	73.66	83.00	
Difference	5.40	10.25	9.50	-----	8.34	6.30	
ACE-Total (Sample)	81.20	98.00	113.50	108.20	129.25	138.03	74
Publishers' Norms	72.00	90.00	106.50	-----	112.50	136.00	
Difference	9.20	8.00	7.00	-----	16.75	2.03	
Otis (Sample)	39.80	47.11	55.00	54.93	63.25	68.20	73
Publishers' Norms	29.20	35.00	42.00	-----	49.00	54.80	
Difference	10.60	12.11	13.00	-----	14.25	13.60	
GM-S (Sample)	27.21	20.03	13.37	14.44	6.87	3.11	63
Publishers' Norms	46.00	36.50	23.00	-----	9.00	3.00	
Difference	18.79	16.47	9.63	-----	2.13	-.11	

TABLE I (Continued)

COMPARISON OF SCORES ON TESTS MADE BY RADIO
ANNOUNCERS AND PUBLISHERS' BASIC NORMS

SELECTED VALUES	P ₁₀	P ₂₅	P ₅₀	M	P ₇₅	P ₉₀	N
GM-T (Sample)	47.43	43.75	38.33	35.36	31.88	26.70	63
Publishers' Norms	61.00	40.50	37.10	-----	22.50	14.00	
Difference	13.57	-3.25	-1.23	-----	9.38	12.70	
GM-D (Sample)	36.40	27.13	16.50	18.58	10.88	6.07	63
Publishers' Norms	53.00	42.00	25.00	-----	11.50	5.00	
Difference	16.60	14.87	8.50	-----	.62	-1.07	
GM-C (Sample)	41.30	32.75	23.83	24.57	18.00	11.70	63
Publishers' Norms	58.00	49.00	31.00	-----	16.00	9.00	
Difference	16.70	16.25	7.17	-----	-2.00	-2.70	
GM-R (Sample)	26.70	31.63	37.50	37.00	46.67	52.10	63
Publishers' Norms	10.00	19.00	38.00	-----	54.00	64.00	
Difference	16.70	12.63	-.50	-----	-7.33	-12.90	
GM-G (Sample)	7.57	10.08	12.25	12.08	15.00	18.90	63
Publishers' Norms	3.00	5.50	12.00	-----	18.00	22.00	
Difference	4.57	5.30	.25	-----	-3.00	-3.10	

TABLE I (Continued)
COMPARISON OF SCORES ON TESTS MADE BY RADIO
ANNOUNCERS AND PUBLISHERS' BASIC NORMS

SELECTED VALUES	P ₁₀	P ₂₅	P ₅₀	M	P ₇₅	P ₉₀	N
GM-A (Sample)	14.70	17.63	22.00	20.92	27.67	30.90	63
Publishers' Norms	5.00	9.50	19.00	-----	29.50	33.00	
Difference	9.70	8.13	3.00	-----	-1.83	-2.10	
GM-M (Sample)	15.57	18.40	20.95	19.50	24.40	27.43	63
Publishers' Norms	6.00	9.00	18.00	-----	24.50	28.00	
Difference	9.57	9.40	2.95	-----	-.10	-.57	
GM-I (Sample)	20.60	28.67	35.50	33.50	41.33	44.77	63
Publishers' Norms	11.00	18.00	33.00	-----	41.00	45.00	
Difference	9.60	10.67	2.50	-----	.33	-.23	
GM-N (Sample)	13.90	21.00	26.75	23.80	31.25	36.30	63
Publishers' Norms	7.00	13.00	24.00	-----	33.00	38.00	
Difference	6.90	9.00	2.75	-----	-1.25	-1.70	
GM-O (Sample)	29.70	39.63	43.83	43.78	53.00	64.80	63
Publishers' Norms	13.00	23.00	42.00	-----	57.50	68.00	
Difference	16.70	16.63	1.83	-----	-4.50	-3.20	

TABLE I (Continued)

COMPARISON OF SCORES ON TESTS MADE BY RADIO
ANNOUNCERS AND PUBLISHERS' BASIC NORMS

SELECTED VALUES	P ₁₀	P ₂₅	P ₅₀	M	P ₇₅	P ₉₀	N
GM-Ag (Sample)	20.10	25.25	31.50	31.20	40.75	47.10	63
Publishers' Norms	13.00	23.00	42.00	-----	57.00	68.00	
Difference	7.10	2.25	-10.50	-----	-16.75	-20.90	
GM-Co	37.10	50.75	65.00	60.95	77.25	87.20	63
Publishers' Norms	20.00	30.50	54.00	-----	76.00	89.00	
Difference	17.10	20.25	11.00	-----	1.25	-1.80	
Coop I	12.00	22.62	29.83	23.80	38.55	45.50	70
Publishers' Norms	5.00	10.00	18.00	-----	26.00	35.00	
Difference	7.00	12.62	11.83	-----	12.55	10.50	
Coop II	9.91	12.79	18.05	17.45	22.06	24.66	70
Publishers' Norms	3.33	6.00	10.00	-----	15.00	20.50	
Difference	6.58	6.79	8.05	-----	7.06	4.16	
Coop III	6.00	12.55	16.60	15.16	19.28	23.27	70
Publishers' Norms	2.27	4.00	8.00	-----	11.00	14.66	
Difference	3.73	8.55	8.60	-----	8.28	8.61	

TABLE I (Continued)

COMPARISON OF SCORES ON TESTS MADE BY RADIO
ANNOUNCERS AND PUBLISHERS' BASIC NORMS

SELECTED VALUES	P ₁₀	P ₂₅	P ₅₀	M	P ₇₅	P ₉₀	N
Coop Total	33.50	46.58	65.33	62.26	74.66	89.27	70
Publishers' Norms	13.33	22.00	36.00	-----	51.00	66.00	
Difference	20.17	24.58	29.33	-----	23.66	23.27	
Kwalwasser	-68.10	-6.50	61.50	48.23	97.50	131.10	65
Publishers' Norms	52.00	85.00	111.00	-----	138.33	162.50	
Difference	-120.10	-91.50	-49.50	-----	-40.83	-31.40	
Strong - Printer	26.90	30.38	35.50	36.24	41.25	48.40	63
Publishers' Norms	20.00	25.69	32.75	-----	39.00	45.50	
Difference	6.90	4.72	2.75	-----	2.25	2.90	
Strong - Personnel Director	25.57	32.60	36.83	36.04	42.13	47.40	63
Publishers' Norms	14.66	23.80	31.33	-----	38.14	44.66	
Difference	10.91	8.80	5.50	-----	3.99	2.74	
Strong - Public Administrator	28.10	32.75	37.70	37.59	41.25	45.90	63
Publishers' Norms	15.33	23.00	30.00	-----	42.00	47.33	
Difference	12.77	9.75	7.70	-----	-.75	-1.43	

TABLE I (Continued)

COMPARISON OF SCORES ON TESTS MADE BY RADIO
ANNOUNCERS AND PUBLISHERS' BASIC NORMS

SELECTED VALUES	P ₁₀	P ₂₅	P ₅₀	M	P ₇₅	P ₉₀	N
Strong - Social Science H. S.	20.70	28.50	35.70	36.14	41.17	50.80	63
Publishers' Norms	10.00	18.66	26.25	-----	35.66	42.50	
Difference	10.70	9.84	9.45	-----	5.51	8.30	
Strong - Social Worker	26.20	31.50	36.50	36.03	41.83	47.10	63
Publishers' Norms	11.66	18.50	27.00	-----	38.00	44.66	
Difference	14.54	13.00	9.50	-----	3.83	2.44	
Strong - Musician	28.90	34.25	40.10	40.23	47.33	51.80	63
Publishers' Norms	13.66	20.60	28.50	-----	38.00	46.00	
Difference	15.24	13.65	11.60	-----	9.33	5.80	
Strong - Mortician	24.55	29.00	36.83	34.93	40.75	43.45	63
Publishers' Norms	17.66	24.25	30.50	-----	36.33	44.00	
Difference	6.89	4.75	6.33	-----	4.42	-.55	
Strong - Sales Manager	27.70	32.57	37.10	36.04	41.20	45.43	63
Publishers' Norms	17.33	23.50	31.25	-----	39.80	48.00	
Difference	10.37	9.07	5.85	-----	1.40	-2.57	

TABLE I (Continued)

COMPARISON OF SCORES ON TESTS MADE BY RADIO
ANNOUNCERS AND PUBLISHERS' BASIC NORMS

SELECTED VALUES	P ₁₀	P ₂₅	P ₅₀	M	P ₇₅	P ₉₀	N
Strong - Life Insurance	27.63	33.03	38.00	37.67	45.00	48.70	63
Publishers' Norms	15.66	23.00	31.28	-----	38.75	46.00	
Difference	11.97	10.03	6.72	-----	6.25	2.70	
Strong - Real Estate	32.70	36.40	40.50	40.23	45.13	48.30	63
Publishers' Norms	26.00	30.50	37.16	-----	44.00	49.50	
Difference	6.70	5.90	3.34	-----	1.13	-1.20	
Strong - Advertiser	32.10	36.25	43.30	42.90	50.14	54.40	63
Publishers' Norms	21.66	25.87	33.33	-----	41.00	46.00	
Difference	10.45	10.38	9.97	-----	9.14	8.40	
Strong - Lawyer	27.20	30.50	35.83	35.78	41.75	45.37	63
Publishers' Norms	20.50	23.00	34.00	-----	41.00	49.25	
Difference	6.70	7.50	1.83	-----	.75	-3.88	

addition, the publishers' norms for each of the percentile rankings and the difference between the two rankings are also given in Table I. By evaluating the various differences, it was possible to determine the relationship between these testing instruments and the announcers' group as a whole, and the apparent value of the various tests and their sub-divisions as evaluation material for radio announcers.

The ACE-Q scores made by the announcers were only a fraction of a point below the publishers' norms throughout the percentile rankings, possibly indicating that this test was valid in judging the ability of professional radio announcers to think in qualitative or arithmetic terms. The ACE-L scores of the testing group placed them in percentile rankings that were somewhat higher than the established norms, with the greatest variances occurring in the lower percentiles. The differences between the announcers' scores and the norms fell off significantly in the upper percentiles, possibly suggesting that this test group could do a slightly better than average job of thinking in linguistic terms. The ACE-Total scores, except around the 75th percentile, seemed to diminish gradually in respect to the norms, even though the scores that were made were above the norms throughout all the rankings of this test. The total effect of the ACE seemed to indicate that the

professional radio announcers involved in the experiment made as good as, and in most cases, slightly better grades than those established by the publishers' norms.

In reviewing the Otis norms and the scores made by the test group it was indicated that the announcers scored from ten to fourteen points above the norm in the percentile rankings. This may not have been a very large gap, but for this test, it was a significant one. Therefore, if this test were to be used for evaluating professional radio announcers, it should be remembered that there could be at least a ten point spread in the difference between the announcers' scores and the norm percentile rankings. In short, those college students who seek a major leading to a job as a radio announcer should be above average in intelligence.

In noting the scores made on the first four sections of the Guilford-Martin Personality Profile, it must be remembered that the scores are inverted, so that low numerical values are found in the upper percentiles. It must also be remembered that, unlike the ACE or the Otis, this scale is not a matter of right or wrong answers, but rather an indication of personality characteristics.

In the "S" factor, Social Introversion-Extroversion, there was a wide divergence in the lower percentiles, but this gap gradually closed, so that a negative relationship

was reached in the extreme upper percentiles. This portion of the Guilford-Martin seemed to indicate that those announcers with the higher numerical scores tended to have a closer resemblance to the national norms and that professional radio announcers, while they seemed to reach "normal" heights of social extroversion, did not seem as prone to social introversion as others who had taken this scale, and whose scores made up the national norms.

In the "T" factor, Thinking Introversion-Extroversion, there were wide divergences at both ends of the scale, a plus factor in the tenth percentile, and an almost equal minus factor in the ninetieth percentile. This seemed to indicate that radio announcers were clustered around the middle range of the national norms, thus, possibly, tending to be neither more nor less inclined to the extremes than the national average.

The "D" factor, Depression, had a trend quite similar to the "S" factor, in that the lower percentiles among announcers were higher on the scale than the national norm, but the variance decreased considerably in the upper percentiles until a slight minus factor was obtained in the ninetieth percentile. This seemed to indicate that radio announcers might not have been as prone to feelings of unworthiness and guilt as the national norms, but, also, they did not seem to achieve as high a feeling of cheerfulness

and optimism as the national norms.

The "C" factor, Cycloid Disposition, was similar to the "D" factor in that the lower percentiles were above the national norms, but the upper percentiles fell off more rapidly than either the "D" or "S" factors. This could have been interpreted to mean that announcers, as a whole, were not, possibly, as liable to rapid fluctuations of mood changes as was the national average. But neither apparently were they as stable in their emotional reactions and moods as the upper percentiles of the national norms.

The "R" factor, Rhathynia, indicated that most announcers clustered around the center of the scale. They were not, it would seem, as inhibited as the national norms indicated, neither were they as carefree and impulsive as those in the upper percentiles of the national averages.

The "G" factor, General Activity, in the lower and middle percentiles was slightly better for the announcers, showing what might be considered as less tendency toward inertness and dis-inclination for motor activities. However, they seemed not as interested in vigorous, overt action as those in the upper and top percentiles of the national norms.

The "A" factor, Ascendance-Submission, showed that announcers were, possibly, more inclined toward

social leadership than the national norms, although this tendency was apparent only in the lower and middle range. In the upper and top range, the announcers seemed more inclined to social passiveness than the national norms.

The "M" factor, Masculinity-Femininity, also indicated somewhat higher values in the lower and middle percentiles and a slight drop in the upper and top percentiles. This seemed to show slightly stronger masculinity of emotion and temperament for all announcers but those in the upper percentile range.

The "I" factor, Inferiority Feelings, showed the same type of development as the "A" and "M" factors. Thus, it might have been assumed that announcers were somewhat more confident, in the main, than those in the national norms.

The "N" factor, Nervousness, was a repetition of the "A", "M", and "I" factors, which seemed to indicate that most announcers were possibly a little more relaxed and unruffled than those in the national norms.

The "O" factor, Objectivity, placed announcers significantly above the national norms only in the lower percentiles. The slight drop-off that did occur was in the middle and upper percentiles. It might have been assumed, therefore, that announcers were not as objective about themselves as those in the national norms, but their

tendency to be hypersensitive was not as great.

The "Ag" factor, Agreeableness, showed a very rapid drop-off in the lower percentiles, with a strong minus factor in the middle and upper percentiles. Thus, it might have been construed that announcers tended more toward belligerence and haggling over trifles than the national norms.

The "Co" factor, Cooperativeness, showed that announcers were well above the lower and middle percentiles, and only slightly below the upper percentiles. This would have seemed to indicate a healthier tolerance of people and things than was apparently true of the national norms.

In reviewing the four segments of the Cooperative Contemporary Affairs Test, it was interesting to note that the announcers made "above-average" scores in all of the percentiles of all of the test segments.

In Coop I (Public Affairs), the lowest percentiles showed the least deviation, while the other percentiles showed variations of equal strength.

In Coop II (Science and Medicine), the fluctuations were more varied, but the announcers still made better scores than the national norms.

In Coop III (Literature and Fine Arts), the fluctuations were almost identical in the middle and upper percentiles, and averaged better than the Coop II grades.

In the Total Score, or Coop IV, the announcers averaged at least twenty-five points above the national average, thus indicating a possibility of significantly more "News Consciousness" on the part of the radio announcers than those in the national norms.

In the Kwalwasser Music Tests a significant minus factor was shown throughout in that the announcers increased in knowledge as they climbed into the upper percentiles, but even in the highest levels, they were still scoring far below the national norms. This would have seemed to indicate a significant lack of knowledge of musical forms and terminology on the part of the radio announcers.

In reviewing the previous tests and sub-tests, evaluations were made on the total scores in comparison with the publishers' national norms. The tests in these various categories were measurements of specific factors, such as intelligence, personality, and subject matter knowledge.

The Strong Vocational Interest Blank was another matter, however. This testing instrument judged similarities in all of these factors as they related to certain occupational groups. It seemed possible that the scores made on the Strong might have indicated whether or not a radio announcer was also suited to work in these occupational

categories, as well as the degree of such suitability. By making some objective extensions of validated data on the intelligence, personality, and aptitude necessary for proficiency in each occupational category, additional factors of intelligence, personality, and aptitude of radio announcers were sought from the Strong.

The Strong, which was based on objective extensions obtained from valid sources, was used to examine additional factors of intelligence, personality, and aptitude of radio announcers.

In the Printer category, the Dictionary of Occupational Titles defined a printer-compositor in the printing and publishing industry as:

Performs any or all of the duties concerned with hand and machine setting of type, the assembling of type and cuts in chases, and related duties prior to the actual printing operations. Is typically a skilled worker who has completed a lengthy apprenticeship and is thoroughly versed in type style and printed page make-up.¹

A further definition for a Job Printer stated:

Sets type by hand (COMPOSITOR), locks up type in chase (IMPOSER), and makes ready and feeds a small manually operated platen press. Lubricates moving parts of press and washes ink rollers with gasoline.²

¹United States Department of Labor, Dictionary of Occupational Titles, Volume I (Washington, D.C.: U.S. Department of Labor, 1950), p. 1029.

²Ibid.

The Occupational Outlook Handbook stated:

In selecting applicants for apprenticeship, most employers require a high school education or its equivalent. A thorough knowledge of spelling, punctuation, and grammar is essential for some of the printing trades. Courses in art, such as drawing, design, color, and lettering, as well as courses in physics and chemistry, are also helpful for many kinds of printing work Mechanical aptitude is necessary for the printing trade.³

In summary, printers seemed to be craftsmen who required knowledge of the basic elements of high school English and Physical Science, an understanding of the requirements of the Fine Arts, as well as some mechanical ability. They had to have enough intelligence to complete high school studies; they must have had the aptitudes mentioned above; and they must have had a personality that permitted them to work patiently at routine, sometimes monotonous tasks.

To the degree that radio announcers were similar to printers, the Strong showed they were slightly better than the national norms, and the degree of superiority diminished only slightly in the upper percentiles.

With Personnel Directors, the Occupational Outlook Handbook stated:

³United States Department of Labor, Occupational Outlook Handbook (Washington, D.C.: U.S. Government Printing Office, 1959), pp. 334-335.

Many personnel jobs require only limited contact with people. Others involve frequent contact with employees, company officials, and people outside the company--for example, prospective employees, union officials, school personnel, and officials of community and other organizations.

Personnel work also involves many levels of responsibility, ranging from policy making to routine administration activities, and includes a number of specialized functions. Industrial relations directors, personnel managers, training directors, and others in executive positions generally formulate policy, advise other company officials on personnel matters, and administer the departments they head.⁴

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A college education is becoming increasingly important for personnel work.⁵

. . . College courses in personnel management, business administration, public administration, applied psychology, statistics, economics, political science, sociology, English, and public speaking are regarded as desirable preparation for personnel work.⁶

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Qualities regarded as important for success in personnel work include the ability to speak and write effectively, and more than average skill in working with people of all levels of intelligence and experience. In addition, the prospective personnel worker should have a liking for detail, a high degree of persuasiveness, and a pleasing personality.⁷

The Dictionary of Occupational Titles described the duties of a Personnel Manager as:

⁴Occupational Outlook Handbook, op. cit., p. 206.

⁵Ibid., p. 207.

⁶Ibid.

⁷Ibid.

Formulates policies relating to the selection, training, promotion, welfare, compensation, recreation, and discharge of employees, and other employer-employee relationships, supervising subordinates engaged in executing the policies or performing these duties himself.⁸

In summary, personnel directors seemed to be executives who had to meet and to work with a variety of people, both those in their employ and those in superior positions. Personnel directors were almost always required to have college training, with work in those areas that would enable them to handle responsibilities in a world of business. They also had to work in those areas that trained them to meet and communicate effectively with people.

The Strong showed that personnel directors and radio announcers were considerably apart in the lower ranges of the scale, with the personnel men having lower ratings. These ratings remained lower for the personnel directors in the upper percentiles, but, with not as much a divergence of scores.

In the Public Administrators category, the Dictionary of Occupational Titles described the duties of the person

⁸Dictionary of Occupational Titles, op. cit., p. 818.

in this occupational group as:

Directs an agency or major function of a public or private organization that operates to alleviate or prevent social problems through the disbursement of monetary grants, provisions of medical care, rendering of counseling services, or similar measures: Advises governing board or independently determines policies and defines scope of services rendered. Formulates procedures for prosecution of program so that requirements of clients will most effectively be met. Coordinates agency with that of other community organizations to avoid duplication of community services. Oversees research activities directed at gathering facts pertinent to planning and execution of program. Determines hiring qualifications and establishes performance standards for paid and volunteer workers. Coordinates work of subordinates. May direct solicitation of funds and public-relations program May establish budget and direct fiscal management of organization. Usually has training and experience⁹ in theoretical and practical aspects of social work.

Public administrators seemed to require mature judgment capable of making major policy decisions. Their education seemed to indicate a need for study in business, finance, management, personnel work, and other related activities.

The Strong scores showed the test group placed considerably above the norm in the lower percentiles, but the upper levels showed that the national norms were just slightly better than the test scores.

The Social Science High School teacher was described

⁹Ibid., p. 9.

in the Occupational Outlook Handbook as:

Besides giving classroom instruction from 20 to 30 hours each week, secondary school teachers also develop and plan teaching materials, develop and correct tests, keep records, make out reports, consult with parents, and perform other duties. Many of them supervise student extra-class activities--sometimes after regular school hours. Maintenance of good relations with parents, the community, and fellow teachers is an important aspect of their jobs.

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The usual educational requirement for a State certificate is a bachelor's degree, with the equivalent of at least one-half year of education courses, including student teaching, and specialization in one or more subjects commonly taught in secondary schools.¹⁰

The Occupational Outlook Handbook also stated:

. . . the social sciences are concerned with the whole range of human history and activities, from the origin of men to the latest election returns.¹¹

The Dictionary of Occupational Titles stated:

. . . (Teacher, High School) teaches pupils in church, private, or public high schools (secondary schools), usually specializing in one or several subjects, such as English, mathematics, or Latin, and is required to have more academic training than TEACHER, GRADE OR GRAMMAR SCHOOL.¹²

In summary, the Social Science High School Teacher required all of the skills and abilities that were so well known to be a part of the make-up of high school teachers,

¹⁰Occupational Outlook Handbook, op. cit., pp. 44-45.

¹¹Ibid., p. 143.

¹²Dictionary of Occupational Titles, op. cit., p. 1356.

plus a knowledge of man and his history in meeting his requirements as a social scientist.

The Strong showed that radio announcers were very well above the publisher's norms throughout the entire percentile range, indicating that announcers might very well have been suited to the vocation of teaching social science on the high school level.

The Social Worker was described in the Dictionary of Occupational Titles as:

. . . a term applied to workers engaged in the alleviation or preventing of social problems by assisting in providing counseling services, recreational or avocational opportunities, monetary grants, medical care, or other services.¹³

The Occupational Outlook Handbook stated:

. . . Social workers help people who have individual or family difficulties which interfere with healthful and useful living. They arrange for counseling services, job guidance, monetary grants, medical care, or other types of aid. To help people improve their social relationships, as well as aid in the normal process of growing up, some social workers conduct leisure time programs and informal educational activities. Others are engaged by communities to help plan and develop health, welfare, and recreation services on a broad scale for a neighborhood or larger area.¹⁴

. . . Professional training is basically the same for all types of social work. Leaders in the field

¹³Ibid., p. 1241.

¹⁴Occupational Outlook Handbook, op. cit., p. 216.

consider two years of graduate education desirable for all social workers and encourage employers and educators to adhere to this standard.¹⁵

. . . In addition to a bachelor's degree, students considering a career in social work should have an interest in people and in social problems, the initiative and perseverance needed for performing or obtaining social services, and an ability to organize work activities effectively. To enable them to promote good working relationships and encourage social adjustment in others, they should have a pleasant, easy manner in working with people, willingness to see other points of view objectively, and ability to use good judgment when dealing with problem situations. To help them find out whether they have the necessary personal qualifications, high school and college students are advised to serve as volunteer or part-time workers for the scouts, or in settlement houses, hospitals, or camps.¹⁶

Social workers seemed to need skills in dealing with people such as compassion, executive and business training, personal objectivity, and a willingness to endure hard work.

As to the showings on the Strong, announcers were as high in relation to the national norms as they were in the Social Science High School category in that they placed above the norms, to a marked degree, throughout the percentiles.

The Dictionary of Occupational Titles defined a Mortician as:

¹⁵Ibid., p. 218.

¹⁶Ibid., p. 219.

. . . Makes arrangements for and conducts funerals: Interviews family to acquire data about deceased and to aid in planning details such as selecting coffin and burial clothes, arranging for services and floral displays, publishing death notices, and selecting burial plot. Arrange coffin in room where services are to be held, adjusting lights and floral displays. Estimates number of mourners and provides for their transportation. Selects PALLBEARS on request of family. Signals officiating clergyman to begin services. Directs PALLBEARS to remove coffin to hearse, and from hearse to grave. Operates device to lower coffin into grave. Prepares bodies for shipment. Frequently embalms bodies.¹⁷

Morticians in their dealings with people seemed to need compassion, administrative ability, business skill, some artistic taste, and a knowledge of science, biology, and anatomy.

Announcers were above the norms on the Strong in this category, except in the extreme upper percentile where the differences were only slightly negative.

Musicians were described in the Dictionary of Occupational Titles as:

. . . a general term to designate one who follows music as a profession . . . plays one or more musical instruments . . . in a symphony orchestra, band, or similar musical organization.¹⁸

This was so well known a vocational category that most of the skills necessary for proficiency in it would

¹⁷Dictionary of Occupational Titles, op. cit., p. 1438.

¹⁸Ibid., p. 883.

would be presumed to be common knowledge. Skills such as artistry, patience, a knowledge of music, musicology, and instrumentation are fit examples.

Radio announcers, according to the Strong, placed well above the norms throughout the percentiles, especially in the lower groupings.

Sales Managers were described in the Dictionary of Occupational Titles as:

. . . Supervises and assigns duties to MANAGER, BRANCH-STORE; RELAY MAN; and ROUTEMAN (any ind.) and oversees their work to insure faithful and efficient performance of their duties. Visits customers to make estimates on proposed work. Adjusts customers' complaints.¹⁹

In summary, the Sales Manager was an executive, who dealt with personnel problems, had an understanding of business and finance, and was able to deal with people.

Announcers scored very well above the Strong norms in the lower and middle percentiles, but they were low, even to scoring in a minus position in the upper percentiles.

Life Insurance Salesmen were described in the Dictionary of Occupational Titles as:

¹⁹Ibid., p. 821.

. . . sells various types of insurance (life, fire, and marine) to new clients.²⁰

The Occupational Outlook Handbook stated:

. . . A life insurance agent spends most of his time meeting people in their homes or places of business to explain different types of insurance. Part of the agent's time is spent in his agency's selecting new prospects to whom he should try to sell insurance and planning insurance programs for his clients. He must also arrange necessary physical examinations, help clients fill out application forms, assist with benefit claims, and perform other services.

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Unlike most salesmen, who sell goods or property which a buyer can see, the life insurance agent is concerned with selling an idea--one of financial protection. He should be able to explain clearly in non-technical language the various kinds of policies available, the costs involved, and the benefits provided. Companies frequently evaluate their agents on how long the policies they sell remain in force. Therefore, an agent must try to balance a client's ability to pay against his need for protection and help him make a wise decision.

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Agents have a great deal of independence and personal responsibility for planning their work. They must build up lists of prospective customers from referrals made by personal acquaintances or satisfied clients, or from other sources. Additional business often depends on the individual agent's ability to gather as much pertinent information as possible on policy holders--for example, births in a family, purchase of a new home, improvements in income status, or other factors that²¹ indicate a prospective sale of additional insurance.

²⁰Ibid., p. 1133.

²¹Occupational Outlook Handbook, op. cit., p. 591.

Summarizing, a Life Insurance Salesman seemed to require a strong ability to deal personally with people on a face-to-face basis, concerning himself with personal problems. He had to have a strong sense of salesmanship and business, and the ability to work effectively without direct supervision. He had to have a high moral standard and to be concerned with strong ethical principles.

Announcers scored above the publisher's norms throughout the percentiles, but the difference diminished steadily, so that only a small difference was noted in the extreme upper percentile.

The Occupational Outlook Handbook described the Real Estate Salesman as:

The chief business of real estate salesmen and brokers is to act as agents between owners and buyers of homes and other properties. Salesmen are employed by brokers mainly to show and sell real estate.

.....

The majority of real estate salesmen and brokers sell houses. Some specialize in selling either low-price or expensive homes. A few, usually those in large real estate firms, handle mainly costly commercial properties, such as multimillion dollar hotels and giant office buildings. Others deal chiefly with farms and other lands. Since real estate usually costs a lot of money, most people buy it only after much careful investigation. For this reason, a salesman may have to meet several times with a prospective buyer to show him properties and answer questions about them. While doing this, the salesman emphasizes major selling points.

.....

In selling commercial property, especially the real estate salesman or broker must be able to discuss such matters as how the property can be used, zoning restrictions, tax rates, and insurance rates. The agent sizes up the buyer's needs and preferences and tries to meet them within his ability to pay; this is important since a great deal of time may be lost with buyers who cannot qualify for the loans required to finance the purchase. Where some bargaining on price may be necessary, the salesman or broker must carefully follow the seller's instructions and be skillful in making counteroffers, in order to get the best possible price and still make the sale. In the closing stages of the sale, the real estate salesman or broker often arranges for a loan, a title search, and the meeting at which the owner finally takes possession of the property.

Real estate salesmen or brokers also do some office work, such as checking listings of properties for sale or rent and phoning prospective clients. They may also answer telephone inquiries about properties, arrange appointments to show real estate, make out reports of activities and keep records on properties sold. Real estate salesmen or brokers generally have a great deal of independence and personal responsibility for planning their work. It is often necessary to work during evenings and weekends.²²

Thus, it would seem that Real Estate Salesmen had much the same responsibilities and duties as a Life Insurance Salesman, that is, a strong knowledge of business and the psychology of selling, as well as a great deal of ability to deal with and be accepted by people.

The Strong showed that the Real Estate Salesman's national norms were below the scores of the radio announcers, but that the wide difference in the lower percentiles

²²Occupational Outlook Handbook, op. cit., pp. 249-250.

was rapidly diminished, until there was a minus factor in the extreme upper percentile.

According to the Dictionary of Occupational Titles, the Advertiser:

. . . plans, writes, lays out, proof reads and keeps records of the effectiveness of newspaper and direct-mail advertising in establishments where all advertising is handled by one individual.²³

So, an Advertiser also seemed to need a strong grounding in the psychology of sales as well as skill in English and Composition, possibly even some knowledge in Art and Design. He would not seem to need as much ability in meeting and dealing with people as those in direct, personal sales.

The announcer placed fairly well above the national norms on the Strong, throughout all of the percentiles of the Advertiser group.

Finally, the Lawyer was analyzed. The Dictionary of Occupational Titles stated:

. . . a classification title for persons of recognized educational, experience, and legal qualifications who are engaged in such phases of law as conducting criminal or civil law suits, drawing up legal documents, or searching proper titles.²⁴

²³Dictionary of Occupational Titles, op. cit., p. 10.

²⁴Ibid., p. 761.

The Occupational Outlook Handbook stated:

Lawyers (attorneys) advise clients on their legal rights and obligations and, when necessary, represent them in courts of law. In addition, they negotiate settlements out of court and represent clients before quasi-judicial or administrative agencies of the government. They may also act as trustees, guardians, or executors. Government attorneys play a large part in administering Federal and State laws and programs; they prepare drafts of proposed legislation, especially procedures for law enforcement, and argue cases in the courts. Some lawyers serve as judges in Federal, State, and local courts. Others are primarily engaged in teaching, research, writing or administrative activities.

The great majority of lawyers are in general practice, handling all kinds of legal work for clients. However, an increasing number are specializing in some branch of the law such as administrative, admiralty, corporation, criminal, estates and wills, international, labor, patent, real estate, trust, and tax law. Some attorneys devote themselves entirely to trying cases in the courts. Others never appear in court and limit their work to such activities as drawing up legal documents, conducting out-of-court negotiations, or doing the legal work necessary to prepare for trials.

.....

As a rule, it takes 6 years of full-time study after high school to complete the required college and law school work. The most usual preparation for becoming a lawyer is 3 years of college study followed by 3 years in law school. However, law school which have a 4-year, full-time curriculum may accept students after 2 years of college work. On the other hand, some schools require applicants to have a college degree. Specific college subjects are not generally required for entrance into law school. However, such courses as English and public speaking are important for prospective lawyers. Students interested in a particular aspect of the law may find it helpful to take related courses; for example, engineering and science courses would be useful to the prospective patent attorney,

and accounting would be useful to the future tax lawyer.²⁵

Law required one of the most intensive of all educational processes, with a high degree of skill in judging human nature and an extensive knowledge of jurisprudence and its application.

Radio announcers, in comparison with the Strong norms in the Lawyer category, placed the weakest of all the Strong vocational ratings. There was only a plus difference of 6.7 at the lowest percentile, and a -3.88 at the upper percentile. Thus, the radio announcer would seem to have been least qualified for the vocation of a lawyer, and the qualities that make a lawyer seem to be the least obvious in radio announcers.

In the preceding pages an analysis and review was made of the total scores acquired by all of the announcers in the various tests and sub-tests that made up the test battery. Total scores in various percentile rankings were charted and analyzed against the total scores on the publishers' norms.

In reviewing these materials, it was noted that in comparing the total scores against the national norms the

²⁵Occupational Outlook Handbook, op. cit., pp. 197-.98.

scores on two tests, the Guilford-Martin "Ag" and the Kwalwasser scores, were well below the norms throughout the percentiles. The scores on two other tests, the ACE-Q and the Guilford-Martin "O" scores, were somewhat below the norms throughout the percentiles. Two tests, the Guilford-Martin "T" and "R" scores, were almost similar to the national norms throughout. Three tests, the Guilford-Martin "S", "D", and "C" scores, were also similar to the national norms, but only in the middle percentiles. Eight tests, the Otis, the Guilford-Martin "A", "M", "I", and "N" scores, and the Strong Printer and Life Insurance Salesmen Scores, were somewhat above the national norms throughout.

Two tests, the Guilford-Martin "G" and the Strong Lawyer's scores, were somewhat higher than the national norms, but only in the lower percentiles. Eleven tests were considerably higher than the national norms throughout the percentiles. These tests were the ACE-Total, the Guilford-Martin "Co", the Coop Part I, II, III, and Total scores, and the Strong Personnel Director, Social Science High School Teacher, Social Worker, Musician and Advertiser scores.

One test, the Strong Public Administrator, was considerably higher than the national norms, but only in the lower percentiles. One test, the Strong Sales Manager, was considerably higher than the national norms, but only in the

lower and middle percentiles. Two tests, the Strong Mor-tician and Real Estate Salesmen, were considerably above the national norms in all but the upper percentiles.

II. TEST SCORES RELATED TO PERSONAL DATA FACTORS

The type of preceding analysis was most valuable for a complete over-view, but there was still the need for an intensive analysis of the scores made by the announcers on each individual test and sub-test in the light of the various personal factors that were obtained from the data sheets filled out by each participant in the testing program. In this way it was hoped that the first part of the basic problem of this study could be made more meaningful; i.e., "to make an anlysis with respect to range and other characteristics of scores made by a group of radio announcers on a selected battery of psychological tests."

The five major personal factors and divisions of each into appropriate categories were: Age - 17 years to 21 years, 21 years to 25 years, 25 years to 29 years, 29 years to 33 years, 33 years to 37 years, and in some instances, 37 years to 41 years; Educational level - non-highschool graduates, highschool graduates, men with some college work, college graduates, and men with some post-graduate work; Radio station job experience - in one year intervals from less than one year of work to seven to eight

years of work; Number of radio stations worked-in - from one station to six stations; and Amounts of vocational experience gained in fields allied to radio announcing - listed as "none", "some", "average", "much", and "very much".

These personal factors are presented in Table II, "Personal Data Distribution With P_{25} , P_{50} , P_{75} and M Values For Various Categories", with their 25th percentile, 50th percentile, and 75th percentile scores, Mean scores, and "f" numbers for the frequency, or number of announcers in each of the personal categories. In analyzing each part of Table II only the most significant or note-worthy points of the tests or sub-tests were discussed.

Part (1): ACE-Q Scores (Page 59) - The men in the 29 years to 33 years age group seemed to obtain the best scores, while the 25 years to 29 years age group, which contained the most men, scored nearly as well. Increasing age seemed related to lower scores. Men with some college work scored highest, although those men with some post-graduate work scored highest in the upper percentiles. The men with the least amount of education scored the lowest, which, for this sub-test, seemed justifiable. In most instances, announcers with one to two years of experience scored higher than any other of the experience groups. However, men with four to five years of experience scored

TABLE II

PERSONAL DATA DISTRIBUTIONS WITH
P₂₅, P₅₀, P₇₅ AND M VALUES FOR VARIOUS CATEGORIES

PART (1): A C E - Q Scores

PERSONAL DATA INTERVALS	f	P ₂₅	P ₅₀	P ₇₅	MEAN
<u>Age Groupings</u>					
17 - 21	8	37.50	42.00	47.50	45.12
21 - 25	20	37.50	42.50	47.17	42.70
25 - 29	25	32.80	39.00	50.13	41.47
29 - 33	11	40.25	44.75	50.75	55.27
33 - 37	5	34.75	37.75	38.38	38.40
37 - 41	4	6.50	16.50	32.50	28.75
<u>Educational Experience</u>					
No High School	4	6.50	25.50	29.50	32.33
High School Only	15	36.00	39.50	46.00	40.50
Some College	33	36.13	44.75	50.25	43.22
Bachelor's Degree	19	35.00	41.41	46.25	42.83
Graduate Work	5	37.75	41.00	53.25	42.60
<u>Radio Experience</u>					
0 - 1 years	6	31.00	37.50	47.00	38.33
1 - 2 years	12	38.50	46.83	55.00	48.09
2 - 3 years	10	37.00	38.50	41.25	39.66
3 - 4 years	11	34.00	41.50	46.00	40.40
4 - 5 years	7	35.00	42.50	56.00	43.83
5 - 6 years	6	36.00	40.50	53.00	43.66
6 - 7 years	5	32.13	36.00	44.25	38.00
7 - 8 years	5	37.75	41.00	50.25	42.00
<u>Radio Stations Worked</u>					
1	21	34.50	40.50	47.50	40.35
2	15	37.67	40.50	49.00	43.85
3	24	32.50	40.83	45.50	39.58
4	5	44.75	51.00	55.25	50.40
5	4	25.50	36.50	49.50	42.50
<u>Extra Occupational Skills</u>					
None	38	37.00	42.50	49.50	42.08
Some	5	40.75	45.00	46.88	42.60
Average	19	35.25	38.25	48.75	41.21
Much	6	36.00	41.44	54.00	43.66
Very Much	8	28.50	35.50	42.50	39.00

TABLE II (Continued)

PERSONAL DATA DISTRIBUTIONS WITH
P₂₅, P₅₀, P₇₅ AND M VALUES FOR VARIOUS CATEGORIES

PART (2): A C E - L Scores

PERSONAL DATA INTERVALS	f	P ₂₅	P ₅₀	P ₇₅	MEAN
<u>Age Groupings</u>					
17 - 21	8	60.58	67.00	69.50	68.62
21 - 25	20	51.50	72.50	80.50	65.50
25 - 29	25	64.25	74.00	82.75	67.00
29 - 33	11	65.25	72.00	83.75	67.30
33 - 37	5	73.75	75.00	77.25	67.40
37 - 41	4	22.50	36.50	78.50	52.50
<u>Educational Experience</u>					
No High School	4	22.50	24.50	48.50	50.60
High School Only	15	52.00	67.00	70.25	65.50
Some College	33	71.13	75.00	83.25	67.70
Bachelor's Degree	19	62.00	74.50	85.00	67.70
Graduate Work	5	66.75	72.00	81.25	73.40
<u>Radio Experience</u>					
0 - 1 years	6	61.00	72.50	84.00	38.30
1 - 2 years	12	65.50	72.50	80.50	58.10
2 - 3 years	10	61.00	67.17	74.00	39.60
3 - 4 years	11	47.00	51.50	79.00	40.40
4 - 5 years	7	50.00	62.44	81.00	67.80
5 - 6 years	6	66.00	70.50	86.00	68.30
6 - 7 years	5	63.75	73.75	74.38	61.30
7 - 8 years	5	73.75	80.00	81.25	71.60
<u>Radio Stations Worked</u>					
1	21	61.00	67.00	78.50	64.90
2	15	67.00	74.50	94.00	70.60
3	24	61.50	73.83	81.00	65.40
4	5	73.75	83.00	85.25	76.80
5	4	24.50	72.50	80.50	63.00
<u>Extra Occupational Skills</u>					
None	38	64.50	71.50	80.00	67.70
Some	5	61.75	74.00	76.25	62.80
Average	19	50.25	74.00	86.75	62.10
Much	6	72.00	74.50	85.00	71.30
Very Much	8	61.50	67.50	74.50	68.10

TABLE II (Continued)

PERSONAL DATA DISTRIBUTIONS WITH
P₂₅, P₅₀, P₇₅ AND M VALUES FOR VARIOUS CATEGORIES

PART (3): A C E - Total Scores

PERSONAL DATA INTERVALS	f	P ₂₅	P ₅₀	P ₇₅	MEAN
<u>Age Groupings</u>					
17 - 21	8	96.50	109.00	116.50	113.50
21 - 25	20	89.50	111.00	129.50	108.20
25 - 29	25	105.25	118.00	127.75	108.50
29 - 33	11	107.42	117.00	131.75	103.83
33 - 37	5	101.75	115.00	128.25	105.80
37 - 41	4	28.50	52.50	110.50	81.00
<u>Educational Experience</u>					
No High School	4	28.50	49.50	77.50	83.00
High School Only	15	91.00	105.50	114.00	106.00
Some College	33	110.58	120.25	133.25	110.00
Bachelor's Degree	19	102.25	110.50	129.00	110.60
Graduate Work	5	118.75	122.00	128.25	110.00
<u>Radio Experience</u>					
0 - 1 years	6	98.00	113.50	131.00	108.60
1 - 2 years	12	104.50	118.50	128.50	114.70
2 - 3 years	10	96.25	105.50	111.25	109.60
3 - 4 years	11	81.00	91.50	125.00	96.90
4 - 5 years	7	85.00	86.50	136.00	106.60
5 - 6 years	6	108.00	110.50	139.00	109.00
6 - 7 years	5	106.75	110.00	111.25	99.20
7 - 8 years	5	120.80	122.00	132.25	113.20
<u>Radio Stations Worked</u>					
1	21	96.00	110.50	123.50	122.50
2	15	105.00	115.50	138.25	114.50
3	24	96.00	110.50	122.50	105.00
4	5	128.75	135.75	136.38	127.20
5	4	49.50	108.50	135.50	105.70
<u>Extra Occupational Skills</u>					
None	38	98.50	115.50	127.50	109.70
Some	5	106.63	107.25	123.25	105.40
Average	19	85.25	111.00	136.75	103.60
Much	6	110.00	122.50	129.00	114.80
Very Much	8	86.50	102.00	118.50	107.10

TABLE II (Continued)

PERSONAL DATA DISTRIBUTIONS WITH
P₂₅, P₅₀, P₇₅ AND M VALUES FOR VARIOUS CATEGORIES

PART (4): OTIS SCORES

PERSONAL DATA INTERVALS	f	P ₂₅	P ₅₀	P ₇₅	MEAN
<u>Age Groupings</u>					
17 - 21	8	47.50	53.50	60.50	53.12
21 - 25	20	47.25	58.75	64.75	54.84
25 - 29	25	47.42	55.75	63.75	55.08
29 - 33	11	51.25	57.00	63.75	54.00
33 - 37	5	46.75	54.00	62.25	53.40
37 - 41	4	15.50	40.50	46.50	39.25
<u>Educational Experience</u>					
No High School	4	15.50	32.50	49.50	44.83
High School Only	15	46.75	49.50	59.25	52.92
Some College	33	47.50	56.17	64.50	55.40
Bachelor's Degree	19	47.75	54.00	64.25	55.22
Graduate Work	5	46.75	62.00	63.25	54.00
<u>Radio Experience</u>					
0 - 1 years	6	46.75	47.50	56.00	46.66
1 - 2 years	12	47.00	58.50	63.50	55.18
2 - 3 years	10	46.70	48.50	60.00	53.66
3 - 4 years	11	33.75	53.00	59.25	49.50
4 - 5 years	7	37.00	48.50	59.00	51.83
5 - 6 years	6	49.00	58.50	64.00	58.50
6 - 7 years	5	46.75	52.00	54.25	52.20
7 - 8 years	5	63.75	67.00	70.88	60.66
<u>Radio Stations Worked</u>					
1	21	46.83	50.50	62.50	51.15
2	15	46.67	49.50	56.00	50.85
3	24	47.25	56.00	66.75	55.82
4	5	57.75	64.00	67.25	63.40
5	4	32.50	56.50	58.50	52.25
<u>Extra Occupational Skills</u>					
None	38	47.19	55.00	61.58	53.82
Some	5	50.75	65.00	66.25	59.40
Average	19	43.25	52.25	63.75	52.26
Much	6	59.00	62.50	69.00	58.80
Very Much	8	37.50	48.50	62.50	51.62

TABLE II (Continued)

PERSONAL DATA DISTRIBUTIONS WITH
P₂₅, P₅₀, P₇₅ AND M VALUES FOR VARIOUS CATEGORIES

PART (5): GUILFORD-MARTIN "S" SCORES

PERSONAL DATA INTERVALS	f	P ₂₅	P ₅₀	P ₇₅	MEAN
<u>Age Groupings</u>					
17 - 21	5	14.30	11.05	4.80	14.50
21 - 25	17	17.08	10.08	6.66	13.11
25 - 29	20	19.80	13.23	9.60	15.00
29 - 33	11	22.86	18.70	3.36	11.91
33 - 37	4	35.54	27.02	26.52	24.00
<u>Educational Experience</u>					
No High School					
High School Only	11	23.86	19.11	13.36	18.09
Some College	27	19.93	13.14	5.64	14.92
Bachelor's Degree	16	14.96	9.34	5.21	12.81
Graduate Work	5	28.30	10.05	6.80	17.80
<u>Radio Experience</u>					
0 - 1 years	5	14.30	13.05	5.80	13.40
1 - 2 years	11	19.62	9.54	4.62	12.81
2 - 3 years	7	27.58	14.58	7.58	14.71
3 - 4 years	7	15.06	13.56	7.06	11.57
4 - 5 years	5	31.54	21.54	14.54	5.40
5 - 6 years	5	22.30	20.05	18.80	20.40
6 - 7 years	4	33.54	19.54	18.54	22.25
7 - 8 years	6	20.30	7.05	5.80	14.16
<u>Radio Stations Worked</u>					
1	17	22.42	17.06	10.31	18.05
2	13	11.44	7.32	5.69	12.69
3	20	22.94	15.35	7.44	15.15
4	5	11.03	4.05	2.80	7.33
5					
<u>Extra Occupational Skills</u>					
None	31	23.06	15.31	8.56	16.80
Some	4	18.54	9.54	6.54	8.00
Average	16	16.90	11.33	4.40	12.87
Much	4	14.54	9.54	5.54	8.50
Very Much	8	27.58	21.58	8.58	17.57

TABLE II (Continued)

PERSONAL DATA DISTRIBUTIONS WITH
P₂₅, P₅₀, P₇₅ AND M VALUES FOR VARIOUS CATEGORIES

PART (6): GUILFORD-MARTIN "T" SCORES

PERSONAL DATA INTERVALS	f	P ₂₅	P ₅₀	P ₇₅	MEAN
<u>Age Groupings</u>					
17 - 21	5	38.43	38.02	37.60	36.20
21 - 25	17	43.66	37.66	31.66	35.18
25 - 29	20	45.57	40.70	34.70	36.40
29 - 33	11	39.86	37.11	29.43	33.65
33 - 37	4	58.54	56.54	47.54	52.25
<u>Educational Experience</u>					
No High School					
High School Only	11	42.86	38.11	33.93	22.54
Some College	27	44.78	38.26	32.14	36.33
Bachelor's Degree	16	44.42	38.34	31.71	36.93
Graduate Work	5	44.30	42.05	39.80	37.00
<u>Radio Experience</u>					
0 - 1 years	5	40.30	38.05	35.80	36.40
1 - 2 years	11	42.62	37.62	29.62	33.63
2 - 3 years	7	46.58	38.58	36.58	39.00
3 - 4 years	7	38.06	33.56	31.78	29.42
4 - 5 years	5	45.54	43.54	42.54	40.60
5 - 6 years	5	48.30	41.05	39.80	43.20
6 - 7 years	4	45.54	42.54	40.54	39.00
7 - 8 years	6	38.30	29.28	28.65	34.66
<u>Radio Stations Worked</u>					
1	17	42.42	37.17	30.92	28.64
2	13	43.38	37.82	31.88	25.38
3	20	43.94	39.25	32.47	38.95
4	5	36.30	34.05	22.80	37.66
5					
<u>Extra Occupational Skills</u>					
None	31	45.69	38.44	33.53	36.93
Some	4	37.54	31.54	28.54	30.50
Average	16	41.90	38.33	31.40	35.06
Much	4	47.54	45.54	41.54	37.00
Very Much	8	44.04	42.58	35.58	40.75

TABLE II (Continued)

PERSONAL DATA DISTRIBUTIONS WITH
P₂₅, P₅₀, P₇₅ AND M VALUES FOR VARIOUS CATEGORIES

PART (7): GUILFORD-MARTIN "D" SCORES

PERSONAL DATA INTERVALS	f	P ₂₅	P ₅₀	P ₇₅	MEAN
<u>Age Groupings</u>					
17 - 21	5	18.40	17.78	14.80	18.60
21 - 25	17	28.66	12.66	8.22	17.35
25 - 29	20	29.70	21.70	11.10	21.25
29 - 33	11	17.68	15.31	9.36	14.00
33 - 37	4	47.54	36.54	35.54	34.25
<u>Educational Experience</u>					
No High School					
High School Only	11	29.86	26.81	15.36	22.54
Some College	27	27.64	15.26	8.78	19.00
Bachelor's Degree	16	22.42	17.84	11.71	18.31
Graduate Work	5	18.30	16.05	9.80	14.60
<u>Radio Experience</u>					
0 - 1 years	5	27.30	18.05	12.80	21.80
1 - 2 years	11	28.62	14.56	7.56	17.09
2 - 3 years	7	25.58	22.04	15.58	19.57
3 - 4 years	7	18.28	17.53	10.78	13.85
4 - 5 years	5	37.54	29.54	18.54	20.60
5 - 6 years	5	27.30	18.05	16.80	24.40
6 - 7 years	4	28.02	27.52	26.54	27.50
7 - 8 years	6	14.90	10.05	8.80	12.66
<u>Radio Stations Worked</u>					
1	17	28.42	22.17	12.92	21.88
2	13	23.38	16.13	8.88	19.00
3	20	26.72	17.85	12.15	17.85
4	5	14.90	11.05	4.80	18.33
5					
<u>Extra Occupational Skills</u>					
None	31	27.39	17.77	11.19	19.96
Some	4	17.54	8.54	8.02	8.25
Average	16	27.90	18.15	12.40	21.12
Much	4	18.54	11.54	9.54	12.00
Very Much	8	35.58	21.58	12.58	21.25

TABLE II (Continued)

PERSONAL DATA DISTRIBUTIONS WITH
P₂₅, P₅₀, P₇₅ AND M VALUES FOR VARIOUS CATEGORIES

PART (8): GUILFORD-MARTIN "C" SCORES

PERSONAL DATA INTERVALS	f	P ₂₅	P ₅₀	P ₇₅	MEAN
<u>Age Groupings</u>					
17 - 21	5	30.30	26.05	24.80	27.00
21 - 25	17	32.66	24.66	18.66	24.35
25 - 29	20	38.60	23.70	19.57	26.50
29 - 33	11	22.86	16.31	11.36	19.27
33 - 37	4	55.54	48.54	38.54	35.40
<u>Educational Experience</u>					
No High School					
High School Only	11	34.18	31.81	22.43	30.27
Some College	27	35.78	21.78	13.32	24.07
Bachelor's Degree	16	27.42	23.84	18.71	25.56
Graduate Work	5	25.30	20.05	18.80	22.00
<u>Radio Experience</u>					
0 - 1 years	5	32.30	26.05	15.80	26.40
1 - 2 years	11	39.62	22.62	13.06	23.81
2 - 3 years	7	33.58	25.58	23.58	28.28
3 - 4 years	7	24.06	22.03	13.06	19.57
4 - 5 years	5	40.54	32.54	26.54	26.40
5 - 6 years	5	29.30	25.05	21.80	30.60
6 - 7 years	4	39.02	38.52	29.54	33.50
7 - 8 years	6	19.90	16.05	10.80	16.00
<u>Radio Stations Worked</u>					
1	17	36.42	23.17	18.71	12.52
2	13	33.38	25.13	13.19	25.92
3	20	30.22	23.85	19.81	22.60
4	5	25.90	19.05	12.80	26.33
5					
<u>Extra Occupational Skills</u>					
None	31	34.06	25.31	19.53	26.87
Some	4	18.54	10.02	9.52	11.50
Average	16	33.90	24.33	16.45	26.06
Much	4	26.54	20.54	19.54	20.25
Very Much	8	40.58	25.58	18.58	27.87

TABLE II (Continued)

PERSONAL DATA DISTRIBUTIONS WITH
P₂₅, P₅₀, P₇₅ AND M VALUES FOR VARIOUS CATEGORIES

PART (9): GUILFORD-MARTIN "R" SCORES

PERSONAL DATA INTERVALS	f	P ₂₅	P ₅₀	P ₇₅	MEAN
<u>Age Groupings</u>					
17 - 21	5	41.80	45.05	52.30	43.40
21 - 25	17	33.58	37.66	45.66	39.64
25 - 29	20	33.70	37.60	45.70	39.50
29 - 33	11	22.36	32.11	47.86	34.63
33 - 37	4	27.54	34.54	58.54	36.75
<u>Educational Experience</u>					
No High School					
High School Only	11	29.26	35.11	40.86	36.36
Some College	27	33.78	39.78	46.78	40.07
Bachelor's Degree	16	31.92	36.17	47.96	39.18
Graduate Work	5	25.80	34.05	47.30	35.20
<u>Radio Experience</u>					
0 - 1 years	5	33.80	38.05	45.30	38.40
1 - 2 years	11	33.62	40.62	47.62	40.63
2 - 3 years	7	33.58	37.04	54.58	43.14
3 - 4 years	7	32.06	39.56	42.06	37.57
4 - 5 years	5	31.54	33.54	45.54	36.40
5 - 6 years	5	30.80	32.05	36.30	31.60
6 - 7 years	4	35.54	41.54	51.54	40.25
7 - 8 years	6	37.80	39.05	47.30	38.16
<u>Radio Stations Worked</u>					
1	17	31.21	33.84	44.42	37.17
2	13	35.88	40.13	42.44	40.61
3	20	30.44	38.19	46.72	38.30
4	5	45.80	48.05	49.30	45.80
5					
<u>Extra Occupational Skills</u>					
None	31	30.56	38.10	47.28	38.74
Some	4	29.54	31.54	54.54	34.25
Average	16	34.40	37.33	41.97	42.50
Much	4	34.02	46.54	47.54	40.75
Very Much	8	31.58	43.58	48.58	38.12

TABLE II (Continued)

PERSONAL DATA DISTRIBUTIONS WITH
P₂₅, P₅₀, P₇₅ AND M VALUES FOR VARIOUS CATEGORIES

PART (10): GUILFORD-MARTIN "G" SCORES

PERSONAL DATA INTERVALS	f	P ₂₅	P ₅₀	P ₇₅	MEAN
<u>Age Groupings</u>					
17 - 21	5	10.75	12.00	13.25	10.60
21 - 25	17	10.83	12.50	16.50	13.58
25 - 29	20	10.17	12.25	15.50	12.65
29 - 33	11	7.25	12.00	13.75	10.63
33 - 37	4	8.50	14.00	14.50	14.50
<u>Educational Experience</u>					
No High School					
High School Only	11	10.25	12.67	14.75	12.17
Some College	27	10.00	12.00	15.50	12.74
Bachelor's Degree	16	10.92	13.25	15.25	12.50
Graduate Work	5	6.75	8.00	12.25	10.80
<u>Radio Experience</u>					
0 - 1 years	5	10.92	11.33	13.25	12.80
1 - 2 years	11	10.50	12.50	16.50	13.63
2 - 3 years	7	5.50	11.50	15.50	12.85
3 - 4 years	7	12.00	13.00	15.00	14.42
4 - 5 years	5	9.50	11.50	13.50	11.60
5 - 6 years	5	9.75	12.00	13.25	11.80
6 - 7 years	4	7.75	9.50	12.50	11.75
7 - 8 years	6	10.63	10.00	12.25	10.16
<u>Radio Stations Worked</u>					
1	17	10.23	12.13	16.38	12.52
2	13	10.25	12.00	15.38	13.30
3	20	9.25	11.75	13.63	11.25
4	5	9.75	12.00	12.88	11.40
5					
<u>Extra Occupational Skills</u>					
None	31	9.94	11.88	16.13	12.64
Some	4	5.50	11.00	11.50	10.00
Average	16	10.38	13.25	15.13	12.87
Much	4	8.50	12.50	14.50	13.00
Very Much	8	9.50	12.50	13.50	11.87

TABLE II (Continued)

PERSONAL DATA DISTRIBUTIONS WITH
P₂₅, P₅₀, P₇₅ AND M VALUES FOR VARIOUS CATEGORIES

PART (11): GUILFORD-MARTIN "A" SCORES

PERSONAL DATA INTERVALS	f	P ₂₅	P ₅₀	P ₇₅	MEAN
<u>Age Groupings</u>					
17 - 21	5	16.13	23.00	31.25	22.60
21 - 25	17	18.50	22.83	27.50	22.94
25 - 29	20	16.00	21.50	23.50	20.25
29 - 33	11	18.25	27.00	29.63	21.71
33 - 37	4	13.50	25.50	27.50	23.00
<u>Educational Experience</u>					
No High School					
High School Only	11	15.88	17.75	20.75	18.09
Some College	27	19.50	23.25	28.50	22.00
Bachelor's Degree	16	19.75	23.00	29.25	22.62
Graduate Work	6	18.75	22.00	27.75	22.40
<u>Radio Experience</u>					
0 - 1 years	5	16.75	19.00	23.25	20.60
1 - 2 years	11	22.50	24.50	28.50	24.27
2 - 3 years	7	14.50	19.50	23.50	19.28
3 - 4 years	7	18.00	21.50	28.00	22.14
4 - 5 years	5	17.50	18.50	21.00	20.60
5 - 6 years	5	12.75	17.00	18.25	17.60
6 - 7 years	4	14.50	20.00	22.50	17.50
7 - 8 years	6	22.75	30.00	20.88	24.83
<u>Radio Stations Worked</u>					
1	17	16.63	21.00	23.38	19.00
2	13	16.75	22.75	28.25	21.08
3	20	20.38	22.67	29.75	23.40
4	5	17.63	18.25	27.25	21.80
5					
<u>Extra Occupational Skills</u>					
None	31	16.42	21.00	26.92	26.45
Some	4	21.50	25.50	28.50	25.00
Average	16	17.25	22.67	28.75	22.87
Much	4	21.50	22.50	31.50	26.00
Very Much	8	18.00	19.50	23.50	20.75

TABLE II (Continued)

PERSONAL DATA DISTRIBUTIONS WITH
P₂₅, P₅₀, P₇₅ AND M VALUES FOR VARIOUS CATEGORIES

PART (12): GUILFORD-MARTIN "M" SCORES

PERSONAL DATA INTERVALS	f	P ₂₅	P ₅₀	P ₇₅	MEAN
<u>Age Groupings</u>					
17 - 21	5	18.75	21.00	24.25	18.20
21 - 25	17	20.00	21.25	25.50	21.71
25 - 29	20	17.50	20.50	23.50	20.30
29 - 33	11	20.88	24.00	27.25	21.72
33 - 37	4	17.54	18.50	19.50	17.00
<u>Educational Experience</u>					
No High School					
High School Only	11	17.25	20.00	24.13	18.90
Some College	27	18.50	20.00	24.00	20.77
Bachelor's Degree	16	20.13	23.33	27.25	22.63
Graduate Work	5	17.75	19.00	20.25	17.00
<u>Radio Experience</u>					
0 - 1 years	5	15.75	20.75	21.38	17.80
1 - 2 years	11	18.50	20.50	23.50	21.09
2 - 3 years	7	13.50	16.50	20.50	18.42
3 - 4 years	7	20.00	21.00	23.00	20.00
4 - 5 years	5	20.50	21.50	25.50	21.20
5 - 6 years	5	18.75	21.00	24.25	16.60
6 - 7 years	4	20.50	21.50	23.50	19.50
7 - 8 years	6	17.75	21.00	28.25	21.33
<u>Radio Stations Worked</u>					
1	17	16.75	20.75	24.42	21.17
2	13	18.63	20.60	21.25	17.38
3	20	18.42	22.75	26.58	21.85
4	5	19.75	21.00	24.88	22.00
5					
<u>Extra Occupational Skills</u>					
None	31	18.38	21.14	25.13	21.00
Some	4	18.00	18.50	26.50	22.50
Average	16	17.38	20.67	23.13	17.43
Much	4	18.50	19.50	20.50	20.50
Very Much	8	20.00	21.50	24.50	22.25

TABLE II (Continued)

PERSONAL DATA DISTRIBUTIONS WITH
P₂₅, P₅₀, P₇₅ AND M VALUES FOR VARIOUS CATEGORIES

PART (13): GUILFORD-MARTIN "I" SCORES

PERSONAL DATA INTERVALS	f	P ₂₅	P ₅₀	P ₇₅	MEAN
<u>Age Groupings</u>					
17 - 21	5	29.75	39.00	40.25	32.00
21 - 25	17	29.17	33.50	41.50	35.58
25 - 29	20	25.50	33.50	41.50	32.40
29 - 33	11	32.25	38.00	44.63	36.27
33 - 37	4	15.50	21.50	34.50	26.00
<u>Educational Experience</u>					
No High School					
High School Only	11	20.25	30.25	33.75	29.09
Some College	27	29.00	37.00	41.50	34.40
Bachelor's Degree	16	31.75	38.00	42.08	34.31
Graduate Work	5	31.75	38.00	46.25	36.80
<u>Radio Experience</u>					
0 - 1 years	5	26.75	30.00	37.25	30.00
1 - 2 years	11	29.00	38.00	41.50	35.36
2 - 3 years	7	28.50	31.50	40.50	33.00
3 - 4 years	7	31.00	32.50	39.00	32.57
4 - 5 years	5	20.50	24.50	42.50	36.80
5 - 6 years	5	20.75	26.00	38.25	27.60
6 - 7 years	4	28.50	30.50	33.50	29.00
7 - 8 years	6	37.75	41.00	46.25	40.00
<u>Radio Stations Worked</u>					
1	17	27.75	32.00	37.88	32.29
2	13	29.13	37.00	43.25	31.30
3	20	28.25	36.00	41.13	35.30
4	5	39.63	40.25	42.25	40.00
5					
<u>Extra Occupational Skills</u>					
None	31	27.88	33.25	41.75	33.35
Some	4	32.50	38.50	41.50	28.25
Average	16	25.25	31.25	39.75	31.62
Much	4	41.54	42.50	43.50	42.75
Very Much	8	24.40	34.00	37.50	32.37

TABLE II (Continued)

PERSONAL DATA DISTRIBUTIONS WITH
P₂₅, P₅₀, P₇₅ AND M VALUES FOR VARIOUS CATEGORIES

PART (14): GUILFORD-MARTIN "N" SCORES

PERSONAL DATA INTERVALS	f	P ₂₅	P ₅₀	P ₇₅	MEAN
<u>Age Groupings</u>					
17 - 21	5	25.13	30.00	33.88	25.80
21 - 25	17	20.50	26.50	29.17	25.29
25 - 29	20	14.50	24.50	30.50	23.70
29 - 33	11	20.25	28.00	25.13	26.81
33 - 37	4	5.50	20.50	23.50	17.50
<u>Educational Experience</u>					
No High School					
High School Only	11	20.25	29.00	31.75	25.18
Some College	27	16.50	25.50	32.00	24.40
Bachelor's Degree	16	23.25	27.00	31.25	26.50
Graduate Work	5	22.63	23.25	28.25	24.80
<u>Radio Experience</u>					
0 - 1 years	5	22.75	25.00	30.25	23.40
1 - 2 years	11	20.50	27.00	29.17	24.36
2 - 3 years	7	14.50	23.00	26.50	33.00
3 - 4 years	7	21.00	23.50	34.00	25.25
4 - 5 years	5	21.50	23.50	24.50	24.60
5 - 6 years	5	19.75	24.00	25.25	22.80
6 - 7 years	4	9.50	21.50	32.50	22.50
7 - 8 years	6	28.13	39.00	35.25	31.00
<u>Radio Stations Worked</u>					
1	17	20.75	25.25	29.19	23.82
2	13	14.13	23.25	32.25	22.23
3	20	22.75	27.00	31.75	26.40
4	5	24.75	32.00	36.88	31.20
5					
<u>Extra Occupational Skills</u>					
None	31	21.25	28.67	31.63	25.90
Some	4	23.50	33.54	34.50	30.50
Average	16	13.75	21.00	33.75	21.31
Much	4	23.50	24.50	27.50	25.75
Very Much	8	23.50	26.50	27.50	26.00

TABLE II (Continued)

PERSONAL DATA DISTRIBUTIONS WITH
P₂₅, P₅₀, P₇₅ AND M VALUES FOR VARIOUS CATEGORIES

PART (15): GUILFORD-MARTIN "O" SCORES

PERSONAL DATA INTERVALS	f	P ₂₅	P ₅₀	P ₇₅	MEAN
<u>Age Groupings</u>					
17 - 21	5	38.75	40.00	42.25	43.00
21 - 25	17	42.50	44.50	47.50	46.93
25 - 29	20	32.50	41.00	46.50	41.30
29 - 33	11	44.25	47.00	59.75	51.81
33 - 37	4	22.50	26.50	41.50	34.00
<u>Educational Experience</u>					
No High School					
High School Only	11	35.88	40.00	49.63	42.09
Some College	27	34.50	45.50	55.50	46.55
Bachelor's Degree	16	41.75	45.00	47.25	46.93
Graduate Work	5	40.13	41.00	42.25	42.00
<u>Radio Experience</u>					
0 - 1 years	5	29.75	47.00	53.25	45.00
1 - 2 years	11	29.50	41.00	45.50	45.54
2 - 3 years	7	41.50	42.50	45.50	41.85
3 - 4 years	7	43.75	44.50	51.00	47.57
4 - 5 years	5	36.50	44.50	47.50	46.60
5 - 6 years	5	39.63	40.25	41.25	37.40
6 - 7 years	4	29.50	32.50	33.50	35.25
7 - 8 years	6	57.75	60.00	69.25	57.33
<u>Radio Stations Worked</u>					
1	17	39.63	41.33	45.38	42.41
2	13	40.75	43.25	51.25	46.00
3	20	36.25	43.75	53.75	45.65
4	5	49.63	50.25	54.25	52.00
5					
<u>Extra Occupational Skills</u>					
None	31	34.38	42.00	53.75	43.96
Some	4	42.50	44.50	68.50	56.00
Average	16	36.25	45.00	53.75	44.43
Much	4	40.50	42.50	43.50	45.00
Very Much	8	41.50	46.00	47.50	47.25

TABLE II (Continued)

PERSONAL DATA DISTRIBUTIONS WITH
P₂₅, P₅₀, P₇₅ AND M VALUES FOR VARIOUS CATEGORIES

PART (16): GUILFORD-MARTIN "Ag" SCORES

PERSONAL DATA INTERVALS	f	P ₂₅	P ₅₀	P ₇₅	MEAN
<u>Age Groupings</u>					
17 - 21	5	29.75	31.00	33.25	31.60
21 - 25	17	21.50	33.00	34.50	30.87
25 - 29	20	27.50	30.50	35.50	32.17
29 - 33	11	25.25	39.00	44.75	35.63
33 - 37	4	21.50	24.50	26.50	27.50
<u>Educational Experience</u>					
No High School					
High School Only	11	29.25	32.75	34.13	31.81
Some College	27	25.50	30.50	42.50	33.25
Bachelor's Degree	16	23.75	33.25	41.88	34.56
Graduate Work	5	25.58	26.00	26.42	24.60
<u>Radio Experience</u>					
0 - 1 years	5	20.75	25.00	41.25	30.40
1 - 2 years	11	27.00	30.50	34.50	31.45
2 - 3 years	7	23.50	31.50	34.50	34.14
3 - 4 years	7	18.00	22.50	39.00	32.42
4 - 5 years	5	20.50	21.50	33.50	30.00
5 - 6 years	5	25.75	30.00	33.25	30.00
6 - 7 years	4	28.50	29.50	32.50	31.75
7 - 8 years	6	40.75	44.00	45.25	38.66
<u>Radio Stations Worked</u>					
1	17	25.75	30.25	41.88	32.76
2	13	25.75	33.75	39.38	33.69
3	20	22.38	30.00	40.75	31.20
4	5	32.75	34.00	40.25	34.40
5					
<u>Extra Occupational Skills</u>					
None	31	25.88	29.75	40.63	31.64
Some	4	18.50	31.50	48.50	38.25
Average	16	23.25	33.25	41.75	32.56
Much	4	26.50	28.50	33.00	29.00
Very Much	8	20.50	24.50	40.50	32.12

TABLE II (Continued)

PERSONAL DATA DISTRIBUTIONS WITH
P₂₅, P₅₀, P₇₅ AND M VALUES FOR VARIOUS CATEGORIES

PART (17): GUILFORD-MARTIN "Co" SCORES

PERSONAL DATA INTERVALS	f	P ₂₅	P ₅₀	P ₇₅	MEAN
<u>Age Groupings</u>					
17 - 21	5	46.75	56.00	87.25	61.80
21 - 25	17	41.50	56.50	69.50	58.52
25 - 29	20	51.50	70.83	75.50	63.45
29 - 33	11	55.25	71.00	76.75	66.54
33 - 37	4	55.50	65.50	67.50	67.00
<u>Educational Experience</u>					
No High School					
High School Only	11	52.25	59.00	70.63	62.59
Some College	27	49.50	67.50	78.50	64.81
Bachelor's Degree	16	54.53	67.00	80.25	60.40
Graduate Work	5	49.75	59.00	73.25	49.20
<u>Radio Experience</u>					
0 - 1 years	5	46.75	48.00	56.25	58.27
1 - 2 years	11	50.50	56.50	77.50	63.71
2 - 3 years	7	42.50	54.50	80.50	62.14
3 - 4 years	7	41.00	49.50	72.00	65.00
4 - 5 years	5	32.00	32.50	87.50	69.00
5 - 6 years	5	58.00	70.75	71.38	66.50
6 - 7 years	4	46.50	71.50	75.50	71.66
7 - 8 years	6	72.50	76.00	78.25	63.69
<u>Radio Stations Worked</u>					
1	17	46.75	55.00	70.38	63.61
2	13	54.63	60.00	80.25	63.60
3	20	46.25	67.00	77.75	73.80
4	5	67.75	71.00	86.88	73.66
5					
<u>Extra Occupational Skills</u>					
None	31	52.88	60.00	74.75	61.83
Some	4	28.50	35.50	77.50	57.50
Average	16	51.25	63.00	76.75	64.12
Much	4	50.50	73.50	89.50	76.50
Very Much	8	32.50	65.50	68.50	60.37

TABLE II (Continued)

PERSONAL DATA DISTRIBUTIONS WITH
P₂₅, P₅₀, P₇₅ AND M VALUES FOR VARIOUS CATEGORIES

PART (18): COOP PART I SCORES

PERSONAL DATA INTERVALS	f	P ₂₅	P ₅₀	P ₇₅	MEAN
<u>Age Groupings</u>					
17 - 21	7	20.11	22.66	26.58	23.80
21 - 25	19	21.33	26.80	33.33	26.14
25 - 29	21	25.33	30.80	38.75	31.60
29 - 33	11	29.41	35.91	42.58	35.87
33 - 37	5	23.91	30.66	34.75	28.40
37 - 41	4	.76	12.16	40.16	23.75
<u>Educational Experience</u>					
No High School	5	.16	4.16	10.80	10.40
High School Only	13	22.58	26.66	34.79	30.84
Some College	29	25.41	31.91	39.08	38.11
Bachelor's Degree	16	24.40	33.33	36.12	29.95
Graduate Work	5	20.04	27.33	32.08	27.73
<u>Radio Experience</u>					
0 - 1 years	5	15.25	26.00	29.41	16.80
1 - 2 years	11	17.50	21.50	26.80	24.06
2 - 3 years	8	20.40	23.91	38.75	28.50
3 - 4 years	9	25.50	33.50	40.16	30.33
4 - 5 years	6	22.66	28.16	32.00	26.66
5 - 6 years	6	25.25	25.50	36.00	29.05
6 - 7 years	5	28.25	32.00	38.75	34.40
7 - 8 years	6	29.25	30.66	32.08	30.66
<u>Radio Stations Worked</u>					
1	18	19.88	22.83	31.42	26.54
2	13	23.91	29.25	34.75	28.61
3	24	23.96	32.08	45.25	32.85
4	5	29.25	35.91	36.12	33.66
5	4	4.16	25.50	29.50	25.66
<u>Extra Occupational Skills</u>					
None	34	25.33	30.83	38.58	30.80
Some	4	12.16	24.00	24.16	23.33
Average	19	22.58	26.66	42.55	28.07
Much	5	21.25	30.66	32.08	28.00
Very Much	8	20.00	30.83	36.16	28.75

TABLE II (Continued)

PERSONAL DATA DISTRIBUTIONS WITH
P₂₅, P₅₀, P₇₅ AND M VALUES FOR VARIOUS CATEGORIES

PART (19): COOP PART II SCORES

PERSONAL DATA INTERVALS	f	P ₂₅	P ₅₀	P ₇₅	MEAN
<u>Age Groupings</u>					
17 - 21	7	12.79	15.33	23.25	18.33
21 - 25	19	14.00	17.94	20.58	16.72
25 - 29	21	12.66	18.00	21.92	17.30
29 - 33	11	16.75	19.25	24.58	19.87
33 - 37	5	14.91	20.66	22.08	17.06
37 - 41	4	4.83	11.50	23.33	16.00
<u>Educational Experience</u>					
No High School	5	3.50	4.83	10.16	11.90
High School Only	13	13.91	18.66	23.29	19.23
Some College	29	16.56	19.33	23.18	18.54
Bachelor's Degree	16	14.91	18.11	20.75	17.72
Graduate Work	5	9.91	11.33	14.08	12.13
<u>Radio Experience</u>					
0 - 1 years	5	8.58	14.00	19.41	14.00
1 - 2 years	11	11.50	15.50	19.33	16.87
2 - 3 years	8	10.41	12.75	14.08	13.58
3 - 4 years	9	6.16	20.66	22.16	16.96
4 - 5 years	6	12.66	16.83	20.66	14.44
5 - 6 years	6	14.00	18.16	24.66	18.55
6 - 7 years	5	17.91	19.25	19.46	19.06
7 - 8 years	6	20.58	23.33	25.96	20.66
<u>Radio Stations Worked</u>					
1	18	12.58	17.94	19.41	16.75
2	13	9.91	14.00	20.75	14.76
3	24	16.61	19.41	22.08	18.71
4	5	15.25	16.66	23.29	18.40
5	4	3.50	23.50	26.00	19.66
<u>Extra Occupational Skills</u>					
None	34	13.91	18.16	22.12	22.62
Some	4	12.83	18.00	18.16	23.33
Average	19	13.75	19.33	23.21	17.70
Much	5	16.54	16.75	23.42	18.53
Very Much	8	10.16	12.83	18.16	16.32

TABLE II (Continued)

PERSONAL DATA DISTRIBUTIONS WITH
P₂₅, P₅₀, P₇₅ AND M VALUES FOR VARIOUS CATEGORIES

PART (20): COOP PART III SCORES

PERSONAL DATA INTERVALS	f	P ₂₅	P ₅₀	P ₇₅	MEAN
<u>Age Groupings</u>					
17 - 21	7	4.75	14.00	16.71	11.90
21 - 25	19	12.66	15.33	19.22	14.95
25 - 29	21	12.33	16.66	19.25	15.16
29 - 33	11	12.75	16.66	19.38	15.96
33 - 37	5	16.58	17.98	18.13	18.33
37 - 41	4	4.83	8.83	22.00	14.33
<u>Educational Experience</u>					
No High School	5	.83	7.33	7.83	8.20
High School Only	13	12.58	15.22	14.75	15.33
Some College	29	12.79	17.86	19.44	16.57
Bachelor's Degree	16	13.92	16.63	19.29	14.39
Graduate Work	5	15.25	16.66	19.08	13.88
<u>Radio Experience</u>					
0 - 1 years	5	5.92	7.33	16.75	11.86
1 - 2 years	11	7.50	12.50	16.83	12.90
2 - 3 years	8	15.19	15.44	17.92	15.33
3 - 4 years	9	6.16	16.66	19.33	14.33
4 - 5 years	6	14.00	15.33	14.66	14.44
5 - 6 years	6	14.00	16.83	20.66	15.27
6 - 7 years	5	16.58	17.92	18.13	15.66
7 - 8 years	6	12.58	14.00	16.75	15.11
<u>Radio Stations Worked</u>					
1	18	8.66	14.16	16.66	13.44
2	13	15.21	16.63	18.08	15.16
3	24	12.75	16.66	19.31	14.50
4	5	19.21	19.42	23.29	20.40
5	4	.83	12.83	18.16	17.33
<u>Extra Occupational Skills</u>					
None	34	10.00	16.66	19.42	19.50
Some	4	6.16	12.83	14.16	14.00
Average	19	8.75	16.54	19.19	18.25
Much	5	15.25	16.66	19.42	18.25
Very Much	8	15.33	18.00	23.28	23.00

TABLE II (Continued)

PERSONAL DATA DISTRIBUTIONS WITH
P₂₅, P₅₀, P₇₅ AND M VALUES FOR VARIOUS CATEGORIES

PART (21): COOP PART IV SCORES

PERSONAL DATA INTERVALS	f	P ₂₅	P ₅₀	P ₇₅	MEAN
<u>Age Groupings</u>					
17 - 21	7	38.75	46.66	69.25	54.05
21 - 25	19	42.66	61.50	73.25	61.72
25 - 29	21	46.22	69.50	74.66	64.43
29 - 33	11	58.08	69.33	82.25	72.70
33 - 37	5	57.25	69.00	73.42	64.26
37 - 41	4	12.16	28.16	85.50	54.33
<u>Educational Experience</u>					
No High School	5	6.83	12.16	28.16	30.60
High School Only	13	57.21	64.00	71.75	65.56
Some College	29	57.42	70.00	82.25	67.42
Bachelor's Degree	16	55.88	69.00	82.75	62.58
Graduate Work	5	43.92	45.33	72.08	56.53
<u>Radio Experience</u>					
0 - 1 years	5	23.58	44.00	70.08	42.66
1 - 2 years	11	42.66	46.83	62.83	53.84
2 - 3 years	8	43.50	46.66	71.75	57.45
3 - 4 years	9	37.50	69.50	80.17	62.11
4 - 5 years	6	57.33	61.50	71.92	57.83
5 - 6 years	6	58.00	69.33	77.33	62.93
6 - 7 years	5	58.92	64.00	74.75	70.92
7 - 8 years	6	58.58	68.00	72.08	66.44
<u>Radio Stations Worked</u>					
1	18	43.66	48.16	70.00	44.27
2	13	43.54	65.25	73.29	58.51
3	24	57.25	69.33	85.31	67.82
4	5	63.92	71.92	72.13	72.73
5	4	6.83	68.17	69.50	58.33
<u>Extra Occupational Skills</u>					
None	34	48.00	68.17	77.33	63.52
Some	4	42.66	42.83	56.17	53.00
Average	19	42.75	62.66	79.98	61.84
Much	5	57.25	62.66	72.08	64.26
Very Much	8	45.50	69.17	72.17	61.20

TABLE II (Continued)

PERSONAL DATA DISTRIBUTIONS WITH
P₂₅, P₅₀, P₇₅ AND M VALUES FOR VARIOUS CATEGORIES

PART (22): KWALWASSER SCORES

PERSONAL DATA INTERVALS	f	P ₂₅	P ₅₀	P ₇₅	MEAN
<u>Age Groupings</u>					
17 - 21	5	16.75	25.00	84.25	42.80
21 - 25	17	40.50	61.50	79.50	59.23
25 - 29	22	11.00	76.50	100.00	70.54
29 - 33	11	-42.75	57.00	113.75	33.54
33 - 37	4	24.50	43.50	83.50	66.25
<u>Educational Experience</u>					
No High School					
High School Only	12	-52.50	- 6.50	76.50	10.33
Some College	28	24.50	57.50	86.50	59.66
Bachelor's Degree	18	43.00	79.50	112.00	67.11
Graduate Work	5	14.75	114.00	131.25	63.20
<u>Radio Experience</u>					
0 - 1 years	5	-76.25	-24.00	-13.75	-16.50
1 - 2 years	11	17.50	44.50	76.50	43.77
2 - 3 years	7	15.50	56.50	84.50	69.00
3 - 4 years	8	40.25	79.00	111.75	57.37
4 - 5 years	6	63.75	77.00	99.25	83.66
5 - 6 years	5	-49.25	- 9.00	108.25	78.75
6 - 7 years	4	-68.50	11.50	72.50	25.00
7 - 8 years	6	38.75	131.00	160.25	78.50
<u>Radio Stations Worked</u>					
1	18	-49.00	15.50	88.00	17.55
2	14	-14.00	54.50	79.25	36.50
3	20	39.25	85.00	130.75	79.55
4	5	24.75	67.00	77.25	47.80
5					
<u>Extra Occupational Skills</u>					
None	33	-49.25	24.00	79.25	20.54
Some	4	-46.50	69.50	84.50	55.00
Average	16	53.25	72.00	98.75	71.06
Much	4	131.50	134.50	146.50	139.05
Very Much	8	36.50	64.50	84.50	67.25

TABLE II (Continued)

PERSONAL DATA DISTRIBUTIONS WITH
P₂₅, P₅₀, P₇₅ AND M VALUES FOR VARIOUS CATEGORIES

PART (23): STRONG PRINTER SCORES

PERSONAL DATA INTERVALS	f	P ₂₅	P ₅₀	P ₇₅	MEAN
<u>Age Groupings</u>					
17 - 21	5	36.00	37.00	37.42	39.20
21 - 25	15	31.50	37.00	45.50	38.00
25 - 29	22	28.00	31.17	36.00	34.09
29 - 33	11	33.25	40.00	45.75	30.09
33 - 37					
<u>Educational Experience</u>					
No High School					
High School Only	12	31.00	34.50	46.50	36.91
Some College	26	31.17	35.00	44.50	37.69
Bachelor's Degree	18	30.00	36.50	39.25	34.66
Graduate Work	5	29.50	30.50	37.50	36.00
<u>Radio Experience</u>					
0 - 1 years	4	32.50	35.50	44.50	42.25
1 - 2 years	11	33.50	37.50	46.00	42.33
2 - 3 years	6	31.25	36.75	40.75	36.00
3 - 4 years	8	30.25	31.25	39.75	35.00
4 - 5 years	5	26.75	36.00	39.25	34.80
5 - 6 years	5	26.75	29.00	31.25	29.40
6 - 7 years	4	28.50	31.50	49.50	33.00
7 - 8 years	6	33.75	41.00	42.25	36.60
<u>Radio Stations Worked</u>					
1	12	33.13	37.25	46.38	40.05
2	13	30.92	34.75	36.88	34.61
3	19	29.88	37.00	40.63	37.10
4	5	26.75	34.00	37.25	34.60
5					
<u>Extra Occupational Skills</u>					
None	31	31.25	34.33	41.75	37.00
Some	4	37.00	37.50	40.50	38.75
Average	15	30.69	33.00	44.75	36.60
Much	4	25.50	30.50	39.50	35.25
Very Much	8	27.50	37.50	41.50	37.25

TABLE II (Continued)

PERSONAL DATA DISTRIBUTIONS WITH
P₂₅, P₅₀, P₇₅ AND M VALUES FOR VARIOUS CATEGORIES

PART (24): STRONG PERSONNEL DIRECTOR SCORES

PERSONAL DATA INTERVALS	f	P ₂₅	P ₅₀	P ₇₅	MEAN
<u>Age Groupings</u>					
17 - 21	5	33.75	36.00	37.25	35.20
21 - 25	15	28.50	33.50	36.50	34.00
25 - 29	22	32.75	38.17	41.75	36.27
29 - 33	11	36.25	42.00	46.13	41.36
33 - 37					
<u>Educational Experience</u>					
No High School					
High School Only	12	26.50	33.50	40.50	33.16
Some College	26	33.50	37.50	45.50	38.34
Bachelor's Degree	18	32.00	37.50	42.00	36.22
Graduate Work	5	34.00	34.50	41.50	38.25
<u>Radio Experience</u>					
0 - 1 years	4	34.00	34.50	39.50	37.50
1 - 2 years	11	31.50	35.50	41.50	37.77
2 - 3 years	6	36.25	37.25	41.75	39.00
3 - 4 years	8	35.25	41.00	45.75	39.62
4 - 5 years	5	25.75	32.00	36.25	30.80
5 - 6 years	5	25.75	30.00	34.25	30.20
6 - 7 years	4	29.50	42.50	48.00	33.40
7 - 8 years	6	33.75	36.00	39.25	36.16
<u>Radio Stations Worked</u>					
1	12	30.75	37.00	41.88	34.70
2	13	33.75	36.00	40.88	36.92
3	19	29.25	36.00	41.75	35.73
4	5	35.63	36.25	43.25	40.00
5					
<u>Extra Occupational Skills</u>					
None	31	32.25	37.00	42.75	35.60
Some	4	31.50	37.50	39.50	39.50
Average	15	35.25	40.75	42.75	37.64
Much	4	32.50	34.50	38.50	36.75
Very Much	8	26.50	33.50	37.50	35.12

TABLE II (Continued)

PERSONAL DATA DISTRIBUTIONS WITH
P₂₅, P₅₀, P₇₅ AND M VALUES FOR VARIOUS CATEGORIES

PART (25): STRONG PUBLIC ADMINISTRATOR SCORES

PERSONAL DATA INTERVALS	f	P ₂₅	P ₅₀	P ₇₅	MEAN
<u>Age Groupings</u>					
17 - 21	5	35.63	36.25	38.25	37.00
21 - 25	15	28.50	36.50	39.17	36.43
25 - 29	22	31.25	34.50	41.25	41.09
29 - 33	11	37.25	40.25	44.13	35.66
33 - 37					
<u>Educational Experience</u>					
No High School					
High School Only	12	33.00	36.50	39.17	36.75
Some College	24	34.00	38.50	43.50	38.40
Bachelor's Degree	18	30.75	38.17	39.75	36.44
Graduate Work	5	28.50	40.00	40.50	37.25
<u>Radio Experience</u>					
0 - 1 years	4	38.00	38.50	41.50	37.20
1 - 2 years	11	34.00	36.50	39.50	38.00
2 - 3 years	6	36.25	39.25	43.75	40.66
3 - 4 years	8	35.88	38.00	40.13	37.50
4 - 5 years	5	33.63	34.25	38.25	35.40
5 - 6 years	5	30.63	31.25	33.25	33.20
6 - 7 years	4	29.50	37.50	46.00	31.60
7 - 8 years	6	27.75	36.00	44.25	36.16
<u>Radio Stations Worked</u>					
1	12	33.13	38.25	42.25	37.41
2	13	35.63	38.67	40.25	37.38
3	19	29.38	36.00	43.75	36.94
4	5	33.75	36.00	39.25	36.80
5					
<u>Extra Occupational Skills</u>					
None	31	32.88	37.67	41.63	37.06
Some	4	28.50	36.50	40.50	37.25
Average	15	31.25	38.75	42.75	37.64
Much	4	28.50	31.50	38.50	34.50
Very Much	8	33.83	34.50	39.50	37.75

TABLE II (Continued)

PERSONAL DATA DISTRIBUTIONS WITH
P₂₅, P₅₀, P₇₅ AND M VALUES FOR VARIOUS CATEGORIES

PART (26): STRONG SOCIAL SCIENCE HIGH SCHOOL TEACHERS' SCORES

PERSONAL DATA INTERVALS	f	P ₂₅	P ₅₀	P ₇₅	MEAN
<u>Age Groupings</u>					
17 - 21	5	33.15	34.00	35.25	35.20
21 - 25	15	24.50	32.50	40.50	36.00
25 - 29	22	21.00	35.50	41.00	33.72
29 - 33	11	36.25	40.75	48.75	41.00
33 - 37	4	26.50	35.50	36.00	33.50
<u>Educational Experience</u>					
No High School					
High School Only	12	19.50	34.00	40.50	34.58
Some College	26	31.50	36.17	40.50	35.61
Bachelor's Degree	18	31.00	35.50	46.00	38.16
Graduate Work	5	33.70	36.00	39.25	37.00
<u>Radio Experience</u>					
0 - 1 years	5	35.75	39.00	40.25	36.40
1 - 2 years	11	33.50	38.50	41.50	40.33
2 - 3 years	7	26.50	36.00	50.50	36.14
3 - 4 years	8	33.25	35.00	47.75	36.14
4 - 5 years	5	22.75	24.00	25.25	24.80
5 - 6 years	5	20.75	28.00	34.25	28.60
6 - 7 years	4	36.50	39.50	49.50	35.20
7 - 8 years	6	24.75	41.00	49.25	37.00
<u>Radio Stations Worked</u>					
1	18	28.00	36.50	40.25	34.94
2	14	33.00	36.17	48.00	39.28
3	19	24.25	35.00	49.75	36.15
4	5	33.63	34.25	37.25	36.20
5					
<u>Extra Occupational Skills</u>					
None	33	32.75	36.13	40.42	35.33
Some	4	31.50	35.50	46.50	40.24
Average	15	32.25	36.00	49.75	38.73
Much	4	21.50	25.50	31.50	29.55
Very Much	8	24.50	26.50	44.50	44.00

TABLE II (Continued)

PERSONAL DATA DISTRIBUTIONS WITH
P₂₅, P₅₀, P₇₅ AND M VALUES FOR VARIOUS CATEGORIES

PART (27): STRONG SOCIAL WORKER SCORES

PERSONAL DATA INTERVALS	f	P ₂₅	P ₅₀	P ₇₅	MEAN
<u>Age Groupings</u>					
17 - 21	5	34.75	36.00	38.25	35.00
21 - 25	15	28.50	34.50	40.00	36.31
25 - 29	22	30.20	34.50	42.00	35.90
29 - 33	11	36.25	42.00	45.63	41.09
33 - 37	4	30.50	35.50	36.50	35.75
<u>Educational Experience</u>					
No High School					
High School Only	12	28.50	33.50	40.50	36.25
Some College	26	33.83	38.50	42.50	37.42
Bachelor's Degree	18	31.00	36.50	45.00	38.22
Graduate Work	5	31.75	35.75	36.38	35.00
<u>Radio Experience</u>					
0 - 1 years	5	38.75	40.00	41.25	39.80
1 - 2 years	11	34.50	39.00	40.17	38.55
2 - 3 years	7	33.50	36.17	40.50	40.71
3 - 4 years	8	33.88	37.75	44.75	38.37
4 - 5 years	5	23.75	30.00	33.25	30.20
5 - 6 years	5	30.13	31.00	32.25	30.80
6 - 7 years	4	38.00	38.50	43.50	33.60
7 - 8 years	6	29.75	45.75	46.38	37.66
<u>Radio Stations Worked</u>					
1	18	30.00	36.00	39.88	34.83
2	14	34.25	38.00	41.00	39.50
3	19	29.88	38.00	45.63	37.31
4	5	34.75	36.00	42.25	37.80
5					
<u>Extra Occupational Skills</u>					
None	33	31.75	36.13	40.42	35.87
Some	4	34.50	36.50	45.50	40.25
Average	15	34.25	38.13	45.75	40.00
Much	4	30.50	31.50	36.40	34.75
Very Much	8	24.50	30.50	40.50	36.00

TABLE II (Continued)

PERSONAL DATA DISTRIBUTIONS WITH
P₂₅, P₅₀, P₇₅ AND M VALUES FOR VARIOUS CATEGORIES

PART (28): STRONG MUSICIAN SCORES

PERSONAL DATA INTERVALS	f	P ₂₅	P ₅₀	P ₇₅	MEAN
<u>Age Groupings</u>					
17 - 21	5	24.75	34.00	50.25	39.00
21 - 25	15	35.50	41.50	49.50	42.93
25 - 29	22	33.75	40.50	47.20	44.09
29 - 33	11	33.25	39.00	42.75	39.27
33 - 37	4	31.50	34.50	39.50	37.50
<u>Educational Experience</u>					
No High School					
High School Only	12	36.50	41.50	51.50	43.25
Some College	26	34.00	39.83	46.50	40.38
Bachelor's Degree	18	30.75	39.50	48.00	39.61
Graduate Work	4	38.75	47.00	47.88	43.80
<u>Radio Experience</u>					
0 - 1 years	4	35.75	39.00	42.25	42.00
1 - 2 years	11	34.50	40.50	48.50	40.55
2 - 3 years	7	35.50	39.50	48.50	41.28
3 - 4 years	8	31.25	41.00	42.75	40.12
4 - 5 years	5	23.13	36.00	46.25	38.60
5 - 6 years	5	32.75	39.00	41.25	39.60
6 - 7 years	4	39.50	42.50	47.00	35.20
7 - 8 years	6	39.75	47.00	49.25	46.33
<u>Radio Stations Worked</u>					
1	18	35.75	41.50	48.00	41.83
2	14	35.00	40.00	45.00	40.64
3	19	34.25	40.25	46.92	40.84
4	5	27.80	36.00	47.25	38.20
5					
<u>Extra Occupational Skills</u>					
None	31	34.06	38.67	42.25	39.33
Some	4	30.30	40.50	43.50	42.00
Average	15	35.25	42.25	49.13	41.53
Much	4	41.50	47.50	48.50	50.00
Very Much	8	23.50	46.50	48.50	36.00

TABLE II (Continued)

PERSONAL DATA DISTRIBUTIONS WITH
P₂₅, P₅₀, P₇₅ AND M VALUES FOR VARIOUS CATEGORIES

PART (29): STRONG MORTICIAN SCORES

PERSONAL DATA INTERVALS	f	P ₂₅	P ₅₀	P ₇₅	MEAN
<u>Age Groupings</u>					
17 - 21	5	23.75	35.00	39.25	31.80
21 - 25	15	25.17	35.83	39.50	33.81
25 - 29	22	31.00	38.00	41.25	36.86
29 - 33	11	25.25	36.75	39.75	33.00
33 - 37					
<u>Educational Experience</u>					
No High School					
High School Only	12	34.50	40.50	43.00	40.83
Some College	26	30.50	37.50	39.25	34.61
Bachelor's Degree	18	27.00	31.50	38.25	32.83
Graduate Work	5	25.50	28.50	39.50	33.75
<u>Radio Experience</u>					
0 - 1 years	4	28.50	35.50	38.50	41.50
1 - 2 years	11	31.50	36.50	42.50	37.66
2 - 3 years	6	24.88	39.00	42.13	33.00
3 - 4 years	8	24.25	36.25	37.75	36.00
4 - 5 years	5	23.13	31.00	39.25	29.80
5 - 6 years	5	28.75	34.00	36.25	33.60
6 - 7 years	4	34.50	35.50	38.50	29.20
7 - 8 years	6	26.75	28.00	38.25	31.66
<u>Radio Stations Worked</u>					
1	12	31.75	35.67	41.25	38.29
2	13	35.75	38.33	42.25	37.30
3	19	35.35	30.00	38.13	31.84
4	5	39.13	40.00	42.25	40.60
5					
<u>Extra Occupational Skills</u>					
None	31	31.38	37.63	41.75	37.41
Some	4	27.50	36.50	37.50	35.75
Average	15	25.38	36.00	38.63	33.26
Much	4	23.50	28.50	29.50	30.25
Very Much	8	25.50	39.50	42.50	34.75

TABLE II (Continued)

PERSONAL DATA DISTRIBUTIONS WITH
P₂₅, P₅₀, P₇₅ AND M VALUES FOR VARIOUS CATEGORIES

PART (30): STRONG SALES MANAGER SCORES

PERSONAL DATA INTERVALS	f	P ₂₅	P ₅₀	P ₇₅	MEAN
<u>Age Groupings</u>					
17 - 21	5	31.75	33.00	45.25	35.80
21 - 25	15	32.50	36.50	42.50	37.31
25 - 29	22	35.00	38.25	41.25	37.72
29 - 33	11	32.88	35.00	40.75	35.54
33 - 37					
<u>Educational Experience</u>					
No High School					
High School Only	12	31.83	32.83	34.50	33.58
Some College	26	32.50	38.17	42.50	39.62
Bachelor's Degree	18	33.25	37.50	41.25	37.77
Graduate Work	5	35.50	37.50	38.50	37.75
<u>Radio Experience</u>					
0 - 1 years	4	22.50	29.50	35.50	30.00
1 - 2 years	11	32.83	36.50	41.50	37.01
2 - 3 years	6	36.88	40.00	45.75	38.84
3 - 4 years	8	34.25	40.00	45.75	40.75
4 - 5 years	5	28.75	37.00	42.25	36.40
5 - 6 years	5	32.75	35.00	37.25	33.60
6 - 7 years	4	33.50	34.50	41.00	30.00
7 - 8 years	6	32.75	38.00	48.25	36.16
<u>Radio Stations Worked</u>					
1	12	31.75	36.00	38.38	34.23
2	13	34.75	41.00	44.25	39.90
3	19	32.25	37.25	40.13	35.68
4	5	37.75	42.00	45.25	41.80
5					
<u>Extra Occupational Skills</u>					
None	31	32.19	35.75	40.81	37.41
Some	4	33.00	33.50	38.50	37.50
Average	15	33.25	38.75	43.75	37.66
Much	4	24.50	37.50	38.50	34.75
Very Much	8	29.50	37.00	42.00	37.00

TABLE II (Continued)

PERSONAL DATA DISTRIBUTIONS WITH
P₂₅, P₅₀, P₇₅ AND M VALUES FOR VARIOUS CATEGORIES

PART (31): STRONG LIFE INSURANCE SALESMAN SCORES

PERSONAL DATA INTERVALS	f	P ₂₅	P ₅₀	P ₇₅	MEAN
<u>Age Groupings</u>					
17 - 21	5	34.75	36.00	38.25	35.40
21 - 25	15	32.50	40.00	44.50	39.12
25 - 29	22	32.88	37.50	46.75	39.31
29 - 33	11	27.25	38.00	44.75	37.81
33 - 37	4	23.50	34.50	35.50	34.25
<u>Educational Experience</u>					
No High School					
High School Only	12	32.50	34.83	37.50	37.33
Some College	26	31.50	37.50	46.00	37.73
Bachelor's Degree	18	38.00	41.50	46.25	40.77
Graduate Work	5	33.63	34.25	38.25	35.40
<u>Radio Experience</u>					
0 - 1 years	5	27.63	28.25	42.25	35.00
1 - 2 years	11	34.50	36.50	41.50	39.14
2 - 3 years	7	34.50	38.50	42.50	48.66
3 - 4 years	8	39.25	47.00	48.13	35.40
4 - 5 years	5	29.75	33.00	37.25	44.80
5 - 6 years	5	35.13	38.00	43.25	39.60
6 - 7 years	4	33.50	35.50	47.50	33.00
7 - 8 years	6	26.25	31.00	33.25	34.00
<u>Radio Stations Worked</u>					
1	18	28.33	34.50	42.00	35.55
2	14	34.75	43.50	48.00	40.57
3	19	31.25	38.00	43.75	37.47
4	5	35.75	36.75	37.38	39.00
5					
<u>Extra Occupational Skills</u>					
None	33	31.75	38.00	44.88	37.87
Some	4	27.50	36.50	38.50	35.00
Average	15	35.38	40.00	48.58	40.73
Much	4	33.00	33.50	34.50	34.75
Very Much	8	34.50	50.00	51.50	38.75

TABLE II (Continued)

PERSONAL DATA DISTRIBUTIONS WITH
P₂₅, P₅₀, P₇₅ AND M VALUES FOR VARIOUS CATEGORIES

PART (32): STRONG REAL ESTATE SALESMAN SCORES

PERSONAL DATA INTERVALS	f	P ₂₅	P ₅₀	P ₇₅	MEAN
<u>Age Groupings</u>					
17 - 21	5	37.63	38.25	44.25	39.40
21 - 25	15	37.50	40.50	45.50	42.37
25 - 29	22	38.75	40.83	44.75	41.36
29 - 33	11	32.25	36.33	46.63	38.45
33 - 37					
<u>Educational Experience</u>					
No High School					
High School Only	12	38.00	39.50	40.50	41.25
Some College	26	35.83	41.17	45.50	40.57
Bachelor's Degree	18	37.67	44.00	46.25	41.83
Graduate Work	5	36.50	38.50	40.50	39.00
<u>Radio Experience</u>					
0 - 1 years	4	31.50	33.50	41.50	39.00
1 - 2 years	11	37.50	40.50	44.50	40.55
2 - 3 years	6	38.25	42.00	48.75	42.66
3 - 4 years	8	36.25	43.75	44.75	42.75
4 - 5 years	5	37.75	39.00	43.25	41.80
5 - 6 years	5	40.58	41.00	41.42	42.75
6 - 7 years	4	36.00	36.50	40.50	31.40
7 - 8 years	6	31.13	38.00	45.25	38.66
<u>Radio Stations Worked</u>					
1	12	35.75	39.67	41.38	39.35
2	13	40.75	44.00	49.25	43.84
3	19	35.75	38.13	45.25	20.36
4	5	40.13	43.00	44.25	43.00
5					
<u>Extra Occupational Skills</u>					
None	31	37.25	40.80	45.25	41.12
Some	4	31.50	36.50	40.50	38.50
Average	15	36.38	42.00	45.75	41.60
Much	4	36.50	38.00	38.50	38.25
Very Much	8	34.50	40.00	43.50	41.02

TABLE II (Continued)

PERSONAL DATA DISTRIBUTIONS WITH
P₂₅, P₅₀, P₇₅ AND M VALUES FOR VARIOUS CATEGORIES

PART (33): STRONG ADVERTISER SCORES

PERSONAL DATA INTERVALS	f	P ₂₅	P ₅₀	P ₇₅	MEAN
<u>Age Groupings</u>					
17 - 21	5	31.75	34.00	43.25	36.60
21 - 25	15	40.50	43.50	52.50	45.00
25 - 29	22	39.25	44.83	50.00	47.04
29 - 33	11	33.25	36.25	49.75	40.50
33 - 37					
<u>Educational Experience</u>					
No High School					
High School Only	12	30.50	39.50	44.50	41.08
Some College	26	35.50	43.17	52.50	44.15
Bachelor's Degree	18	40.00	45.50	50.25	44.72
Graduate Work	5	39.50	45.50	50.00	45.75
<u>Radio Experience</u>					
0 - 1 years	4	29.50	32.50	38.50	36.75
1 - 2 years	11	39.50	41.50	43.50	39.00
2 - 3 years	6	35.25	54.00	56.13	48.66
3 - 4 years	8	36.25	43.25	49.75	44.50
4 - 5 years	5	38.75	49.00	50.25	44.80
5 - 6 years	5	43.75	48.75	49.38	45.60
6 - 7 years	4	31.50	43.50	53.50	45.25
7 - 8 years	6	34.75	40.00	45.25	43.66
<u>Radio Stations Worked</u>					
1	12	34.75	39.75	49.25	41.05
2	13	42.81	45.00	53.25	46.53
3	19	35.25	45.00	49.92	43.57
4	5	41.63	42.25	50.25	44.40
5					
<u>Extra Occupational Skills</u>					
None	31	36.25	42.75	49.56	42.58
Some	4	33.50	34.50	36.50	38.75
Average	15	39.88	43.33	53.63	44.60
Much	4	39.50	45.50	49.00	46.00
Very Much	8	34.50	50.00	51.50	47.12

TABLE II (Continued)

PERSONAL DATA DISTRIBUTIONS WITH
P₂₅, P₅₀, P₇₅ AND M VALUES FOR VARIOUS CATEGORIES

PART (34): STRONG LAWYER SCORES

PERSONAL DATA INTERVALS	f	P ₂₅	P ₅₀	P ₇₅	MEAN
<u>Age Groupings</u>					
17 - 21	5	30.75	33.00	36.25	34.00
21 - 25	15	31.50	34.00	39.50	36.87
25 - 29	22	30.75	36.50	42.25	36.90
29 - 33	11	27.38	34.00	42.63	34.63
33 - 37	4	21.50	36.50	39.50	35.75
<u>Educational Experience</u>					
No High School					
High School Only	12	27.50	32.50	39.50	34.16
Some College	26	31.17	34.50	40.17	36.38
Bachelor's Degree	18	32.75	37.50	43.33	37.55
Graduate Work	5	28.75	38.00	45.25	37.40
<u>Radio Experience</u>					
0 - 1 years	5	27.63	28.25	37.25	30.20
1 - 2 years	11	30.50	31.50	34.50	33.44
2 - 3 years	7	33.50	38.50	45.50	40.57
3 - 4 years	8	30.25	35.00	38.75	44.75
4 - 5 years	5	37.75	37.00	40.25	38.80
5 - 6 years	5	39.75	43.00	45.25	40.40
6 - 7 years	4	28.50	29.50	42.50	37.00
7 - 8 years	6	28.75	31.00	37.25	33.00
<u>Radio Stations Worked</u>					
1	18	28.00	32.00	38.00	33.05
2	14	33.75	36.50	42.00	37.85
3	19	30.25	38.75	42.63	36.78
4	5	30.75	33.00	40.25	34.60
5					
<u>Extra Occupational Skills</u>					
None	33	30.63	36.75	42.08	36.09
Some	4	23.50	30.50	32.50	29.50
Average	15	30.88	36.00	41.75	36.86
Much	4	28.50	29.50	37.50	34.25
Very Much	8	32.83	33.50	40.50	36.37

highest in the upper percentiles. Men with the least and the most amount of experience seemed to score the poorest. Men with experience in four stations had the best grades, while those who had worked in five stations had the poorest scores. Those men with "some" extra skills, and those with "much" extra skills seemed to score highest, while those with the most extra skills scored the poorest.

Part (2): ACE-L Scores (Page 60) - One of the smallest groups, in age, the 33 years old to 37 years old scored highest in the lower and middle percentiles, but the 25 years old to 33 years old scored highest in the upper percentiles. The oldest men did the poorest work in the lower percentiles, but the youngest men did the poorest work in the upper percentiles. Thus, it would seem that age as a variable in this sub-test provided a jumbling of results. Therefore, the age factor with this sub-test might not have been a valuable criteria. Announcers with some college work scored the best in the lower and middle percentiles, but the men with college degrees scored highest in the upper percentiles. The men without a formal education scored the poorest throughout the percentile rankings. Here, too, there was enough variance in scores to confuse the issue relative to education and its effect on the scores in this sub-test. In the experience category, the men with the most experience did the best work in the lower and middle

percentiles, but the men with five to six years of experience scored highest in the upper percentiles. Once again, there seemed to be an unaccountable mixture of grades and category segments, adding further to the belief that this sub-test might have lacked value as a testing instrument. Men with experience in four stations scored the best in the lower and middle percentiles, while men with experience in two stations worked group scored highest in the upper percentiles. This category was not as confused as the others in this sub-test, but there was still some doubt existing. In the extra skills grouping, the "much" section seemed to score highest consistently. In final analysis, the great variety of significant segments in each grouping and the inconsistency of the groups might have indicated a negative value for this sub-test in the testing battery.

Part (3): ACE-Total Scores (Page 61) - The 29 years old to 33 years old age group seemed to score the highest throughout, while the oldest men scored the lowest throughout. In the lower and middle percentiles, the men with graduate work did the best, and the men with some college experience scored highest in the upper percentile. In spite of this variance, the men in the "some college work" category seemed most consistent in the high scores. It was in the experience category that the inconsistency of most of the test again appeared. The men with the most experience

scored the best in the lower and middle percentiles, but the men with five to six years of experience scored best in the upper percentiles. In the same way, the lowest scores jumped from section to section in each percentile ranking. Experience and its effect on the scores in this test might have seemed to be a questionable factor. The men with experience in four stations seemed to do the best throughout the test, although the men with experience in two stations did best in the upper percentiles. Men with "much" extra skills did seem to do the best throughout the test, even though the "average" extra skills men did the best in the upper percentile.

All in all, the ACE seemed to be useful in the study only to a limited degree, in that there was a tendency for the percentile rankings to become confused in relation to the various personal categories.

Part (4): Otis Scores (Page 62) - The men in the 21 years old to 24 years old age group scored the highest throughout this test, and the oldest men scored the lowest throughout the test. Educational experience showed that the men with college backgrounds did better than the men with only a high school education or less. The men with some college work seemed to score the highest with the greatest consistency. Men with seven to eight years of experience in radio scored the highest throughout the

percentiles. The low scores in each percentile did not seem to align with any one age grouping. Men with experience in four stations did the best. They scored consistently high while the low scores ranged between the men with experience in two stations and the men with experience in five stations. The men with "some" and "much" extra skills seemed to do the best on this test. In spite of some juggling for positions of excellence among some of the personal factors, this test seemed, possibly, to be a little more critical than the ACE and, therefore, a little more valuable.

Part (5): Guilford-Martin "S" Scores (Page 63) -

In this, as well as the next three segments of this testing instrument, the scores improved inversely, so that a low score was an indication of strong effort. There was no age grouping that consistently showed the best scoring, but the oldest men showed the poorest scoring throughout the percentiles. College graduates did the best work in all the rankings of this sub-test. The men with the least and the most experience in radio seemed to score the best, although the rankings in the experience groupings was rather erratic. The men with experience in four stations scored the best, as did the men with "much" allied experience. Therefore, it might have been construed that the test group portion with the strongest tendency towards social leadership and social activity were the men who were college graduates

of indeterminate age, who had either just started their announcing careers or who were veteran announcers, and who had worked in four stations and had acquired a considerable amount of experience in allied fields.

Part (6): Guilford-Martin "T" Scores (Page 64) -

The older men seemed to be the most significant in this portion of the Guilford-Martin, in that the 29-33 year old age group scored highest, while the 33-37 year old age group scored the lowest. Men who had completed a high school education had the best showing on this sub-test. However, those with college graduate work scored the poorest. The men with the most experience scored the best, while those in the middle range of experience seemed to do the poorest job. Again, the men with experience in four stations were those with the best scores, and the men with "some" extra skills scored the best. The men whose thought processes seemed to be the most aggressive and the most openly active were possibly indicated by this sub-test to be the men from 29 to 33 years of age, with no more than a high school education, a major amount of experience in four stations, and with above-average amount of allied skills.

Part (7): Guilford-Martin "D" Scores (Page 65) -

Except for the educational factor, this sub-test was exceedingly similar to the results of the "T" scores. The educational factor was, however, a complete reversal of the "T"

scores in that men with graduate work were consistently poor. Thus, the men whose moods were most consistently cheerful and friendly seemed to be the men from 29 years to 33 years of age, who had some graduate work in college, who were veteran announcers that had worked in four stations, and who had above-average amounts of extra skills.

Part (8): Guilford-Martin "C" Scores (Page 66) -

This sub-test and the one that followed seemed to have greater value when the scores were above the norm, but were not exceedingly high. Very high scores on this sub-test would have indicated abnormally slow changes of mood, almost to the point of lethargy, while abnormally rapid and erratic changes of mood would have been indicated by very low scores. Therefore, in the hopes of locating the men who showed the most wholesome variation of mood, the high, but not extremely high scores, were considered in evaluating this sub-test. Therefore, on this basis no specific age group seemed to score consistently well, although the men in the 21 years to 29 years old age group did fairly well throughout the percentile groupings. The men with some college work and the men with college degrees seemed to be the most significant throughout the rankings, while the men with experience in the four to five year bracket scored the best in the lower and middle percentiles. The men with experience in two stations seemed to do the best, and the men with

the most extra training scored the best in their grouping. This sub-test seemed to indicate that the men who might have the more stable emotions and the least chance of rapid fluctuation of emotions were those who were 21 to 29 years of age, with some or all of their college work completed, those who had worked from four to five years in two stations, and those who had a great deal of additional allied experience.

Part (9): Guilford-Martin "R" Scores (Page 67) -

This sub-test, as with the preceding sub-test, had to be considered on an evaluation of high, but not extremely high scores. In this sub-test and the remaining sub-tests in this entire instrument, the scores increased normally from low scores to high scores. While there was no single age group that was truly significant, the best scores, generally, were those in the 33 year old to 37 year old group. In education as well, no highly significant group could be seen, but the men with some graduate work seemed to be about the best. The same was true of the men with six to seven years of experience in four stations. The men with some extra skills were also better than the rest, but not significantly good. In this entire sub-test, the men seemed to score considerably above the national norms, and no individual personal category was within what might be deemed to be an acceptable range. Thus, it might be indicated that most of the men tended to be more carefree and impulsive

than the norm, regardless of their personal grouping, although the men with the greatest tendency toward emotional stability seemed to be the ones with some graduate work, 33 to 37 years of age, with experience in four stations over a seven to eight year period, and with some extra skills.

Part (10): Guilford-Martin "G" Scores (Page 68) - In this section of this instrument the men in the 21 to 25 year old age bracket seemed to score the best, while the men in the 33 to 37 year age group scored the lowest. The men who had completed their college work seemed to do the best, generally speaking. Although men with three to four years of experience did well, those with experience in one station did much better. The men with an average amount of extra training did as well as, if not better than, the remainder of the men. Thus, the tendency towards vigor and overt activity seemed to be in the men in their early twenties, who were college graduates with three to four years of experience in one station and with an average amount of additional, allied training.

Part (11): Guilford-Martin "A" Scores (Page 69) - This portion of the Guilford-Martin showed that the men in the 29 to 33 year old age bracket scored the highest, as did the men who had completed their college work. The best scores were also made by the men with one to two years of experience in three stations, and with "much" additional

outside experience. These were the men who tended, apparently, toward a more active role in social leadership.

Part (12): Guilford-Martin "M" Scores (Page 70) -

The tendency toward a healthy, masculine outlook seemed to be most indicative of the men in the 29 to 33 year old age group, who had a college degree. This group was also composed of those men with 4 to 5 years of experience in three stations. In the extra skills category, none of the groupings were especially significant.

Part (13): Guilford-Martin "I" Scores (Page 71) -

In this sub-test the best scores were made by the men in the 29 year old to 33 year old age group, by men with college and graduate work, by men with seven to eight years of experience, by men with experience in four stations, and by men with "much" extra skills. Thus, those announcers who showed the most confidence in their attitudes and behavior seemed to be the men in their late twenties and early thirties, who were college graduates with at least eight years of experience in four stations, and with a considerable amount of additional vocational experiences.

Part (14): Guilford-Martin "N" Scores (Page 72) -

The men who did the best in this part of the testing instrument were those who were 17 years old to 21 years old. The effect of the education factor was mixed and seemed to be inconclusive. The men with seven to eight years of

experience in four stations did the best, as did the men with "some" additional experience. Therefore, as far as the personality factor examined by this sub-test was concerned, the men who seemed the calmest and most unruffled were the youngest men. However, this fact coupled with the evidence that the best scores were made by men with at least eight years of experience in four stations made for some confusion in evaluating this particular sub-test. Also, the lack of significance in the educational factor seemed to add to the uncertainty of the value of this particular section.

Part (15): Guilford-Martin "O" Scores (Page 73) -

This sub-test showed that, again, the men in the 29 year old to 33 year old group scored the best, as did those with seven to eight years of experience in four stations. The educational factor and the additional experience factor were confused enough to consider them as being not significant. The men in the 29-33 year old age group with at least eight years of experience in four stations, and without regard to educational background, or additional experience factors, seemed to be the ones with the highest sense of objectivity about themselves and their environment.

Part (16): Guilford-Martin "Ag" Scores (Page 74) -

This particular sub-test showed that the age factor was somewhat confused, as was the educational factor, in that

a continuous series of high scores did not appear among any one of the sub-sections of either of these personal factors. Consistently high scores were noted in the experience category in the seven to eight year group. The same was true for the four stations group in the stations-worked category. The extra skills category was also lacking significance. Thus, only the most meager conclusions could be drawn from this sub-test as it related to each of the personal factors, and no important or significant results were able to be construed.

Part (17): Guilford-Martin "Co" Scores (Page 75) -
In this last sub-test of this instrument the age factor was again mixed up enough to result in insufficient evidence. The men with a college education seemed to score consistently high, as did the men with experience in four stations and those with "much" extra skills. The factor of years of experience showed no significant results. This sub-test, measuring the degree of cooperativeness, lacked enough stability and concreteness in the range of scores to have considered it also unuseable in the evaluation process.

Part (18): Coop Part I Scores (Page 76) - This was the first of the five tests of knowledge and the first sub-test in this particular testing instrument. The men in the 29 to 33 year old age group definitely had the best

scores, while the men with some college experience were consistently, if not completely, best. So too, the men with three to four years of experience were consistently best, as were the men with experience in three and four stations. The extra skills category was confused enough to make a specific choice somewhat difficult. Thus, it seemed that the announcers who had the strongest knowledge of events in the field of public affairs were those in their late twenties and early thirties, with some college experience, and who had worked for at least three to four years in the industry in at least three or four stations.

Part (19): Coop Part II Scores (Page 77) - In this sub-test, the best scores were made by the men in the 29 year old to 33 year old age groupings. Similarly, the men with some college work also scored very well throughout the percentiles. The men with seven to eight years of experience did the best with this sub-test, while the men with experience in five stations and the men with an average amount of extra skills did the best consistent job in scoring throughout the rankings. Thus, the men in their late twenties, with some college work, a large amount of radio experience in quite a number of stations, and with an average amount of allied training had the best knowledge of current events in the field of science and medicine.

Part (20): Coop Part III Scores (Page 78) - In this third portion of this testing instrument the best scores were made by the men in the "four stations worked" category and in the "very much" additional skills category. The scoring in the age, education, and years of experience groupings were so confused as to make these groupings seem without value. This section tested current events topics in the field of literature and fine arts. It seemed that this particular sub-test might not have been valid, because of the confused scoring patterns in the first three personal data groupings.

Part (21): Coop Part IV Scores (Page 79) - This series of scores covering the entire Coop battery showed that the best scores were made by the men in the 29 year old to 33 year old age grouping, and also by the men with some college experience. However, the grades in the experience, stations-worked, and extra skills categories were confused enough to make the value of this test, as a whole instrument, somewhat doubtful.

Part (22): Kwalwasser Scores (Page 80) - This testing instrument was the last of five tests and sub-tests that measured quantities of information rather than indicate abstractions such as personality traits or general intelligence levels. This particular test was used to determine the exact amount of information or knowledge an

individual might have acquired about music, music appreciation, music history, and similar areas of knowledge. In looking at the scores as analyzed against the various personal factors, the first quick observance indicated that the men who took this test did fairly well, but it had to be remembered that the norms on this test were well below the national norms, as were shown in Table I, page 30, of this chapter. Therefore, the only evaluation that could be made of this test was to see which personal factors contributed the least to the low scores made throughout the test. In other words, to determine the best of the worst. In this light, even with a very careful study of the scores, it was still somewhat apparent that the various personal factors had so unreliable an effect on the grades, that the entire testing instrument had to be considered as having little, if any, value in the entire study.

Part (23): Strong Printer Scores (Page 81) - This was the first of twelve segments of this testing instrument that was used to investigate the similarities between the scores made by radio announcers on one hand, as compared to men in other vocational fields. Reference to the materials that were cited in pages 38 through 55 of this chapter would illustrate the qualities that were being evaluated for each of the vocations examined in this battery. In this particular sub-test three of the personal factors resulted

in a confused scoring pattern, namely, the experience, extra skills, and age groupings, although in this latter category the men in the 29 year old to 33 year old age group seemed to do somewhat better than the other age groupings. The men with high school and some college experience, as well as the men with experience in one station, were definitely the strongest sections in their respective groupings. Therefore, while some slight indications of similarity between Printers and Radio Announcers seemed to exist in reviewing this sub-test, it seemed also that the examination for Printers was not a strongly valid instrument for testing radio announcers.

Part (24): Strong Personnel Directors Scores (Page 82) - Only the men in the 29 year old to 33 year old age group showed definite strength in their grouping, while the other personal groups had segments that showed only fairly consistent scoring. The men with some college work, the men with six to seven years of experience, the men with experience in four stations, and the men with "average" extra skills were those that were consistently high, but they were not completely high in their scoring throughout the percentiles. This test might, therefore, have some value, if it were used with caution.

Part (25): Strong Public Administrators Scores (Page 83) - Again, here was another sub-test that produced enough

confusion in the scoring to make its value somewhat dubious, especially in the experience, stations-worked, and extra skills categories. Not one of the educational section was strong throughout, although the men with some college experience were more consistently high in their scoring than the other sections in the educational category. Only in the age groupings, in the 29 year old to 33 year old group, were the grades highest throughout the percentiles. Thus, this sub-test also became one that seemed less than useful.

Part (26): Strong Social Science High School Teachers Scores (Page 84) - Only the age category in this sub-test had a section, the 29 year old to 33 year old group, that scored high throughout the percentiles. All of the other categories resulted in confused scoring. Thus, this test was considered as, possibly, not being capable of leading to any significant conclusions.

Part (27): Strong Social Worker Scores (Page 85) - This sub-test had a good response in the age groupings where the men in the 29 year old to 33 year old age group scored highest throughout the percentiles. The men with some high school experience scored consistently well, but the other groupings resulted in confused scoring. This test, while doubtful in its application, might, with care, have some significance.

Part (28): Strong Musician Scores (Page 86) -

This was the first sub-test in this instrument to show some acceptable results. The 21 year old to 25 year old age group, the men with experience in one station and with seven to eight years of experience, did the best throughout the percentiles in their groupings. The men with graduate work in college and the men with "much" extra skills were, at least, consistently higher than any other segments of their groupings. Thus, there seems to be some significance in this test as a part of the experimental battery.

Part (29): Strong Mortician Scores (Page 87) -

This sub-test also had a good scoring pattern. The men in the 25 year old to 29 year old age group, the men with at least a high school education, and the men with experience in four stations did the best throughout their percentile groupings. However, the scores in the experience and extra skills category were confused and were not readily subject to a meaningful interpretation. Nevertheless, this sub-test was still one that might have some value in the experiment.

Part (30): Strong Sales Manager Scores (Page 88) -

This sub-test showed high scoring throughout the percentiles of the men with experience in four stations, and the men in the "average" extra skills categories. Consistently good scores throughout most of the percentile rankings were shown by the men in the 25 year old to 29 year old grouping,

the men with some college experience, and the men with two to three years of experience. Thus, this sub-test, also, seemed to be a valid addition to the experimental battery.

Part (31): Strong Life Insurance Salesman Scores (Page 89) - While the age groups resulted in confused scoring, the men with a college degree and the men with experience of three to four years did the best in the percentile rankings in their respective groupings. The men with experience in two stations, and the men with "very much" extra skills scored consistently well in their groupings. In spite of the confused scoring in the age category, this still seemed to be a valid test.

Part (32): Strong Real Estate Salesman Scores (Page 90) - High scoring throughout the percentile rankings was achieved by the men with experience in two stations, while consistently good scores in the percentile rankings were achieved by the men in the 25 year old to 29 year old age grouping, the men with a college degree, the men with five to six years of experience, and the men with no extra skills. All in all, this also seemed to be a valid sub-test of this particular testing instrument.

Part (33): Strong Advertiser Scores (Page 91) - Only the men with experience in two stations scored the best throughout their percentile rankings, and thus were

able to achieve any valid results on this sub-test. The scores in all of the other groups were confused enough to throw extreme doubt on the value of this sub-test in the experimental battery.

Part (34): Strong Lawyer Scores (Page 92) - While none of the groupings produced sections that scored high throughout the percentile rankings, the men with five to six years of experience, the men with experience in four stations, and the men with no extra skills did sufficiently well in their groupings. Only the scores in the age grouping were confused enough to be unuseable. Thus, this sub-test was also considered as a potential part of the experimental battery.

From the tabulation above concerning the relationship between scores made by the radio announcers on the tests and the personal data factors, a number of interesting findings emerged.

In regards to age, the 17-21 year old age group scored above average on only one test, the Guilford-Martin "N". The 21-25 year old age group scored above average on three tests, the Otis, the Guilford-Martin "G", and the Strong Musician tests. The 25-29 year old age group had scores above average on four tests, the Guilford-Martin "C", the Strong Mortician, Sales Manager and Real Estate Salesman tests. The 29-33 year old age group were above

average on fifteen tests, the ACE-Q, the ACE-Total, the Guilford-Martin "T", "D", "A", "M", "I", and "O", and the Coop Part I, II, and IV, the Strong Personnel Director, Public Administrator, Social Science High School Teacher, and the Social Worker tests. The 33-37 year old age group did well on only one test, the Guilford-Martin "R" test. Age did not seem to be a significant factor on the remaining ten tests.

With the education factor, men without a high school education did not do well (scored above average) on any test. The radio announcers with only a high school education were above average in three tests, the Guilford-Martin "T", and the Strong Social Worker and Mortician tests. Men in both the high school and "some college" categories shared high scores in one test, the Strong Printer test. In addition, those men with some college education did well in nine tests, the ACE-Q and Total, the Otis, the Guilford-Martin "D", the Coop Part I, II, and IV, and the Strong Personnel Director and Sales Manager tests. Men with some college work and with a college degree, shared high scores in one test, the Guilford-Martin "C" test. Moreover, men with a college degree did well in seven tests, the Guilford-Martin "S", "G", "A", "M", and "Co", and the Strong Life Insurance Salesman and Real Estate Salesman tests. The members of the testing group with a college degree and some graduate work shared high scores in

one test, the Guilford-Martin "I" test. Men with graduate work did well in two tests, the Guilford-Martin "R" and the Strong Musician tests. The remaining ten tests did not seem to reveal any significance relative to education. The experience factor showed no one with less than one year of experience scoring independently high on any test, but this group did share high score honors twice with the men who had 7-8 years of experience on the ACE-Q and the Guilford-Martin "S" tests. Men with 1-2 years scored well only on the Guilford-Martin "A" test, and those with 2-3 years scored well only on the Strong Sales Manager test. Those with 3-4 years scored well on three tests, the Guilford-Martin "G", Coop Part I, and the Strong Life Insurance Salesman tests, and those men with 4-5 years scored well on two tests, the Guilford-Martin "C" and "M" tests. The announcers with 5-6 years also scored well on two tests, the Strong Real Estate Salesman and Lawyer tests, while those with 6-7 years scored well only on the Strong Personnel Director test. Finally, the men with 7-8 years of experience scored well on ten tests, the Otis, the Guilford-Martin "T", "D", "R", "I", "N", "O", and "Ag", the Coop Part II, and the Strong Musician tests. The remaining ten tests did not seem to show any significance.

In the stations worked category, the group that worked in one station scored above average on three tests,

the Guilford-Martin "G", and the Strong Printer and Musician tests. The group in two stations did well with four tests, the Guilford-Martin "C", and the Strong Life Insurance Salesman, Real Estate Salesman, and the Advertiser tests. The section with experience in three stations did well in two tests, the Guilford-Martin "A" and "M" tests. The men with experience in four stations did well in seventeen tests, the ACE-Q and Total, the Otis, the Guilford-Martin "S", "T", "D", "R", "I", "N", "O", "Ag", and "Co", the Coop Part II, the Strong Personnel Director, Mortician, Sales Manager, and the Lawyer tests. Also, the men who worked in five stations were above average on only the Coop Part II. In addition, men with experience in both three and four stations scored equally well on the Coop Part I. The remaining six tests did not seem to show any significance.

In the extra skills category men with no additional training did well with two tests, the Strong Real Estate Salesman and the Lawyer tests. Men with some skills did well with four tests, the Guilford-Martin "T", "D", "R", and "N" tests. Those with an average amount of skills did well on four tests, the Guilford-Martin "G", Coop Part II, and the Strong Personnel Director and Sales Manager tests. Also, those with above average skills did well in five tests, the ACE-Total, the Guilford-Martin "S", "I", "Co", and the Strong Musician tests. Men with a great deal

of additional skills did well on three tests, Guilford-Martin "C", Coop Part III, and the Strong Life Insurance Salesman. Finally, the men with both some and above average skills shared high scores on two tests, the ACE-Q and the Otis. The remaining fourteen tests did not seem to indicate any significance.

CHAPTER V

RELATION OF PERSONALITY AND JOB ANALYSIS RATINGS TO TEST SCORES

I. PERSONALITY AND JOB ANALYSIS RATINGS

The third purpose of this study, as stated in Chapter I, was "to describe any tendency for the radio announcers rated 'good' by their immediate supervisors to be those making the highest scores on the tests." This third purpose was included in this study with the hope that further evaluations and correlations might be made between the men who seemed to be the best qualified as radio announcers by their immediate supervisors and by the scores on the various tests and sub-tests of this experimental battery. It was felt that such evaluations and correlations might supply further evidence that the tests which seemed the most valuable, on the basis of the analyses made in Chapter IV, might prove even more valuable if they were also the ones that indicated the most "useful" radio announcers.

In the process described in Chapter III, during which correspondence was held with the managers of the various stations from whom participants in the testing program were obtained, evaluation sheets were also sent to the Station Managers, Commercial or Sales Managers, and the Program Directors of the participating stations. These

sheets asked that the men from their respective stations be graded on a five point scale on two factors. First, the factor of personality, contained among other things, such elements as amiability, pleasantness, cooperation, aggressiveness, and loyalty. The station executives were asked to grade the announcer's personality on the basis of Very Strong Personality, Strong Personality, Average Personality, Weak Personality, and Very Weak Personality. Secondly, the factor of aptitude, contained, among other things, such elements as intelligence, academic education -- including both high school and college work, pronunciation ability with some foreign language, some knowledge of music, and some knowledge of current events. The station executives were asked to grade announcer's aptitude on the basis of Superior Aptitude, Above-average Aptitude, Average Aptitude, Below-average Aptitude, and No Aptitude. In compiling the ratings, it was found that none of the men were listed as having a Very Weak personality. It was also found that none of the men were listed as having No Aptitude. Only one man in the entire group was listed as having a Superior Aptitude. Thus, the lowest ratings in aptitude and personality and the highest rating in aptitude were not a part of the tables that were set up to tabulate the results. The results are shown in Table III.

TABLE III
 PERSONAL DATA DISTRIBUTIONS WITH
 P₂₅, P₅₀, P₇₅ AND M VALUES FOR TWO CATEGORIES

PART (1): ACE-Q SCORES

PERSONAL DATA INTERVALS	f	P ₂₅	P ₅₀	P ₇₅	MEAN
<u>Personality Ratings</u>					
Very Strong	4	46.50	50.50	55.50	54.00
Strong	33	32.25	39.00	47.38	40.66
Average	29	35.25	41.33	47.13	41.72
Weak	6	40.00	45.50	46.25	43.66
<u>Job Analysis Ratings</u>					
Above Average	32	32.00	37.50	47.50	41.18
Average	28	38.50	44.00	49.50	42.60
Below Average	10	37.25	42.00	46.75	41.80

TABLE III (Continued)

PERSONAL DATA DISTRIBUTIONS WITH
P₂₅, P₅₀, P₇₅ AND M VALUES FOR TWO CATEGORIES

PART (2): ACE-L SCORES

PERSONAL DATA INTERVALS	f	P ₂₅	P ₅₀	P ₇₅	MEAN
<u>Personality Ratings</u>					
Very Strong	4	78.50	79.50	89.50	74.75
Strong	33	67.25	74.33	85.25	70.36
Average	29	30.28	67.00	79.63	63.03
Weak	6	48.00	62.50	74.00	53.33
<u>Job Analysis Ratings</u>					
Above Average	32	70.50	75.50	87.50	70.71
Average	28	51.50	67.00	78.50	64.35
Below Average	10	48.25	72.00	75.75	59.50

TABLE III (Continued)

PERSONAL DATA DISTRIBUTIONS WITH
P₂₅, P₅₀, P₇₅ AND M VALUES FOR TWO CATEGORIES

PART (3): ACE-TOTAL SCORES

PERSONAL DATA INTERVALS	f	P ₂₅	P ₅₀	P ₇₅	MEAN
<u>Personality Ratings</u>					
Very Strong	4	125.50	133.50	139.50	128.75
Strong	33	108.75	116.00	128.38	111.03
Average	29	86.25	108.00	128.75	104.75
Weak	6	89.00	107.50	120.00	87.00
<u>Job Analysis Ratings</u>					
Above Average	32	102.50	118.50	129.50	111.90
Average	28	89.50	111.00	129.50	106.95
Below Average	10	83.25	111.00	122.75	101.30

TABLE III (Continued)

PERSONAL DATA DISTRIBUTIONS WITH
P₂₅, P₅₀, P₇₅ AND M VALUES FOR TWO CATEGORIES

PART (4): OTIS SCORES

PERSONAL DATA INTERVALS	f	P ₂₅	P ₅₀	P ₇₅	MEAN
<u>Personality Ratings</u>					
Very Strong	4	54.50	62.50	64.50	59.25
Strong	32	47.30	54.50	62.50	54.68
Average	29	46.25	57.67	63.75	54.31
Weak	6	46.00	48.50	51.00	51.33
<u>Job Analysis Ratings</u>					
Above Average	32	47.25	56.17	63.50	56.15
Average	27	47.25	58.67	63.63	56.33
Below Average	10	46.25	47.75	64.75	50.80

TABLE III (Continued)

PERSONAL DATA DISTRIBUTIONS WITH
P₂₅, P₅₀, P₇₅ AND M VALUES FOR TWO CATEGORIES

PART (5): GUILFORD-MARTIN "S" SCORES

PERSONAL DATA INTERVALS	f	P ₂₅	P ₅₀	P ₇₅	MEAN
<u>Personality Ratings</u>					
Very Strong	4	21.54	14.54	13.54	19.25
Strong	30	19.90	12.60	6.90	15.30
Average	22	19.62	9.74	5.62	12.63
Weak	5	33.54	20.54	19.02	17.80
<u>Job Analysis Ratings</u>					
Above Average	29	19.76	12.75	6.77	14.20
Average	22	28.86	17.24	7.22	17.54
Below Average	8	21.58	10.58	5.58	12.75

TABLE III (Continued)

PERSONAL DATA DISTRIBUTIONS WITH
P₂₅, P₅₀, P₇₅ AND M VALUES FOR TWO CATEGORIES

PART (6): GUILFORD-MARTIN "T" SCORES

PERSONAL DATA INTERVALS	f	P ₂₅	P ₅₀	P ₇₅	MEAN
<u>Personality Ratings</u>					
Very Strong	4	49.54	41.54	37.54	38.50
Strong	30	46.10	38.65	31.40	36.83
Average	22	42.74	37.62	31.74	34.54
Weak	5	43.02	42.52	40.54	39.00
<u>Job Analysis Ratings</u>					
Above Average	29	45.85	38.29	31.04	36.72
Average	28	42.86	39.11	33.22	35.53
Below Average	8	44.58	42.58	37.54	40.12

TABLE III (Continued)

PERSONAL DATA DISTRIBUTIONS WITH
P₂₅, P₅₀, P₇₅ AND M VALUES FOR TWO CATEGORIES

PART (7): GUILFORD-MARTIN "D" SCORES

PERSONAL DATA INTERVALS	f	P ₂₅	P ₅₀	P ₇₅	MEAN
<u>Personality Ratings</u>					
Very Strong	4	40.54	26.54	21.54	28.75
Strong	30	27.90	15.65	10.90	19.23
Average	22	25.74	14.74	8.74	17.09
Weak	5	28.54	26.54	17.54	18.40
<u>Job Analysis Ratings</u>					
Above Average	29	27.52	15.90	9.27	18.51
Average	22	26.22	17.57	11.86	21.36
Below Average	8	29.54	22.58	12.58	19.62

TABLE III (Continued)

PERSONAL DATA DISTRIBUTIONS WITH
P₂₅, P₅₀, P₇₅ AND M VALUES FOR TWO CATEGORIES

PART (8): GUILFORD-MARTIN "C" SCORES

PERSONAL DATA INTERVALS	f	P ₂₅	P ₅₀	P ₇₅	MEAN
<u>Personality Ratings</u>					
Very Strong	4	46.54	28.54	24.54	28.00
Strong	30	33.90	22.80	18.30	18.25
Average	22	31.74	23.74	16.12	16.72
Weak	5	39.54	29.54	21.54	20.00
<u>Job Analysis Ratings</u>					
Above Average	29	38.51	20.43	16.02	13.75
Average	22	32.22	25.11	21.22	21.75
Below Average	8	33.58	26.04	23.58	24.00

TABLE III (Continued)

PERSONAL DATA DISTRIBUTIONS WITH
P₂₅, P₅₀, P₇₅ AND M VALUES FOR TWO CATEGORIES

PART (9): GUILFORD-MARTIN "R" SCORES

PERSONAL DATA INTERVALS	f	P ₂₅	P ₅₀	P ₇₅	MEAN
<u>Personality Ratings</u>					
Very Strong	4	41.54	37.54	32.54	34.25
Strong	30	45.30	37.65	32.30	38.63
Average	22	48.25	44.74	31.62	40.95
Weak	5	40.54	35.54	31.54	36.80
<u>Job Analysis Ratings</u>					
Above Average	29	45.54	38.40	33.04	38.65
Average	22	48.36	34.24	28.41	37.63
Below Average	8	51.58	37.04	35.58	42.62

TABLE III (Continued)

PERSONAL DATA DISTRIBUTIONS WITH
P₂₅, P₅₀, P₇₅ AND M VALUES FOR TWO CATEGORIES

PART (10): GUILFORD-MARTIN "G" SCORES

PERSONAL DATA INTERVALS	f	P ₂₅	P ₅₀	P ₇₅	MEAN
<u>Personality Ratings</u>					
Very Strong	4	10.50	13.50	15.50	12.50
Strong	30	9.88	12.10	14.75	12.50
Average	22	10.50	12.00	14.50	12.36
Weak	5	9.50	12.50	13.50	12.80
<u>Job Analysis Ratings</u>					
Above Average	29	9.81	12.13	14.19	12.06
Average	22	10.00	12.83	17.67	13.00
Below Average	8	10.50	11.00	11.50	12.62

TABLE III (Continued)

PERSONAL DATA DISTRIBUTIONS WITH
P₂₅, P₅₀, P₇₅ AND M VALUES FOR TWO CATEGORIES

PART (11): GUILFORD-MARTIN "A" SCORES

PERSONAL DATA INTERVALS	f	P ₂₅	P ₅₀	P ₇₅	MEAN
<u>Personality Ratings</u>					
Very Strong	4	13.50	16.50	21.00	16.25
Strong	30	18.00	23.00	29.00	22.23
Average	22	18.17	21.50	27.50	21.72
Weak	5	14.50	17.50	23.50	21.80
<u>Job Analysis Ratings</u>					
Above Average	29	19.63	22.88	27.88	22.10
Average	22	17.00	20.50	23.33	20.00
Below Average	8	14.50	21.50	31.00	23.30

TABLE III (Continued)

PERSONAL DATA DISTRIBUTIONS WITH
P₂₅, P₅₀, P₇₅ AND M VALUES FOR TWO CATEGORIES

PART (12): GUILFORD-MARTIN "M" SCORES

PERSONAL DATA INTERVALS	f	P ₂₅	P ₅₀	P ₇₅	MEAN
<u>Personality Ratings</u>					
Very Strong	4	20.50	21.00	21.50	20.00
Strong	30	17.63	20.25	23.75	20.23
Average	22	19.50	21.33	25.50	20.50
Weak	5	18.50	19.50	23.50	20.30
<u>Job Analysis Ratings</u>					
Above Average	29	18.25	21.13	24.42	21.93
Average	22	18.75	21.10	24.75	19.22
Below Average	8	18.50	20.00	21.50	19.87

TABLE III (Continued)

PERSONAL DATA DISTRIBUTIONS WITH
P₂₅, P₅₀, P₇₅ AND M VALUES FOR TWO CATEGORIES

PART (13): GUILFORD-MARTIN "I" SCORES

PERSONAL DATA INTERVALS	f	P ₂₅	P ₅₀	P ₇₅	MEAN
<u>Personality Ratings</u>					
Very Strong	4	24.50	26.50	29.50	26.50
Strong	30	30.25	35.50	43.00	34.33
Average	22	27.50	37.50	41.75	34.09
Weak	5	28.50	29.50	32.50	35.40
<u>Job Analysis Ratings</u>					
Above Average	29	30.13	36.75	41.38	43.39
Average	22	28.00	31.50	42.00	32.77
Below Average	8	20.50	29.50	40.50	33.12

TABLE III (Continued)

PERSONAL DATA DISTRIBUTIONS WITH
P₂₅, P₅₀, P₇₅ AND M VALUES FOR TWO CATEGORIES

PART (14): GUILFORD-MARTIN "N" SCORES

PERSONAL DATA INTERVALS	f	P ₂₅	P ₅₀	P ₇₅	MEAN
<u>Personality Ratings</u>					
Very Strong	4	16.50	21.50	31.50	22.75
Strong	30	21.00	28.17	31.00	25.36
Average	22	21.50	25.00	29.50	25.09
Weak	5	20.50	23.50	25.50	25.80
<u>Job Analysis Ratings</u>					
Above Average	29	21.13	27.00	30.42	26.69
Average	22	20.25	25.50	31.00	24.50
Below Average	8	14.50	25.50	32.00	23.50

TABLE III (Continued)

PERSONAL DATA DISTRIBUTIONS WITH
P₂₅, P₅₀, P₇₅ AND M VALUES FOR TWO CATEGORIES

PART (15): GUILFORD-MARTIN "O" SCORES

PERSONAL DATA INTERVALS	f	P ₂₅	P ₅₀	P ₇₅	MEAN
<u>Personality Ratings</u>					
Very Strong	4	41.00	41.50	46.50	48.00
Strong	30	39.00	44.83	55.00	45.93
Average	22	40.00	44.00	47.50	45.13
Weak	5	33.50	36.50	40.50	38.60
<u>Job Analysis Ratings</u>					
Above Average	29	33.63	43.00	58.25	47.17
Average	22	40.25	44.00	47.00	44.09
Below Average	8	36.50	42.00	47.00	40.00

TABLE III (Continued)

PERSONAL DATA DISTRIBUTIONS WITH
P₂₅, P₅₀, P₇₅ AND M VALUES FOR TWO CATEGORIES

PART (16): GUILFORD-MARTIN "AG" SCORES

PERSONAL DATA INTERVALS	f	P ₂₅	P ₅₀	P ₇₅	MEAN
<u>Personality Ratings</u>					
Very Strong	4	22.50	27.50	42.50	36.25
Strong	30	26.25	32.50	41.00	33.26
Average	22	21.00	21.50	39.50	32.13
Weak	5	18.50	29.50	30.50	27.40
<u>Job Analysis Ratings</u>					
Above Average	29	24.75	28.25	42.08	33.41
Average	22	27.22	33.17	39.33	34.45
Below Average	8	21.50	29.50	33.00	26.87

TABLE III (Continued)

PERSONAL DATA DISTRIBUTIONS WITH
P₂₅, P₅₀, P₇₅ AND M VALUES FOR TWO CATEGORIES

PART (17): GUILFORD-MARTIN "CO" SCORES

PERSONAL DATA INTERVALS	f	P ₂₅	P ₅₀	P ₇₅	MEAN
<u>Personality Ratings</u>					
Very Strong	4	37.50	71.50	72.50	63.93
Strong	30	54.00	65.50	77.00	62.45
Average	22	47.50	56.50	83.50	62.60
Weak	5	35.50	60.50	71.00	67.24
<u>Job Analysis Ratings</u>					
Above Average	29	52.63	70.75	79.25	61.72
Average	22	49.25	59.50	72.00	57.50
Below Average	8	32.50	54.50	71.50	59.96

TABLE III (Continued)

PERSONAL DATA DISTRIBUTIONS WITH
P₂₅, P₅₀, P₇₅ AND M VALUES FOR TWO CATEGORIES

PART (18): COOP PART I SCORES

PERSONAL DATA INTERVALS	f	P ₂₅	P ₅₀	P ₇₅	MEAN
<u>Personality Ratings</u>					
Very Strong	4	34.83	37.83	45.50	41.10
Strong	31	24.08	30.58	39.91	28.67
Average	27	21.25	29.25	35.91	25.56
Weak	6	14.00	15.50	33.33	27.72
<u>Job Analysis Ratings</u>					
Above Average	31	22.75	29.66	38.91	29.86
Average	25	25.21	23.08	37.75	31.49
Below Average	10	10.79	22.66	33.25	23.46

TABLE III (Continued)

PERSONAL DATA DISTRIBUTIONS WITH
P₂₅, P₅₀, P₇₅ AND M VALUES FOR TWO CATEGORIES

PART (19): COOP PART II SCORES

PERSONAL DATA INTERVALS	f	P ₂₅	P ₅₀	P ₇₅	MEAN
<u>Personality Ratings</u>					
Very Strong	4	18.16	20.66	20.83	21.33
Strong	31	11.46	17.91	22.08	16.98
Average	27	13.87	17.91	23.23	17.23
Weak	6	11.33	18.16	19.33	16.50
<u>Job Analysis Ratings</u>					
Above Average	31	12.75	18.00	21.91	17.11
Average	25	14.04	19.33	22.14	18.24
Below Average	10	10.12	13.66	21.91	15.30

TABLE III (Continued)

PERSONAL DATA DISTRIBUTIONS WITH
P₂₅, P₅₀, P₇₅ AND M VALUES FOR TWO CATEGORIES

PART (20): COOP PART III SCORES

PERSONAL DATA INTERVALS	f	P ₂₅	P ₅₀	P ₇₅	MEAN
<u>Personality Ratings</u>					
Very Strong	4	16.66	16.83	19.50	16.83
Strong	31	12.79	16.66	19.41	16.29
Average	27	7.58	15.41	19.25	13.60
Weak	6	10.00	14.16	16.66	13.55
<u>Job Analysis Ratings</u>					
Above Average	31	12.75	17.76	20.58	15.97
Average	25	12.58	15.44	14.29	15.42
Below Average	10	6.08	15.22	16.54	11.73

TABLE III (Continued)

PERSONAL DATA DISTRIBUTIONS WITH
P₂₅, P₅₀, P₇₅ AND M VALUES FOR TWO CATEGORIES

PART (21): COOP PART IV SCORES

PERSONAL DATA INTERVALS	f	P ₂₅	P ₅₀	P ₇₅	MEAN
<u>Personality Ratings</u>					
Very Strong	4	69.50	82.83	85.50	79.08
Strong	31	45.41	65.33	74.58	64.83
Average	27	46.58	62.70	73.29	56.40
Weak	6	38.66	58.16	69.33	58.43
<u>Job Analysis Ratings</u>					
Above Average	31	46.75	65.25	74.58	63.01
Average	25	56.00	69.33	80.08	65.33
Below Average	10	28.12	42.75	71.58	50.43

TABLE III (Continued)

PERSONAL DATA DISTRIBUTIONS WITH
P₂₅, P₅₀, P₇₅ AND M VALUES FOR TWO CATEGORIES

PART (22): KWALWASSER SCORES

PERSONAL DATA INTERVALS	f	P ₂₅	P ₅₀	P ₇₅	MEAN
<u>Personality Ratings</u>					
Very Strong	4	8.50	85.50	88.50	69.00
Strong	32	17.50	57.50	97.50	51.84
Average	22	46.50	56.50	96.50	29.40
Weak	5	48.50	11.50	76.50	56.50
<u>Job Analysis Ratings</u>					
Above Average	30	7.00	53.50	99.00	49.03
Average	24	36.75	61.00	98.75	40.50
Below Average	8	75.50	25.50	69.50	27.50

TABLE III (Continued)

PERSONAL DATA DISTRIBUTIONS WITH
P₂₅, P₅₀, P₇₅ AND M VALUES FOR TWO CATEGORIES

PART (23): STRONG PRINTER SCORES

PERSONAL DATA INTERVALS	f	P ₂₅	P ₅₀	P ₇₅	MEAN
<u>Personality Ratings</u>					
Very Strong	3	27.50	30.50	37.50	39.33
Strong	31	30.75	34.25	38.75	34.64
Average	21	30.88	37.00	45.63	38.23
Weak	4	34.50	40.50	46.50	44.50
<u>Job Analysis Ratings</u>					
Above Average	29	31.58	34.25	40.38	37.13
Average	22	29.00	36.50	46.25	37.54
Below Average	7	31.50	35.50	37.17	36.00

TABLE III (Continued)

PERSONAL DATA DISTRIBUTIONS WITH
P₂₅, P₅₀, P₇₅ AND M VALUES FOR TWO CATEGORIES

PART (24): STRONG PERSONNEL DIRECTOR SCORES

PERSONAL DATA INTERVALS	f	P ₂₅	P ₅₀	P ₇₅	MEAN
<u>Personality Ratings</u>					
Very Strong	3	26.50	38.50	41.50	40.66
Strong	31	32.75	38.25	42.63	37.03
Average	21	32.38	35.00	38.75	35.85
Weak	4	30.50	35.50	48.50	40.75
<u>Job Analysis Ratings</u>					
Above Average	29	32.92	38.75	42.42	36.89
Average	22	30.00	35.00	42.00	35.80
Below Average	7	31.50	36.00	37.50	35.71

TABLE III (Continued)

PERSONAL DATA DISTRIBUTIONS WITH
P₂₅, P₅₀, P₇₅ AND M VALUES FOR TWO CATEGORIES

PART (25): STRONG PUBLIC ADMINISTRATOR SCORES

PERSONAL DATA INTERVALS	f	P ₂₅	P ₅₀	P ₇₅	MEAN
<u>Personality Ratings</u>					
Very Strong	3	31.50	38.50	39.50	39.00
Strong	31	32.38	38.67	42.75	37.54
Average	21	31.38	36.20	39.75	36.95
Weak	4	33.50	39.50	40.50	39.50
<u>Job Analysis Ratings</u>					
Above Average	29	31.63	38.25	43.88	37.51
Average	22	33.25	36.50	39.33	37.18
Below Average	7	28.50	36.50	39.00	36.85

TABLE III (Continued)

PERSONAL DATA DISTRIBUTIONS WITH
P₂₅, P₅₀, P₇₅ AND M VALUES FOR TWO CATEGORIES

PART (26): STRONG SOCIAL SCIENCE HIGH SCHOOL TEACHERS SCORES

PERSONAL DATA INTERVALS	f	P ₂₅	P ₅₀	P ₇₅	MEAN
<u>Personality Ratings</u>					
Very Strong	3	33.50	38.50	40.50	40.66
Strong	31	26.50	36.17	41.50	35.90
Average	21	25.00	34.25	39.50	34.77
Weak	4	28.50	46.50	51.50	44.25
<u>Job Analysis Ratings</u>					
Above Average	29	26.00	37.50	44.00	36.46
Average	22	28.25	34.33	40.63	36.90
Below Average	7	26.50	34.50	36.50	37.28

TABLE III (Continued)

PERSONAL DATA DISTRIBUTIONS WITH
P₂₅, P₅₀, P₇₅ AND M VALUES FOR TWO CATEGORIES

PART (27): STRONG SOCIAL WORKED SCORES

PERSONAL DATA INTERVALS	f	P ₂₅	P ₅₀	P ₇₅	MEAN
<u>Personality Ratings</u>					
Very Strong	3	30.50	38.50	39.50	42.00
Strong	31	33.00	36.50	42.00	37.31
Average	21	30.00	35.83	40.50	36.00
Weak	4	33.50	40.50	43.50	40.75
<u>Job Analysis Ratings</u>					
Above Average	29	30.42	38.83	42.75	37.53
Average	22	31.25	35.00	39.92	36.13
Below Average	7	31.50	35.50	41.50	37.42

TABLE III (Continued)

PERSONAL DATA DISTRIBUTIONS WITH
P₂₅, P₅₀, P₇₅ AND M VALUES FOR TWO CATEGORIES

PART (28): STRONG MUSICIAN SCORES

PERSONAL DATA INTERVALS	f	P ₂₅	P ₅₀	P ₇₅	MEAN
<u>Personality Ratings</u>					
Very Strong	3	30.50	39.50	50.50	46.66
Strong	31	33.75	40.00	47.50	40.87
Average	21	35.50	40.00	46.60	40.95
Weak	4	39.50	40.50	43.50	42.50
<u>Job Analysis Ratings</u>					
Above Average	29	35.00	40.00	47.40	41.30
Average	22	34.38	40.75	45.75	41.73
Below Average	7	28.50	35.50	47.50	36.42

TABLE III (Continued)

PERSONAL DATA DISTRIBUTIONS WITH
P₂₅, P₅₀, P₇₅ AND M VALUES FOR TWO CATEGORIES

PART (29): STRONG MORTICIAN SCORES

PERSONAL DATA INTERVALS	f	P ₂₅	P ₅₀	P ₇₅	MEAN
<u>Personality Ratings</u>					
Very Strong	3	24.50	29.50	32.50	28.33
Strong	31	29.25	37.25	40.63	35.41
Average	21	27.25	36.25	41.63	35.76
Weak	4	37.50	39.50	43.50	42.50
<u>Job Analysis Ratings</u>					
Above Average	29	29.13	35.25	38.88	35.79
Average	22	25.25	36.50	40.25	34.68
Below Average	7	36.50	39.50	43.50	38.00

TABLE III (Continued)

PERSONAL DATA DISTRIBUTIONS WITH
P₂₅, P₅₀, P₇₅ AND M VALUES FOR TWO CATEGORIES

PART (30): STRONG SALES MANAGER SCORES

PERSONAL DATA INTERVALS	f	P ₂₅	P ₅₀	P ₇₅	MEAN
<u>Personality Ratings</u>					
Very Strong	3	29.50	32.50	39.50	34.00
Strong	31	32.69	37.33	40.92	36.74
Average	21	33.25	37.25	44.63	37.38
Weak	4	32.50	33.00	33.50	34.00
<u>Job Analysis Ratings</u>					
Above Average	29	32.13	37.33	39.88	34.96
Average	22	32.25	34.50	44.00	36.50
Below Average	7	33.50	41.50	45.50	42.42

TABLE III (Continued)

PERSONAL DATA DISTRIBUTIONS WITH
P₂₅, P₅₀, P₇₅ AND M VALUES FOR TWO CATEGORIES

PART (31): STRONG LIFE INSURANCE SALESMAN SCORES

PERSONAL DATA INTERVALS	f	P ₂₅	P ₅₀	P ₇₅	MEAN
<u>Personality Ratings</u>					
Very Strong	3	28.50	40.50	46.50	38.66
Strong	31	32.83	36.50	45.50	39.61
Average	21	32.50	38.00	43.50	38.04
Weak	4	33.50	35.50	39.50	37.00
<u>Job Analysis Ratings</u>					
Above Average	29	30.33	35.50	44.00	36.73
Average	22	35.23	43.45	48.85	38.47
Below Average	7	35.83	36.50	43.50	41.14

TABLE III (Continued)

PERSONAL DATA DISTRIBUTIONS WITH
P₂₅, P₅₀, P₇₅ AND M VALUES FOR TWO CATEGORIES

PART (32): STRONG REAL ESTATE SALESMAN SCORES

PERSONAL DATA INTERVALS	f	P ₂₅	P ₅₀	P ₇₅	MEAN
<u>Personality Ratings</u>					
Very Strong	3	37.50	38.50	44.50	40.00
Strong	31	36.38	40.20	45.13	40.48
Average	21	36.25	41.33	46.75	41.85
Weak	4	36.00	36.50	38.50	37.75
<u>Job Analysis Ratings</u>					
Above Average	29	35.13	40.13	44.38	39.10
Average	22	37.63	40.50	46.00	41.09
Below Average	7	40.50	44.50	49.50	46.42

TABLE III (Continued)

PERSONAL DATA DISTRIBUTIONS WITH
P₂₅, P₅₀, P₇₅ AND M VALUES FOR TWO CATEGORIES

PART (33): STRONG ADVERTISER'S SCORES

PERSONAL DATA INTERVALS	f	P ₂₅	P ₅₀	P ₇₅	MEAN
<u>Personality Ratings</u>					
Very Strong	3	41.50	43.50	49.50	44.66
Strong	31	38.88	44.60	51.63	44.46
Average	21	33.88	44.00	50.25	43.28
Weak	4	30.50	36.00	36.50	36.50
<u>Job Analysis Ratings</u>					
Above Average	29	38.13	42.75	49.65	49.75
Average	22	35.00	43.50	52.00	43.86
Below Average	7	46.70	51.70	56.70	45.28

TABLE III (Continued)

PERSONAL DATA DISTRIBUTIONS WITH
P₂₅, P₅₀, P₇₅ AND M VALUES FOR TWO CATEGORIES

PART (34): STRONG LAWYER'S SCORES

PERSONAL DATA INTERVALS	f	P ₂₅	P ₅₀	P ₇₅	MEAN
<u>Personality Ratings</u>					
Very Strong	3	30.50	36.50	47.00	38.00
Strong	31	31.50	36.00	46.50	36.09
Average	21	31.00	36.83	42.50	35.50
Weak	4	27.50	28.50	30.50	29.35
<u>Job Analysis Ratings</u>					
Above Average	29	29.00	36.50	41.67	35.43
Average	22	31.25	34.25	41.75	34.86
Below Average	7	31.50	33.50	45.50	38.41

Part (1): ACE-Q Scores (Page 118) - This sub-test showed that the men with the strongest personalities were the ones that scored the highest, while the remaining segments were significantly varied in the lower percentiles, having only about a one point spread in the upper percentiles. The aptitude ratings showed that the men with above-average aptitudes had the lowest scores in the low and middle percentiles, and they were equal to the below-average aptitude men in the upper percentiles. In this sub-test, the men with average aptitudes seemed to do the best. Therefore, this portion of the ACE seemed to indicate the best personality, but it did not seem as significant in pointing out the men with the best aptitudes.

Part (2): ACE-L Scores (Page 119) - This portion of the ACE seemed to indicate that the men with the strongest personalities made the best scores, and the ranking of the scores was in direct ratio to the personality levels. All of the personality rankings seemed to show significant differences in the point spread of their scores. The men with the above-average aptitudes also scored the highest. The mean and percentile scores for the ACE-L showed a rather strong tendency for those rated highly by their supervisors to be the same persons making the highest scores on this test.

Part (3): ACE-Total Scores (Page 120) - On the

ACE, in terms of total scores, the men with the strongest personality and aptitude ratings made the highest scores. This test discriminated quite well.

Part (4): Otis Scores (Page 121) - This test seemed to show that while the men with the best personality made the highest marks in the lower and middle percentiles, there was less than one point between the top three ratings in the upper percentiles. In the aptitude ratings, the top two categories were close to each other throughout the percentiles. Here, too, was a test that seemed to indicate the strongest personality by the highest score, but this test seemed less significant in selecting the men with the best aptitude.

Part (5): Guilford-Martin "S" Scores (Page 122) - In this sub-test, as in the next three segments of this instrument, the scores increased in an inverse order. The men with average personalities seemed to do the best on this sub-test, while the men with weak personalities did the poorest. The men with below-average aptitudes also did the best on this test. Therefore, this instrument did not show promise for selecting the men with the best personalities and aptitudes.

Part (6): Guilford-Martin "T" Scores (Page 123) - In this sub-test, the best scoring was done by the men with the average personalities, while the poorest scores were

recorded, most often, by the men with the weakest personalities. In the job analysis, the scores were mixed, making this category somewhat confusing. Because of the resultant score in both the personality and the job groupings, this sub-test might not have been a valid test for determining the best in either of the two categories.

Part (7): Guilford-Martin "D" Scores (Page 124) -

In this sub-test, the average personalities were again the best scorers, while the men with the very strong personalities scored the poorest throughout the percentiles. In the job analysis section, the men with the above average ratings did the best, except in the lower percentiles, and the men with the below average ratings performed the poorest in this sub-test. Thus, it might be plausible to assume that the personality rankings would not be shown to advantage in this sub-test, but the job aptitudes would show some discrimination.

Part (8): Guilford-Martin "C" Scores (Page 125) -

The men with the average personality ratings had the higher scores except in the middle rankings, while the men with the very strong personalities most consistently scored the poorest throughout the percentiles. Except in the lower percentile, the men with above average job ratings did the best, and the men with below average rankings had the poorest showing on this sub-test. The results would

seem to indicate that this sub-test was not completely useless, but its validity was not strong.

Part (9): Guilford-Martin "R" Scores (Page 126) -

In this and the remaining segments of this testing instrument, the scores were in direct proportion in that the highest scores indicated the best work. In this sub-test, the men with the average personalities scored the best in the lower and middle percentiles, and the men with very strong personalities scored the best in the upper percentiles. In the job ratings, the scoring was mixed enough to cause doubts as to its effectiveness. In all, the findings on this sub-test indicated that its use for accurate prediction in this particular situation would be doubtful.

Part (10): Guilford-Martin "G" Scores (Page 127) -

This sub-test showed the highest scores throughout the percentile rankings were made by the men with "very strong" personality ratings, and the lowest scores were made by the men in the lowest grouping throughout the percentile rankings. In the job category, the men with average abilities scored the best, while the poorest scores were made by the top and bottom sections of this grouping. Thus, this sub-test seemed quite useable for personality judgments, but it did not seem as useful for job analysis.

Part (11): Guilford-Martin "A" Scores (Page 128) -

This portion of the Guilford-Martin had inconsistent results

in both the personality and the job analysis scores. The strong and the average personalities had the best scores, but the scores fluctuated from one category to another throughout the percentiles. In the job categories, the above average group scored the best in the lower and middle percentiles, while the below average group did the best in the upper percentiles. This sub-test seemed to lack usefulness in this battery.

Part (12): Guilford-Martin "M" Scores (Page 129) -

This sub-test, as with the previous sub-test, also presented confused scoring throughout the percentiles. In the personality groupings the very strong group scored the best in the lowest percentiles, and the average group scored the best in the middle and upper percentiles. In the job categories, the average group scored the best in the upper and lower percentiles, and the above average group scored the best in the middle percentiles. This seemed to indicate that the use of this sub-test was doubtful.

Part (13): Guilford-Martin "I" Scores (Page 130) -

This sub-test, in the personality ratings, showed the men in the strong segment with the best scores in the upper and lower percentiles, and the men with the average rating had the best scores in the middle percentiles. In the job ratings, the above average group had the best scores in the lower and middle percentiles, while the men in the average

group had the best scores in the upper percentiles. This sub-test seemed to lack usefulness, because of the lack of uniformity in the upper ratings.

Part (14): Guilford-Martin "N" Scores (Page 131) -

The top three segments of the personality ratings in this sub-test each scored well in some portion of the percentiles. These scores caused confusion as to the use of this phase of the sub-test. The same degree of confused scoring was also evident in the job analysis. Thus, this entire sub-test seemed to lack usefulness.

Part (15): Guilford-Martin "O" Scores (Page 132) -

In this sub-test the very strong personality group scored the best in the lower percentiles, while the men in the strong personality group scored the best in the middle and in the upper percentiles. The men rated average in their jobs did the best in the lower and middle rankings, and the men with above average job ratings did the best in the upper percentiles. Lack of uniformity seemed to indicate that this sub-test was not valid enough to warrant its use.

Part (16): Guilford-Martin "Ag" Scores (Page 133) -

This portion of this test showed that the men with the strong personality ratings scored best in the lower percentiles and that the men in the very strong personality section scored the best in the middle and upper percentiles. The men with the average ratings in the job analysis had the

best scores in the lower and middle percentiles, while the men with the above average job ratings scored the best in the upper percentiles. This sub-test did not seem a valid item of the battery, also due to its confused scoring.

Part (17): Guilford-Martin "Co" Scores (Page 134) -

In this final portion of the Guilford-Martin, the men with the strong personalities scored the best in the lower and middle percentiles, while the men with the average personalities scored the best in the upper percentiles. In the job analysis, the men with above average ratings scored the best in all of the percentiles. This sub-test would seem to be useful for job analysis, but not for personality judgments.

Part (18): Coop Part I Scores (Page 135) - In this sub-test, the men with the very strong personality ratings had the best scores throughout the percentiles. The men with average job ratings had the best scores in the lower percentiles, while the men with above average job ratings scored the best in the middle and upper rankings. The use of this sub-test for personality ratings is most valid, and while the job ratings seem somewhat valid, they were possibly not as strong in their use as the personality ratings.

Part (19): Coop Part II Scores (Page 136) - In this sub-test, the men with very strong personalities scored

the best in the lower and middle percentiles, while the men with average personalities scored the best in the upper percentiles. In the job ratings, the men with average ratings scored the best throughout the percentiles. This sub-test seemed somewhat useful, but, in the main, it was not as useful as might have been hoped for.

Part (20): Coop Part III Scores (Page 137) - In this sub-test, the men with very strong personalities scored the best throughout the percentiles, and the men with above average job ratings scored the best throughout the job ratings. Thus, this sub-test, in its entirety, seemed most valid for both personality and job evaluations.

Part (21): Coop Part IV Scores (Page 138) - This test as a complete instrument showed the men with very strong personality ratings scoring the best throughout the percentiles. In the job ratings, however, the men with average job ratings scored the best throughout the percentiles. As a total evaluative instrument, this test seemed useful for personality judgments, but not for job analysis.

Part (22): Kwalwasser Scores (Page 139) - In this testing instrument, it had to be remembered that none of the men scored very well in relation to the national norms. In judging the scores solely from a numerical rating, only negative judgments could be made. None of the personality

ratings scored consistently well in any of the percentile rankings. The same was true for the ratings in the job analysis section. Thus, this test seemed useless as a part of the eventual test battery.

Part (23): Strong Printer Scores (Page 140) - In this sub-test, the men with weak personalities made the best scores throughout the entire percentiles, while the men in the very strong ratings made the worst showing. In the job analysis the men with average ratings made the best scores in the middle and upper percentiles, and the men with above average ratings did the best in the lower percentiles. The variety of scores in relation to the ratings made this sub-test seem dubious in its use.

Part (24): Strong Personnel Director Scores (Page 141) - This sub-test showed that the men with strong personalities did the best in the lower and middle percentiles, while the best scores in the upper percentiles were made by the men with weak personalities. Relative to the job analysis, the men with above average ratings scored the highest throughout the percentiles. This sub-test seemed unuseable for personality evaluations, but it was apparently valid for job proficiency determinations.

Part (25): Strong Public Administrator Scores (Page 142) - This portion of the Strong seemed to indicate that the men with the weakest personalities made the best scores

in the lower and middle percentiles, while the men with strong personalities made the best scores in the upper percentile rankings. In the job analysis, those with average ratings scored the best in the lowest percentiles, and the above average men made the best scores in the middle and upper percentiles. There seemed to be an indication that this sub-test was not valid for personality judgments and that it was only partially useful for a job analysis.

Part (26): Strong Social Science High School Teachers Scores (Page 143) - This portion of this testing instrument seemed to indicate that the best scores in the lower percentiles were made by the men with the very strong personalities, while the weakest personalities scored the best in the middle and upper percentiles. In the job analysis ratings, the average men scored the best in the lower percentiles, although the above average men scored the best in the middle and upper percentiles. In summary, this sub-test would probably not be valid for personality judgments, and only somewhat valid for job evaluations.

Part (27): Strong Social Worker Scores (Page 144) - The men with the weakest personalities scored the best throughout the percentile rankings on this sub-test, while in the job ratings, the men with below average classifications did the best in the lower percentile groups, and the above average men did the best in the other percentiles.

This sub-test also seemed invalid for personality ratings, and only somewhat valid for job ratings.

Part (28): Strong Musician Scores (Page 145) - This sub-test also seemed invalid in this evaluative process, as the men with weak personalities scored the best in the lower and middle percentiles, and the men with very strong personalities were able to show the best scores only in the upper percentiles. The percentile rankings in the job area were mixed and confused enough to substantiate the opinion that this sub-test was not a valid examination instrument.

Part (29): Strong Mortician Scores (Page 146) - Both of the lowest rating segments scored the best throughout the percentile rankings of this sub-test, namely, the weakest personalities and the below average job analysis groups. This portion of the Strong seemed, therefore, to be completely invalid.

Part (30): Strong Sales Manager Scores (Page 147) - This sub-test, as with the previous section of the Strong, had one rating, the average personality men and the men with below average job analysis ratings, in each segment scoring the best throughout the percentile rankings. Thus, this sub-test also seemed invalid for use in the testing battery.

Part (31): Strong Life Insurance Salesman Scores (Page 148) - In this sub-test, the men with the weakest

personalities scored the best in the lower percentiles, while the men with very strong personalities scored the best in the middle and upper percentiles. The below average job ratings did the best in the lowest percentiles, and the average job ratings did the best in the middle and upper percentile rankings. This sub-test seemed somewhat valid for personality judgments, but invalid for job analysis.

Part (32): Strong Real Estate Salesman Scores (Page 149) - In this sub-test the men with very strong personalities scored the best only in the lower percentiles. The best scores in the remaining percentiles rankings were made by the men with average personalities. In the job analysis ratings, the below average men scored the best throughout the entire percentile rankings. This sub-test, therefore, also seemed invalid.

Part (33): Strong Advertiser's Scores (Page 150) - The top categories of the personality rankings seemed to do the best in this segment of this testing instrument in that the very strong personality men scored the best in the lower percentiles, and the strong personality men scored the best in the other percentile groupings. In the job analysis ratings, however, the below average men did the best throughout the percentile rankings. This sub-test seemed somewhat useful for personality groupings, but not useful for job analysis.

Part (34): Strong Lawyer's Scores (Page 151) - In this final portion of the Strong, the scoring in all of the personality ratings as well as in all of the job analysis ratings was mixed and confused enough to warrant the opinion that this sub-test was not a valuable addition to the testing battery.

In summarizing this chapter, of the thirty-four tests or sub-tests that comprised this battery, only eight sections seemed to be valid in determining the men with the highest personality ratings. These instruments were the ACE-Q, the ACE-L, the ACE-Total, the Otis, the Guilford-Martin "G" factor, the Coop Part I, the Coop Part II, and the Coop Part IV tests. Four additional tests indicated a possible use in determining the strongest personalities. These were the Guilford-Martin "Ag" factor, Coop Part II, Strong Life Insurance Salesman, and the Strong Advertiser tests. The remaining twenty-two tests did not seem valid in their use as determinants of the strongest personalities in the test group. In determining the men with the highest job ratings, only four tests seemed valid: the ACE-L, the Guilford-Martin "Co" factor, Coop Part III, and the Strong Personnel Director tests. Five additional tests seemed to indicate some validity in job analysis. They were the Guilford-Martin "D" factor, Coop Part I, Strong Public Administrator, Strong Social Science High School Teacher,

and the Strong Social Worker tests. The remaining twenty-five tests did not seem valid in determining the highest job proficiencies among the men in the testing group.

CHAPTER VI

SUMMARY, CONCLUSIONS AND RECOMMENDATIONS

As indicated in Chapter I, the purpose of this study was fourfold: (1) to make an analysis with respect to range and other characteristics of scores made by a group of radio announcers on a selected battery of psychological tests; (2) to relate selected personal data, such as age and educational levels of these same radio announcers, to their scores on the psychological tests; (3) to describe any tendency for the radio announcers rated "good" by their immediate supervisors to be those making the higher scores on the tests; (4) and to correlate these significant data concerning the professional radio announcer into suggestions and recommendations on improving the training procedures and the practices for student radio announcers.

The first three of these objectives or purposes have been accomplished in the detailed analyses and descriptions presented in the previous chapters of this study. These will be summarized briefly in the present chapter and then attention will be given to purpose number four and conclusions presented.

The first purpose of the study was an analysis of the scores made by the men in the testing group on the various

testing instruments with respect to range of scores and to other characteristics. The scores made by the testing group were reviewed as total scores made by all of the men in relation to national norms. In analyzing the information that was obtained, it was noted that for the test group as a whole, and as shown in the computations of Table I, on fifteen tests or sub-tests the scores that were made by the radio announcers were in general above the national norms. These tests and sub-tests were the ACE-L and Total, the Otis, the Guilford-Martin "M", all four sections of the Coop, and the Strong Printer, Personnel Director, Social Science High School Teacher, Social Worker, Musician, Life Insurance Salesman, and Advertiser tests.

The second purpose was that of relating selected personnel data to scores on the tests. The material in Table II seemed to indicate that twelve tests or sub-tests were at least significant in one or more personal sections in each of the personal groupings. These significant tests and sub-tests were the ACE-Q, the Otis, the Guilford-Martin "T", "D", "C", "R", and "I" sections, the Coop Part II, and the Strong Personnel Director, Musician, Sales Manager, and Real Estate Salesman tests.

The third purpose of this study was that of describing any tendency of "good" announcers to make high scores on the tests and sub-tests. In analyzing the materials compiled

in Chapter V, it has been noted that the "good" announcer, both in personality and in job aptitude, had higher scores on eight tests or sub-tests. These tests and sub-tests were the three sections of the ACE, the Otis, the Guilford-Martin "G", and the Coop Part I, Part II, and Part IV Scores. Four tests or sub-tests seemed significant in the evaluation of job aptitudes: the ACE-L, the Guilford-Martin "Co", the Coop Part III, and the Strong Personnel Director. Thus, only the ACE-L scores seemed to indicate high levels of personality and job aptitude combined, and this was the only test that seemed to indicate the completely "good" announcer. The other tests and sub-tests that seemed to show significance in either personality or job aptitude seemed valid for usage, though each showed significance in only one trait.

By combining the tests that seemed significant in the evaluations based on the national norms, the variations of personal factors, the high personality ratings, and the strong job aptitudes, it was noted that there was no test that did well in all four categories. Four tests were significant, however, in three of the areas noted above: the ACE-L, the Otis, the Coop Part II, and the Strong Personnel Director scores. There was also a secondary group of six tests and sub-tests that scored well in two of the previously mentioned areas. They were the ACE-Q and Total Scores,

the Coop Part I, Part III and Part IV scores, and the Strong Musician tests. Thus, a battery composed of the entire ACE, the Otis, the entire Coop, and the Strong Personnel Director and Musician tests seemed to include the tests and sub-tests that might most readily indicate a valid battery for possible pre-determination of success by a student as a radio announcer.

I. THE "COMPOSITE" ANNOUNCER

The fourth purpose was to correlate these significant data about the professional radio announcers into suggestions and recommendations for improving the training and selection procedures for student radio announcers. A further series of analyses of the results of the various tests and sub-tests was made to give possible further insights into the character and makeup of the "composite-good" announcer as derived from the test group. As derived from Table I, this "composite-good" announcer had average but not exceptionally high intelligence, and he was far more capable of linguistic thought processes than of numerical thought processes. These factors were derived from the results of the complete ACE scores and the Otis scores. The Guilford-Martin seemed to show that the "composite-good" announcer, as compared to the "average" man, sought a little more general and social activity and social leadership. He had normal thought processes, and he was emotionally stable, being neither more nor

less depressed or cheerful, changeable in mood, or inhibited or impulsive. He was slightly stronger in his masculinity and self confidence, usually not as prone to nervousness, usually less agreeable and cooperative, and usually more objective. The Coop showed that he was completely conversant with current events, and the Kwalwasser showed him to be almost completely unfamiliar with musicology. The Strong seemed to indicate that he could do a little work that had a technical or "crafts" requirement. However, he seemed apt in positions that required him to work with people and supervise their activities, especially young people or people with personal problems. Moreover, he was not too capable in supervisory positions on a major policy-making level. He had an appreciation of music and the fine arts, and he was effective in selling personal services or in presenting promotional activities.

This "composite-good" announcer, as shown by the analysis of Table II, seemed to be 29 to 33 years old, with some college work, but not necessarily a college degree. He had seven to eight years of professional experience and had worked in four stations. There did not seem to be any need for his having acquired any additional vocational experience in related fields.

The men with the best personalities seemed to be identical to the "composite-good" announcers except for

the two factors that included the men who had worked for three to four years professionally, and who had also acquired an above-average amount of "outside" vocational experience. It was construed that the existence of fewer years of professional radio experience was balanced by the increased amount of training in a related field.

The men with the best job aptitudes were also identical to the "composite-good" announcer except for two factors. They had six to eight years of professional experience, and they, too, had an above average amount of "outside" vocational experience. It was construed here that increased years of professional work and additional "outside" work would make for an announcer with a higher job aptitude.

II. CONCLUSIONS

On the basis of this study the following conclusions then seem justified:

1. A battery of tests and sub-tests which could be most helpful in pre-determining probable success as a radio announcer could be composed of: (1) The American Council on Educational Psychological Examination for College Freshman; (2) The Otis Quick-Scoring Mental Ability Test, Gamma; (3) The latest edition of the Cooperative Contemporary Affairs Test; (4) and the Personnel Director and Musician sections of the Strong Vocational Interest Blank for Men. This testing battery could be used by schools and college or University departments that train student radio announcers.
2. The courses in which student radio announcers are enrolled should be those that are useable for

- people who have above-average intelligence, but who are not overly bright or superior in intelligence.
3. Student radio announcers should not be enrolled in too many courses that require Qualitative-Arithmetical thinking, such as Mathematics or the Sciences.
 4. Emphasis in the curricular studies of the student radio announcer should be placed in the Social Sciences, Elementary Psychology, Music and Fine Arts Appreciation, Advertising and Salesmanship, Speech and Drama.
 5. Extensive "professional" laboratory work, to more readily qualify student radio announcers for successful careers, should be used.
 6. Student radio announcers should be encouraged to participate in related fields, so as to acquire the additional skills that seemed valuable for success in the professional field.

III. RECOMMENDATIONS

A number of recommendations was also deemed advisable, based on the development of some of the items listed in the Conclusions, as well as additional needs for research in the areas touched on or areas adjacent to the problems investigated in this study. These additional areas of development, research and investigation seemed to include the following:

1. Use of the battery of tests and sub-tests listed in the first of the Conclusions on Page 171 as one element in both a pre-registration testing program for new students entering a college or university for training in the field of Radio Announcing, as well as in a continuing program of guidance and counseling for such Radio Announcing students. In addition, this same battery could also be used as one element of a screening battery for applicants for positions within the professional field.
2. Investigations and research to determine what factors, in addition to intelligence, personality, and aptitude lead to success in radio

announcing. Some of these factors might be vocal ability, technical skills, and personal appearance.

3. Investigations and research to determine the relationship of locale to success in radio announcing, in which studies, similar to the one undertaken in this experiment, are conducted in other parts of the United States, in addition to Texas.
4. Further investigations and research on the degree of success achieved by student radio announcers who had been trained under the recommendations made in this study, after these students had been in the professional field for some time.
5. Investigations and research of the type done in this study, using television announcers as the test group.
6. Investigations and research of the type done in this study, using radio personnel other than announcers as the test group.
7. Investigations and research of the type done in this study, using television personnel other than announcers as the test group.

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APPENDIX

APPENDIX A

DATA OF RAW SCORES FOR EXPERIMENTAL GROUP

CASE				TEST AND SCORE														
1-40	ACE			OTIS	GUILFORD-MARTIN													
	Q	L	T	I.Q.	S	T	D	C	R	G	A	M	I	N	O	Ag	Co	
1	63	98	161	54	14	38	18	25	42	15	16	21	39	34	64	54	89	
2	46	74	120	46	34	43	27	30	36	9	14	23	23	32	33	29	71	
3	36	41	77	42	20	41	36	44	31	18	23	17	25	11	23	30	37	
4	34	47	81	34	--	--	--	--	--	--	--	--	--	--	--	--	--	
5	46	43	89	41	21	43	29	40	41	20	23	19	29	20	36	34	60	
6	25	24	49	32	--	--	--	--	--	--	--	--	--	--	--	--	--	
7	42	41	83	48	22	44	30	41	32	11	17	20	20	23	47	21	32	
8	44	85	129	59	15	46	19	27	34	14	21	25	43	27	44	33	96	
9	42	67	109	53	--	--	--	--	--	--	--	--	--	--	--	--	--	
10	28	74	102	62	27	59	36	49	35	14	30	23	34	27	46	24	67	
11	45	62	107	51	19	32	18	10	22	13	28	18	32	23	44	18	35	
12	55	80	135	64	1	29	5	11	52	22	31	21	46	35	60	44	72	
13	41	81	122	71	6	42	10	20	47	12	31	18	48	28	42	28	73	
14	29	67	96	34	28	44	22	19	26	5	19	16	32	30	45	20	42	
15	32	64	96	52	15	46	28	39	52	12	22	20	33	21	32	32	75	
16	53	75	128	67	27	57	37	39	24	14	25	18	21	20	26	21	65	
17	31	82	113	50	14	46	42	48	38	19	16	16	14	13	26	25	19	
18	16	36	52	40	--	--	--	--	--	--	--	--	--	--	--	--	--	
19	--	--	---	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
20	35	83	118	47	9	31	13	18	44	12	24	24	37	27	41	47	80	
21	38	66	104	50	10	19	6	19	48	19	27	33	42	29	60	42	69	
22	38	94	132	57	23	38	15	16	39	8	30	29	41	28	69	45	76	
23	56	81	137	73	--	--	--	--	--	--	--	--	--	--	--	--	--	
24	24	62	86	37	32	43	38	33	23	13	21	27	24	21	36	20	32	
25	56	72	128	63	10	13	7	13	34	8	22	20	38	23	40	26	50	
26	37	74	111	43	15	47	23	24	37	10	14	20	29	14	42	23	51	
27	35	50	85	36	--	--	--	--	--	--	--	--	--	--	--	--	--	
28	32	88	120	56	13	46	16	21	45	12	31	27	41	36	34	27	53	
29	53	66	119	62	29	40	18	25	11	7	18	21	21	20	40	26	59	
30	43	74	117	55	10	38	11	20	47	15	26	26	45	28	55	35	51	
31	55	78	133	62	23	50	41	47	38	16	21	21	29	16	41	27	37	
32	39	90	129	71	13	14	11	19	35	10	16	25	40	37	50	34	71	
33	26	70	96	46	24	47	27	34	27	5	20	18	31	37	61	47	87	
34	45	72	117	58	1	23	2	12	48	13	27	25	45	37	54	18	49	
35	--	--	---	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
36	41	55	96	48	5	38	8	19	55	11	31	26	42	34	42	31	28	
37	47	80	127	58	8	34	8	13	42	10	28	21	38	27	43	27	87	
38	6	22	28	15	17	27	18	16	34	11	17	7	27	23	53	41	48	
39	45	72	117	47	6	38	13	26	46	11	31	21	37	32	47	21	56	
40	50	89	139	64	22	35	27	29	31	10	13	28	26	31	41	42	71	

APPENDIX A (Continued)

DATA OF RAW SCORES FOR EXPERIMENTAL GROUP

CASE					TEST AND SCORE													
41-76	ACE			OTIS	GUILFORD-MARTIN													
	Q	L	T	I.Q.	S	T	D	C	R	G	A	M	I	N	O	Ag	Co	
41	55	83	138	67	4	45	15	26	52	12	33	19	40	25	40	33	87	
42	51	85	136	64	11	34	15	26	49	13	18	20	34	32	50	40	68	
43	49	89	138	72	6	10	11	22	56	22	23	21	31	14	43	16	41	
44	54	86	140	69	3	48	12	21	48	18	35	19	42	24	43	33	89	
45	36	74	110	62	--	--	--	--	--	--	--	--	--	--	--	--	--	
46	43	87	130	52	3	30	12	20	42	14	28	24	37	19	54	42	67	
47	36	72	108	58	20	52	48	55	36	13	10	17	11	14	23	19	52	
48	51	84	135	73	41	37	26	36	28	2	4	15	28	16	46	49	83	
49	50	71	121	71	20	28	15	20	38	10	23	16	35	30	58	41	78	
50	42	67	109	60	--	--	--	--	--	--	--	--	--	--	--	--	--	
51	62	74	136	57	3	36	5	13	46	9	18	21	42	24	67	51	87	
52	33	74	107	67	7	29	9	10	30	5	21	28	38	38	70	56	88	
53	37	61	98	47	17	36	27	32	45	13	23	24	30	25	30	18	47	
54	38	100	138	47	7	48	16	33	59	22	27	19	46	23	41	26	80	
55	46	79	125	66	15	42	22	24	33	13	21	20	24	21	46	22	72	
56	32	79	111	47	20	39	28	39	42	20	23	21	30	9	29	28	46	
57	40	71	111	52	17	33	22	26	34	12	17	9	31	23	45	43	82	
58	41	50	91	59	17	34	11	22	32	12	18	26	33	29	44	33	49	
59	38	77	115	54	36	47	48	56	28	8	13	8	15	5	22	39	55	
60	38	67	105	47	11	31	30	34	37	15	21	13	17	5	36	33	54	
61	61	94	155	56	13	40	9	10	29	11	19	21	43	30	69	47	79	
62	29	48	77	49	--	--	--	--	--	--	--	--	--	--	--	--	--	
63	32	78	110	46	9	32	20	24	47	11	20	23	36	23	34	22	53	
64	47	76	123	65	10	23	8	7	32	11	25	18	41	29	68	48	77	
65	47	84	131	66	--	--	--	--	--	--	--	--	--	--	--	--	--	
66	29	52	81	49	--	--	--	--	--	--	--	--	--	--	--	--	--	
67	41	61	102	68	8	39	12	25	54	18	23	27	40	26	46	34	65	
68	47	69	116	62	29	38	18	30	29	7	16	12	20	30	39	30	56	
69	53	61	114	59	35	42	32	32	28	18	15	21	30	31	42	29	59	
70	46	65	111	47	5	39	15	23	50	16	30	29	45	29	45	25	55	
71	40	70	110	48	19	41	17	22	32	12	17	24	38	25	40	30	71	
72	49	94	143	56	1	32	2	13	59	18	31	32	47	35	56	27	94	
73	56	96	152	64	2	30	5	11	36	14	29	23	44	38	65	34	55	
74	37	51	88	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
75	24	45	69	28	7	32	8	13	40	10	31	23	44	39	51	39	63	
76	44	63	107	54	19	41	16	16	21	9	20	24	38	35	47	39	77	

APPENDIX A (Continued)

DATA OF RAW SCORES FOR EXPERIMENTAL GROUP

CASE	TEST AND SCORE												
1-40	STRONG VOCATIONAL INTEREST TEST												KWAL
	PRI.	PER. DIR.	PUB. ADM.	SOC. SCI.	SOC. WOR.	MUS.	MOR.	SLS. MGR.	R.E. AG'T.	L.I. SLSM.	ADV.	LAW.	
1	37	41	40	33	38	50	24	32	38	40	43	36	112
2	56	48	46	51	43	47	39	33	36	33	43	28	11
3	46	47	42	35	42	47	42	38	41	41	40	31	53
4	--	--	--	--	--	--	--	--	--	--	--	--	---
5	46	35	39	52	40	40	51	32	38	40	30	31	76
6	--	--	--	--	--	--	--	--	--	--	--	--	---
7	24	18	24	24	24	23	45	50	57	52	51	47	64
8	39	32	38	31	40	65	23	24	38	33	49	37	146
9	--	--	--	--	--	--	--	--	--	--	--	--	---
10	39	37	36	26	30	31	29	26	28	23	33	21	84
11	40	50	40	46	45	43	37	38	36	39	36	30	114
12	42	46	36	41	48	62	40	47	47	46	59	37	160
13	30	34	28	25	30	47	28	40	38	33	45	29	131
14	37	42	40	50	40	48	42	37	40	42	50	38	15
15	31	48	46	49	50	47	34	41	40	47	53	47	69
16	32	45	45	35	39	34	26	32	35	35	38	36	24
17	44	42	44	39	39	42	28	29	33	28	32	28	106
18	--	--	--	--	--	--	--	--	--	--	--	--	---
19	27	38	36	35	34	31	41	49	44	47	45	35	79
20	33	33	34	44	40	48	47	42	47	50	60	33	36
21	33	10	20	17	19	35	31	36	45	40	40	42	44
22	58	36	48	50	46	49	15	21	31	24	40	40	173
23	--	--	--	--	--	--	--	--	--	--	--	--	---
24	48	26	34	23	23	46	23	29	34	25	34	33	99
25	47	41	41	39	36	48	39	38	36	34	39	28	147
26	35	36	39	26	31	35	25	40	42	36	54	47	79
27	--	--	--	--	--	--	--	--	--	--	--	--	---
28	40	33	32	20	30	40	30	28	35	30	45	39	97
29	29	34	40	34	32	33	25	35	41	38	50	45	91
30	27	38	37	32	34	29	45	45	47	46	50	41	76
31	51	38	39	38	39	51	32	29	37	28	41	30	88
32	34	43	32	37	36	47	43	38	40	33	42	26	67
33	40	40	40	52	47	47	52	32	45	44	50	39	53
34	26	51	42	50	45	36	42	51	48	52	57	43	37
35	36	41	47	18	33	36	31	37	39	30	39	36	7
36	37	37	36	35	36	30	43	46	46	38	34	33	84
37	37	32	36	40	39	40	43	42	44	44	43	34	58
38	--	--	--	25	26	36	--	--	--	18	--	17	132
39	32	34	38	36	41	39	44	41	51	43	47	37	76
40	27	26	31	40	30	30	36	39	44	46	49	47	9

APPENDIX A (Continued)

DATA OF RAW SCORES FOR EXPERIMENTAL GROUP

CASE	TEST AND SCORE												
41-76	<u>STRONG VOCATIONAL INTEREST TEST</u>												<u>KWAL</u>
	<u>PRI.</u>	<u>PER.</u> <u>DIR.</u>	<u>PUB.</u> <u>ADM.</u>	<u>SOC.</u> <u>SCI.</u>	<u>SOC.</u> <u>WOR.</u>	<u>MUS.</u>	<u>MOR.</u>	<u>SLS.</u> <u>MGR.</u>	<u>R.E.</u> <u>AGT.</u>	<u>L.I.</u> <u>SISM.</u>	<u>ADV.</u>	<u>LAW.</u>	
41	37	36	36	34	35	28	39	45	44	36	32	31	25
42	48	33	39	34	42	55	40	33	40	37	42	33	107
43	31	35	31	32	34	42	36	45	51	49	53	39	61
44	25	38	31	21	31	41	29	37	41	43	49	43	134
45	--	--	--	--	--	--	--	--	--	--	--	--	---
46	33	43	48	37	42	24	37	38	36	39	28	27	57
47	31	23	30	19	30	54	34	25	40	35	44	40	108
48	46	37	44	36	36	38	24	21	32	26	35	34	96
49	34	17	20	7	16	32	38	38	45	31	35	31	39
50	--	--	--	--	--	--	--	--	--	--	--	--	---
51	27	36	34	25	30	23	39	42	43	37	50	40	77
52	41	39	44	49	46	40	27	33	31	27	33	23	- 47
53	57	34	38	40	40	52	35	22	31	28	29	28	- 24
54	--	--	--	36	36	39	--	--	--	34	--	47	114
55	30	42	38	51	49	39	29	40	45	48	50	47	85
56	28	29	29	36	38	39	35	41	46	49	54	42	86
57	26	28	26	21	33	44	39	47	50	49	56	32	54
58	51	33	36	34	28	41	36	34	34	32	26	22	- 68
59	36	19	26	36	35	45	38	36	46	45	52	39	43
60	31	41	39	53	52	51	42	42	49	52	47	45	- 98
61	35	39	41	41	43	34	38	35	41	42	38	42	- 14
62	--	--	--	--	--	--	--	--	--	--	--	--	---
63	32	33	29	34	36	36	38	41	51	46	50	43	167
64	37	31	28	31	34	55	36	33	40	36	52	32	69
65	--	--	--	--	--	--	--	--	--	--	--	--	---
66	--	--	--	--	--	--	--	--	--	--	--	--	---
67	41	55	59	58	60	52	25	37	38	41	56	45	56
68	28	26	34	33	26	34	23	33	38	35	45	42	17
69	30	18	33	18	25	34	41	32	39	33	33	32	100
70	38	46	38	41	40	25	35	41	47	45	42	43	- 80
71	34	30	33	28	33	39	43	33	41	35	36	27	- 49
72	32	47	42	38	43	40	37	37	41	44	45	40	41
73	45	54	51	61	55	49	25	33	32	30	43	30	99
74	--	--	--	--	--	--	--	--	--	--	--	--	---
75	31	46	43	48	38	27	38	44	44	48	43	34	40
76	49	42	37	39	38	42	38	34	36	35	31	29	72

APPENDIX A (Continued)

DATA OF RAW SCORES FOR EXPERIMENTAL GROUP

CASE	TEST AND SCORE			
<u>1-40</u>	<u>COOP CONTEMPORARY AFFAIRS TEST</u>			
	I	II	III	TOTAL
1	46 2/3	26	16 2/3	89 1/3
2	52	22	18	92
3	17 1/3	16 2/3	8 2/3	42 2/3
4	--	--	--	--
5	17 1/3	11 1/3	10	38 2/3
6	4	3 1/3	- 2/3	6 2/3
7	10 2/3	7 1/3	2/3	18 2/3
8	30 2/3	16 2/3	15 1/3	62 2/3
9	26 2/3	22	20 2/3	69 1/3
10	30 2/3	15	23 1/3	69
11	33 1/3	19 1/3	16 2/3	69 1/3
12	29 1/3	26	12 2/3	68
13	32	23 1/3	16 2/3	72
14	20	10	15 1/3	45 1/3
15	28	18	18	64
16	40	26	18	84
17	26	19 1/3	24 2/3	70
18	12	11 1/3	4 2/3	28
19	--	--	--	--
20	20	11 1/3	15 1/3	46 2/3
21	22 2/3	19 1/3	6	48
22	48	26	24 2/3	98 2/3
23	28	18	15 1/3	61 1/3
24	32	22	18	72
25	20	11 1/3	12 1/3	43 2/3
26	8	10	15 1/3	33 1/3
27	22 2/3	20 2/3	14	57 1/3
28	46 2/3	22	24 2/3	93 1/3
29	42 2/3	14	20 2/3	77 1/3
30	38 2/3	16 2/3	16 2/3	72
31	37 1/3	20 2/3	24 2/3	82 2/3
32	29 1/3	15 1/3	19 1/3	64
33	34 2/3	10	12 2/3	57 1/3
34	36	16 2/3	19 1/3	72
35	--	--	--	--
36	24	12 2/3	6	42 2/3
37	29 1/3	15 1/3	20 2/3	65 1/3
38	0	4 2/3	7 1/3	12
39	33 1/3	23 1/3	16 2/3	73 1/3
40	34 2/3	18	16 2/3	69 1/3

APPENDIX A (Continued)

DATA OF RAW SCORES FOR EXPERIMENTAL GROUP

CASE	TEST AND SCORE			
<hr/>				
<u>41-76</u>	<u>COOP CONTEMPORARY AFFAIRS TEST</u>			
	<u>I</u>	<u>II</u>	<u>III</u>	<u>TOTAL</u>
41	22 2/3	23 1/3	16 2/3	62 2/3
42	44	23 1/3	23 1/3	90 2/3
43	40	20 2/3	19 1/3	80
44	36	24 2/3	24 2/3	85 1/3
45	21 1/3	16 2/3	19 1/3	57 1/3
46	46 2/3	23 1/3	19 1/3	89 1/3
47	25 1/3	26	18	69 1/3
48	38 2/3	24 2/3	18	82 1/3
49	30 2/3	20 2/3	7 1/3	58 2/3
50	20	12 2/3	14	46 2/3
51	36	12 2/3	23 1/3	72
52	24	18	14	56
53	5 1/3	14	4 2/3	24
54	24	2	18	44
55	45 1/3	20 2/3	19 1/3	85 1/3
56	38 2/3	19 1/3	16 2/3	74 2/3
57	22 2/3	14	16 2/3	53 1/3
58	34 2/3	23 1/3	15 1/3	73 1/3
59	34 2/3	22	16 2/3	73 1/3
60	42 2/3	13 2/3	15 1/3	71 2/3
61	29 1/3	8 2/3	6	44
62	10 2/3	10	7 1/3	28
63	40	23 1/3	22	85 1/3
64	12	18	12 2/3	42 2/3
65	--	--	--	--
66	--	--	--	--
67	46 2/3	18	18	82 2/3
68	21 1/3	15 1/3	2	38 2/3
69	52	26	15 1/3	93 1/3
70	36	12 2/3	7 1/3	56
71	25 1/3	18 2/3	14	58
72	44	23 1/3	22	89 1/3
73	26 2/3	19 1/3	19 1/3	65 1/3
74	--	--	--	--
75	25 1/3	6	6	37 1/3
76	32	19 1/3	7 2/3	59

APPENDIX B

PERSONAL DATA ON EXPERIMENTAL GROUP

CASE 1-40	CITY	CITY SIZE	AGE GROUP	EDUCATION
1	BEAUMONT	MEDIUM	17-21	BACHELOR OF SCIENCE
2	SAN ANTONIO	LARGE	25-29	HIGH SCHOOL AND COLLEGE
3	HOUSTON	LARGE	25-29	HIGH SCHOOL AND COLLEGE
4	BAY CITY	SMALL	17-21	BACHELOR OF SCIENCE
5	SAN ANTONIO	LARGE	21-24	HIGH SCHOOL ONLY
6	BAYTOWN	SMALL	24-29	NO HIGH SCHOOL
7	HOUSTON	LARGE	21-25	BACHELOR OF SCIENCE
8	VICTORIA	SMALL	21-25	BACHELOR OF SCIENCE
9	FREEPORT	SMALL	17-21	HIGH SCHOOL ONLY
10	AUSTIN	MEDIUM	33-37	BACHELOR OF SCIENCE
11	FORT WORTH	LARGE	29-33	BACHELOR OF SCIENCE
12	SAN ANTONIO	LARGE	25-29	HIGH SCHOOL AND COLLEGE
13	HOUSTON	LARGE	25-29	POST GRADUATE
14	HOUSTON	LARGE	37-41	POST GRADUATE
15	ROSENBERG	SMALL	25-29	HIGH SCHOOL AND COLLEGE
16	VICTORIA	SMALL	33-37	HIGH SCHOOL AND COLLEGE
17	HOUSTON	LARGE	25-29	HIGH SCHOOL AND COLLEGE
18	BAYTOWN	SMALL	37-41	HIGH SCHOOL AND COLLEGE
19	ABILENE	MEDIUM	25-29	BACHELOR OF SCIENCE
20	HOUSTON	LARGE	25-29	BACHELOR OF SCIENCE
21	BRYAN	SMALL	21-25	BACHELOR OF SCIENCE
22	SAN ANTONIO	LARGE	29-33	HIGH SCHOOL AND COLLEGE
23	GALVESTON	MEDIUM	21-25	HIGH SCHOOL AND COLLEGE
24	HOUSTON	LARGE	21-25	HIGH SCHOOL AND COLLEGE
25	BRYAN	SMALL	25-29	POST GRADUATE
26	BAYTOWN	SMALL	21-25	HIGH SCHOOL AND COLLEGE
27	HOUSTON	LARGE	25-29	HIGH SCHOOL AND COLLEGE
28	BAYTOWN	SMALL	33-37	HIGH SCHOOL ONLY
29	HOUSTON	LARGE	29-33	POST GRADUATE
30	HOUSTON	LARGE	25-29	HIGH SCHOOL AND COLLEGE
31	HOUSTON	LARGE	21-25	HIGH SCHOOL AND COLLEGE
32	AUSTIN	MEDIUM	25-29	HIGH SCHOOL ONLY
33	ROSENBERG	SMALL	41-45	HIGH SCHOOL ONLY
34	AUSTIN	MEDIUM	29-33	HIGH SCHOOL AND COLLEGE
35	ABILENE	MEDIUM	25-29	HIGH SCHOOL ONLY
36	FORT WORTH	LARGE	17-21	BACHELOR OF SCIENCE
37	HOUSTON	LARGE	21-25	HIGH SCHOOL AND COLLEGE
38	HOUSTON	LARGE	37-41	NO HIGH SCHOOL
39	BAY CITY	SMALL	21-25	HIGH SCHOOL AND COLLEGE
40	AUSTIN	MEDIUM	25-29	BACHELOR OF SCIENCE

APPENDIX B (Continued)

PERSONAL DATA ON EXPERIMENTAL GROUP

CASE 41-76	CITY	CITY SIZE	AGE GROUP	EDUCATION
41	BAYTOWN	SMALL	17-21	HIGH SCHOOL AND COLLEGE
42	HOUSTON	LARGE	49-54	HIGH SCHOOL AND COLLEGE
43	AUSTIN	MEDIUM	21-25	HIGH SCHOOL AND COLLEGE
44	DALLAS	LARGE	25-29	BACHELOR OF SCIENCE
45	VICTORIA	SMALL	21-25	HIGH SCHOOL AND COLLEGE
46	BAY CITY	SMALL	25-29	HIGH SCHOOL ONLY
47	LUBBOCK	MEDIUM	29-33	HIGH SCHOOL AND COLLEGE
48	ROSENBERG	SMALL	29-33	HIGH SCHOOL AND COLLEGE
49	LUBBOCK	MEDIUM	25-29	HIGH SCHOOL AND COLLEGE
50	FREEPORT	SMALL	17-21	NO HIGH SCHOOL
51	BAY CITY	SMALL	25-29	HIGH SCHOOL AND COLLEGE
52	HOUSTON	LARGE	29-33	BACHELOR OF SCIENCE
53	FREEPORT	SMALL	17-21	HIGH SCHOOL ONLY
54	HOUSTON	LARGE	33-37	POST GRADUATE
55	GALVESTON	MEDIUM	25-29	BACHELOR OF SCIENCE
56	EL CAMPO	SMALL	25-29	HIGH SCHOOL AND COLLEGE
57	HOUSTON	LARGE	21-25	HIGH SCHOOL AND COLLEGE
58	GONZALES	SMALL	21-25	HIGH SCHOOL AND COLLEGE
59	ROSENBERG	SMALL	33-37	BACHELOR OF SCIENCE
60	HOUSTON	LARGE	25-29	HIGH SCHOOL ONLY
61	TEXAS CITY	SMALL	25-29	HIGH SCHOOL AND COLLEGE
62	FREEPORT	SMALL	25-29	NO HIGH SCHOOL
63	ABILENE	MEDIUM	37-41	BACHELOR OF SCIENCE
64	GALVESTON	MEDIUM	21-25	HIGH SCHOOL AND COLLEGE
65	AMARILLO	MEDIUM	21-25	HIGH SCHOOL AND COLLEGE
66	TEXAS CITY	SMALL	21-25	BACHELOR OF SCIENCE
67	BAY CITY	SMALL	25-29	HIGH SCHOOL ONLY
68	GONZALES	SMALL	25-29	HIGH SCHOOL ONLY
69	BAYTOWN	SMALL	17-21	HIGH SCHOOL ONLY
70	HOUSTON	LARGE	29-33	BACHELOR OF SCIENCE
71	EL CAMPO	SMALL	29-33	HIGH SCHOOL ONLY
72	SAN ANTONIO	LARGE	38-41	HIGH SCHOOL AND COLLEGE
73	DALLAS	LARGE	21-25	BACHELOR OF SCIENCE
74	BRYAN	SMALL	21-25	HIGH SCHOOL AND COLLEGE
75	HOUSTON	LARGE	21-25	HIGH SCHOOL AND COLLEGE
76	HOUSTON	LARGE	29-33	HIGH SCHOOL AND COLLEGE

APPENDIX B (Continued)

PERSONAL DATA ON EXPERIMENTAL GROUP

CASE 1-40	YEARS OF EXPERIENCE	STATIONS WORKED	EXTRA SKILLS	PERSONALITY RATING	JOB APTITUDE
1	3-4	2	AVERAGE	VERY STRONG	SUPERIOR
2	6-7	3	NONE	WEAK	BELOW AVERAGE
3	1-2	1	AVERAGE	AVERAGE	ABOVE AVERAGE
4	3-4	1	ABOVE AVERAGE	AVERAGE	AVERAGE
5	1-2	2	NONE	WEAK	AVERAGE
6	3-4	5	AVERAGE	AVERAGE	ABOVE AVERAGE
7	4-5	3	VERY GREAT	AVERAGE	BELOW AVERAGE
8	4-5	3	ABOVE AVERAGE	AVERAGE	AVERAGE
9	3-4	6	NONE	STRONG	AVERAGE
10	16-17	10	ABOVE AVERAGE	STRONG	ABOVE AVERAGE
11	3-4	3	BELOW AVERAGE	WEAK	NONE
12	7-8	5	NONE	AVERAGE	AVERAGE
13	7-8	3	ABOVE AVERAGE	STRONG	ABOVE AVERAGE
14	7-8	1	VERY GREAT	STRONG	ABOVE AVERAGE
15	6-7	1	NONE	STRONG	ABOVE AVERAGE
16	15-16	6	NONE	STRONG	ABOVE AVERAGE
17	0-1	1	NONE	STRONG	ABOVE AVERAGE
18	15-16	8	NONE	AVERAGE	BELOW AVERAGE
19	3-4	2	NONE	STRONG	AVERAGE
20	1-2	1	VERY GREAT	STRONG	ABOVE AVERAGE
21	1-2	1	NONE	AVERAGE	ABOVE AVERAGE
22	7-8	3	AVERAGE	STRONG	ABOVE AVERAGE
23	4-5	3	AVERAGE	WEAK	BELOW AVERAGE
24	4-5	3	VERY GREAT	AVERAGE	AVERAGE
25	1-2	1	ABOVE AVERAGE	STRONG	ABOVE AVERAGE
26	2-3	2	AVERAGE	STRONG	BELOW AVERAGE
27	10-11	3	NONE	STRONG	ABOVE AVERAGE
28	4-5	3	AVERAGE	AVERAGE	AVERAGE
29	5-6	9	NONE	AVERAGE	AVERAGE
30	9-10	10	NONE	VERY STRONG	ABOVE AVERAGE
31	1-2	1	NONE	VERY STRONG	AVERAGE
32	9-10	4	NONE	STRONG	ABOVE AVERAGE
33	8-9	3	NONE	STRONG	ABOVE AVERAGE
34	8-9	4	NONE	AVERAGE	AVERAGE
35	4-5	1	NONE	STRONG	ABOVE AVERAGE
36	2-3	3	BELOW AVERAGE	AVERAGE	BELOW AVERAGE
37	1-2	2	NONE	AVERAGE	ABOVE AVERAGE
38	0-1	1	NONE	AVERAGE	AVERAGE
39	0-1	2	NONE	AVERAGE	BELOW AVERAGE
40	5-6	1	NONE	VERY STRONG	ABOVE AVERAGE

APPENDIX B (Continued)

PERSONAL DATA ON EXPERIMENTAL GROUP

CASE 41-76	YEARS OF EXPERIENCE	STATIONS WORKED	EXTRA SKILLS	PERSONALITY RATING	JOB APTITUDE
41	1-2	4	AVERAGE	AVERAGE	BELOW AVERAGE
42	12-13	4	VERY GREAT	STRONG	AVERAGE
43	3-4	2	AVERAGE	AVERAGE	AVERAGE
44	5-6	3	ABOVE AVERAGE	AVERAGE	AVERAGE
45	6-7	3	ABOVE AVERAGE	AVERAGE	ABOVE AVERAGE
46	5-6	5	AVERAGE	AVERAGE	ABOVE AVERAGE
47	9-10	3	AVERAGE	STRONG	ABOVE AVERAGE
48	2-3	1	NONE	AVERAGE	AVERAGE
49	7-8	3	NONE	STRONG	ABOVE AVERAGE
50	2-3	1	NONE	AVERAGE	AVERAGE
51	4-5	4	VERY GREAT	AVERAGE	ABOVE AVERAGE
52	7-8	3	BELOW AVERAGE	AVERAGE	ABOVE AVERAGE
53	0-1	1	NONE	AVERAGE	ABOVE AVERAGE
54	2-3	2	NONE	STRONG	ABOVE AVERAGE
55	3-4	3	AVERAGE	VERY STRONG	ABOVE AVERAGE
56	6-7	3	AVERAGE	STRONG	ABOVE AVERAGE
57	2-3	2	AVERAGE	STRONG	AVERAGE
58	3-4	1	NONE	AVERAGE	AVERAGE
59	9-10	2	NONE	STRONG	AVERAGE
60	2-3	2	AVERAGE	STRONG	BELOW AVERAGE
61	0-1	2	NONE	STRONG	ABOVE AVERAGE
62	5-6	3	AVERAGE	WEAK	BELOW AVERAGE
63	15-16	3	NONE	AVERAGE	ABOVE AVERAGE
64	1-2	1	BELOW AVERAGE	STRONG	BELOW AVERAGE
65	0-1	1	BELOW AVERAGE	AVERAGE	AVERAGE
66	2-3	2	VERY GREAT	AVERAGE	AVERAGE
67	2-3	2	NONE	STRONG	ABOVE AVERAGE
68	8-9	1	NONE	STRONG	AVERAGE
69	1-2	3	NONE	STRONG	AVERAGE
70	1-2	1	NONE	STRONG	AVERAGE
71	5-6	1	NONE	WEAK	AVERAGE
72	15-16	5	NONE	STRONG	ABOVE AVERAGE
73	1-2	2	AVERAGE	STRONG	ABOVE AVERAGE
74	3-4	3	NONE	STRONG	AVERAGE
75	3-4	2	AVERAGE	STRONG	AVERAGE
76	6-7	6	AVERAGE	AVERAGE	AVERAGE