

THE PERSONALITY CHARACTERISTICS
OF THE RESIDENCE HALL ASSISTANT
AS RELATED TO JOB PERFORMANCE

Thesis for the Degree of Ed. D.

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This is to certify that the

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THE PERSONALITY CHARACTERISTICS OF THE RESIDENCE HALL ASSISTANT
AS RELATED TO JOB PERFORMANCE

By

Wesley S. ¹⁹⁵⁷Simons

A DISSERTATION

Submitted to the School for Advanced Graduate Studies of Michigan
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Dedicated to

My Wife

Rosemary

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ABSTRACT

The Problem

The purposes of this study were: (1) To determine, within the limitations of certain personality appraisal instruments, the personality characteristics of the sixty-eight student Resident Assistants employed in the eight men's residence halls at Michigan State University. (2) To develop a method of effectively rating the job performance of the Resident Assistants. (3) To determine the extent and the degree to which the personality characteristics of the more successful Resident Assistants were similar or dissimilar to those of the Resident Assistants who were rated less successful in job performance. (4) To determine the advisability of utilizing these selected personality appraisal instruments to aid in the selection of more effective Resident Assistants.

Methods and Procedures

The personality appraisal instruments selected for studying the personality characteristics of the sixty-eight Resident Assistants were: The Minnesota Multiphasic Personality Inventory, The Guilford-Zimmerman Temperament Survey, The Allport-Vernon Study of Values, and the Index of Adjustment and Values.

The high and low job performance groups were established by means of a rating form developed to evaluate the job performance of the

Resident Assistant. The high and low Resident Assistant performance groups were compared on the individual scales of the selected personality appraisal instruments.

The final phase of this study was concerned with the comparison of the total group of sixty-eight Resident Assistants with selected male college population groups on the results obtained with the four personality appraisal instruments. The "t" test was selected as the main statistical technique for the comparison of these groups.

Results

1. The low performance group showed a tendency to score above the high performance group on nine of the twelve MMPI scales, but these differences were not significant at the .05 level of confidence.
2. The high performance group scored significantly above the low performance group on the Emotional Stability scale of the Guilford-Zimmerman Temperament Survey.
3. The Allport-Vernon Study of Values showed the high group to be significantly higher on the Religious value scale, and the low group to be significantly higher in terms of the Theoretical values scale.
4. When the total group of sixty-eight Resident Assistants were compared with selected male college populations the following results were found:

- a) The Resident Assistant group scored less in the direction of psychopathic deviation on the MMPI.
 - b) The Resident Assistant group scored significantly higher on eight of the ten scales of the Guilford-Zimmerman Temperament Survey.
 - c) The Allport-Vernon Study of Values revealed that the Resident Assistant group differed significantly on the Theoretical value scale.
 - d) The Index of Adjustment and Values revealed that the Resident Assistant group differed significantly from the selected college population with 91.1 percent of the Resident Assistant group falling in the ++ and +- categories.
5. On the basis of the results of the comparisons made between the Resident Assistants and selected male college populations the Resident Assistants were found to be a more select group.
6. The rating form was found to be a fairly valid and reliable instrument for measuring Resident Assistant performance.

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CHAPTER I

FORMULATION AND DEFINITION OF THE PROBLEM

Introduction

At the close of World War II the demand for university housing increased to such an extent that many colleges and universities were forced to construct additional residence halls as a partial solution to the housing problem. The housing and feeding of students is, of course, one of the oldest forms of student personnel work, dating back to the opening of Harvard College in 1638. In the past these services were regarded primarily as necessities, for students had to be housed and fed, but they were also provided on the assumption that they contributed in some way to the social and educational development of the student.

In actuality, during the last half century there has been an increased awareness on the part of educators of the social and educational opportunities which could be derived from residence hall living. This awareness has resulted in a general shift from a negative approach which emphasized the control of behavior to a more positive approach of creating a social and educational atmosphere within the residence hall.

Kidd, in his book Residence Hall Guidance, reflects the current trend of thought regarding the educational potentialities of the residence hall:

It is the thesis here that the residence hall can be and should be a scene of guided growth and development for the individuals concerned; growth in the sense of achieving intellectual and social maturity of personality; development in the sense of achieving social as well as academic competency not likely to emerge from classroom experience alone. (35:1)

Sifferd (58), in considering the educational implications of the residence hall for higher education, stated that if educators are concerned with the education of the whole student, then they must recognize the residence hall's potentiality for achieving this goal. For example, he pointed out that democratic living can best be learned through actual experience and that residence halls can provide a natural setting for this experience.

An examination of additional material pertaining to the place of the university residence hall in the educative process revealed that such authorities as: Wrenn (70), Arbuckle (4), Thompson (63), and Lind (40) regard the residence hall as an important factor in the total educative process. They pointed out that to be effective, provisions must be made to include a workable basic philosophy which defines the role of the residence hall in the total educative process. Simply stated, then, a residence hall program must be carefully thought out, planned, and directed by a competent staff if it is to be effective. Such a program calls for both part time and full time staff members that can operate at various levels within the residence hall.

Student leaders as well as trained personnel workers are necessary if the residence hall program is to operate effectively.

Some research concerning residence halls and student assistants has been attempted in the past, but in general there is a paucity of research in this area. The role of the part-time student assistant as it pertained to his functions in the men's residence hall personnel programs of the Big Ten Universities was studied by Raines. In this study, Raines (49), indicated that the part-time student assistant was regarded by administrators as indispensable to the adequate operation of the residence hall program. Raines further pointed out that the role of the part-time student assistant in the residence hall was receiving more and more attention from college administrators who were concerned with the educational aspects of the residence hall.

In commenting on the utilization of student assistants in residence hall programs, Arbuckle (4:205), indicated that there was a trend toward the greater use of student assistants in university residence halls. He stated that Stanford University, Washington State College, Miami University, the Big Ten Universities, and many other institutions with residence halls were increasingly employing the services of the student assistant in the residence hall program.

Michigan State University has perhaps one of the best known residence hall programs in the Big Ten, and here as elsewhere student resident assistants play a "key role" in the residence hall program. At present Michigan State University employs sixty-eight student

Resident Assistants in the eight men's residence halls on campus. These Resident Assistants are compensated to the extent of room and board for their services.

Each of the men's residence halls at Michigan State University is under the direction of a full time personnel worker who is designated as the Head Resident Advisor. He is assisted by two graduate students who are called Graduate Advisors and by undergraduate students called Resident Assistants. These undergraduate students or Resident Assistants are the part time personnel staff members who operate at the level closest to the men in the hall. They live in the precinct and are responsible for the general welfare of the men within that precinct. The precinct is a well defined area within the residence hall and usually includes from sixty to seventy men. Although the Resident Assistant enforces certain regulations his role is not that of a policeman; rather, he is regarded as a leader, friend, and helper to the men in his precinct. Since each residence hall has an active program that includes scholarship, athletics, special activities, student government, and social participation; a competent Resident Assistant must be able to work effectively in a leadership capacity in these areas at the precinct level, as well as the residence hall at large.

With the current emphasis on the educational aspects of the residence hall program there has been a conscientious attempt at Michigan State University to select men well qualified to provide the leadership required for successfully carrying out the residence hall program. In the past, such criteria as grade point averages, age,

intelligence, sociometric status, etc., have been used as a means of selecting Resident Assistants. Regardless of the method of selection used, however, some Resident Assistants have been more effective than others in their performance as Resident Assistants. The question arose then, as to why one Resident Assistant was more effective than another in the residence hall program.

It is axiomatic that some personality characteristics and competencies must be possessed by the Resident Assistant, in a reasonable degree, to enable him to perform his job in an acceptable manner. However, what these personality characteristics and competencies are, and to what extent they exist has not been determined by research at the present time.

A statement of the problem that has emerged from this framework is as follows:

Statement of the Problem

It is the purpose of this study: (1) to determine, within the limitations of certain personality appraisal instruments, the personality characteristics of the sixty-eight student Resident Assistants presently employed in the eight men's residence halls at Michigan State University. (2) To develop a method for effectively rating the job performance of the Resident Assistants. (3) To determine the extent and the degree to which the personality characteristics of the more successful Resident Assistants are similar or dissimilar to those of the Resident Assistants who are rated as less successful in job performance.

(4) To determine the advisability of utilizing these selected personality appraisal instruments to aid in the selection of more effective Resident Assistants.

Importance of the Problem

Reference has been made in a previous section of this chapter to the increased awareness on the part of college administrators of the educational and social potentialities of the residence hall. It has also been pointed out that more and more residence hall programs are employing the services of the student resident assistant as an aid to attaining the educational and social goals of the residence hall program. Despite these trends there has been little research in the area of residence halls and almost a complete absence of research in the area of the student resident assistant.

Examination of the available research in the educational and industrial areas revealed that a number of studies had been conducted which dealt with the relationship between the individual's personality characteristics and his job success. Many of these early studies failed to reveal any consistent relationship between the individual's personality characteristics and his job success. With the development of more sophisticated measures, however, researchers were able to employ greater precision in personality evaluation and its application to problems of work effectiveness.

Since studies of this type have contributed useful data to the educational and industrial fields it appears feasible that a similar

study of the personality characteristics of the Resident Assistant, as related to job success, could make a useful contribution to the residence hall program at Michigan State University and to universities with similar residence hall programs. It is for this reason that the officials responsible for the residence hall program at Michigan State University have encouraged the investigator to undertake a study of this type.

Scope of the Study

During the initial planning stages of this study it was realized that a study of "The Personality Characteristics of the Residence Hall Assistant as Related to Job Performance," could have broader implications. However, it was felt that an intensive study of one residence hall system would be more meaningful than a study of a combination of residence hall systems with variant philosophies and practices. For this reason, this study was delimited to the sixty-eight Resident Assistants presently employed in the eight men's residence halls at Michigan State University.

Limitations of the Study

It is evident at the outset that certain limitations are inherent in a study which utilizes job performance rating techniques and personality appraisal instruments, for no instrument is completely devoid of instrumental error, nor of certain inherent limitations.

Some of the limitations encountered in the use of rating forms are the following: the difficulty of establishing validity for the instrument, the influence of personal biases on the objectivity of the ratings, the hesitation on the part of some raters to give ratings at the extremes of the rating scale, and the difficulty of wording the items so that they will not be misinterpreted.

Personality appraisal instruments are subject to such limitations as: the extent to which they can measure the personality characteristics of the individual, their dependency on the honesty of the respondent in answering the items, and the degree to which the respondents were able to apply these instruments to their own particular situations.

Recognition of these facts is necessary, however, for these limitations are automatically imposed on the study and any predictability which may be derived from this study must take these limitations into consideration. It should be noted that the investigator was aware of these limitations at the outset of this study and used every precaution at his command to minimize these limitations.

An additional limitation which may have been imposed on this study was due to the fact that the investigation was delimited to the sixty-eight Resident Assistants at Michigan State University. For this reason, a direct application of the results of this study to other institutions would be dependent upon the extent to which the role of the student resident assistant in a particular institution approximates that of the Resident Assistant at Michigan State University. On the other hand, however, the delimitation of this study to the Resident

Assistants at Michigan State University has certain advantages: namely, that the results of this investigation may be directly applied to the improvement of the system which has been studied without recasting these data into another frame of reference.

Definition of Terms

There are certain terms to which frequent reference will be made throughout this study. Since many of these terms are used to refer to the particular residence hall system at Michigan State University it seems necessary to clarify their meaning and usage at this time.

Residence Hall: The term "residence hall" is appearing more frequently in current literature than the term "dormitory". One reason for this change is that the dormitory in its exact sense refers merely to a building containing sleeping accommodations. The term residence hall, on the other hand, includes the housing and feeding of students; and further implies that there is in existence an organized educational program and certain personnel services within the hall. This, then, is the meaning of the term residence hall as it is used throughout this study.

Precinct: Each residence hall building is divided into two wings. Each wing has from four to five floors and these floors are designated as precincts. The number of precincts varies with the size and structure of the building. Six of the residence halls have eight precincts and two of the residence halls have ten precincts each.

Head Resident Advisor: The Head Resident Advisor is the highest ranking personnel staff member in the residence hall. He is a trained personnel person and resides in the hall. In this position he devotes full time to the direction and supervision of his particular residence hall. Administratively he is directly responsible to the Educational Director of the Men's Residence Halls and works cooperatively with the related personnel services and referral agencies in the University.

Graduate Resident Advisors: Two Graduate Resident Advisors are employed in each of the men's residence halls at Michigan State University. The Graduate Resident Advisors are directly responsible to the Head Resident Advisor and are the second highest ranking personnel staff members within the residence hall. In this role they aid the Head Resident Advisor in the direction and supervision of the residence hall program. The Graduate Resident Advisors are part-time personnel staff members and may carry ten hours of graduate credit. It is preferred that their graduate work be directed toward a major in Counseling and Guidance or toward a closely related field.

Resident Assistant (RA): Each residence hall at Michigan State University employs the services of from eight to ten student Resident Assistants. This number varies with the structure of the building, for one Resident Assistant is appointed to each precinct. The Resident Assistant is usually a full time undergraduate student and is permitted to carry a full schedule of credits in his chosen field. The Resident Assistant must maintain a 2.6 all college average on the four point basis.

The Resident Assistant is directly responsible to the Head Resident Advisor and to the Graduate Advisors of his particular hall. He is the member of the personnel staff who operates at the level nearest the men. The Resident Assistant lives with the sixty to seventy men in his precinct and is responsible for the general welfare of the men in his care. He also shares a responsibility for the general residence hall program and is directly responsible for the residence hall program at the precinct level. In effectuating the program at the precinct level he works cooperatively with the athletic, social, activities, and judiciary chairmen of his precinct. The Resident Assistant acts as the scholastic chairman of his precinct in many halls, for he is intrusted with information that is of a confidential and personal nature. The Resident Assistant is selected by the Head Resident Advisor and is given intensive training to prepare him for the position as a Resident Assistant. He receives board and room for his services.

Advisory Staff: The term "advisory staff" is used in a collective sense to include the Head Resident Advisor and the two Graduate Advisors.

Organization of the Study

This thesis is divided into six chapters: Chapter II includes a review of the pertinent literature. Chapter III presents the methods and procedures used in this study which includes: the sample, selection of the personality appraisal instruments, and the development

of the job performance rating form. Chapter IV presents the analysis of the data. Chapter V provides a description of the personality characteristics of the total group of sixty-eight Resident Assistants. Chapter VI presents a summary of the study, presentation of the conclusions and suggestions for further research.

CHAPTER II

REVIEW OF PERTINENT LITERATURE

Introduction

The purpose of this chapter is to present a review of selected literature and related materials which are pertinent to this study. For purposes of simplification the literature reported in this chapter has been classified according to the following categories: residence hall studies, rating scales and job performance rating techniques, and job performance ratings as related to personality characteristics. This chapter reports only those investigations which are directly related to this study.

Pertinent Studies and Materials Related to Residence Halls

While no intensive study of the relationship between job performance and the personality characteristics of the residence hall assistant has been reported, studies in related areas provide some insight into the subject.

Raines (49:1) conducted a study which had the following purposes in mind: (1) to define the role of the part-time student assistant as it pertained to his functions in the men's residence hall personnel programs of the Big Ten Universities; (2) to determine the attitudes

Of the personnel staff members (including the part-time student assistant) toward the functioning role of the student assistant, and (3) to evaluate his role as an agent for extending the personnel services of these universities.

Raines (49:313-316) reported the following conclusions as a result of his study: (1) the student assistant performed a wide variety of custodial, special staff, proctoral, counseling, group guidance, resource, and group morale functions; (2) contradictory functions frequently caused inconsistencies in his role as a personnel agent; (3) the demands of too many functions frequently abused the part-time concept thus resulting in an inadequate performance; (4) insufficient training reduced potential effectiveness; and (5) there was a need for clarification of many functions within these programs.

Kidd (36) was interested in defining the nature of social rejection, and in particular in determining what factors were associated with the rejection of a group of male college students in a men's residence hall. Kidd administered a Moreno type of sociometric questionnaire to the 639 residents residing in a men's residence hall.

By testing a series of hypotheses regarding specific factors to determine which were associated with rejection, as opposed to selection, he found that rejection was significantly associated with being from an atypical regional background, particularly foreign nationality, being from a city of more than 100,000 population, and being a lower classman.

Rejection was also significantly associated with restricted interaction as evidenced by: (1) low leadership prestige status; (2) restricted rejection and selection of others; (3) restricted spectator and extra-curricular activities; (4) restricted part-time employment; (5) low rating on group participation by selves and others; (6) low rating on over-all social participation by others.

In pointing out further implications of his study, Kidd (36) recommended that the high selects and those with high leadership-prestige status should be indirectly recruited into the program of student leadership such as that of the Resident Assistant at Michigan State University. According to Kidd, Resident Assistant appointees who were relatively high in the leadership prestige and friendship ratings seemed to have high morale and cooperative spirit among their residents.

Mill (45) conducted a study in which he compared the personality patterns of socially accepted and socially rejected individuals in a men's residence hall. Mill utilized the sociometric type of questionnaire developed by Kidd to identify the socially accepted and socially rejected individuals of a men's residence hall. The Minnesota Personality Inventory, the Rorschach, the Thematic Apperception Test, a Self Rating Scale to determine consistency in the self concept, and the Rokeach Map Technique were used as additional instruments in the study.

Mill reported that both groups in the study were found to contain members showing signs of maladjustment, but that the rejects as a group were more disturbed.

Martin, Darley, and Gross (43) studied the members of residence groups as subjects in the methodological study of group behavior. They developed two indexes for studying groups: the index of mutuality and the index of cohesiveness. The characteristics of mutuality and cohesiveness were found to be specific not only to the group but to the type of relationship defined by the sociometric questionnaire.

Studies Involving Problems and Methods of Rating Job Performance

An examination of the available literature regarding rating techniques and employee performance ratings revealed that there was a considerable fund of information in this area. For this reason consideration was given primarily to research which was most directly related to this study.

The value of rating techniques as applied to job performance has been criticized by some researchers. Early studies in this area found rating scales unreliable and caused their value to be questioned. Recent studies have done much, however, to favorably influence the standing of the rating scale and rating techniques. **Despite frequent** criticism, the rating scale has seemingly increased both in favor and usage. Guilford (25:265) has stated that "without any doubt, rating-scale methods have made their place secure in individual practice and in the educational world." Mahler (42) in a survey of the rating practices of 125 companies found that the majority used rating scales, with twelve using check lists and seven ranking or grading.

Starr and Greenly (60) conducted a survey which covered sixty-four companies employing from 500 to more than 100,000 employees. Approximately one-third of the companies used merit ratings.

Additional studies in this area point out that most concerns find it helpful to have a measurement of their present employees as they do their jobs. Performance on most jobs calls for more than the physical creation of a product; intangible factors also affect job performance. Employee performance ratings provide a tool to obtain a systematic measurement of employee characteristics that affect performance on the job and in the social situation surrounding the job.

Rating techniques are also employed in the educational area. Ulman (65) secured ratings of teaching ability from the teacher's superintendent, principal, or supervisor as an aid to determining teacher success. Rogers (53) reported that over one-half of the teachers studied by the Educational Research Service of the National Educational Association were given efficiency ratings. The typical way of appraising efficiency was by using a comparative scale with several levels of efficiency on which the teacher was checked.

Thirty teacher measures were studied for statistical validity by Rolfe (54:73). He stated, "Rating scales when used by experienced and competent supervisors for the purpose of evaluating teacher efficiency give a positive correlation ($r = .36$ to $r = .43$)."

Anderson (3) developed a teacher rating scale composed of thirty selected traits which he said were predictive of a man's worth as a teacher of vocational agriculture. Each of the thirty traits was

accompanied by three descriptions varying in degree of attainment of the trait. The person marking the scale had only to check the degree of attainment of each trait.

Sledge (59) developed a rating scale to evaluate the performance of teachers of vocational agriculture and reported that this instrument provided a fairly reliable measure of performance. Sledge also pointed out that one of the weaknesses in his scale was its failure to discriminate among teachers scoring relatively high in performance. As a result he recommended a set of procedures to avoid this weakness in rating scales of a similar type.

A recent study of personal characteristics and job success was reported by the 1955-1956 A. C. P. A. Committee on Standards and Training (2). Graduates who received a Doctorate Degree were rated by their major advisor on eighteen personal characteristics. It was assumed that those graduates who were judged to be more successful possessed more of each of these characteristics than the less successful graduates.

Thirty professors were selected who were considered to be making important contributions to the student personnel field, and were invited to participate. Of the thirty professors contacted, only nine completed the ratings on their students. The data from this group indicates the following:

To a marked degree professors differentiate their more successful graduates in terms of a greater Social Sensitivity, Fondness for People, General Leadership Ability, Decisiveness of Action, Dependability, Ability to Get Along Well with Others, Tolerance of Markedly Different Points of View, Warmth in Interpersonal Relations, Sense of Humor, Physical Attractiveness, Dedication

to the 'Cause' of Student Personnel Work, Patience, Self Confidence, Well Developed Interests and Appreciations, Demonstrated Research Ability, Scores Earned on Tests, and Mental Alertness. (2:467-468)

The evidence provided in this study did not indicate whether or not this difference actually existed, but only that it was judged to exist.

These data indicate that rating systems are used in the evaluation of employees in industry and education. Various rating techniques have been employed in the studies just cited; but in general, according to Monroe (47:962-963) rating methods may be classified conveniently into four categories: rating scales, rank order method, forced-choice technique, and the paired-comparison method. Monroe further indicated, that rating scales are most frequently applied in educational investigations.

In discussing rating scales, Monroe stated that there are five major types:

1. A number of phrases descriptive of varying degrees of a trait or characteristic arranged in order form a descriptive rating scale. In using this scale, an observer selects the phrase that best describes the individual being measured. If the phrases have been numbered, the result may be recorded in numerical form.
2. If the descriptive phrases are printed at appropriate positions under a straight line, the instrument is called a graphic rating scale.
3. A product scale consists of a series of products, e.g., specimens of handwriting, arranged according to values determined by a jury.
4. A man to man rating scale consists of descriptions of a number of persons (three or five) each of which is known to the user of the scale. These descriptions (or persons) are selected as

representative of the highest, lowest, and one or three intermediate degrees of merit. Appropriate numerical values are assigned to the scale persons. This instrument has been widely used, especially in the United States Army for rating officers with reference to physique, intelligence, leadership, personal qualities, and general value to the service.

5. A numerical rating scale, frequently called a score card, consists of a number of items (characteristics) each of which has been assigned a numerical value. Ratings on a trait are made by assigning either the whole or a part of a value for the amount of the characteristic judged to be present.
(47:962-963)

Krech and Crutchfield (38) report that many different types of scales have been developed, but that those created by Thurstone, Likert, and Guttman have been most widely used. These sources were included in this section for they provide some of the background material for the construction of the rating form used in this study.

Since many readers have some familiarity with these scales a description of the scales and the methods of their construction is not included here; however, the reader who desires a full account of the three scales may find this information by consulting the work of Remmers (50), Likert (39), Guttman (27), Thurstone (64), or Edwards and Kenny (20).

Regardless of the type of rating form used, a trait appearing on the rating form is considered amenable to rating when competent judges or raters tend to agree in their evaluations. Findings from several studies indicate that some traits are more amenable to rating than others. Hollingworth (31) found close agreement among raters upon such traits as efficiency, originality, perserverence, quickness, judgment,

clearness, energy and will. He found fair agreement on mental balance, breadth, leadership, intensity, reasonableness, independence, health, etc.; and poor agreement on such traits as courage, unselfishness, integrity, cooperativeness, cheerfulness and kindness. In another study, Miner (46) found good agreement for such traits as leadership, general ability, reliability and energy.

In determining the number of scale units for the rating scale, apparently no hard and fast rule can be laid down for the number of units or steps on a rating scale. Too few steps result in coarse ratings and a scale too refined makes it difficult for the rater to discriminate between one step and the next.

Conklin (15) concluded that the maximum number of steps should be five, for a single scale which extends from zero to a maximum; and nine for a double scale which extends through zero with opposite qualities at the extremes of the scale. Symonds (62:79) maintains that the degree of reliability desired in the final ratings should decide the matter. He concluded that for rating human traits seven is the optimal number, but that conditions are often such that more or fewer classes are justified.

Research regarding the weighting of items in a rating scale tends to support the position that little is gained by the weighting of items. Culler (16) found that when the number of items is large there is little difference between the rank of scores based on weighted and unweighted items. Goode and Hatt (24:239) pointed out that while the question frequently arises as to whether all the items of a rating

scale are of equal importance, still another question arises; namely, what method should be used to allow for this inequality? Having discussed weighting techniques at some length they indicated their preference for a simple method of scoring rating scale responses.

Durea and Norman (19), after studying the interests and attitudes of 140 subjects by weighting and not weighting items, pointed out that there is yet some difference in opinion as to whether weighted or unweighted items are best in differentiating between groups. They were, however, inclined to believe that little was gained by weighting items. Symonds (62:159) stated, however, "It seems only common sense that answers to the more valid items should have greater significance and perhaps should be given more weight than answers to less valid items."

Research on the reliability and validity of ratings indicates the following: In general it is agreed that the reliability of pooled ratings increases with the number of raters. Rugg (55) recommends the use of pooled or averaged ratings of not less than three independent raters. Symonds (62) recommends at least eight raters, and Bradshaw (10) from five to one hundred six depending on the degree of reliability sought. In each instance it is assumed that the several raters are all competent raters and that the reliability of pooled ratings tends to increase according to the Spearman-Brown formula.

Studies reporting the reliability of ratings indicate that much depends upon the particular trait rated, the training of the raters, and the manner of securing the ratings. Richards and Ellington (51),

for example, reported reliability ranging from $-.24$ to $.84$ for pairs of teacher raters who were asked to judge their students on twelve traits.

In a study at Purdue University, instructors were asked to rate their students on six traits at the end of a term's work. Carter (14) reported reliabilities of $.30$ and $.40$ for two raters in this study and estimated reliabilities of $.80$ to $.90$ for sixteen raters. He concluded that ratings of students by instructors are sufficiently reliable for practical purposes.

An examination of the research pertaining to the validation of rating scales reveals, in general, that it is difficult to establish validity for a rating scale.

Goode and Hatt have pointed out the following:

A scale possesses validity when it actually measures what it claims to measure. It can at once be seen that this is very difficult to establish. Since, as was pointed out earlier, a scale measures a continuum which is inferred to exist from the items themselves, there are frequently no independent measures which can be used as a criterion of validity for the scale. Nevertheless every scale, to be useful, must have some indication of validity. The consequence of this is that much work remains to be done with regard to validating scales already in use and with regard to developing techniques of validation. (24:237)

Goode and Hatt further point out that rating scales can be validated by: logical validity, jury opinion, known groups, and independent criteria. They indicate that validation by independent criteria is one of the most effective of all techniques of validation. When this is impossible they recommend employing the three previous methods cited.

Pertinent Studies Regarding the Relationship of Personality
Characteristics to Job Performance

Verniaud (66:113) tested forty clerical workers, twenty-seven department store saleswomen and thirty optical workers with the Minnesota Multiphasic Personality Inventory and found marked occupational differences. Verniaud emphasized that "one conclusion can be drawn from this investigation: there are group differences in the personality of successful workers corresponding to gross differences in job requirements and some of these differences may be identified by responses on the MMPI."

Capwell (13:15) studied a group of retail store personnel by using a series of psychological tests. She found that supply room keepers had by far the lowest scores on the Guilford Martin Personality Inventory for the following traits: objectivity, agreeableness and cooperativeness. Capwell concluded that either this is a job which tends to develop poor attitudes of this kind in those who work in this capacity, or that this is the type of job where people with rather bad dispositions are more successful.

Wadsworth (68:4-17) reported the following findings from a survey of 814 cases in a company where individual employee performance and behavior on the job have been reported from year to year since 1934. Employees were rated by their supervisors in terms of successful job performance and tested by the means of personality tests. Wadsworth reported that in 77 percent of the cases the ratings of the supervisors

agreed with the test results and reported a coefficient of correlation of .75 between ratings and test results.

Burr (12:81) in a study of psychological tests applied to factory workers reported that the correlations obtained between the results of the employees standing in each of the several tests administered and the ranking of these employees varied according to the particular test applied. She pointed out, however, that the tests approximated the evaluation established by the company especially in the upper and lower quartiles of the scale involved.

Shuman (56) tested supervisory workers in aircraft and propeller industries and compared the test results with the job success of the supervisors studied. He reported that job success on supervisory work was related positively and significantly to the test scores in three industrial plants engaged in the study. He concluded that the test results indicate there are levels below which the supervisory force of a plant should not fall.

Cotton mill supervisors were tested by Harrell (28) as part of an experiment sponsored by the Georgia State Engineering Experiment Station. The purpose of this experiment was to determine whether or not there was a relationship between test scores and job success. Harrell reported a significant relationship between ratings and intelligence. He also indicated that supervisors were more interested in people and business than in science and language. The interest patterns of the supervisors were similar to those of successful boy scout masters, policemen, office clerks, and accountants. These interest

patterns were most unlike those of lawyers, city school superintendents, advertisers, and architects.

Mason and Cleeton (44) pointed out that executive traits are not clearly defined by performance on tests of mental ability unless supplemented by temperament or personality tests covering such areas as dominance, submissiveness, extraversion, and introversion, emotional sensitivity, and placidity.

Kahn (33) studied thirty-seven employees in a furniture company by the means of selected standardized tests and reported that the executives of this company were more domineering and less impulsive than the supervisors or workers. The executives also exhibited more self confidence and possessed greater mental ability than either the supervisors or the workers. In general, the executives and supervisors were more satisfied with their jobs than the workers. Kahn also reported that the Allport-Vernon Study of Values revealed that those who were more satisfied with their jobs were less theoretical and more economical in their values. On the other hand, the less satisfied people were more theoretical and more aesthetic in their values.

Hatton (30) studied the personality patterns of Michigan Agricultural Extension Workers and their relationship to work adjustment. He reported that personality patterns of County Agricultural Agents and 4-H Club Agents in the Michigan area were somewhat similar. In comparison with the "less effective" County Agents, the total group of "more effective" County Agents obtained significantly higher scores on the Hypochondriasis and Hysteria scales of the Minnesota Multiphasic

Personality Inventory. The "less effective" group of 4-H Club Agents obtained significantly higher scores than the total group of "more effective" agents on the Hysteria and Status scales of the MMPI. Hatton also reported a low but significant relationship between the scores of County Agents and 4-H Club Agents in Michigan on certain MMPI scales and their rated work effectiveness.

Peak (48:47) studied the adjustment difficulties of one hundred women teachers, fifty-two women students who were not teachers, and twenty-five men teachers through the use of the Thurstone Personality Schedule and the Otis S-A Test of Mental Ability. Peak reported that the Thurstone scores and the personnel data sheets utilized in this study revealed that women teachers were less well adjusted than either men or women who were not teachers.

A study by Dodge (18) of 266 high school teachers in general confirms an earlier study of 239 Air Corps teachers. In both groups the more successful teachers possessed the following traits more frequently than did the less successful instructors: socially inclined, willingness to take initiative, willingness to assume responsibility, free from fears or worries, sensitive to the opinions of others, and slow in making decisions. These teachers and instructors were rated by their supervisors and the top and low groups were established on the basis of the ratings.

Blesh (9) reported the results of a questionnaire study which was concerned with factors which were important to the successful teacher of physical education. He reported that the personality of the

teacher was regarded as one of the most important factors for success as a teacher of physical education.

A number of investigators have sought to identify the qualities of the successful teacher by correlating measures of teaching success with various teacher qualities such as personality characteristics, years of teaching experience, age, etc. In summarizing the research in this area, Monroe (47:1449) reported the following information: "It appears, however, that age, years of experience, and skill in handwriting approach zero in their correlation with teaching success. On the other hand, several relatively high correlations have been reported for measures of personality traits."

Although the research in this area has added materially to the understanding of the qualities of the successful teacher there is a noticeable lack of research in this area in a number of specific teaching situations. Then too, the validity of the findings of studies such as those that have been summarized depends upon many things; such as, the method of gathering data, the sample studied, the statistical treatment, and the criterion of teacher success used in the study. As one would expect there is a certain variation among the studies reported in these respects. However, despite these limitations the research reported in this area has contributed much helpful information regarding the qualities of the successful teacher.

Summary

Considerable research has been conducted in the areas of business, industry, and teaching to determine the relationship between personality characteristics and job success. However, a review of the literature failed to reveal any study which dealt directly with the particular problem of the personality characteristics of the residence hall assistant as related to job performance.

Reference to the studies cited will reveal that significant relationships have been reported between job success and personality characteristics for various occupational groups. Pertinent studies in these areas have been included for they provide insight into the problem at hand.

A review of the literature on rating techniques revealed that the value of rating techniques has been criticized by some researchers. Some of the earlier studies found rating scales and rating techniques unreliable and caused their value to be questioned.

While other methods have been tried that give promise of accomplishing the objectives that have been set up for rating plans, it is ordinarily recognized that there is no completely satisfactory substitute for "judgment" in the form of a systematic evaluation of employees by their supervisors.

Recent studies, however, have done much to favorably influence the standing of rating techniques in business, industry, and education. Evidence is available that despite frequent criticism, the rating scale has increased both in favor and usage.

CHAPTER III

METHODS AND PROCEDURES

Introduction

This chapter presents the methods and procedures followed in the study. A description of the sample is provided along with a brief description of the selected personality instruments. The procedures and methods used in the development of the Resident Assistant rating form and the procedures for scoring the rating form are described in detail.

The Sample

The sample for this study included the sixty-eight Resident Assistants employed for the school year 1956-1957, in the eight men's residence halls at Michigan State University. These undergraduate men had been carefully screened and selected for their leadership ability before being appointed as Resident Assistants, and were required to maintain a 2.6 all college average on the four point basis. After their appointment these men completed a required three credit course in Personnel Work in the Residence Halls. Additional on-the-job training was continued by the Head Advisor of each hall.

Selected Personality Appraisal Instruments

In selecting personality appraisal instruments for this study, it was necessary to give consideration to the practical situation: for a complete evaluation of the personality structure of each of the Resident Assistants would require testing beyond the time available to the Resident Assistant. Due to this fact, only four personality appraisal instruments were selected from those available. Care was taken to select instruments which would provide valid and reliable measures of the personality characteristics of the Resident Assistants. Brief descriptions of the personality appraisal instruments selected for use are included at this point.

The Minnesota Multiphasic Personality Inventory

The MMPI is a psychometric instrument designed ultimately to provide, in a single test, scores on all the more important phases of personality. The instrument comprises 566 statements covering a wide range of subject matter; from the physical condition to the morale and the social attitudes being tested. These statements are listed in the manual for the MMPI (29:26-29).

The MMPI yields scores on four validating scales, and nine clinical scales. The four validating scales are a question (?) scale, lie (L) scale, validity (F) scale and a test attitude (K) scale or correction factor. The clinical or diagnostic scales on which scores can be obtained are those for Hypochondriasis (Hs), Depression (D), Hysteria

(Hy), Psychopathic Deviate (Pd), Masculinity-Femininity of interests (Mf), Paranoia (Pa), Psychasthenia (Pt), Hypomania (Ma), and Schizophrenia (Sc). These scales are based upon clinical cases classified according to conventional psychiatric nomenclature.

There is some controversy as to the reliability of subjective, structured, paper and pencil inventories; however, the MMPI appears to be generally recognized as being among the better available tests of this type. Super (61) for example, in a critical evaluation of the MMPI has pointed out that the retest reliabilities for this instrument range from .71 to .83 which according to Super are about as high as those of most personality inventories.

In discussing the validity of the MMPI Super concluded from the findings of Ellis (21), "that the Minnesota Multiphasic has more validity for screening and classifying personality problems than any other of the generally available instruments." (61:503) Additional studies which substantiate these findings may be found by referring to the following: Buros (11), Ellis (21), Baker and Peatman (5) and Capwell (13).

The Minnesota Multiphasic Personality Inventory has been included in this study as a means of determining the degree to which personality deviations are either present or absent in the group of Resident Assistants included in this study. According to the research reported on the MMPI the use of this instrument as a means of screening and classifying personality problems is justifiable.

The Guilford-Zimmerman Temperament Survey

The Guilford-Zimmerman Temperament Survey has been developed to incorporate the Guilford series of personality inventories. The time required to administer and score the three inventories in the Guilford series called attention to the need for a single inventory which would provide a similarly comprehensive personality inventory in a more economical manner.

According to Guilford and Zimmerman (26:1) the Guilford-Zimmerman Temperament Survey was constructed with the following objectives in mind: (1) a single booklet of items; (2) a single answer sheet; (3) an efficient scoring method; (4) coverage of the traits proven to have the greatest utility and uniqueness; and (5) condensations and omissions of trait scores where intercorrelations are sufficiently high.

The Guilford-Zimmerman Temperament survey includes a total of 300 items. The following ten traits are measured by the inventory: G-- General activity, R -- Restraint, A -- Ascendancy, S -- Sociability, E -- Emotional stability, O -- Objectivity, F -- Friendliness, T -- Thoughtfulness, P -- Personal relations, and M -- Masculinity. A full description of these traits is presented in the test manual (26:8-9).

Guilford and Zimmerman (26:6) report that each score is probably a fairly clear indicator of one unique trait which has been identified by factor-analysis procedures. An examination of the intercorrelations of the ten trait scores reveals that in general these are low. This is, then, indicative of the prevailing uniqueness of the scores.

Estimates of the reliability reported in the test manual indicate reliability coefficients for the ten traits that range from .79 to .87. Guilford and Zimmerman present the following information regarding the validity of the Guilford-Zimmerman Temperament Survey:

The internal validity or factorial validity of the scores is fairly well assured by the foundation of factor-analysis studies plus the successive item-analyses directed toward internal consistency and uniqueness. It is believed that what each score measures is fairly well defined and that the score represents a confirmed dimension of personality and a dependable descriptive category. (26:6)

Further information concerning the construction of the test, scoring techniques, determination of reliability, validity, and interpretations can readily be found in the test manual. Additional references concerning these areas are also presented in the manual.

The Guilford-Zimmerman Temperament Survey was included in this study as a means of further identifying the personality characteristics of the Resident Assistants. The studies reported to date have indicated that the high quality of statistical work and the use of the factor analysis technique in the construction of the instrument have given the Guilford-Zimmerman certain advantages over other well-known tests. These advantages in addition to the reported reliability and validity resulted in the inclusion of this test in the study.

The Allport-Vernon Study of Values

The Allport-Vernon Study of Values was designed to measure the relative prominence of six basic interests or motives in personality: the theoretical, economic, aesthetic, social, political, and religious.

It is based on the conception of Edouard Spranger that there are six basic types of men.

The authors of the test do not give the social values scale their unqualified support because of a reliability figure of .65; although the average retest reliability after three weeks was .82 indicating considerable stability for the other scales (1). These reliability figures have been established by other investigators.

In a review of the Allport-Vernon Study of Values, Buros (11:100) reports the following: "Considering its a priori method of construction, the problematic validity of its theoretical foundations (Spranger's types), and the relatively small number (45) of items which are used to measure six value dimensions, this seems to be a remarkably good test."

Additional information regarding the Allport-Vernon Study of Values may be found by consulting the test manual (1). An extensive list of references of studies and research connected with the Allport-Vernon Study of Values is also included in the manual.

The Allport-Vernon Study of Values was included in this study as an aid to determining the values held by the Resident Assistants, included in this study. In this capacity it was also used to determine if there was a difference in the values of the more successful Resident Assistants as compared to those who were less successful. The research reported on the Allport-Vernon Study of Values indicates that this test is one of the few structured personality devices having considerable value for research of this type.

The Index of Adjustment and Values

The Index of Adjustment and Values¹ was designed by Bills, Vance, and McLean (6) to measure self-concept, self-acceptance, concept of the ideal self, discrepancy between self-concept and the concept of the ideal self, and the perception of how other people accept themselves. Since this is an unpublished test and perhaps not too widely known, a more detailed description has been presented for this instrument.

The index consists of forty-nine adjectives, such as, acceptable, busy, calm, poised, tactful, etc. The subject is asked to use each word to complete the sentence "I am a (an) - - - - person," using a five point scale to indicate how much of the time this is like him. Simply stated the subject is asked to answer three questions about himself and three questions about other people for each of the traits in the Index. These questions are: (1) How often are you this sort of person, (2) How do you feel about being this way, and (3) How much of the time would you like this trait to be characteristic of you? The subject is also asked to answer these questions about other people.

Two answer sheets are provided, one marked "SELF" and the other marked "OTHERS." Three columns are provided on each answer sheet for the recording of the responses of the subjects. Each of these columns is totaled according to the instructions in the manual (7). Column I provides an index of the concept of self, Column II measures the acceptance of self, and Column III provides a concept of the ideal self.

¹
See Appendix A.

The authors report that other predictions can be made from a combination of the acceptance-of-self scores on the "Self" Index and the Column II score of the "Others" Index.

With these two scores, subjects may be divided into four categories: ++, →, +-, and --. The first of each of these signs refers to the Column II score of the "Self" Index. If this score is above the mean (172 or greater) the sign is +, but if it is below the mean (171 or less) it is -. The second sign of each pair is obtained from the Column II score of the "Others" Index. If this score is equal to or greater than the "Self" Column II score it is +, if less it is -. Thus, a ++ person has an above average self-acceptance score, an "Others" Column II score equal to or greater than his self-acceptance score, and a → has a below average self-acceptance score coupled with an "Others" Column II score equal to or greater than his self-acceptance score. (7:18)

The above relationships between the scores on the "Self" and "Others" Indexes may be expressed numerically by means of the following formulae: (7:19)

For ++ the score is "Others" Column II minus "Self" Column II

For → the score is "Others" Column II minus "Self" Column II

For +- the score is "Self" Column II minus "Others" Column II plus 50

For -- the score is "Self" Column II minus "Others" Column II plus 50

These categorical designations have been used as measures in studies of IAV correlates such as: Acceptability for leadership, language behavior, and superintendent's ratings of the success of their principals. Additional information in this area may be found in a study by Hopper and Bills (32) and by referring to the section on validity in the manual for the Index of Adjustment and Values. An extensive list

of references pertaining to research concerned with the Index is also included in the manual.

The following information concerning the reliability of the Index of Adjustment and Values is reported by Bills (7:60). Corrected split-half reliability coefficients of .91 and .88 were obtained for a group of 237 students. Test-retest reliability coefficients over a period of six weeks for a group of 175 students were .83 and .87. Further information concerning the reliability of the Index may be found in the manual in the section which deals with reliability.

Reference to the section on validity in the manual for the Index of Adjustment and Values reveals that several studies have been included which report the validity of the Index. Bills, for example, presents evidence of concurrent validity which is the extent to which measures derived from the IAV are related to the status of people or their concurrent performances.

A section on construct validity, that is, the usefulness of the Index as a measure of traits or qualities presumed to be reflected in the test performances is also presented. The evidence presented in this section supports the claim for construct validity of the instrument. Since the IAV has not been validated at present as a predictive instrument information for this category has not been presented. A section on content validity, however, is included in the manual.

Additional studies which report the validity of the Index are presented by Klopfer (37) who reported that the Rorschak partially validates the acceptance of self scores as a measure of adjustment and that

the Rorschak partially validates the mean acceptance of self scores as an important dividing point.

Roberts (52) studied the Index of Adjustment and Values and reported that the self-ratings of the Index are valid indices of emotionality.

Bills (7:71) reported that three groups of students at the University of Kentucky completed the "Self" Index and were tested with the Phillips Attitudes Toward Self and Others Questionnaire, the California Test of Personality, and the Washburne S-A Inventory. He reported that although the coefficients of correlation were small, statistically significant relationships were found between the acceptance of self scores of the California Test of Personality. The discrepancy score on the IAV also showed a small but statistically significant correlation with both the Phillips self measure and the Washburne Test. A full account of this study is presented in the manual along with additional validation studies.

In commenting on the suggested uses of the Index of Adjustment and Values, Bills pointed out that despite the fact that the Index has not been validated for selection purposes, it has had success in showing the importance of personality characteristics in the success of teachers and school administrators. Bills stated that the findings in this area suggest that similar factors may be correlated with success in other occupations. Accordingly, Bills (7:9) stated, "A legitimate use of the IAV would be in the study of experimental groups to see if these

same characteristics were important for success in other fields. Such research might be useful in the future selection of personnel."

Since the present study is concerned with the personality characteristics of the residence hall assistant as related to successful job performance, the Index has been included in the study.

The Administration of the Personality
Appraisal Instruments

Since this study involved the cooperation of the Head Resident Advisors, the Graduate Advisors, and the Resident Assistants; every possible effort was made to enlist the cooperative support of the individuals involved. The study was discussed at a Resident Advisor's meeting in October of 1956. Support for the project was given at this time by the Director of the Men's Division of Student Affairs and by the Educational Director of the Men's Residence Halls. Procedures for the administration of the tests were discussed at this meeting. It was decided that since the Head Resident Advisor of each hall had the most rapport with his men that he would be the most logical person to administer the personality appraisal instruments to his Resident Assistants. Since these instruments were not complicated to administer, and since most of the Head Advisors were experienced in testing, little instruction was necessary.

A set of procedures for the administration of the personality appraisal instruments was distributed and discussed at a meeting of the Head Resident Advisors so that there would be uniformity in the testing

procedures. A copy of these instructions may be found in the appendix.² A letter was sent to each of the sixty-eight Resident Assistants and to the sixteen Graduate Advisors explaining the purpose of the study and asking for their support. This letter was signed by the Educational Director of the Men's Residence Halls. A copy of this letter is included in the Appendix.³

On November 5, 1956 the following personality appraisal instruments were distributed to the eight Head Resident Advisors.

- 1) The Minnesota Multiphasic Personality Inventory
- 2) The Guilford-Zimmerman Temperament Survey
- 3) The Allport-Vernon Study of Values
- 4) The Index of Adjustment and Values

These tests were administered to all of the Resident Assistants and were returned within the period of one week.

Developing the Performance Rating Form

One of the problems faced in the development of the rating form was the collection of a list of items which would be descriptive of the performance of the successful Resident Assistant. The Director of the Men's Division of Student Affairs made available a list of approximately 200 items which were believed to be descriptive of the successful Resident Assistant. These items had been collected over a four year period from the Head Resident Advisors in the residence hall program.

² See Appendix B.

³ See Appendix C.

Each year, the Head Advisors were asked to submit a list of the qualities they felt were characteristic of their most successful Resident Assistants. These qualities or characteristics were then rated by the Head Advisors as to their importance. This process was repeated for four years until forty items were identified as the most important aspects contributing to the successful performance of the Resident Assistant. This list served as a starting point for the collection of items for the rating form.

The duties and responsibilities of the Resident Assistant were then listed, and descriptive statements were prepared for each of the items listed. Additional items were collected from students in the residence hall, Resident Assistants, Graduate Advisors, and Head Resident Advisors. These items were then divided into the following five categories: personal qualities, attitude toward job responsibilities, dealing with individual students, dealing with the group, and operational procedures. Provisions were made to utilize these categories so that the rating form would include five major subsections similar to the categories listed above. It was felt that these subsectional scores would add to the diagnostic value of the rating form by providing five subsectional scores in addition to the total score.

A list of statements characterizing the performance of the Resident Assistant was submitted to residence hall personnel and guidance committee members for suggestions and criticisms. This list was revised on the basis of these suggestions and 125 items were selected for

inclusion in the rating form which would be presented to a jury of the Head Advisors and Graduate Advisors.

Although provisions had been made to include five major subsections in the rating form it was felt that some raters might be influenced in the rating of the items if the items were listed under these headings. Therefore, as a precaution against a possible "halo effect" these headings were not utilized. The items were arranged in random order as a further precaution against the rater being influenced by a series of related items. It was hoped that this arrangement would result in a more objective evaluation of the items included in the rating form.

This form was designated as "The Resident Assistant Performance Rating Form"⁴ and included a set of instructions to the jury for evaluating the items in the rating form. Simply stated, each juror was provided with the opportunity to decide whether an item should be retained, omitted, or rewritten. Since it could not be assumed that all of the items were of equal importance the juror was asked to determine the degree of importance of each item according to a three point scale.

The eight Head Resident Advisors of the men's residence halls and the eight most experienced Graduate Advisors were selected as a jury of sixteen to evaluate and weight the items. Each member of this jury was qualified to serve in the evaluation of the rating form due to his

⁴ See Appendix D.

experience in the residence halls, the nature of his position, and his professional training. The rating forms were distributed at a meeting of this group. The instructions were read to the group and questions that arose were answered so that each member of the jury was well informed as to his function as a jury member. All of the jury members returned the rating forms within a period of one week.

In order to facilitate the tabulation of the responses of the jury, to the 125 items on the rating form, a work sheet was prepared which included columns for the tabulation of the following responses: retain, rewrite, omit, and weight. When all of the responses were tabulated the totals for each item were recorded on the work sheet.

The standards for the elimination of items were decided upon after conferring with members of the guidance committee. It was arbitrarily decided that since there were five major subsections in the rating form that a total of approximately one-hundred items should be retained in the final form. Since no item received more than six tallies in the omit column an arbitrary decision was made to eliminate any item that had three or more tallies in the omit column. This practice resulted in the elimination of 26 items from the rating form and the retention of 99 items. Since it was desired to include 100 items in the final rating form the 26 omitted items were re-examined for the purpose of selecting the best item of this group for inclusion in the final rating form. Item 20 was chosen as the most appropriate item of this group because it has the fewest tallies in the omit and rewrite columns.

The addition of this item provided a total of 100 items for the final rating form.

The twenty-five items which were eliminated by the procedure described above may be identified by referring to the "Resident Assistant Job Performance Form" which is included in the appendix. The omitted items are marked with an asterisk.⁵ All items which are not marked in this manner (*) were retained in the final rating form.

Most of the jurors suggested revisions for the items they checked as rewrite and these suggestions were utilized when the items were revised.

The weights for each of the retained items were computed by totaling the weights of the item for the sixteen jurors. The total number of points was divided by sixteen (the number of jurors) and this weight was assigned to the item. In cases where the division of the weights resulted in a fraction, the process of division was carried out to two decimal places and all decimals of .50 or above were relegated to the position of the next whole number. For example, if a number such as 1.56 was obtained as a result of the division process it was assigned the value of the next whole number, or 2. For the convenience of the reader, the final weights assigned to the items by the jurors are recorded on Table I. These weights were not, however, included on the final rating form presented to the raters. It was felt that the elimination of the weights from the final form would result in a more objective rating on the part of the raters.

⁵ See Appendix D.

TABLE I
DISTRIBUTION OF ITEMS INCLUDED IN THE FINAL RATING FORM ACCORDING TO
THE FIVE SUBSECTIONAL GROUPS

* Subsections with Item Numbers and Weights										
I		II		III		IV		V		
Personal Qualities		Attitude Toward Job Responsibilities		Dealing With Individuals		Dealing With Groups		Operational Procedures		
Item no.	W	Item no.	W	Item no.	W	Item no.	W	Item no.	W	
1	2	2	2	3	2	4	2	5	2	
6	3	7	3	8	2	9	3	10	2	
11	2	12	2	13	3	14	2	15	2	
16	2	17	2	18	2	19	2	20	2	
21	2	22	2	23	2	24	2	25	2	
26	2	27	3	28	2	29	2	30	2	
31	3	32	2	33	2	34	3	35	2	
36	3	37	3	38	2	39	2	40	2	
41	2	42	2	43	2	44	1	45	2	
46	3	47	3	48	2	49	2	50	2	
51	2	52	3	53	3	54	3	55	2	
56	2	57	2	58	2	59	3			
60	2	61	3	62	2	63	2			
64	2	65	2	66	2	67	3			
68	2	69	2	70	2	71	2			
72	3	73	2	74	3	75	2			
76	3	77	3	78	2	79	3			
80	2	81	2	82	2	83	2			
84	3	85	2	86	2	87	3			
88	2	89	1	90	3	91	3			
92	3	93	2	94	3	95	2			
		96	3	97	3	98	2			
				99	3	100	2			
21		22		23		23		Total no.		
								11	items = 100	

*W refers to the averaged weights assigned by the jury.

Procedures Followed in Constructing
the Final Rating Form

The final rating form was designated as the "Resident Assistant Rating Form."⁶

The retained items were resorted into the following five categories: I. Personal Qualities, II. Attitude Toward Job Responsibilities, III. Dealing with the Individual, IV. Dealing with the Group, and V. Operational Procedures. Roman numerals were assigned to each of these subsections as a means of easily identifying these groups. For example, Group I refers to the Personal Qualities, Group II the Attitude toward Job Responsibilities, etc. These categories will be used throughout the remainder of the thesis when reference is made to the subsections of the rating form.

Table I presents the distribution of the items included for the final rating form according to the five established subsectional groups. Table I also includes the weights of the items as assigned by the jurors. Since the original items were renumbered, the reader can easily find the descriptive statement for each of the items in Table I by referring to the number of the item in the final rating form which is included in the appendix.⁷ After all of the items were sorted into the five designated groups the problem arose as to whether or not the items in the final rating form should be placed under these group headings. It was

⁶ See Appendix E.

⁷ See Appendix E.

decided that the group headings should not be used, for it was felt that there was a possibility of again introducing a "halo effect."

The second problem to be considered was the arrangement of the 100 items in the rating form. Since each rater was to rate eight Resident Assistants on 100 items a decision was made to alternate the items according to groups. For example, a Group I item was selected as the first item, a Group II item for the second item, etc. All of the items were distributed in this manner until there were no items left in Group V, which contained 11 items. From this point on the items were alternated in a similar fashion by using the four remaining groups until all of the 100 items were assigned a position in the rating form. A final check was made to avoid the possibility of two items of a similar nature appearing too close to one another. A few of the items were shifted to other positions when it was felt they were too near items of a similar nature. It was hoped that this procedure would provide a more objective rating on the part of the raters and offer a change of set which would aid in reducing the monotony often encountered in rating forms with a similar number of items.

Development of Rating Form Response Units and Method of Recording Responses

One of the problems encountered in the design of the rating form was the number of scale units to be included in the rating form. On the basis of the research reported in Chapter II it was decided that five units was the optimal number. Once this decision was made

experiments were conducted with a group of raters to determine the most objective type of descriptive phrases to be used for each of these units. This procedure resulted in the adoption of the following system which is included in the directions to the raters.⁸

- (1) Less than 25 percent of the time
- (2) More than 25 percent of the time, but less than 50 percent
- (3) About 50 percent of the time
- (4) About 75 percent of the time
- (5) About 100 percent of the time

In short, each rater was to decide how much of the time a particular Resident Assistant was like each of the statements in the rating form. The responses to each item were recorded on a five column IBM answer sheet according to this scale. If the rater decided that the Resident Assistant he was rating performed this particular function about seventy-five percent of the time, he blackened space number four on the IBM answer sheet. This procedure was followed for each of the items on the rating form.

It was felt that the system of using percentages in place of such terms as below average, average, and above average had certain advantages. The main advantage was that the rater was asked to make only one decision. After reading the item the rater would merely have to decide how much of the time the Resident Assistant was like the item. If, on the other hand, the terms below average, average, and above average were

⁸ See Appendix F.

used the rater would have to determine the average performance of the group of Resident Assistants in his hall and then determine the position of the Resident Assistant in relation to this group. Then too, the average performance of one hall might not be as high as that of another hall, for standards of average performance could vary from hall to hall. By utilizing the percentage procedure it was felt that these variables would be eliminated and more objective ratings could be obtained from the raters.

Administration of the Final Rating Form

The administration of the final rating form was discussed in detail at the January 4, 1957, advisory staff meeting. The instruction sheets and rating materials were distributed to the raters at this time. The instructions were read to the group and any questions raised by the group were answered.

The raters were asked to independently rate each of the Resident Assistants in their respective halls, in order to provide three ratings for each of the Resident Assistants. The raters were also cautioned against rating all of the Resident Assistants at one sitting, since it was felt that the fatigue factor might bias the ratings. Instructions for returning the rating forms were presented at this time and the raters were asked not to compare their ratings.

Scoring the Performance Rating Form

Since there were 100 items on the rating form, there was a need to develop methods to reduce the problem of scoring the 204 forms which were returned. A scoring strip was designed for each column on the IBM answer sheet with the weights for each item running vertically on the scoring strip. Four scoring strips were prepared, one for each column used on the IBM answer sheet. By aligning the scoring strip with the appropriate column on the answer sheet the weights for each item appeared opposite the item.

The score for each item was computed by multiplying the weight of the item by the response on the answer sheet. For example, a response of 4 for an item weighted 2 would yield a score of 8. The number 8 was recorded opposite the item on the IBM answer sheet. All of the items were scored in this manner.

When this process had been completed stencils were prepared for each of the five subsectional parts of the rating form. The stencils were cut so that the scores for a particular subsection were visible when the stencil was placed on the IBM answer sheet. By applying the scoring stencils to each rating form and using an adding machine, computations for each of the subsections were made quickly and accurately. Each of the five subsectional scores were recorded on the IBM answer sheet. The total performance scores were computed by adding the five subsectional scores. Each answer sheet, then, contained the five subsectional scores and a total performance score.

Table II presents the highest possible scores which could be obtained on the rating form for each of the five subsections according to the scoring system previously described. The highest possible combined scores for the three raters are also presented in this table. The total scores were obtained by summing the part scores. A similar table was used to check the accuracy of the scoring computations.

TABLE II
HIGHEST POSSIBLE SCORES FOR EACH OF THE FIVE SUBSECTIONS
INCLUDED IN THE RATING FORM

Subsections	Part Scores	Combined Part Scores for Three Raters
I Personal Qualities	250	750
II Attitude Toward Job	255	765
III Dealing with Individuals	265	795
IV Dealing with the Group	270	810
V Operational Procedures	110	330
Totals	1150	3450

Assumptions Made in Conjunction with
the Rating Form

The following assumptions were made in this study:

1. That the jury composed of Head Resident Advisors and selected Graduate Advisors were qualified to evaluate and weight the items on the rating form.

2. That the ratings by the Head Advisors and Graduate Advisors of each hall were valid and reliable since each of these persons was intimately aware of the performance of the Resident Assistants in their respective halls.

3. That each rater made the most objective rating he could make.

4. A more objective rating was received since the relative weights for each of the items was not included on the final rating form.

5. That the percentage system utilized provided for a more objective rating than if each rater had been asked to make such value judgments on performance as "below average," "average," or "above average."

CHAPTER IV

ANALYSIS AND INTERPRETATION OF DATA

Introduction

In this chapter the presentation and analysis of data are made together with pertinent findings. Attention was first given to the establishment of the two groups of Resident Assistants who were to be compared in terms of the individual scales on the selected personality appraisal instruments. The procedures used in separating the Resident Assistants into high and low job performance groups on the basis of the rating form results have been described in some detail.

The analysis of the relationships of the personality characteristics between the high and low groups have been presented for each of the selected personality appraisal instruments. The methods and techniques used in determining these relationships have been described and the pertinent findings have been presented.

Results of the Rating Forms and the Determination of the Groups to be Studied

When the rating forms were returned they were scored according to the procedures described in Chapter III. In order to insure anonymity the following coding process was utilized: The Resident Assistants were assigned code numbers from 1 to 68, the eight residence halls were

assigned code numbers from 1 to 8, and the three raters from each hall were identified by the code letters A, B, and C. This system was also utilized in reporting the data. .

A summary of the subsectional scores on the "Resident Assistant Rating Form" for the 68 Resident Assistants has been included in the appendix.⁹ The mean scores were obtained by computing the arithmetic mean of the sums of the scores on each of the subsections. This procedure was followed for all cases except one. This exception may be found by referring to the data reported for hall number four, where only two ratings are reported for Resident Assistant number 27. Rater B could not rate this particular Resident Assistant because the Resident Assistant resigned before rater B was appointed. Thus rater B had no basis on which to rate this Resident Assistant. In this case the total scores of rater A and rater C were averaged to provide a mean total score for this Resident Assistant.

The total mean scores for the 68 Resident Assistants were ranked according to halls, the highest score receiving the rank of one. This data has been presented in Table III. Reference to Table III reveals that the scores ranged from a high of 1136 to a low of 773, yielding a range of 363.

In determining a high group and a low group from the results of the rating form the possibility of taking the upper 25 percent of the scores and the lower 25 percent of the scores was explored. By ranking

⁹ See Appendix G.

TABLE III
TOTAL MEAN RATING SCORES FOR RESIDENT ASSISTANTS RANKED BY HALLS

Ranks	HALLS							
	1	2	3	4	5	6	7	8
1	1136	1089	1025	1128	1131	1117	1122	1103
2	1117	1080	1022	1092	1096	1104	1118	1059
3	1100	1064	1002	1084	1084	1086	1108	1049
4	1089	1046	999	1075	1081	1082	1105	1033
5	1085	1044	936	1029	1038	1073	1097	974
6	1067	1020	930	1016	1038	1069	1094	972
7	1057	1014	919	994	984	1063	1071	968
8	1010	986	866	773	933	1016	1053	957
* 9	--	--	--	--	--	--	987	949
10	--	--	--	--	--	--	952	880
* Halls one through six have eight Resident Assistants.								

the scores in Table III from a low of 773 to a high of 1136, and taking the top 25 percent, the following classifications were obtained for the high group:

Residence Hall code number:	1	2	3	4	5	6	7	8
Number of R.A.'s included:	4	0	0	2	2	2	6	1

By selecting the lower 25 percent of the scores the following classifications were obtained for the low group:

Residence Hall code number:	1	2	3	4	5	6	7	8
Number of R.A.'s included:	0	1	4	2	2	0	2	6

If this procedure was utilized in establishing the high group six of the Resident Assistants from hall 7 would be placed in the high group, and halls 2 and 3 would be omitted from the high group. A comparable situation existed in terms of the halls included in the low group. Halls 1 and 6 were omitted from the low group while six of the Resident Assistants in the low group were from hall 8.

Since some of the halls were omitted from the high and low groups and since other halls had as many as 60 percent of their Resident Assistants included in either the high or low groups a further investigation was carried on to determine the possibility of rater differences within halls and between halls.

An examination of the data suggested the possibility that there were differences among the three raters within each hall. For this

reason the decision was made to test the possibility that there were differences among these raters. Since little was known about the characteristics of the distribution of these rating form scores various nonparametric statistical techniques were examined to determine an appropriate technique of hypothesis testing.

The Kendall coefficient of concordance: W which was reported in Siegel (57) was selected as the most appropriate statistical procedure for the data involved. Since this is one of the less frequently used nonparametric techniques a rather full account of the procedures utilized is presented at this time.

Siegel made the following comments regarding the use of this technique:

The Kendall coefficient of concordance W measures the extent of association among several (k) sets of rankings of N entities. It is useful in determining the agreement among several judges or the association among three or more variables. It has special applications in providing a standard method of ordering entities according to consensus when there is available no objective order of the entities. (57:239)

The null hypothesis to be tested by this method is the following:
That there is no relationship between the three rankings of the Resident Assistants within halls. This hypothesis was tested by computing the Kendall Coefficient of Concordance: W , according to the following formulas presented by Siegel (57:231):

$$W = \frac{s}{\frac{1}{12} k^2 (N^3 - N)}$$

Where s = sum of squares of the observed deviations from the mean of R_j , that is, $s = \sum (R_j - \frac{\sum R_j}{N})^2$

k = number of sets of rankings, e.g., the number of judges

N = number of entities (objects or individuals) ranked

$\frac{1}{12} k^2 (N^3 - N)$ = maximum possible sum of the squared deviations, i.e., the sum s which would occur with perfect agreement among k rankings

To compute W , the sum of ranks, R_j , in each column of a $k \times N$ table are found. The R_j are then summed and that sum is divided by N to obtain the mean value of the R_j . Each of the R_j may then be expressed as a deviation from the mean value. Finally, s , the sum of squares of these deviations, is found. After these values have been found W is computed according to formula. The coefficient of concordance may have values ranging from 0 to 1, but it cannot be negative. The coefficient of concordance: W , expresses the degree of agreement among raters.

Tables have been provided for the values of s for W 's at the five percent and one percent level of confidence. These tables are applicable, however, only when N does not exceed 7; since N for the data examined exceeded 7, these tables could not be used.

Siegel (57:236) stated that when N is larger than 7, the expression given in the following formula is approximately distributed as chi-square with:

$$df = N - 1$$

$$X^2 = \frac{S}{\frac{1}{12} k N (N + 1)}$$

That is, the probability associated with the occurrence of the null hypothesis of any value as large as an observed W may be determined by finding X^2 by the above formula, and then determining the probability associated with the value of X^2 by referring to a table of critical values of chi-square. Since the N for the data analyzed in this study exceeded 7, this procedure was used in determining the probability associated with the occurrence of the null hypothesis.

Walker and Lev, (69:285) point out that the Kendall coefficient of concordance, W , bears a linear relation to the Spearman rank correlation coefficient, R . They further point out, that if a single measure of the general agreement among four judges is desired that the correlation of each judge with every other judge might be found and the average of all judges taken. This process would then yield the mean of the six rank order coefficients which is designated as $\bar{R}$. Since this is a laborious process they have suggested the use of the following formula for the computation of $\bar{R}$:

$$\bar{R} = \frac{k W - 1}{k - 1}$$

Walker and Lev have demonstrated that both methods yield the same value of $\bar{R}$. In discussing the difference between the W and the $\bar{R}$ methods of expressing agreement among a number of sets of rankings they indicate that the $\bar{R}$ may take values between -1 and +1, whereas W may take values only between 0 and +1.

The data reported in Table IV was computed according to the procedures outlined by Walker and Lev.

TABLE IV
RELATION AMONG RANKS ASSIGNED TO RESIDENT ASSISTANTS FROM EIGHT HALLS
BY THREE RATERS FROM EACH RESPECTIVE HALL

Hall	N	s	W	χ^2	$\bar{R}$
1	8	290	.76	16.17*	.65
2	8	192	.50	10.66	.26
3	8	340	.89	18.90**	.84
4	7	208	.82	14.85*	.73
5	8	156	.41	8.65	.11
6	8	262	.69	14.70*	.53
7	10	532.5	.65	17.58*	.47
8	10	552.5	.67	18.24*	.51

* Significant at the five percent level.

** Significant at the one percent level.

Reference to a table of critical values of chi-square reveals that for seven degrees of freedom, $(N - 1)$, the value reported at the .05 level of confidence is 14.07. If the value of χ^2 is equal to or exceeds 14.07, the value reported at the .05 level of significance, then the null hypothesis that there is no relationship between the three rankings of Resident Assistants within halls may be rejected at this level of significance.

Reference to Table IV reveals that the null hypothesis was rejected at the .01 level of confidence for hall number 3, and at the .05 level of confidence for the following halls: 1, 4, 6, 7, and 8. Therefore, it may be concluded that there is a significant relationship between the ratings of the raters within these respective halls. Or, to put it another way, that there are differences among the Resident Assistants.

Since the null hypothesis was not rejected for halls 2 and 5 at the .05 level of confidence it may be concluded that the raters in these halls are not in agreement and that the differences among the Resident Assistants could have occurred by chance.

An examination of the data for halls 2 and 5 revealed that the three raters in each of these halls were in agreement in their rankings of the top two Resident Assistants and the two lowest Resident Assistants. Since there was agreement among the raters of halls 2 and 5 in the ranking of the top two Resident Assistants and the two lowest Resident Assistants it may be concluded that the differences in rankings appeared in the middle group. If then, the top two Resident Assistants from each hall were selected for the high group and the two lowest men from each hall were selected for the low group; the top two men and the lowest two men from halls 2 and 5 could be justifiably included in these groups. Since the method of establishing the high and low groups of Resident Assistants by taking the top two men from each hall and the two lowest men from each hall offered a practical solution to the establishment of the high and low groups the possibility of using this method was further explored.

Since differences occurred between raters within two halls it seemed logical that differences might also occur between the raters of the eight halls. If, then, significant differences were found to exist between the raters of the eight halls this could have some effect on the system of establishing the high and low groups by selecting the top two men and the lowest two men from each hall. For this reason further tests were made to determine whether or not there were differences between the raters of halls.

The Kruskal-Wallis one way analysis of variance test described by Siegel was used to test the null hypothesis: that there are no differences among the mean Resident Assistant scores of the eight halls. In comparing the Kruskal-Wallis test with a similar parametric test, Siegel (57:192) reports the following: "Compared with the most powerful parametric test, the F test, under conditions where the assumptions associated with the statistical model of the F test are met the Kruskal-Wallis test has asymptotic efficiency of $\frac{3}{\pi} = 95.5$ percent." On the basis of this evidence it may be concluded that the Kruskal-Wallis test compares most favorably in terms of power efficiency with the most powerful parametric test, and for this reason it was selected as the most appropriate test for these data.

The Kruskal-Wallis test is defined by the following formula (57:185) which is distributed as chi-square with $df = k - 1$:

$$H = \frac{12}{N(N+1)} \sum_{j=1}^k \frac{R_j^2}{n_j} - 3(N+1)$$

where k = number of samples

n_j = number of cases in j th sample

$N = \sum n_j$, the number of cases in all samples combined

R_j = sum of ranks in (j) th sample (column)

$\sum_{j=1}^k$ directs one to sum over the k samples (columns)

Siegel (57:185) provides the following instructions for interpreting the level of significance of H :

When there are more than 5 cases in the various groups, that is, $n_j > 5$, the probability associated with the occurrence under H_0 (null hypothesis) of values as large as an observed H may be determined by reference to a table of critical values of chi-square. If the observed value of H is equal to or larger than the value of chi-square given in the table for the previous set level of significance and for the observed value of $df = k - 1$, then the null hypothesis may be rejected at that level.

Before the computations were made the level of significance was set at .01 for testing the null hypothesis: that there are no differences among the mean Resident Assistant scores of the eight halls. The value of H according to the computations is as follows: $H = 73.32$. Reference to a table of critical values of chi-square reveals that the value of chi-square for 7 degrees of freedom at the .001 level of significance is 24.32. Since the value of H is 73.32 the null hypothesis may be rejected at this level of confidence and the conclusion may be

made that there is a highly significant difference between halls.

It is not known, however, whether these differences are due to inherent differences in raters, stringency of raters, or due to the differences in the quality of Resident Assistants.

Since, however, some of the raters indicated that when they were in doubt about an item they gave the Resident Assistant the highest rating, and other raters indicated they used the middle rating when in doubt; the most logical conclusion is that the differences are due to the stringency of the raters to a greater extent than they are due to the differences among Resident Assistants.

In determining the relative merits of the two systems of establishing the high and low groups of Resident Assistants, consideration was given to the system which presented the least chance for misclassification of the Resident Assistants. It was decided that the chances of misclassification would be less if the top two Resident Assistants from each hall were selected for the high group and the two lowest Resident Assistants from each hall were selected for the low group. This procedure provided 16 Resident Assistants for the high group and 16 Resident Assistants for the low group. The 16 Resident Assistants placed in the high group are listed as follows according to halls and Resident Assistant code numbers.

High Group by Halls:

Halls	1	2	3	4	5	6	7	8
RA	4	9	22	28	34	46	57	61
	1	10	17	25	37	48	52	66

The 16 Resident Assistants who were selected for the low group are also listed by halls and Resident Assistant code numbers. They are as follows:

Low Group by Halls:

Halls	1	2	3	4	5	6	7	8
RA	3 7	15 6	24 18	32 29	36 35	45 41	53 54	59 63

The total scores and subsectional scores for each of the Resident Assistants in the high and low groups may be easily located by referring to the summary of scores included in the appendix.¹⁰

Since the "Resident Assistant Rating Form" contained five subsections it was necessary to determine if these parts were related or if they were independent measures of Resident Assistant performance. The Kendall coefficient of concordance: W was used to determine the association among the five part scores. (57:231) The average of the rank order coefficients $\bar{R}$, was also determined for the part scores of the rating form. Table V shows the relationship of the five subsectional scores for the "Resident Assistant Rating Form."

¹⁰ See Appendix G.

TABLE V
RELATIONSHIP OF THE FIVE SUBSECTIONAL SCORES
ACCORDING TO HALLS

Halls	1	2	3	4	5	6	7	8
W	.85	.79	.82	.76	.92	.77	.77	.82
$\bar{R}$	.81	.74	.79	.70	.90	.71	.71	.78
Mean average of eight $\bar{R}$ coefficients = .77								

The coefficients of correlation for W and $\bar{R}$ reported in this Table revealed that there was a significant relationship between the five subsections of the rating form. The mean average of the eight $\bar{R}$ coefficients was .77. Since this relationship existed the five subsections of the rating form could not be used with confidence as independent measures of Resident Assistant Performance. On the basis of these data the total scores were used in preference to the part scores in the analysis of the relationship between ratings and personality characteristics of the Resident Assistants.

In view of the lack of direct means of validating the rating form by the use of an independent criterion it was necessary to assume that the rating form possessed satisfactory validity. This assumption was based on the fact that the rating form appeared to have logical or "face validity" and the fact that a jury of experts aided in the selection and weighting of the items.

In as much as this instrument was used only once in this study no measure of the stability of ratings over a period of time could be obtained. However, the average intercorrelation, .77 among the five subsectional scores for all of the eight halls provides evidence for the internal consistency of the instrument. If this figure was corrected by the Spearman-Brown formula for an instrument five times the length, an estimate of instrument reliability of over .90 would be obtained. This procedure is not strictly applicable, but on this basis it may be concluded that the instrument possesses sufficient reliability for its function in this study.

Results Obtained with the Personality Appraisal Instruments

Techniques of analysis. The "t" test was used to determine the significance of the difference between the means of the high and low groups on the various scales of the personality appraisal instruments. Since the assumption of normality is implicit in the application of this statistical technique an effort was made to determine the normal properties of the distribution of scores obtained on the various personality scales. Cumulative frequency graphs were prepared for both the high and low groups for each of the scales on the personality appraisal instruments. The same procedure was employed for the total group of sixty-eight Resident Assistants. These cumulative frequency curves were examined to determine the extent to which they simulated a normal distribution. Aside from a moderate skewness and a moderate flattening

out of some of the curves the distributions approximated a normal distribution. McNemar (41) has observed that evidence is available to support the contention that a moderate skewness, piling up (leptokurtic), or flattening out (platykurtic) is permissible in the use of the "t" test. On this basis it was concluded that the "t" test could be justifiably used to determine the significance of the difference between the means of the scores obtained by the high and low groups on the personality scales.

Results Obtained with the Minnesota Multiphasic Personality Inventory

Before the tests were scored, each answer sheet was examined for the "?" score, which is the number of items omitted. This constitutes the first of the validation scales. If more than one item in ten is omitted, the other scales are invalidated. No "?" score approached this magnitude and all of the answer sheets were used. The tests were scored on an IBM scoring machine. The raw scores were transferred to a work sheet for convenience in making the statistical calculations, for comparisons between the high and low groups of Resident Assistants. In order to provide a frame of reference for the interpretation of the MMPI Scales a brief summary of these scales has been included in the appendix.¹¹

Comparison of the groups on the individual scales. Comparisons were made between the high and low groups on the four validation scales,

¹¹ See Appendix H.

of which the "?" has already been considered; and the nine clinical scales which appear on the profile sheet. In clinical use, the configurational aspects of the profile are considered as a whole. An elevation on any one of the scales obtains importance only when it is considered in relation to the other scales. For purposes of research, where group comparisons are made, the usual procedure is to compare the group means of the individual scales.

The means for the high and low group were calculated from the raw scores rather than from the T scores. The conversion of raw scores to T scores adjusts the mean and standard deviation to that of the normative population. Since it was not desired, however, to compare the high and low groups at this point in terms of their deviation from the normative group, but rather to compare the groups with each other, the raw scores were used.

Table VI presents the mean raw scores for the high and low groups of Resident Assistants. The mean raw scores are presented for each group on twelve of the scales along with the "t" values for the significance of the difference between means. Since the mean of the low group was subtracted from the mean of the high group a negative "t" resulted in cases where the mean for the high group was smaller than the mean of the low group.

Reference to the data included in Table VI reveals that the low group showed a tendency to score above the high group on nine of the twelve MMPI scales. Since, however, none of the values of "t" for these

TABLE VI
COMPARISON OF THE HIGH AND LOW RA GROUPS ON MEANS OF RAW SCORES
FOR TWELVE MINNESOTA MULTIPHASIC SCALES

MMPI Scale	High RA mean	s	Low RA mean	s	t
L	3.56	1.75	2.56	4.47	.83
F	2.68	1.14	3.00	1.59	-.65
K	17.87	4.75	17.37	4.85	.29
Hs	3.18	2.32	4.00	2.37	-.99
D	16.68	2.27	17.43	4.63	-.58
Hy	22.18	3.98	21.06	3.95	.80
Pd	13.81	2.59	14.87	3.26	-1.02
Mf	25.18	4.38	26.25	5.13	-.63
Pa	9.75	2.98	10.44	2.81	-.67
Pt	8.12	5.52	9.25	2.08	-.76
Sc	7.50	4.15	8.62	5.32	-.66
Ma	17.18	2.66	17.50	3.65	-.28

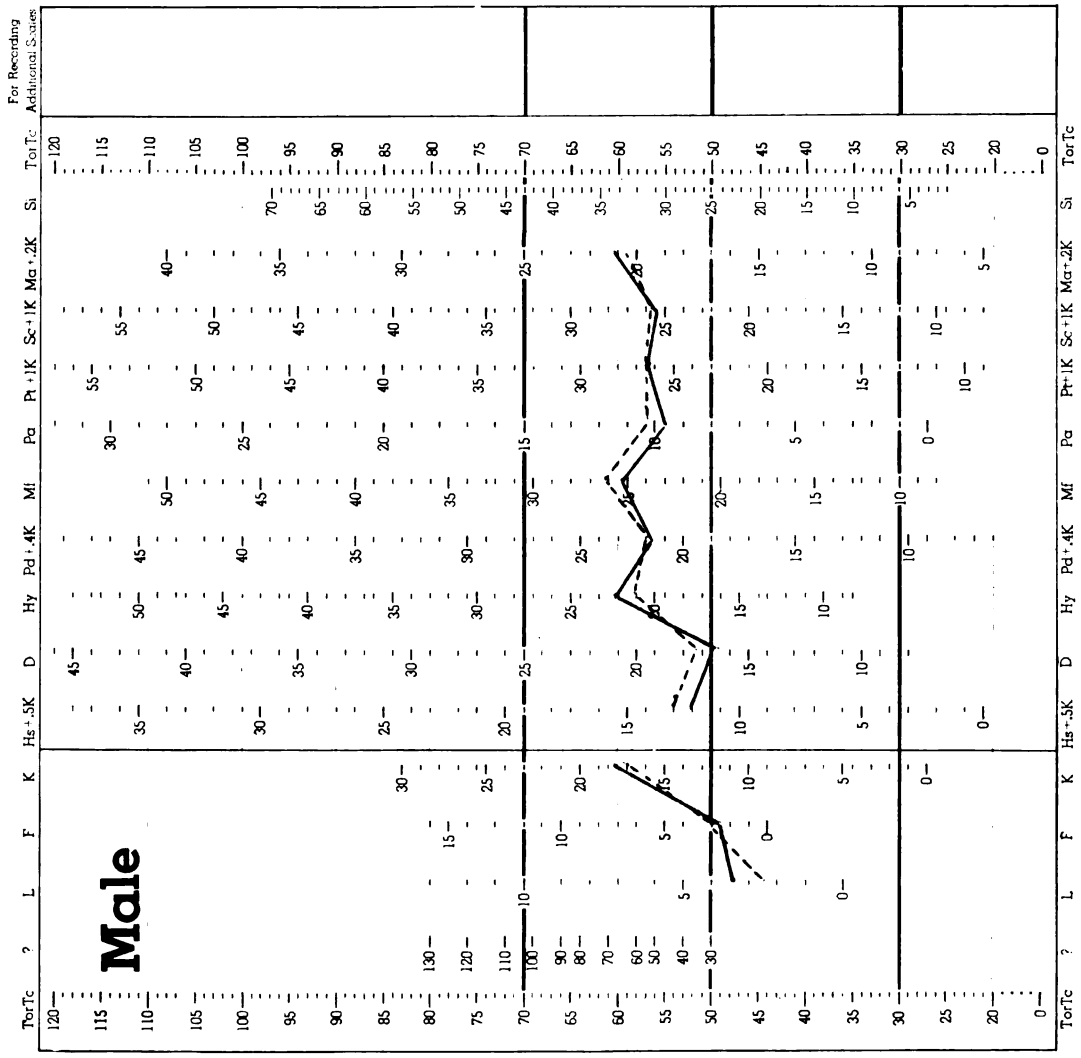
s = the estimate of the population standard deviation.

differences were significant at the selected level of confidence, which was .05, the conclusion cannot be made that there were significant differences between the high and low groups on these scales. At best it may be concluded that these results are indicative of a slight trend for the high group to score in a more favorable direction on nine of the MMPI scales than the low group.

It was possible to make further comparisons of these groups by converting the raw scores into T scores. The conversion of raw scores into T scores changes the raw scores into standard score equivalents. This process makes the subtest scores comparable to one another and puts them in terms of the mean and standard deviation of the normative population so that some conception may be obtained of the level of the scores in comparison to the normative population. Since it was desired at this time to compare the high and low groups in terms of their deviation from the normative group this procedure was followed. An examination of the profile made up of the mean T scores of the two groups, Figure 1, will bring out the relationship between the two groups in addition to illustrating their deviation from the normative group.

A T score of 50 is the expected score for a normal record. As the T score of an individual case rises, the deviation from the norm becomes more serious, but not until it exceeds 70 does an interpretation of real deviation or maladjustment become warranted. Further examination of the profile sheet, Figure 1, indicates that neither the high group nor the low group attained this level. The profile, however, reveals that there is a tendency for both groups to score above the

Scorer's Initials _____



Raw Score	_____	K to be added	_____	Raw Score with K	_____
_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____

Fractional at K									
30	15	12	6	3	1	0	0	0	0
29	15	12	6	3	1	0	0	0	0
28	14	11	6	3	1	0	0	0	0
27	14	11	5	3	1	0	0	0	0
26	13	10	5	3	1	0	0	0	0
25	13	10	5	3	1	0	0	0	0
24	12	10	5	3	1	0	0	0	0
23	12	9	5	3	1	0	0	0	0
22	11	9	4	3	1	0	0	0	0
21	11	8	4	3	1	0	0	0	0
20	10	8	4	3	1	0	0	0	0
19	10	8	4	3	1	0	0	0	0
18	9	7	4	3	1	0	0	0	0
17	9	7	3	3	1	0	0	0	0
16	8	6	3	3	1	0	0	0	0
15	8	6	3	3	1	0	0	0	0
14	7	6	3	3	1	0	0	0	0
13	7	5	3	3	1	0	0	0	0
12	6	5	2	3	1	0	0	0	0
11	6	4	2	3	1	0	0	0	0
10	5	4	2	3	1	0	0	0	0
9	5	4	2	3	1	0	0	0	0
8	4	3	2	3	1	0	0	0	0
7	4	3	1	3	1	0	0	0	0
6	3	2	1	3	1	0	0	0	0
5	3	2	1	3	1	0	0	0	0
4	2	2	1	3	1	0	0	0	0
3	2	2	1	3	1	0	0	0	0
2	1	1	0	3	1	0	0	0	0
1	1	1	0	3	1	0	0	0	0
0	0	0	0	3	1	0	0	0	0

FIGURE 1

MEAN T SCORES OF THE TWO GROUPS PLOTTED ON AN MMPI PROFILE SHEET.

Legend: — High Group ----- Low Group.

Note: MMPI profile sheet reproduced by permission of publisher: The Psychological Corporation. Copyright by University of Minnesota.

The Minnesota Multiphasic Personality Inventory

Starke R. Hathaway and J. Chamley McKinley

Female

Name

Address

Scorer's Initials

Occupation

Date Tested

Education

Age

Marital Status

Referred by

NOTES

TorTc	?	L	F	K	Ha+SK	D	Hy	Pd+AK	Mf	Pa	P+IK	S+IK	Ma+2K	Si	TorTc	For Recording Additional Scores
120															120	
115															115	
110															110	
105															105	
100															100	
95															95	
90															90	
85															85	
80															80	
75															75	
70															70	
65															65	
60															60	
55															55	
50															50	
45															45	
40															40	
35															35	
30															30	
25															25	
20															20	
15															15	
10															10	
5															5	
0															0	

Percent of K	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30
1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
9	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
10	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
12	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
13	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
14	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
16	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
17	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
18	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
19	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
20	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
21	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
22	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
23	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
24	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
25	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
26	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
27	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
28	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
29	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Raw Score

K to be added

Raw Score with K

Signature

Date

mean of the normative group. In the validation of the MMPI and in the study reported by Fry (22) it has been noted "that in general mean T scores of ... college students range from one-half to one standard deviation in an upward direction from that of the normal group." Since the highest peak in the profile for the high and low groups of Resident Assistants (Mf) falls at approximately one standard deviation above the mean, it seems safe to conclude that while these students differ somewhat from the general population in their personal adjustment as shown by the MMPI, they are fairly typical of college students.

In summary, the comparison of mean raw scores of the high and low groups of Resident Assistants on the individual scales of the MMPI revealed that the low group showed a tendency to score above the high group on nine of the twelve MMPI scales. However, since these differences were not statistically significant at the five percent level of confidence it cannot be concluded that there were significant differences between the two groups on these scales. In general, the patterns of the two groups were very similar. A possible explanation for this similarity may be attributed to the fact that each Resident Assistant is carefully screened before he is appointed as a Resident Assistant. The selection process, then, may contribute to the homogeneity of the two groups. If this may be assumed then a slight trend or a direction of differences between the two groups may have some value in terms of further describing these two groups of Resident Assistants.

When the mean T scores of the high and low groups were compared with the normative population there was a tendency for both groups to

peak on certain scores, but since neither the high or low group approached or exceeded the T score of 70 no particular significance was attached to the upward tendency of these scores.

Results Obtained with the Guilford-Zimmerman Temperament Survey

A further analysis of the personality characteristics of the high and low groups of Resident Assistants was made by means of the Guilford-Zimmerman Temperament Survey. The means of the raw scores were computed and the "t" test was used to determine the significance of the differences between the means of these groups, at the five percent level of confidence.

Comparison of the groups on the individual scales. Table VII presents the mean raw scores for the high and low groups on the ten Guilford-Zimmerman scales and the "t" values for the significance of the difference between the means. Only one of these differences was significant at the five percent level of confidence. Figure 2, on page 77 shows the raw scores plotted on a profile chart which has been designed for use with the Guilford-Zimmerman Temperament Survey. In the profile chart the raw scores are printed so as to normalize the distributions and to render score levels comparable from one trait to another. Three reference scales are included on the profile chart: the C scale, the centile-rank scale, and the T scale. The mean raw scores for the high and low groups have been plotted on the profile chart by approximating the nearest raw score. For example, a mean raw

TABLE VII
COMPARISON OF THE HIGH AND LOW RA GROUPS ON MEANS OF RAW SCORES
FOR TEN GUILFORD-ZIMMERMAN TEMPERAMENT SCALES

G-Z Scale	High RA mean	s	Low RA mean	s	t
G	18.75	4.45	16.75	6.14	1.06
R	20.87	3.50	20.87	2.63	0
A	20.43	3.33	18.12	4.66	1.62
S	23.62	3.16	21.68	5.78	1.18
E	21.81	4.07	19.25	2.30	2.19*
O	21.93	5.09	20.25	6.14	.84
F	16.93	5.61	15.12	6.26	.86
T	21.18	3.92	21.62	3.14	-.35
P	23.75	3.73	22.56	6.37	.65
M	21.56	3.78	21.37	3.32	.15

* Significant at the five percent level.

PROFILE CHART FOR THE GUILFORD-ZIMMERMAN TEMPERAMENT SURVEY
For high-school, college, and adult ages

77

C SCORE	G	R	A		S	E	O	F		T	P	M		CENTILE RANK	NEAREST T SCORE
	General Activity Energy	Restraint Seriousness	Ascendancy Social Boldness	M F	Social Interest Sociability	Emotional Stability	Objectivity	Friendliness Agreeableness	M F	Thoughtfulness Reflectiveness	Personal Relations Cooperativeness	Masculinity Femininity	M F		
10	30 29 28	30 29 28 27	30 30 29 29 28 28 28 27		30	30 29	30 29	30 30 28 29 26 28		30 29 28	30 29	30 0 29 1		99	75
9	27 26	26 25	27 26 25 25 26 24		29	28 27	28 27	25 27 24 26		27 26	28 27	28 2 27 3			70
8	25 24	24 23	25 23 22 22 24 21		28 27	26 25	26 25	23 25 22 24 21 24		25 24	26 25	26 4 25 5		95 90	65
7	23 22	22 21	23 20 22 19 21 19		26 25	24 23	24 23	20 23 22 22 19 21		23 22 22	24 23	24 6 24 7		80	60
6	21 20	20 19 18	20 18 19 17 18 16		24 23 22	22 21 20	22 21 20	18 20 17 19 16 18		21 20	22 21 20	23 8 22 9		70 60	55
5	19 18 17	17 16 15	17 15 16 14 15 13		21 20 19	19 18 17	19 18 17	15 17 14 16 13 15		19 18 17	19 18 17	21 10 20 11		50 40	50
4	16 15 14	14 13 12	14 12 13 11 12 11		18 17 16 15	16 15 14 13	16 15 14	12 14 11 13 10 12		16 15 14	16 15 14	19 12 18 13		30	45
3	13 12 11	11 10	11 10 9 9 10 8		14 13 12 11	12 11 10 9	13 12 11 10	9 11 8 10 7 9		13 12 11	13 12	17 14 16 15 15 15		20	40
2	10 9 8	9 8 7	9 7 8 6 7 6		10 9 8 7	8 7 6	9 8 7	6 8 5 7		10 9 8	11 10 9	14 16 13 17 12 18		10 5	35
1	7 6	6 5	6 5 4 4 5 3		6 5 4	5 4	6 5	4 6 3 5		7 6 5	8 7 6	11 19 10 20 9 20			30
0	5 3 2 1	4 3 2 1	4 2 3 1 2 1 1 0		3 2 1 0	3 2 1	4 3 2 1	2 4 1 3 1 2 0 1		4 3 2 1	5 3 1	8 21 5 23 2 25		1	25
	Inactivity Slowness	Impulsiveness Rhythymia	Submissiveness	M F	Shyness Seclusiveness	Emotional Instability Depression	Subjectivity Hypersensitiveness	Hostility Belligerence		Unreflectiveness	Criticalness Intolerance	Femininity Masculinity			

Note: Guilford-Zimmerman Temperament Survey profile chart reproduced by permission of publisher: Sheridan Supply Company.

FIGURE 2
PROFILE OF GUILFORD-ZIMMERMAN
TEMPERAMENT TRAITS FOR THE
HIGH AND LOW GROUPS OF RESIDENT
ASSISTANTS.

Legend:
— High Group
- - - Low Group

score of 21.83 was plotted as 22 on the profile chart. This method provides little or no distortion of the scores and provides a convenient method of handling the decimals found in the mean raw scores.

In the discussion which follows the high and low groups have been compared on the ten Guilford-Zimmerman scales. A definition of each of these scales is also included at this point as a guide to interpreting the data on the profile chart in Figure 2, page 77. The definitions and interpretations presented for each scale were those presented in the manual for the Guilford-Zimmerman Temperament Survey (26).

General activity (G). A high score on this scale indicates strong drive, energy and activity. A low score indicates a tendency to inertness and disclination for motor activity. An extremely high score may represent a manic tendency while an extremely low score may be indicative of a hypothyroid condition or other causes of inactivity. Thus, for good mental health a score in the middle range is usually most desirable. The C score for both the high and low groups was 5. The mean G score for the high group was 18.75, for the low group 16.75. The "t" for the difference was 1.06 which indicates a tendency for the high group to score higher, but fails to reach an adequate level of confidence.

Restraint (R). A low score on this scale is indicative of the happy-go-lucky, carefree, and impulsive individual who is usually not well suited to positions of responsibility such as supervision. An extremely high score, on the other hand, is indicative of the over restrained and over serious individual who is usually not well suited to supervisory positions. The optimal score for this trait is in the

upward direction from the C score of 5. Both the high and low groups had a C score of 7. The mean R score for the high group was 20.87 and for the low group 20.87. Thus, there were no significant differences between these groups.

Ascendance (A). A high score on this scale indicates social leadership and a low score social passiveness. It is generally recommended that individuals with C scores below 6, (certainly below 5) should be avoided in selecting foremen and supervisors. The mean (A) score for the high group was 20.43 and for the low group 18.12. The "t" for the difference was 1.62 which indicates a tendency for the high group to score above the low group, but fails to reach the five percent level of confidence. The C score for both groups was 6.

Sociability (S). The high and low scores indicate the contrast between the person who is at ease with others, enjoys their company and readily establishes intimate rapport, versus the withdrawn, reserved person who is hard to get to know. The mean S score for the high group was 23.62 and for the low group 21.68. There is a slight tendency for the high group to score above the low group on this trait, but since the "t" of 1.18 failed to reach the five percent level of confidence, no significance could be concluded for this difference.

Emotional Stability (E). A high score indicates optimism and cheerfulness on the one hand, and emotional stability on the other. A low score may be interpreted as a sign of poor mental health or poor emotional stability. The mean score for the high group was 21.81 and for the low group 19.25. The "t" for the difference was 2.19 which

was significant at the five percent level of confidence. It may be concluded that at this level of confidence the high group showed more emotional stability according to the E scale than the low group.

Objectivity (O). A high score on this trait indicates a tendency to view one's self and surroundings objectively and dispassionately. A low score indicates a tendency to take everything personally and subjectively and to be hypersensitive. There was no significant difference between the groups on this scale. The high group mean was 21.93, the low group mean 20.25, and "t" .84.

Friendliness (F). A high score may mean lack of fighting tendencies to the point of pacifism, or it may mean a healthy, and realistic handling of frustrations and injuries. It may also mean an urge to please others; a desire to be liked. A low score means hostility in one form or another. At best it means a fighting attitude. If kept under control, in many situations this can be a favorable quality. Many of the higher-ranking executives who are regarded as successful may have a below average F score. They may not always be the most pleasant persons to work with, but there are occasions when they can capitalize on this disposition. There was no significant difference between the groups on this scale. The high group mean was 16.93, the low group mean was 15.12, and "t", .86.

Thoughtfulness (T). Men who score on the introvert or thoughtful side of this trait have a small but distinct advantage in supervisory positions over the man who scores on the extravert side. The reason given is that the extravert of this type is so busy interacting with his social environment that he is a poor observer of people and himself.

He is probably not subtle and may be lacking in tact. He dislikes reflection and planning. The mean score for the high group was 21.18 and for the low group 21.62, the "t" for the difference was $-.35$. There was, therefore, no significant difference between the groups on this scale.

Personal relations (P). Of all the scores, the P score has consistently correlated highest with all criteria involving human relations. It seems to represent the core of "getting along with others" whether on the same or on a different level of organizational hierarchy. A high score means tolerance and understanding of other people and their human weaknesses. A low score indicates faultfinding and criticalness of other people and of institutions generally. So positive is the indication that it would seem to be a good rule not to appoint anyone to a supervisory position who has a C score below 6. (It is interesting to note that both the high and low groups have a C score of 7.) All things being equal it was recommended that the higher the C score was above 5, the better. On the basis of the information presented it may be concluded that both groups have similar potential for supervisory positions. There was no significant difference between the groups on this scale. The mean raw score for the high group was 23.75, for the low group 22.56, and "t", $.65$.

Masculinity (M). A high score on this trait indicates that the person behaves in ways characteristic of men and that he is likely, therefore, to be better understood by men and to be more acceptable to

them. If the M score is very high, it may mean that the person is somewhat unsympathetic and callous. He may, on the other hand, be attempting to compensate for some feminine tendencies or for feelings of weakness in traits other than M. The best supervisors are probably those who have their genuine masculine tendencies tempered with refinements and with just enough "motherly" attributes to give them feelings of responsibility toward those in their charge. The mean raw score for the high group was 21.56 and for the low group 21.37, for "t", .15. There was no significant difference between the groups.

In summary, the comparison of mean raw scores on the individual scales of the Guilford-Zimmerman Temperament Survey revealed that on the Emotional Stability (E) scale the high group exceeded the low group to a significant degree. This might be interpreted as meaning that the high group as a whole was more optimistic and cheerful, and possessed more emotional stability than the low group.

Among the remaining scales, the high group showed a tendency to score above the low group on the following scales: General Activity (G), Ascendancy (A), and Sociability (S). These differences, however, were not significant at the five percent level of confidence. In general, aside from the exceptions mentioned, the two groups were much alike in terms of the personality characteristics measured by the Guilford-Zimmerman Temperament Survey.

Results Obtained with the Allport-Vernon
Study of Values

The Allport-Vernon Study of Values has been widely used as an instrument for measuring personality differences through an analysis of evaluative attitudes. The Study of Values measures the relative prominence of six basic interests or values in personality: the Theoretical, Economic, Aesthetic, Social, Political, and Religious.

The tests were scored according to the instructions contained in the manual for the Allport-Vernon Study of Values (1). The mean raw scores for each of the six scales of the Study of Values were calculated and the "t" test was used to determine the significance of the difference between the means of the high and low groups of Resident Assistants.

Comparison of the groups on the individual scales. In interpreting the means of the high and low groups it should be remembered that a score of 40 is considered "average," since the total of the six scores for each respondent must be 240. This average of 40 is best considered a "neutral score" rather than the mean of any group with respect to a single category. Since a higher score on one value automatically lowers the score of another value, the test provides a relative rather than an absolute estimate of values.

Table VIII presents the mean raw scores for the high and low groups for the six Allport-Vernon scales and the value of "t" for the significance of the difference between the means. The comparisons that follow are based on the data presented in Table VIII. A brief description of each of the scales has been presented as a guide to interpreting the

TABLE VIII
COMPARISON OF THE HIGH AND LOW RA GROUPS ON MEANS OF SCORES
FOR THE SIX ALLPORT-VERNON VALUE SCALES

Value Scale	High RA mean	s	Low RA mean	s	t
Theoretical	42.62	7.60	49.68	6.26	-2.87 **
Economic	41.75	7.18	43.18	9.97	- .47
Aesthetic	30.43	6.50	34.06	8.61	-1.34
Social	37.56	6.89	33.68	4.80	1.85
Political	43.18	5.84	53.56	4.58	- .21
Religious	44.50	7.25	35.81	8.47	3.12 **

** Significant at the one percent level.

results obtained by the high and low groups on the six Allport-Vernon scales. The definitions of these scales are based on the material found in the manual for the Allport-Vernon Study of Values (1).

Theoretical. The interests of the theoretical man are empirical, critical, and rational. His chief aim in life is to order and to systematize his knowledge. The mean Theoretical scores of the low group exceeded that of the high group, the scores being 49.68 and 42.62 respectively. The value of "t" for the difference was -2.87 which is significant at the one percent level. It may be concluded with considerable confidence that the low group obtained higher Theoretical values than the high group.

Economic. The economic man is characteristically interested in what is useful. This type is thoroughly practical and conforms well to the prevailing concept of the average American business man. The two groups were similar in respect to their economic values. There was no significant difference between the groups on this scale.

Aesthetic. The aesthetic man sees his highest value in form and harmony. His chief interest is in the artistic episodes of life. The mean score for the low group was 34.06 and for the high group 30.43. The value of "t" for the difference was -1.34 which indicates a tendency for the low group to score higher on aesthetic values, but fails to reach an adequate level of confidence.

Social. The social man prizes love of people, and is therefore himself, kind, sympathetic, and unselfish. He is likely to find the

theoretical, economic, and aesthetic attitudes cold and inhuman. The mean for the high group was 37.56 and for the low group 33.68. The value of "t" for the difference was 1.85 which indicates a tendency for the high group to score above the low group on social values, but fails to reach an adequate level of confidence.

Political. The political man is interested primarily in power. His activities are not necessarily within the field of politics; but whatever his vocation may be he is interested in power. Most leaders, however, in any field generally have high power value. The mean for the low group was 43.56 and the mean for the high group was 43.18. There was no significant difference between the groups on this scale.

Religious. The highest value for the religious man may be called unity. He seeks to comprehend the cosmos as a whole, and to relate himself to its embracing totality. The mean score for the high group was 44.50 and for the low group 35.81. The value of "t" for the difference was 3.12 which was significant at the one percent level of confidence. It may be concluded with considerable confidence that the high group holds higher religious values than the lower group.

These relationships may be more clearly seen by referring to Figure 3, on page 87. Figure 3, shows the profiles of the high and low groups according to mean raw scores obtained on the six scales of the Allport-Vernon Study of Values. The plotting of final raw scores on the profile sheet brings out the dominant values more effectively and with less exaggeration. This procedure is recommended in the manual for the Allport-Vernon Study of Values (1).

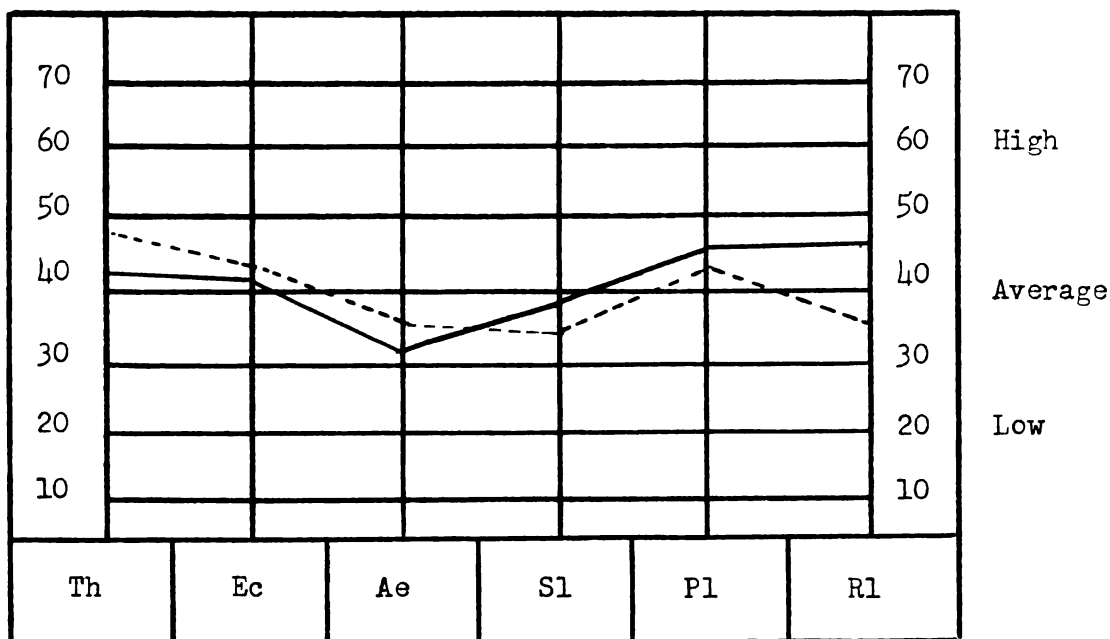


FIGURE 3

PROFILE OF VALUES FOR THE HIGH AND LOW GROUPS OF RESIDENT ASSISTANTS (FROM ALLPORT-VERNON STUDY OF VALUES)

Legend: ——— High Group - - - - - Low Group

Note: Allport-Vernon Study of Values profile sheet reproduced by permission of the publisher: Houghton Mifflin Company.

In summary, the low group scored significantly higher than the high group on Theoretical values. The high group scored significantly higher than the low group on Religious values. These differences were significant at the one percent level of confidence. Therefore, it may be concluded with some confidence that the low group exceeds the high group in Theoretical values and that the high group exceeds the low group in Religious values.

Additional comparisons between the high and low groups indicated a tendency for the low group to score above the high group on Aesthetic values; and a tendency for the high group to score above the low group on Social values. Since, however, these differences failed to attain an adequate level of significance, it cannot be concluded with confidence that there are differences with respect to groups for these values. At best a tendency or trend is merely indicated for these groups to differ in terms of these values. The high and low groups were found to be more similar in respect to their Economic and Political values.

Without additional information one can only speculate as to the reasons for the different value scores obtained between the high and low groups. The different scores may, however, reflect basic motivational differences between the Resident Assistants who were rated high in terms of job performance and the Resident Assistants who were rated low in terms of job performance. In light of the available data this seems to be a reasonable conclusion, however, the study of future Resident Assistant groups is recommended.

Results Obtained with the Index of
Adjustment and Values

The principle use of the Index of Adjustment and Values has been as a research tool. It has been used to investigate a variety of problems including success as a school administrator and success as a teacher. Since the research reported in this area indicated that the IAV has had some success in showing the importance of personality characteristics in the success of school administrators and teachers; the IAV was used in this study as an experimental instrument to determine whether similar IAV characteristics are important for success as a Resident Assistant.

Reference, to the research reported by Bills (8), revealed that when school administrators were studied by means of the IAV, the ++ person was selected by educational authorities as the ideal type of administrator, the → was selected as the next most desirable, and the +- person was the least desirable. A similar situation was found to exist when principals were asked to name their most successful teachers. The ++ people were named as the most successful teachers, the → people as the next most successful group, and the +- people as the least successful teachers. The -- category of the IAV was not included in these groupings.

Since the IAV categories mentioned in the research cited above are used in the remainder of this chapter, a definition for each of these categories is included at this point. The following definitions for the IAV categories are those presented by Bills (8:20):

(1) People who accept themselves and who believe that other people in their peer group are equally or more accepting of themselves (referred to hereafter as ++), (2) People who are rejecting of themselves but who believe that other people in their peer group are more accepting of themselves (-+), (3) People who accept themselves but who believe that other people in their peer group are not as accepting of themselves (+-), and (4) People who reject themselves and who believe that other people in their peer group are equally or less accepting of themselves (--).

These definitions and symbols will be used in the discussion that follows.

Comparison of high and low RA groups and IAV categories. The Index was scored according to the procedures recommended by Bills. A summary of these procedures may be found in Chapter III in the section concerned with the description of the Index of Adjustment and Values. Chi-square was used to test the null hypothesis, that there is no relationship between the high and low groups of Resident Assistants and the three classifications obtained from the Index of Adjustment and Values.

Table IX shows the arrangement of the data in the form of a contingency table. Chi-square for Table IX was computed at 2.33. Reference to a chi-square table revealed that the probability (P) value was located between .30 and .50; hence the value of chi-square is not significant.

Because of the relatively small number of expected frequencies of 2 of the 6 cells in Table IX, the probability .30 associated with the observed value of chi-square should be considered as only approximate and probably conservative. Since, however, the value of .30 is much greater than .05, there can be little doubt that these data are

TABLE IX
COMPARISON OF HIGH AND LOW RESIDENT ASSISTANT GROUPS AND
INDEX OF ADJUSTMENT AND VALUES CATEGORIES

RA Group	IAV Categories			Total
	(++)	(+-)	(-+)	
High	4	10	2	16
Low	8	6	2	16
Total	12	16	4	32
Chi-square 2.33 P = .30				

consistent with the null hypothesis. It may be concluded then, that there is no evidence of any significant relationship between the Resident Assistants and the IAV classifications.

Since these findings were somewhat contradictory to those cited for teachers and administrators where a relationship was shown between success and the IAV categories, a possible explanation for this discrepancy was sought. The most logical explanation, seemed to be that provided by Bills, who stated:

... it is probably best to emphasize again that no predictive ability is implied for the IAV and success as a leader, acceptability for leadership, or success as a teacher as a result of these studies. Subjects in each study knew that their performance would have no important bearing on their future success and this probably had a significant affect on their behavior. In addition, it would be extremely dangerous to draw anything more than the most tentative conclusions because of the small numbers involved. And, too, a question may be asked, 'To what extent can any instrument lead to predictions for individuals when the variations of the individuals are ignored in the standardization of the instrument?' (7:77)

Since this is a seemingly rational explanation for the failure to find a significant relationship between the Resident Assistants and the IAV categories it will be accepted as such. Then, too, there is always the possibility that the same characteristics which determine the success of administrators and teachers are not necessarily the same characteristics that determine the success of Resident Assistants. However, without additional information it is only possible to speculate as to the lack of relationship between the Resident Assistants and the IAV categories. It may be that these results will take on a new meaning when additional studies of Resident Assistants become available.

A Comparison of the Grade Point Averages for the High
and Low Groups of Resident Assistants

A further comparison was made between the grade point averages obtained by the high and low groups of Resident Assistants to determine whether the "halo" effect of rating the academically capable student higher in terms of job performance was prevalent in the ratings of the raters. The fifth term was selected as the most appropriate term for this comparison since some of the Resident Assistants were sophomores and others were seniors. By using the grade point averages at the end of the fifth term a more equal comparison between groups could be made.

The grade point averages were secured from the Michigan State University Registrar's office: the mean grade point averages were computed for each of the groups, and the estimate of the population standard deviation (s) was calculated. The "t" test was used to determine the significance of the difference between the means of the high and low groups.

The mean grade point average for the high group was 2.85 and the estimate of the population standard deviation (s) was .38. The mean grade point average for the low group was 2.87 and the estimate of the population standard deviation (s) was .42. The "t" value for the difference between means of the high and low group was $-.15$, which was not significant.

The all college mean grade point for male students at the end of the fifth term was reported as approximately 2.40. Both the high and

the low group were above this average with respective mean averages of 2.85 and 2.87. This is not too surprising, however, for Resident Assistants must attain a 2.6 all college grade point average before they can be appointed as a Resident Assistant.

Since there were no significant differences between the grade point averages of the high and low groups it may be concluded that these two groups were fairly homogeneous with respect to grade point averages. It is possible to infer, therefore, that since these groups were fairly homogeneous in this respect that the "halo" effect of rating the academically capable student higher in terms of job performance may not have been prevalent in the ratings of the raters. If this may be assumed it would be indicative that the ratings were not biased in this direction.

As has been pointed out, both the high and low groups were found to have higher grade point averages than the male college population at the end of the fifth term. This may indicate that the Resident Assistants may be a select group which is not typical of the average college population.

For this reason, the total group of sixty-eight Resident Assistants will be compared in Chapter V, with various male college populations to determine whether the results of the personality appraisal instruments show a trend for the Resident Assistant to differ from these population groups.

Summary. Attention was first given to the establishment of the high and low groups of Resident Assistants who were to be compared in terms of the individual scales on the selected personality appraisal instruments. On the basis of the rating form results, sixteen Resident Assistants were selected for the high group and sixteen Resident Assistants were selected for the low group.

The personality appraisal instruments which were employed in studying the personality characteristics of the two Resident Assistant groups consisted of the Minnesota Multiphasic Personality Inventory, The Guilford-Zimmerman Temperament Survey, the Allport-Vernon Study of Values, and the Index of Adjustment and Values.

A comparison of the high and low groups of Resident Assistants on the MMPI revealed the following: In general the patterns for the high and low groups were found to be very similar, and no significant differences were found between these groups on the MMPI scales. The low group, however, showed a tendency to score above the high group on nine of the twelve scales. There was a tendency for both groups to peak on certain MMPI scales, but since these peaks were within the normal range for male college students no particular significance was attached to this tendency.

The most significant difference obtained between the high and low groups on the Guilford-Zimmerman Temperament Survey was on the Emotional Stability scale (E). The high group scored significantly higher on this scale than the low group. Since the (E) scale indicates optimism

and cheerfulness, in addition to emotional stability, it was concluded that the high group possessed a higher degree of these characteristics than the low group.

With the Allport-Vernon Study of Values it was found that the low group scored significantly higher than the high group on Theoretical values. The high group, however, scored significantly higher than the low group on Religious values. There were no significant differences between the high and low groups in terms of the other Allport-Vernon scales.

There was no evidence of a significant relationship between the high and low groups of Resident Assistants and the classifications obtained from the Index of Adjustment and Values.

A comparison was also made between the high and low groups of Resident Assistants on the basis of total grade point averages. The mean grade point average for the high group was 2.85 and for the low group 2.87. There was no significant difference between the groups with respect to grade point averages.

In general, with the exceptions noted, the group comparisons indicated that the two groups were fairly homogeneous in terms of their personality characteristics.

CHAPTER V

THE PERSONALITY CHARACTERISTICS OF THE TOTAL GROUP OF SIXTY-EIGHT RESIDENT ASSISTANTS

Introduction

The purpose of this chapter is to describe the personality characteristics of the total group of sixty-eight Resident Assistants as determined by the results of the personality appraisal instruments used in this study. Since the high and low groups were shown to be fairly similar in terms of the results of the personality appraisal instruments, it was felt that the total group of sixty-eight Resident Assistants could justifiably be combined.

Inspection of the results obtained on the four personality appraisal instruments by the Resident Assistants suggested the possibility that the Resident Assistants as a group were a more select group than that of an average male college population. If so, the establishment of such differences that might occur between the Resident Assistant group and the selected normative college group would increase the value of the personality appraisal instruments as aids in the selection of Resident Assistants.

Then, too, the comparison of the Resident Assistant group with a normative male college population might provide information which would be helpful in further describing the personality characteristics of the Resident Assistant group.

The mean scores obtained by the sixty-eight Resident Assistants on the various scales of the personality appraisal instruments were compared to the mean scores obtained by various male college population groups. The "t" test was used to determine the significance of the difference between means. By using this procedure it was possible to determine the extent to which the Resident Assistants were similar or dissimilar to a selected college group.

Comparison of the Total Group of Resident Assistants with a College Group on the Minnesota Multiphasic Personality Inventory

The college population selected for comparison with the total group of Resident Assistants consisted of 230 male students from Michigan State University, who were studied by Dahrke (17). This group was selected for its representativeness of the male student population at Michigan State University. Table X shows a comparison of the two groups on the means of raw scores for the Minnesota Multiphasic Personality Inventory. In the discussion that follows, the Resident Assistants will be referred to as the RA group and the 230 male students from Michigan State University will be designated as the MSU group.

Reference to Table X indicates that nine of the differences between means were significant at the one percent level and one was significant at the five percent level of confidence. In the following discussion the results of the comparisons of each scale will be considered.

Comparison of the groups on the individual scales. The L scale consists of fifteen items seldom answered in the scored direction by

TABLE X

A COMPARISON OF MEAN RAW SCORES OF 68 RESIDENT ASSISTANTS AND
230 MALE MICHIGAN STATE UNIVERSITY STUDENTS ON TWELVE
MINNESOTA MULTIPHASIC PERSONALITY INVENTORY SCALES

Scale	RA Mean	SD	MSU Mean	SD	t
L	3.03	1.64	2.89	1.92	.54
F	2.98	2.16	4.62	2.84	-4.39 **
K	17.87	4.61	13.33	4.24	7.42 **
Hs	3.54	3.06	4.68	3.21	-2.60 **
D	17.24	3.49	17.88	4.69	-1.04
Hy	22.13	4.02	18.47	4.20	6.34 **
Pd	14.84	3.64	15.92	3.98	-1.99 *
Mf	26.44	5.29	24.31	4.92	3.07 **
Pa	10.04	3.12	8.75	2.77	3.26 **
Pt	8.60	5.78	13.82	7.10	-5.52 **
Sc	8.19	5.64	12.88	6.82	-5.16 **
Ma	16.98	3.83	18.55	4.27	-2.72 **

* Significant at the five percent level.
** Significant at the one percent level.

normal subjects. It acts as a validating score by giving a measure of the subject's effort to place himself in the most favorable light.¹ The mean score on this scale for the RA group was 3.03 and for the MSU group it was 2.89. The "t" value for the difference was .54, which was not significant.

The F scale is a validating scale and serves as a check on the validity of the whole record. If the F score is high, the other scores are likely to be invalid either because the subject was careless or because he was unable to comprehend the items. A low F score is a reliable indication that the subject's responses were rational and relatively pertinent. The mean F score for the RA group was 2.98 and for the MSU group 4.62. The "t" value for the difference was -4.39, which is significant at the one percent level of confidence.

The K scale is essentially a correction factor which, when added to certain MMPI scales, sharpens their discriminatory power. This scale also measures "test taking attitudes." A high K score may be indicative of a defensive attitude and a low K score suggests unusual frankness or candidness. The mean K score of the RA group exceeded that of the MSU group; mean scores being 17.87 and 13.33 respectively. The value of "t" for the difference was 7.42, which is significant at the one percent level. It may be concluded with considerable confidence that the RA group was more guarded and evasive while the MSU group was

¹ In the discussion which follows, the definition of each scale, unless otherwise indicated, is that given in the manual for the MMPI (29).

more frank and candid. It should be pointed out, however, that neither the RA group or the MSU group obtained a level on the K score which would indicate that their responses on the MMPI scales were invalid.

The Hypochondriasis scale (Hs), purports to measure abnormal concern over bodily functions. Undue worry about health, an immaturity in approach to adult problems, and a history of exaggeration of physical complaints characterize the person with a high Hs score. The RA group obtained a mean score of 3.54 on the Hs scale and the MSU group obtained a mean score of 4.68. The value of "t" for the difference was -2.60 which is significant at the one percent level. It may be concluded at this level of confidence that the RA group was less concerned over bodily functions or worry about health, and showed more maturity in approaching adult problems than the MSU group.

The Depression scale (D), is primarily a symptom scale and tends to reveal the present level of adjustment of the individual. It is the middle scale of the "neurotic triad" made up of Hs, D, and Hy. In evaluating the extent or severity of neuroticism the D score has been found to be more discriminating alone than the mean of Hs, D, and Hy scales. The mean D score for the RA group was 17.24 and for the MSU group 17.88. There was no significant difference between the groups on this scale.

The Hysteria scale (Hy) was designed to measure the degree to which the subject is like patients who have developed conversion-type hysteria symptoms. Hysterical cases may be considered more immature psychologically than any other group. The mean score for the RA group on this scale was 22.13 and for the MSU group 18.47. The value of "t"

for the difference of the means was 6.34 which is significant at the one percent level. It may be concluded with some confidence that the RA group showed more of a tendency to score in the direction of hysteria than the MSU group.

The Psychopathic Deviate (Pd) scale is reported to measure the similarity of the subject to a group of persons whose main difficulty lies in their absence of deep emotional response, their inability to profit from experience, and their disregard of social mores. The mean for the RA group on this scale was 14.84 and the mean for the MSU group was 15.92. The value of "t" for the difference between means was -1.99 which was significant at the five percent level of confidence. It may be concluded, with this degree of confidence, that the RA group may be more inclined to profit from experience and is more apt to have a higher regard for social mores than the MSU group.

The Interest scale (Mf) is reported to measure the tendency toward masculinity or femininity of interest pattern. A high score on this scale indicates a deviation of the basic interest pattern in the direction of the opposite sex. The mean for the RA group was 26.44 and the mean for the MSU group was 24.31. The value of "t" for the difference between means was 3.07 which is significant at the one percent level of confidence. It may be concluded that the RA group has less masculine identification than the MSU group. A certain lack of masculine identification was indicated in both groups, however, by an elevation of the mean T scores for both groups.

The Paranoia scale (Pa) is believed to measure the similarity of a subject to patients characterized by suspiciousness, oversensitivity, and delusions of persecution. The mean for the RA group was 10.04 on this scale and the mean for the MSU group was 8.75. The value of "t" for the difference between means was 3.26 which was significant at the one percent level of confidence. The conclusion may be made with some confidence that the RA group had a tendency to score above the MSU group on the Pa scale. It should be pointed out, however, that according to the MMPI manual: "Persons with an excess amount of paranoid suspiciousness are common and in many situations are not especially handicapped." (29:20) Since, however, the T score of 56 for the RA group did not reach the level of 70, which is used as an indicator of significant abnormality, abnormality on the Pa scale for the RA group should not be inferred.

The Psychasthenia scale (Pt) is believed to measure the similarity of the subject to patients troubled by phobias or compulsive behavior. The RA group mean was 8.60 and the MSU group mean was 13.82. The value of "t" was -5.52, which is significant at the one percent level. It may be concluded that the RA group as shown by the Pt scale was less troubled by phobias or compulsive behavior than the MSU group.

The Schizophrenia scale (Sc) is reported to distinguish about 60 percent of the observed cases diagnosed as schizophrenia. Subjects answering the items of this scale in the scored direction give an indication of unusual or bizzare thoughts or behavior. Among normals, high scores are described as self-dissatisfied, sensitive, high strung,

and sentimental. The comparison of the RA group and the MSU group showed respective means of 8.19 and 12.88, with a "t" of -5.16, which was significant at the one percent level. It may be concluded with this degree of confidence, that since both groups scored within the normal range of the Sc scale, that the MSU group showed a tendency to be more self-dissatisfied, sensitive, high strung, and sentimental than the RA group.

The Hypomania scale (Ma), measures the personality factor characteristics of persons with marked overproductivity in thought and action. Simply stated, Hypomania may be regarded as a condition just slightly off normal in that the person exhibits an overproductivity of thought and action. It is recommended that an elevation on the Ma scale should be interpreted cautiously since the most common peak score among normals is on this scale. The mean for the RA group was 16.98 and for the MSU group 18.55. The value of "t" was -2.72, which was significant at the one percent level. This may be interpreted as indicating a tendency for the MSU group to possess more of a trend toward hypomania than the RA group, however, caution should be used in any inferences based on this conclusion since both groups scored within the normal range on this scale.

In summary, the comparison of the mean raw scores on the individual scales of the MMPI revealed that the RA group was significantly higher on the K, Hy, Mf, and Pa scales than the MSU group.

This may be interpreted as meaning that the RA group as shown by the K scale were more aware of a feeling of self-esteem and tended to

strive consciously or unconsciously to protect and enhance this feeling. Since they were Resident Assistants they would have more to lose if they were to reveal socially disapproved strivings by their test responses. In terms of the Hy scale the RA group showed a tendency to differ from the MSU group in the direction of hysteria as measured by this scale. The tendency for the RA group to peak on the Hy scale may be interpreted to mean that as a group they tended to worry more, were more high strung, more individualistic, and perhaps more immature psychologically than the MSU group. A certain lack of masculine identification was indicated on the part of the RA group in terms of the Mf scale. However, there was a tendency for both groups to show an elevation on the Mf scale. As indicated by the Pa scale the Ra group showed more of a trend in the direction of persons who are characterized by suspiciousness, oversensitivity and delusions of persecution than the MSU group.

The MSU group was significantly higher on the following scales of the MMPI: F, Hs, Pd, Pt, Sc, and Ma.

Since the F, Pd, and Ma are "character" scales, they emphasize the importance of the symptomatology expressed in the elevated Pt and Sc scales. Perhaps the most definite trend to be noted was a tendency toward psychopathic deviation in the MSU group. However, since the MSU group was within the normal area with respect to these scales this tendency at best may be described as slight.

The two groups were most similar with respect to the L and D scales on the MMPI. No significant differences were found between the groups on these scales.

Comparison of the Total Group of Resident Assistants with a College Group on the Guilford-Zimmerman Temperament Survey

The results obtained for the high and low groups of Resident Assistants on the Guilford-Zimmerman Temperament Survey offered the possibility that this instrument might serve as a helpful aid in the selection of Resident Assistants. For this reason, the total group of 68 Resident Assistants was compared with a group of 523 male college students, from a Southern California University, who were included by Guilford and Zimmerman (26:6) in the establishment of the norms for this instrument. It was felt that by comparing these two groups the establishment of any significant differences that might occur would increase the value of the test for RA selection purposes as well as to provide additional information pertaining to the personality characteristics of the total group of Resident Assistants. In the discussion that follows the 68 Resident Assistants will be referred to as the RA group, and the 523 male students from a Southern California University will be designated as the SCU group.

Comparison of the groups on the individual scales. Table XI shows a comparison of the two groups on the means of raw scores for the individual scales of the Guilford-Zimmerman Temperament Survey. Reference to Table XI reveals that the RA group scored considerably higher than the SCU group on the following scales: Restraint (R), Ascendancy or Social Boldness (A), Social Interest (S), Emotional Stability (E), Objectivity (O), Friendliness (F), Thoughtfulness (T),

TABLE XI

A COMPARISON OF THE MEAN RAW SCORES OF 68 RESIDENT ASSISTANTS AND 523 MALE COLLEGE STUDENTS ON THE GUILFORD-ZIMMERMAN TEMPERAMENT SCALES

Scale	RA Mean	SD	SCU * Mean	SD	t
G	17.34	5.19	17.0	5.64	.47
R	20.40	3.44	16.9	4.94	5.66 **
A	19.29	4.14	15.9	5.84	4.63 **
S	23.24	4.64	18.2	6.97	5.79 **
E	20.66	5.75	16.9	6.15	4.77 **
O	20.84	5.21	17.9	4.98	4.54 **
F	16.76	5.15	13.8	5.07	4.51 **
T	20.85	3.52	18.4	5.11	3.83 **
P	22.87	4.70	16.7	5.05	9.53 **
M	20.56	3.49	19.9	3.97	1.30

* The means for male students from a Southern California University reported only to one decimal place in the original data.

** Significant at the one percent level.

and Personal Relations (P).² Since the differences between the means for the RA group and the SCU group on these scales were significant at the one percent level, it may be concluded at this degree of confidence that the RA group showed a tendency to score higher than the SCU group on these eight scales. It may be possible, then, to conclude that the RA group possessed a somewhat higher degree of these eight personality characteristics as shown by this instrument than the SCU group.

Perhaps the most definite trend to be noted in this comparison was the tendency for the RA group to peak on the Restraint (R) scale, and the Personal Relations (P) scale. Since these scales may be indicative of specific personality characteristics of the RA group the following interpretations of the R and P scales have been included.

In general Guilford (26:8) has indicated that persons who score low or high on the Restraint scale (R) are not well suited to positions of supervisory responsibility. The low scorer is too carefree and impulsive and the high scorer is over restrained and over serious. The optimal position for a score on this trait was, however, recommended as being on the upper side of the normative mean of 16.9, which was established for this trait. Since the RA group mean score was 20.40, it is possible that this may be an optimal score for Resident Assistants on this scale. On the basis of the information available at the present time, however, little more than a recommendation can be made in terms of an optimal score for Resident Assistants on this scale.

² Definitions of these scales may be found in Chapter IV.

The highest raw score for the RA group on the Guilford-Zimmerman Scales was found on the Personal Relations scale (P). The mean score for the RA group on this scale was 22.87 and for the SCU group 16.7. The value of "t" was 9.53. Since the difference between means was highly significant, and since the Personal Relations scale (P) has been reported to be correlated highest with all criteria involving human relations it is possible that further consideration should be given to this scale as an RA selection aid. As indicated by Guilford and Zimmerman (26:9), "The low-scoring person is not likely to 'get along with others.' So positive is the indication that it would seem to be a good rule not to appoint anyone to a supervisory position who has a C score below 6." The C score for the Resident Assistant group on the Personal Relations scale (P), was 7. Since successful personal relations are believed to be one of the most important attributes of the successful Resident Assistant it is recommended that this scale be given careful attention in terms of Resident Assistant selection.

The RA group and the SCU group were found to be most similar with respect to General Activity (G) and Masculinity (M). No significant differences were found on these scales.

In summary, the RA group was found to score higher on eight of the ten Guilford-Zimmerman scales than the SCU group. The RA group differed most from the SCU group in terms of the Restraint (R) scale and the Personal Relations (P) scale, but significant differences were also found on the A, S, E, O, F, and T scales. The groups were found to be most similar on the General Activity (G) and Masculinity (M) scales.

Since the RA group scored higher on eight of the ten scales, and since these differences were significant at the one percent level, it may be concluded with some degree of confidence that the RA group appeared to be a more select group than the SCU group.

Comparison of the Total Group of Resident Assistants with a
College Group on the Allport-Vernon Study of Values

In this study of group differences on the Allport-Vernon Study of Values a male population of 219 students from Ohio State University was selected for comparison with the 68 Resident Assistants. The Ohio State group was included as part of the normative group by Allport and Vernon (1:9). The Ohio State University group was selected for comparison with the Resident Assistant group since the male student population it included was most similar to that of the Michigan State male student population. In the discussion that follows the 68 Resident Assistants will be referred to as the RA group and the 219 male Ohio State University students will be referred to as the OSU group.

Comparison of the groups on the individual scales. Table XII shows the comparison of the two groups on means of the raw scores for the individual scales of the Allport-Vernon Study of Values. Reference to Table XII reveals that only one significant difference was found between the mean raw scores of the two groups. The RA group scored higher than the OSU group on the Theoretical scale. The mean score for the RA group was 44.24 and for the OSU group 40.92. The value of "t" for the difference between means was 3.25 which is significant at the one percent

TABLE XII

A COMPARISON OF THE MEAN RAW SCORES OF 68 RESIDENT ASSISTANTS
AND 219 MALE OHIO STATE UNIVERSITY STUDENTS
ON THE ALLPORT-VERNON STUDY OF VALUES

Scale	RA Mean	SD	OSU Mean	SD	t
Theoretical	44.24	7.75	40.92	7.18	3.25 **
Economic	43.29	7.81	45.15	8.33	-1.62
Aesthetic	33.15	7.99	34.48	8.72	-1.16
Social	36.82	6.54	36.94	6.62	- .13
Political	42.99	5.38	43.30	6.78	- .34
Religious	39.53	8.57	39.21	8.90	.26

** Significant at the one percent level.

level. On the basis of this information it may be concluded with some degree of confidence that the RA group has shown a significant tendency to score above the OSU group on the Theoretical scale. Simply stated, the Theoretical man is regarded as empirical, critical, and rational. The OSU group, on the other hand, showed a tendency to score above the RA group on Economic and Aesthetic values. These differences were not, however, statistically significant. The two groups were most alike with respect to their Social, Political, and Religious values.

In summary, only one significant difference was found between the RA group and the OSU group on the Allport-Vernon Study of Values. This difference was on the Theoretical scale. It is possible that this difference may have occurred by chance, however, it is also possible that a basic motivational difference could exist in the RA group. Without additional information it is only possible to speculate as to the reason for this difference.

Comparison of the Total Group of Resident Assistants with a College Group on the Index of Adjustment and Values

The group chosen for comparison with the 68 Resident Assistants was a sample of 564 university students reported by Bills (7:85) as part of normative data for the Index of Adjustment and Values. An examination of this group showed that approximately 26 percent were in the ++ category, 34 percent were in the -+ category, 34 percent were in the +- category, and 6.0 percent were found in the -- category.

Since the chi-square test represents a useful method of evaluating experimentally determined results against results to be expected on the basis of a formulated hypothesis it was selected as an appropriate technique for the comparison of these two groups. In the comparisons that follow the 68 Resident Assistants are referred to as the RA group and the 564 students in the criterion group are referred to as the UK group, since part of the sample included a group of male students from the University of Kentucky.

Comparison of the groups on the IAV categories. An examination of the distribution of the 68 Resident Assistants revealed that they were distributed, according to the four IAV categories, as follows: 27 were in the ++ category, 5 were in the -+ category, 35 were in the +- category, and 1 was in the -- category.

Table XIII was set up to aid in the computation of chi-square and shows the distribution of the RA group according to observed and expected frequencies on the IAV. The observed data, which comprises the distribution of the RA group, is shown in the first row. The expected frequencies for the RA group, in the second row, were determined from the percentages given for the UK group. For example, if 26 percent of the UK group was found in the ++ category, 26 percent of the Resident Assistants could also be expected to be found in this category. The expected frequencies were entered in row two and designated as expected frequencies. The null hypothesis to be tested was that there is no difference between the observed RA frequencies and the expected RA frequencies for the IAV.

TABLE XIII

A COMPARISON OF THE OBSERVED AND EXPECTED FREQUENCIES FOR
SIXTY-EIGHT RESIDENT ASSISTANTS ON FOUR INDEX OF
ADJUSTMENT AND VALUES CATEGORIES

RA Frequencies	IAV Categories				Total
	(++)	(-+)	(+-)	(--)	
Observed	27	5	35	1	68
Expected	18	23	23	4	68
Chi-square	27.11	P = .001			

Reference to Table XIII reveals that the chi-square obtained for the comparison of the observed RA frequencies and the expected RA frequencies was 27.11. Reference to a table of chi-square revealed that the probability (P) value was found to be .001. Since the chi-square value was highly significant the null hypothesis was rejected at the .001 level and the conclusion was made that the divergence of the observed results from the expected results was much too large to be attributed solely to sampling fluctuations.

Further comparisons of the RA group may be made by referring to the observed frequencies for the RA group in Table XIII. From these data it may be noted that out of a total group of sixty-eight Resident Assistants approximately 39.6 percent were in the ++ category, 7.4 percent were in the -+ category, 51.5 percent were in the +- category, and 1.5 percent were in the -- category. By comparing the percent of the Resident Assistants within each of these four categories it was possible to obtain a relative picture of the proportion of the personality characteristics in terms of the total RA group as revealed by the IAV. For example, 51.5 percent of the Resident Assistants were in the +- category. Since +- persons accept themselves, but believe that other people in their peer group are not as accepting of themselves it may be concluded that 51.5 percent of the RA group had this attitude toward themselves and others.

The next highest group of Resident Assistants was found in the ++ category. The ++ category contained 39.6 percent of the total RA group. The ++ persons are described as persons who accept themselves and who

believe that other people in their peer group are equally or more accepting of themselves. According to Bills (8:21), ++ people are democratic individuals who have a high regard for the dignity, worth and integrity of people, including themselves; and faith in the efficacy of group action. The ++ person is believed to be the most successful leader. Since 39.6 percent of the Resident Assistants were found in the ++ category it may be concluded that 39.6 percent of the RA group possess these attributes.

The third highest number of Resident Assistants, 7.4 percent, were found in the -+ category. People in the -+ group are rejecting of themselves, but believe that other people in their peer group are more accepting of themselves. The -+ people hold essentially the same beliefs and attitudes as the ++ people, but to a lesser degree than the ++ people, since the -+ persons are not as accepting of themselves. Since -+ people are similar to ++ people, they are ranked second for leadership acceptability.

Only 1.5 percent of the RA group were in the -- category. Persons in the -- category are believed to reject themselves and others. For this reason they would be least likely to be accepted as leaders.

In summary, when the RA group was ranked according to the percent of Resident Assistants in each of the four IVA categories the highest percentage of Resident Assistants were found in the +- group, and the ++ group. The +- group included 51.5 percent of the Resident Assistants and the ++ group included 39.6 percent. By combining these two percents it can be seen that a total of 91.1 percent of the Resident Assistants

were in these two groups. On this basis, then, it may be tentatively concluded that if the IAV was used as a Resident Assistant selection aid, to obtain a similar group of Resident Assistants, preference should be given to the ++ and -+ categories.

Little can be said about the -+ category since it was purported to rank second as a predictor for acceptability as a leader. In terms of the RA group only 7.4 percent of the Resident Assistants were included in this category which would rank it in third position according to the Resident Assistant distribution. At best, the conclusion may be made that the -+ category was not as typical of the Resident Assistant population as the ++ and +- categories.

The -- category may also prove useful as a selection aid since only 1.5 percent of the Resident Assistants appeared in this category. It is unlikely, then, that a -- person would be a good risk as a Resident Assistant. It is recommended that further studies be conducted with future RA groups before definite conclusions are drawn from this population in terms of the IAV.

Summary. Since a rather complete summary has been included at the end of each section for the comparisons between the Resident Assistants and selected male collegiate populations on the personality appraisal instruments, this brief general summary has been included to highlight the most significant findings which resulted from the analysis of these data.

On the basis of the MMPI results the MSU group was found to score more in the direction of psychopathic deviation than the RA group.

On this basis it was concluded that in general the RA group showed more of a tendency toward better personal adjustment than the MSU group.

When compared with a group of 523 male students from a Southern California University the RA group scored significantly higher on eight of the ten Guilford-Zimmerman Temperament scales. On this basis it was concluded that the RA group appeared to be a more select group as shown by this comparison.

Only one significant difference was found on the Allport-Vernon Study of Values when the Resident Assistants were compared with a male college population from Ohio State University: The RA group was significantly higher than the OSU group on the Theoretical values scale.

When compared with a normative group of 564 university students in terms of the distributions obtained on the Index of Adjustment and Values, the RA group differed significantly from this group in terms of their expected frequency distribution on the four IAV categories. In terms of the predictive ability as implied by the IAV, and success as a leader, the RA group was found to differ from the recommended classifications for leadership acceptability.

The results of these findings indicate that in general, the RA group appeared to be a more select group than the groups used for comparison, with respect to the personality characteristics as measured by the personality appraisal instruments.

CHAPTER VI

SUMMARY, CONCLUSIONS, AND SUGGESTIONS FOR FURTHER RESEARCH

The present chapter contains a summary of the investigations which were made in this study, conclusions that were reached as a result of these investigations, and suggestions for further research.

Summary

The problem. The purposes of this study were: (1) to determine, within the limitations of certain personality appraisal instrument, the personality characteristics of the sixty-eight student Resident Assistants employed in the eight men's residence halls at Michigan State University; (2) to develop a method for effectively rating the job performance of the Resident Assistants; (3) to determine the extent and the degree to which the personality characteristics of the more successful Resident Assistants were similar or dissimilar to those of the Resident Assistants who were rated as less successful in job performance, and (4) to determine the advisability of utilizing these selected personality appraisal instruments to aid in the selection of more effective Resident Assistants.

Methods and procedures. The personality appraisal instruments selected for studying the personality characteristics of the sixty-eight Resident Assistants were the following: The Minnesota Multiphasic

Personality Inventory, the Guilford-Zimmerman Temperament Survey, the Allport-Vernon Study of Values, and the Index of Adjustment and Values.

The high and low job performance groups were established by means of a rating form which was developed to evaluate the job performance of the Resident Assistants. On the basis of the results obtained with this rating form the top two Resident Assistants from each hall were selected for the high group and the two lowest Resident Assistants from each hall were selected for the low group. This procedure provided sixteen Resident Assistants for each group. These two groups were then compared on the individual scales of the selected personality appraisal instruments.

The final phase of this study was concerned with the comparison of the total group of sixty-eight Resident Assistants with selected male college population groups on the results obtained with the four personality appraisal instruments.

Findings

Rating form findings. 1. The rating form, developed in this study, was found to have sufficient reliability for classifying the Resident Assistants into high and low job performance groups. The average intercorrelation, .77 among the five subsectional scores for the eight halls provides evidence for the internal consistency of the instrument. When this figure was corrected by the Spearman-Brown formula an estimate of instrument reliability of over .90 was obtained.

2. Since the mean average of the eight $\bar{R}$ coefficients was found to be .77, the five subsections of the rating form could not be used as independent measures of Resident Assistant performance. This was not considered a serious limitation, however, since the main function of the rating form in this study was to establish the high and low Resident Assistant performance groups. By combining the five subsectional scores into a total score it was possible to obtain a reliable measure of Resident Assistant performance for the establishment of the high and low groups.

3. When the total scores of the rating form were used it was found that the three raters in each of the eight halls were in agreement in their rankings of the upper two and lower two Resident Assistants in their halls. The greatest differences in rater agreement occurred in the middle group of Resident Assistants. On this basis the rating form may be used with confidence to determine the job performance of the upper and lower groups of Resident Assistants within halls.

4. The greatest discrepancy of ratings was found between the raters of the eight halls. For example, one hall was overly lenient and another hall was overly severe in their ratings. Since some of the raters indicated that when they were in doubt they gave the Resident Assistant the highest rating, and since other raters indicated they used the middle rating when in doubt; the differences between the ratings of halls were attributed to the stringency of the raters rather than to differences among the Resident Assistants.

5. Despite the fact that the rating form developed in this study has some limitations, it lends itself to a more objective approach for the evaluation of Resident Assistant performance than the type of evaluation that is so commonly made on the basis of intuition alone. By use of the rating form the Head Resident Advisor may be able to point out the strong and weak areas of performance to his Resident Assistants. A periodic evaluation of this type could be beneficial to both the Head Advisor and to the Resident Assistants.

Findings for the high and low groups. 1. The low group of Resident Assistants showed a tendency to score above the high group on nine of the twelve Minnesota Multiphasic Personality Inventory (MMPI) scales. Since, however, none of the values of "t" for these differences were significant at the selected level of confidence, which was .05, caution should be used in interpreting these findings. At best, these results indicate a trend for the low group to score above the high group on nine of the MMPI scales.

2. By converting the mean MMPI raw scores of the high and low Resident Assistant groups into T scores (standard score equivalents) it was possible to compare the Resident Assistant groups with the normative MMPI population. The results of this comparison revealed that both the high and low groups of Resident Assistants showed a tendency to peak on some of the scales. Since, however, neither the high nor low group approached or exceeded the T score of 70 no inference of abnormality was attributed to the upward tendency of these scores.

3. When the high and low groups were compared on the individual scales of the Guilford-Zimmerman Temperament Survey, the high group exceeded the low group on the Emotional Stability (E) scale. This difference was significant at the five percent level of confidence. The high group scored above the low group on the following scales: General Activity (G), Ascendancy (A), and Social Interest (S). The differences between the groups on these scales were not significant, however, at the five percent level of confidence; and should therefore, be viewed as directional differences rather than as actual differences.

4. The high group scored significantly higher than the low group on the Religious value scale of the Allport-Vernon Study of Values. The low group, however, exceeded the high group on the Theoretical value scale. These differences were significant at the one percent level of confidence. Additional comparisons between the high and low groups revealed a tendency for the low group to score above the high group on Aesthetic values; and a tendency for the high group to score above the low group on Social values. The high and low groups were found to be most similar with respect to their Economic and Political values.

5. No significant relationships were found between the high and low groups of Resident Assistants and the classifications obtained from the Index of Adjustment and Values.

6. A further comparison of the high and low groups of Resident Assistants was made to determine whether the "halo" effect of rating the academically capable student higher in terms of job performance was prevalent in the ratings of the raters. The mean grade point average

for the high group was 2.85 and for the low group, 2.87. The difference between means was not statistically significant. On this basis it is possible to infer that the "halo" effect of rating the academically capable student higher in terms of job performance was not prevalent in the ratings of the raters.

Findings for the total group of sixty-eight Resident Assistants.

1. When the Resident Assistants were compared with 230 male students from Michigan State University (MSU) on the twelve MMPI scales; the MSU group scored significantly higher on the following scales than the Resident Assistant group: the validity scale (F), Hypochondriasis (Hs), Psychopathic Deviate (Pd), Psychasthenia (Pt), Schizophrenia (Sc), and Hypomania (Ma).

2. A comparison of the Resident Assistants with a group of 523 male college students from a Southern California University (SCU) on the scales of the Guilford-Zimmerman Temperament Survey revealed the following: The Resident Assistant group scored significantly higher on eight of the ten scales than the SCU group. These differences were significant at the one percent level of confidence.

3. A comparison of the Resident Assistant group with a male population of 219 students from Ohio State University (OSU) on the scales of the Allport-Vernon Study of Values, revealed that the RA group scored higher than the OSU group on the Theoretical values scale. The OSU group, showed a tendency to score above the RA group on the Economic and Aesthetic scales, but these differences were not statistically significant.

4. When the Resident Assistant group was compared on the Index of Adjustment and Values with a group of 564 university students, predominately from the University of Kentucky (UK), the RA group differed significantly from the UK group in terms of their expected frequency distributions on the four IAV categories. In terms of the predictive ability as implied by the IAV, and success as a leader, the RA group was found to differ from the recommended classifications for leadership acceptability with 91.1 percent of the RA population falling in the ++ and +- categories.

Conclusions

On the basis of the findings of this investigation, the following conclusions seem warranted:

1. In contrast to the low group; the high group showed a slight tendency to be better adjusted; exhibited a higher degree of emotional stability; appeared to possess more energy; more social boldness; more social interest; a higher degree of religious values; and higher social values than the low group of Resident Assistants. Since, however, many of these personality differences were not highly significant the conclusion which seems warranted is that the two groups were fairly homogeneous with respect to the personality characteristics as shown by the personality appraisal instruments.

2. When the Resident Assistants were compared with a male population from Michigan State University there was a slight tendency for

the MSU student group to score more in the direction of psychopathic deviation than the RA group. Since, however, the MSU student group was within the normal limits for college students, abnormality should not be inferred for this group. On this basis, then, it may be concluded that the RA group appeared to be slightly better adjusted than the MSU student group.

3. In terms of the Guilford-Zimmerman Temperament Survey, the RA group scored higher than the selected male college group on the following scales: Restraint (R), Ascendancy or Social Boldness (A), Social Interest (S), Emotional Stability (E), Objectivity (O), Friendliness (F), Thoughtfulness (T), and Personal Relations (P). Since the differences between means on these scales were significant at the one percent level it may be concluded with confidence that the RA group possessed these personality characteristics to a greater extent than the male population used for comparison on these scales. On this basis it may be further concluded, that, the RA group appeared better suited for positions of supervisory responsibility as indicated by the results of the Guilford-Zimmerman Temperament Survey.

4. The RA group was found to possess higher Theoretical values than the selected male college population on the Allport-Vernon Study of Values. The two groups were most alike with respect to their Social, Political, and Religious values. It should be pointed out, however, that the high RA group held higher Religious values than the low RA group. If, then, the Allport-Vernon Study of Values is used to aid in the selection of Resident Assistants it would seem most logical to

give preference to the candidates who score higher on Religious values.

5. Although research with the Index of Adjustment and Values has indicated that when acceptability for leadership is considered, ++ people rank first, -+ people rank second, +- people rank third, and -- people rank fourth; this relationship was not found with the Resident Assistant group. Rather, on the basis of the results of the IAV the Resident Assistants were ranked in the following order: 51.5 percent in the +- category, 39.6 percent in the ++ category, 7.4 percent in the -+ category, and 1.5 percent in the -- category. Since the Resident Assistants are regarded as leaders it is only possible to speculate as to the reasons for the differences between the obtained and expected leadership classifications. It is possible, of course, that the characteristics which determine the leadership acceptability of teachers and administrators differ from those of the Resident Assistants. For this reason, until further evidence is available the leadership prognosis offered by the IAV should not be regarded as strictly applicable to the Resident Assistant group.

6. It can be concluded, on the basis of the research conducted with the personality appraisal instruments used in this study, that the Minnesota Multiphasic Personality Inventory and the Guilford-Zimmerman Temperament Survey showed the most promise as instruments for Resident Assistant selection. The Allport-Vernon Study of Values and the Index of Adjustment of Values, on the other hand, may be useful as aids for Resident Assistant selection, but to a lesser degree than the two recommended instruments.

Suggestions for Further Research

It would seem inappropriate to conclude this investigation without recommending that further research of this type be conducted with other groups of Resident Assistants here and in other institutions. The success or failure of the residence hall program is greatly dependent upon the caliber of Resident Assistants in the residence hall, and for this reason, every attempt should be made to secure the best qualified persons for these positions. With these thoughts in mind the following suggestions for further research have been formulated:

1. Cross-validation studies should be conducted to determine the predictive validity of these findings when applied to new Resident Assistant groups.
2. An item analysis of the personality appraisal instruments should be made with the intent of constructing a Resident Assistant selection instrument which would discriminate between the potentially "good" and "poor" Resident Assistant candidates.
3. The rating form developed in this study should be revised so that five independent measures of Resident Assistant performance could be established. This would increase the diagnostic value of the rating form by providing valid and reliable subsectional scores in addition to a total score.
4. Further research pertaining to the personality characteristics of the Resident Assistants should be conducted by utilizing such

projective instruments as the Rorschack and Thematic Apperception test. This approach would offer an additional dimension for the analysis of the personality structures of the Resident Assistants.

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APPENDIXES

APPENDIX A

THE INDEX OF ADJUSTMENT AND VALUES

The Index of Adjustment and ValuesDIRECTIONS
(Adult Form)

This device is a way of helping you to state some of your beliefs about yourself and other people. It tells nothing more than what you want it to say--there are no hidden scores or tricks. It will have value only if you are careful and do your best to give an accurate description of yourself and other people as you see them.

On page 3 of this booklet is a list of 49 trait words. You will be asked to answer three questions about yourself and three about other people for each of these traits. For yourself, these questions are: 1. How often are you this sort of person, 2. How do you feel about being this way, and 3. How much of the time would you like this trait to be characteristic of you?

You will also answer these same questions about other people. In order to do this you will first think about other people like you (To the examiner: This refers to peers such as other college seniors, juniors, etc., other high school seniors, other teachers, other school principals, etc. You should help the subjects to determine their appropriate peer group.), and then answer the questions as you think the average member of this group would answer it for himself.

Please complete the ratings for yourself before you make the ratings for "other people." Be certain that you use the answer sheet marked "SELF" in the upper right hand corner for yourself and the one marked "OTHERS" when making the ratings for other people. Finally, please make the three ratings for each trait before going to the next trait.

On pages 4 and 5 are two lists of 49 trait words and an example. Take each word separately and apply it to yourself (or to other people) by completing the following sentence:

I am (average person in my group is) a (an)_____ person.

The first word in the list is academic, so you would substitute this term in the above sentence. It would read: "I am (He is) an academic person." Then decide how much of the time this statement is like you (him), that is, is typical or characteristic of you (him) as an individual, and rate yourself (him as he would himself) on a scale from one to five according to the following key:

1. Seldom, is this like me (him).
2. Occasionally, this is like me (him).
3. About half of the time, this is like me (him).
4. A good deal of the time, this is like me (him).
5. Most of the time, this is like me (him).

Select the number beside the phrase that tells how much of the time the statement is like you (him) and insert it in Column I on the next page.

EXAMPLE: Beside the term ACADEMIC, number two is inserted to indicate that, "Occasionally, I am (he is) an academic person."

Now go to Column II. Use one of the statements given below to tell how you feel (he feels) about yourself (himself) as described in Column I.

1. I (He) very much dislike(s) being as I am (he is) in this respect.
2. I (He) dislike(s) being as I am (he is) in this respect.
3. I (He) neither dislike(s) being as I am (he is) nor like(s) being as I am (he is) in this respect.
4. I (He) like(s) being as I am (he is) in this respect.
5. I (He) like(s) very much being as I am (he is) in this respect.

You will select the number beside the statement that tells how you (he) feel(s) about the way you are (he is) and insert the number in Column II.

EXAMPLE: In Column II beside the term ACADEMIC, number one is inserted to indicate that I (he) dislike(s) very much being as I am (he is) in respect to the term, academic. Note that being as I am (he is) always refers to the way you (he) described yourself (himself) in Column I.

Finally, go to Column III, using the same term, complete the following sentence:

I (He) would like to be a (an)_____ person.

Then decide how much of the time you (he) would like this trait to be characteristic of you (him) and rate yourself (him as he would himself) on the following five point scale.

1. Seldom, would I (he) like this to be me (him).
2. Occasionally, I (he) would like this to be me (him).
3. About half of the time, I (he) would like this to be me (him).
4. A good deal of the time, I (he) would like this to be me (him).
5. Most of the time, I (he) would like this to be me (him).

You will select the number beside the phrase that tells how much of the time you (he) would like to be this kind of person and insert the number in Column III.

EXAMPLE: In Column III beside the term ACADEMIC, number five is inserted to indicate that most of the time, I (he) would like to be this kind of person.

Start with the word ACCEPTABLE and fill in Columns I, II, and III before going on to the next word. There is no time limit. Be honest with yourself so that your description will be a true measure of how you see yourself and other people.

Please fill in the blanks with your name, date, school, class, section, age, and sex.

-4-

"SELF"

Name _____ School _____ Class _____

Sex _____ Age _____

	I	II	III		I	II	III
a. academic	_____	_____	_____				
1. acceptable	_____	_____	_____	26. merry	_____	_____	_____
2. accurate	_____	_____	_____	27. mature	_____	_____	_____
3. alert	_____	_____	_____	28. nervous	_____	_____	_____
4. ambitious	_____	_____	_____	29. normal	_____	_____	_____
5. annoying	_____	_____	_____	30. optimistic	_____	_____	_____
6. busy	_____	_____	_____	31. poised	_____	_____	_____
7. calm	_____	_____	_____	32. purposeful	_____	_____	_____
8. charming	_____	_____	_____	33. reasonable	_____	_____	_____
9. clever	_____	_____	_____	34. reckless	_____	_____	_____
10. competent	_____	_____	_____	35. responsible	_____	_____	_____
11. confident	_____	_____	_____	36. sarcastic	_____	_____	_____
12. considerate	_____	_____	_____	37. sincere	_____	_____	_____
13. cruel	_____	_____	_____	38. stable	_____	_____	_____
14. democratic	_____	_____	_____	39. studious	_____	_____	_____
15. dependable	_____	_____	_____	40. successful	_____	_____	_____
16. economical	_____	_____	_____	41. stubborn	_____	_____	_____
17. efficient	_____	_____	_____	42. tactful	_____	_____	_____
18. fearful	_____	_____	_____	43. teachable	_____	_____	_____
19. friendly	_____	_____	_____	44. useful	_____	_____	_____
20. fashionable	_____	_____	_____	45. worthy	_____	_____	_____
21. helpful	_____	_____	_____	46. broad-minded	_____	_____	_____
22. intellectual	_____	_____	_____	47. businesslike	_____	_____	_____
23. kind	_____	_____	_____	48. competitive	_____	_____	_____
24. logical	_____	_____	_____	49. fault-finding	_____	_____	_____
25. meddlesome	_____	_____	_____				

Name _____

(Complete this Index as you think the average person in your peer group would complete it for himself)

	I	II	III		I	II	III
a. academic	_____	_____	_____				
1. acceptable	_____	_____	_____	26. merry	_____	_____	_____
2. accurate	_____	_____	_____	27. mature	_____	_____	_____
3. alert	_____	_____	_____	28. nervous	_____	_____	_____
4. ambitious	_____	_____	_____	29. normal	_____	_____	_____
5. annoying	_____	_____	_____	30. optimistic	_____	_____	_____
6. busy	_____	_____	_____	31. poised	_____	_____	_____
7. calm	_____	_____	_____	32. purposeful	_____	_____	_____
8. charming	_____	_____	_____	33. reasonable	_____	_____	_____
9. clever	_____	_____	_____	34. reckless	_____	_____	_____
10. competent	_____	_____	_____	35. responsible	_____	_____	_____
11. confident	_____	_____	_____	36. sarcastic	_____	_____	_____
12. considerate	_____	_____	_____	37. sincere	_____	_____	_____
13. cruel	_____	_____	_____	38. stable	_____	_____	_____
14. democratic	_____	_____	_____	39. studious	_____	_____	_____
15. dependable	_____	_____	_____	40. successful	_____	_____	_____
16. economical	_____	_____	_____	41. stubborn	_____	_____	_____
17. efficient	_____	_____	_____	42. tactful	_____	_____	_____
18. fearful	_____	_____	_____	43. teachable	_____	_____	_____
19. friendly	_____	_____	_____	44. useful	_____	_____	_____
20. fashionable	_____	_____	_____	45. worthy	_____	_____	_____
21. helpful	_____	_____	_____	46. broad-minded	_____	_____	_____
22. intellectual	_____	_____	_____	47. businesslike	_____	_____	_____
23. kind	_____	_____	_____	48. competitive	_____	_____	_____
24. logical	_____	_____	_____	49. fault-finding	_____	_____	_____
25. meddlesome	_____	_____	_____				

APPENDIX B

INSTRUCTIONS TO HEAD ADVISORS ON TEST ADMINISTRATION

CONTENTS OF THE PACKET:

1. Four tests for each of your Resident Assistants.
2. Special pencils to be used on tests that are to be machine scored.
3. Answer sheets. (The Allport-Vernon answers are to be made in the booklet) Answer sheets are provided for the other three tests.

GENERAL PROCEDURES FOR TESTING:

1. Each Resident Assistant has received a letter explaining the purpose and general procedures for testing. A copy was forwarded to you for your convenience.
2. It is helpful to read the instructions for each test prior to administering it to the Resident Assistants. This is helpful in clarifying any issues that may come up regarding correct procedures.
3. Tests may be given at any time that is convenient for you or for the Resident Assistant. We would, however, like to complete all of the tests within the period of a week.
4. Tests may be administered in group sessions or individually. There are no time limits on the tests, but it is believed that somewhat rapid answering is better than long deliberation. Use whatever system seems most appropriate for your group.
5. Resident Assistants may complete the tests in the following places:
 - a) Their own rooms
 - b) The Advisor's apartment
 - c) The study hall.
 The main point is that he not seek the opinions of others in answering the items.
6. Tests may be administered as follows:
 - a) One test per night for four nights.
 - b) Two tests per night for two nights.
 It would seem best to avoid giving all of the tests in one night as the total testing time may be as long as $3\frac{1}{2}$ hours.
7. We would suggest that you administer the tests in the following order if possible:
 - a) The Minnesota Multiphasic Personality Inventory. *
 - b) The Guilford-Zimmerman Temperament Survey. *
 - c) The Index of Adjustment and Values.
 - d) The Allport-Vernon Study of Values.
 * These tests are to be machine scored and will require the use of the special pencils.

INSTRUCTION TO THE RESIDENT ASSISTANT:

1. Ask the Resident Assistant to read the instructions for each test carefully. Make sure that he knows what he is to do.
2. Issue the necessary materials.
3. Use the special pencils for the tests that are to be machine scored.

4. Ask the Resident Assistant to print his name on each answer sheet.
5. When the test is completed be sure that the following materials are returned to you. a) test booklet, b) answer sheet, c) pencil.
6. When this procedure has been completed make arrangements as to time and place for the next test.

PROCEDURE FOR RETURNING TEST MATERIALS:

It would facilitate matters if you could bring the test materials, including the answer sheets, to the Resident Advisor's meeting which will be held on Monday, November 12, 1956. I will pick them up at this time.

SPECIAL INSTRUCTIONS FOR THE INDEX OF VALUES AND ADJUSTMENT:

Sometimes students become confused when they read the directions for this instrument for the first time. For this reason, it is a good idea to ask the student to read the directions twice and to refer back to them if necessary during the test.

The directions state that students should complete the answer sheet marked "SELF", first, and then proceed to the answer sheet marked "OTHER". This is an important point and should eliminate a good deal of confusion.

A further suggestion concerns completion of the answer sheet by recording answers in Columns I, II, and III for each word, before going on to the next word. (You will notice that each answer sheet contains three columns.) However, an alternative method may be employed in filling out these columns. The student may mark all of the items in Column I on the answer sheet marked "SELF", then all of the items in Column II, and all of the items in Column III. He may then proceed in the same manner with the answer sheet marked "OTHER". Simply stated, the student proceeds in a vertical manner to answer the items instead of horizontally as suggested in the instructions. This procedure is often easier for the student and in no way affects the validity of the results.

If you have any special questions or problems please call me at Extension 2772. In closing I would like to express my appreciation to each of you for your help in this project.

W. S. Simons

APPENDIX C

LETTER TO THE RESIDENT ASSISTANTS FROM THE EDUCATIONAL DIRECTOR
MEN'S RESIDENCE HALLS, MICHIGAN STATE UNIVERSITY

MICHIGAN STATE UNIVERSITY

OF AGRICULTURE AND APPLIED SCIENCE • EAST LANSING

MEN'S RESIDENCE HALLS • EDUCATIONAL DIRECTOR

November 1, 1956

MEMO TO: RESIDENT ASSISTANTS

FROM: WAYNE F. TINKLE, EDUCATIONAL DIRECTOR

When you joined the personnel staff of the residence hall, you automatically became a member of the Michigan State staff-family. That family is proud of its past, and optimistic about its future. This year we have one of the best groups of Resident Assistants in the history of the residence hall program. This did not happen by accident. For years we have revised and improved our selection techniques to enable us to select the best qualified people for positions as Resident Assistants. Within the next ten years we will be faced with one of the largest student enrollments of all times. This will mean that several new residence halls must be constructed and that we must find people such as yourself to fill the Resident Assistant positions that will be available.

We know that we have a good group of Resident Assistants this year, but we do not know what qualities this group possesses or to what extent these qualities are possessed by the group. We can speculate that such qualities as democratic leadership, loyalty etc. are important, but we are not certain. To date we have not determined through research what these qualities are or to what extent they exist. This is necessary if we are to preserve and improve our staff selection process.

It is for this reason that Dr. Truitt has asked Mr. Simons, Head Advisor of Butterfield, to undertake a research project in this area as his doctoral dissertation and has promised him our full cooperation. We would like you to participate in this research program and to feel that you have had a part in making our future residence hall program just a little bit better by your contribution.

During the week of November 5, 1956, your Head Advisor will ask you to complete four personality inventories. He will see to it that you are provided with the necessary materials and facilities to complete these inventories. In general, these are the instructions you are to follow:

1. Read the instructions for each inventory carefully. If you have any questions regarding what you are to do ask your Head Advisor.
2. Use the special pencil provided you as the answer sheets will be machine scored.
3. Print your name on each answer sheet.



"IT IS FOR US THE LIVING . . . TO BE DEDICATED HERE TO THE UNFINISHED WORK . . ."

LINCOLN

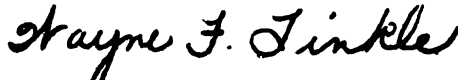
Page 2

4. Answer all of the questions frankly, honestly, and to the best of your ability. These answers will not effect your present position in any way.
5. When you have completed your inventory be sure:
 - a. You have not omitted any items.
 - b. You have printed your name on the answer sheet.
6. When you have completed these steps return all materials to your Head Advisor.

We will make provisions for you to find out the results of your inventories if you would like this information. The results of your inventories will be treated with complete confidence. Your name will not be revealed to anyone other than the person conducting this study. Your assistance and cooperation in this project can make a vital contribution to our future residence hall program.

In closing I would like to extend my best wishes for a successful year and my thanks for your cooperation.

Sincerely,



Wayne F. Tinkle
Educational Director,
Men's Residence Halls

WFT:p

APPENDIX D

PERFORMANCE RATING FORM SUBMITTED TO THE JURY OF EXPERTS

RESIDENT ASSISTANT PERFORMANCE RATING FORM

The following rating form includes a series of descriptive statements which are believed to be related to the job performance of the Resident Assistant at Michigan State University. In preparing this list of statements each phase of the duties and the responsibilities of the Resident Assistant was analyzed and descriptive statements were prepared for each of these areas. The statements included in this form do not comprise all of the possible descriptions of the Resident Assistant's job performance, but include only those aspects which are believed to be primary.

The purpose of submitting this list of statements to a jury of experts is to determine whether or not certain items should be included in the final rating form and to determine the importance of these items as concepts of the Resident Assistant's job performance.

The jury is requested to examine each of the items carefully and to proceed according to the following instructions:

- 1) Spaces have been provided to the left of each item for entering your responses to the item.
- 2) If you feel that an item should be retained in the final rating form, place a check mark (✓) in the space farthest to the left of the item.
- 3) If you feel that an item should not be retained in the final rating form, LEAVE BOTH SPACES TO THE LEFT OF THE ITEM BLANK.
- 4) If you react favorably to the idea expressed by the item, but do not like the wording of the item; place an (X) in the space farthest to the left of the item. You may make any changes in the wording of an item that you feel are necessary.
- 5) If you have placed a check mark (✓) or an (X) to the left of an item, determine the degree of importance of the item according to the following scale: 1) Moderately Important, 2) Important, 3) Very Important. Write the number of your chosen response in the space to the left of the item.

SAMPLE: ✓ 3 72. Learns easily. For item (72) the juror has indicated that he would like to retain the item by placing a check in the first space. He has also indicated that he considers the item "Very Important" by placing a (3) in the space next to the item.

- 6) If you would like to add additional items that you feel should be included in the final rating form you may use the reverse side of this form for these items. Be sure to indicate the importance of the item by assigning it a number as described in section (5) above.

- ___ * 1. Seldom talks about himself when he is with others; focuses his attention on their interests.
- ___ 2. Is adept in ascertaining the needs of his men.
- ___ 3. Basically likes people and enjoys working with them.
- ___ 4. Never refers a man for disciplinary action without first telling the man that he is being referred.
- ___ * 5. Gives reasons for his requests.
- ___ 6. Avoids sarcasm and disparaging remarks in making criticisms and suggestions to or about others.
- ___ 7. Serves as a mediator, advisor, and if necessary as a referral agent for those residents who have verbal clashes, roommate conflicts, etc.
- ___ 8. Looks for causes of behavior; is as much concerned with the causes of the behavior as the behavior itself.
- ___ 9. Can avoid being dissuaded from fulfilling such obligations as reporting alcohol violations, meal ticket violations, etc.
- ___ 10. Handles cases of minor infractions in the precinct and refers the more serious cases to the Head Resident Advisor.
- ___ 11. Delegates responsibilities to precinct chairmen and checks to see whether these responsibilities have been fulfilled. Offers aid to the chairmen when necessary.
- ___ 12. Praises precinct chairmen and precinct members when they have done a good job.
- ___ 13. Considers the other fellow's point of view; tries to put himself in the other fellow's place.
- ___ 14. Is discreet in questioning others; does not pry needlessly into their personal life.
- ___ 15. Recognizes the symptoms of those needing counseling. (i.e. vocational, educational, academic, social, etc.)
- ___ 16. Respects confidences, does not discuss the personal problems of any of his men with other precinct members.

* Designates items which were omitted from the final rating form.

- ___ 17. Works with students whose problems are less serious in implication and refers to the proper persons those problems which appear to be more serious in nature.
- ___ 18. Is tactful; unless an action is so extreme as to demand immediate attention he waits and discusses it privately with the individual concerned.
- ___ 19. Reserves judgment concerning individuals, until valid information is available.
- ___ 20. Is able to work with all social and economic groups in the precinct.
- ___ 21. Makes a sincere effort to personally know each man in his precinct.
- ___ 22. Is loyal to the organization for which he works and is loyal to the people for whom he works.
- ___ 23. Is dependable and reliable. You can count on him in almost every situation.
- ___ * 24. Attends Resident Assistant meetings regularly, makes careful notes as to the business on hand, and makes good contributions to the meetings.
- ___ 25. Investigates chance findings and rumors and reports these to the Head Resident Advisor or Graduate Advisors when they have a bearing on the welfare of the residence hall program or the welfare of an individual.
- ___ 26. Prevents and reports unauthorized personnel who attempts to utilize without permission any residence hall facilities or equipment.
- ___ * 27. Serves as a host to guests who visit his living unit or who attend social functions of the men's residence halls.
- ___ 28. Is willing to undertake additional work voluntarily in an effort to improve the residence hall program.
- ___ 29. Has demonstrated a willingness to devote time and effort to the position of Resident Assistant.
- ___ 30. Is willing to sacrifice outside activities. Does not attempt to be active in other organizations or groups to the extent that he hinders his performance as a Resident Assistant.

- ___ 31. Is available to the men in his precinct. The men feel free to visit him in his room and to discuss their problems with him.
- ___ 32. Accepts administrative policy even though it may differ from his own.
- ___ * 33. Accepts the policies of the institution where he is employed--even those which he feels are inappropriate.
- ___ 34. Has a thorough knowledge of University and residence hall policies and encourages the men in his precinct to abide by these policies.
- ___ 35. Is a good personal example, realizes that the pattern he sets will be an important influence, particularly among the younger men.
- ___ 36. Attends and supports activities and events sponsored by his precinct and by his residence hall.
- ___ 37. Knows the reasons for rules and policies and is able to clearly explain these to the men in his precinct.
- ___ 38. Has a positive attitude toward the residence hall program and toward Michigan State University. Is able to sincerely accept the philosophy and the objectives of Michigan State University and the residence hall program.
- ___ * 39. Makes sure that he is properly informed before he discusses administrative policies.
- ___ 40. Demonstrates initiative in organizing and promoting functions in the precinct and in the residence hall.
- ___ 41. Encourages activities which will produce greater unity among the residents of his precinct and which will contribute to their sense of belonging.
- ___ 42. Does not talk against the organization with which he is associated. Avoids making disparaging remarks about other residence hall staff members.
- ___ 43. Clearly understands the overall objectives of Michigan State University and the objectives of the residence hall program.
- ___ * 44. Seldom asks for special privileges for himself.

- ___ 45. Has a thorough knowledge of every aspect of his job as a Resident Assistant. Is able to see how his work fits into the total program.
- ___ 46. Uses the dining hall to get acquainted with the various men in his precinct and in his residence hall. Does not eat with the same group each meal.
- ___ 47. Stays on the job until he should leave and reports back promptly after vacations.
- ___ 48. Answers notes promptly, seldom has to be reminded twice to complete assigned tasks.
- ___ 49. Is constantly on the alert for men that have the potential for becoming Resident Assistants. Recommends possible candidates to the Head Resident Advisor.
- ___ 50. Is sincere about his work as a Resident Assistant; he is free from pretentiousness.
- ___ 51. Has his finger on the "pulse of the precinct" and does not leave the precinct when he feels that all might not be well.
- ___ 52. Operates his precinct as a part of the total residence hall program and not as a separate entity.
- ___ 53. Keeps the Head Resident Advisor or Graduate Advisors informed as to his plans, actions, or important phases of the program. Supplies information that is complete and useful.
- ___ * 54. Is developing a program in the precinct which is in line with the educational objectives of the residence hall program. Constantly strives to improve the program.
- ___ 55. Disseminates through individual contact, written notices, general announcements, or bulletin board, any information designated by the advisory staff as essential for the efficient operation of the residence hall.
- ___ 56. Maintains records of information concerning his residents which have been designated by the advisory staff as essential for the efficient operation of the residence hall.
- ___ 57. Keeps accurate records, follows instructions exactly, and gets reports in on time.

- ___ 58. Serves as a source of information for those residents who request information regarding university policy, residence hall regulations, etc. Keeps up to date on current information.
- ___ 59. Keeps a well ordered bulletin board that is not an unread accumulation of last month's notices.
- ___ 60. When a student needs the services of a trained advisor or of a particular department, the Resident Assistant knows where to refer him.
- ___ 61. Knows the proper channels through which to request special services.
- ___ 62. Reports cases of lost, damaged, or stolen property belonging to the management or to any resident living in his residence hall unit.
- ___ 63. Picks up meal tickets, room inventory forms, etc., without being told.
- ___ * 64. Is able to profit from his experiences as a Resident Assistant in terms of personal growth.
- ___ * 65. Is able to profit from personal experiences in dealing with other students.
- ___ 66. Shows maturity on the job and in his relationships with others.
- ___ * 67. Can be trusted completely in any situation.
- ___ 68. His personal character is above reproach.
- ___ 69. Has a genuine concern for the men in his precinct.
- ___ 70. Understands and shows an awareness of the feelings of others.
- ___ 71. Is patient in working with others. Is undisturbed by reasonable delays, obstacles, or failures.
- ___ 72. Learns easily, has the ability to grasp new methods or techniques.
- ___ 73. Is a good listener. Listens with keen, eager, or fixed attention. Concentrates on what is being said.

- ___ 74. Recognizes his own limitations and inadequacies. Promptly refers problems that he is not capable of handling to the Head Resident Advisor.
- ___ 75. Can be persuasive when necessary.
- ___ 76. Is able to remain calm during emergencies, practices self control, and reacts favorably when he is under pressure. Issues instructions promptly in an emergency situation.
- ___ 77. Is able to recognize a potential emergency situation and is able to formulate plans in advance to meet this emergency if it should arise.
- ___ 78. Budgets his time and utilizes his time effectively.
- ___ * 79. Can prepare a detailed plan which includes a breakdown of the steps involved in the total project and is able to translate this plan into action so that the plan may be accomplished.
- ___ 80. Is able to recognize that a plan, regulation, or policy is inadequate in certain respects and is able to offer constructive suggestions for improvement.
- ___ 81. Is able to make a sensible decision where the situation requires deviation from standard procedure.
- ___ 82. Can make an intelligent decision promptly. Considers the problem at hand, existing policies and regulations, and available facts before making a decision.
- ___ 83. Is able to adjust to new situations easily and meets changed conditions with ease.
- ___ 84. Completes duties and responsibilities without prodding. Proceeds with his work without having to be told every detail; has the ability to make and carry out practical suggestions for doing things in original and improved ways.
- ___ * 85. Seldom makes excuses for failure to discharge responsibilities.
- ___ 86. Is able to steer clear of exploitation by personal friends.
- ___ 87. Accepts suggestions and criticisms without resentment or rebelliousness. Makes a sincere effort to benefit from these suggestions.

- ___ 88. Obtains all of the facts regarding incidents of misbehavior before making a referral for disciplinary action to the Head Resident Advisor.
- ___ 89. Possesses social intelligence. Knows what to do in social situations and encourages his men to practice accepted social conventions.
- ___ 90. Has a good sense of humor; can appreciate a humorous situation even if the joke is on himself.
- ___ 91. Is respected as a leader by the men in his precinct; the men have confidence in him and will follow his leadership.
- ___ 92. Is respected by the Resident Assistants in his particular hall; when he speaks at a Resident Assistant meeting the others pay strict attention to his remarks.
- ___ * 93. Provides just the "spark" that is needed for effective teamwork.
- ___ 94. Possesses a "safe" level of academic achievement--has a 2.6 all college grade point average or above.
- ___ * 95. Is neat in appearance, dresses appropriately during the week and for all social occasions.
- ___ 96. Keeps precinct standards high by personal example, direction, and personal influence. Consistently does what he expects others to do.
- ___ * 97. In the event that administrative channels are not made explicit he is able to decide upon the most appropriate channels through which to work.
- ___ 98. Is considerate of others. Respects their feelings and is thoughtful and kind in his dealings with others.
- ___ 99. Is fair in his dealings with the men in his precinct. Avoids favoritism.
- ___ 100. Is conscientious and is sincerely concerned with the welfare of the students who come to him for help.
- ___ 101. Refrains from gossiping--treats confidences well.
- ___ 102. Periodically evaluates his progress and constantly strives to improve himself and his precinct program.

- ___ * 103. Is discreet; his inquiries are motivated by sincere interest not by mere "nosiness" or inquisitiveness.
- ___ 104. Is able to make criticisms or suggestions tactfully.
- ___ * 105. Avoids making extreme judgments about individuals.
- ___ 106. Is firm, consistent, but not unreasonable or overdemanding in his leadership.
- ___ 107. Is alert to other leadership in the group, encourages it, and utilizes it.
- ___ * 108. Does not attempt to force objectives on the group.
(Works subtly so that the goals seem to emanate from within the group.)
- ___ * 109. Is capable of organizing and directing the work of others.
- ___ * 110. Maintains an environment in the precinct which will enhance the achievement of the goals and objectives of the residence hall program.
- ___ * 111. Is able to retain the support and respect of the majority of the members of the precinct after reporting violations so serious as to result in the suspension of the violator.
- ___ 112. Is able to successfully conduct a group meeting. Plans the meeting in advance, runs the meeting smoothly, and summarizes the main points of the meeting.
- ___ * 113. Makes use of early meetings with the precinct for a discussion of precinct objectives and their attainment.
- ___ 114. Develops an "esprit de corps" within the precinct.
- ___ * 115. Develops precinct identity early, uses a symbol such as a number, letter, name or slogan.
- ___ 116. Has his precinct so well organized that another capable person could step in without much difficulty if he should resign.
- ___ 117. Respects the abilities of the other students; gives the students in the precinct an opportunity to participate in the planning of the precinct program.

- ___ ___ 118. Encourages participation in the whole residence hall program: social, cultural, athletic, scholastic, and activities.
- ___ ___ * 119. Studies the group structure or group formation as a means of identifying cliques, clique leaders, and marginal or outer-fringe residents in his precinct.
- ___ ___ 120. Serves as a consultant and leader to the chairmen in his precinct.
- ___ ___ 121. Is able to obtain cooperation from the men in his precinct; can get opposing groups to work together on a precinct project.
- ___ ___ 122. Avoids a stereotyped pattern of operation, varies his techniques and methods to fit the situation at hand.
- ___ ___ 123. Uses informal visits with precinct groups as an opportunity for discussion of precinct policy and the cooperative point of view.
- ___ ___ 124. Instructs the men in his precinct as to the effective utilization of all equipment in the residence hall unit. (i.e. recreational equipment, emergency equipment, athletic equipment, etc.)
- ___ ___ 125. Gives group instruction or explanations to his precinct of those areas designated by the residence hall staff as essential to the effective operation of the residence hall. (i.e. residence hall policy, definition of his own role, study habits, dress regulations, etc.)

APPENDIX E

REVISED RESIDENT ASSISTANT PERFORMANCE RATING FORM

RESIDENT ASSISTANT RATING FORM

1. Learns easily, does not resist new methods or techniques.
2. Looks for the causes of behavior; is as much concerned with the causes of the behavior as the behavior itself.
3. Avoids sarcasm and disparaging remarks in making criticisms and suggestions to or about others.
4. Is firm, consistent; but not unreasonable or overdemanding in his leadership.
5. Answers notes and completes assigned tasks promptly.
6. Recognizes his own limitations and inadequacies.
7. Can avoid being dissuaded from fulfilling such obligations as reporting meal ticket violations, gambling, etc..
8. Is a good listener. Listens with keen, eager, or fixed attention. Concentrates on what is being said.
9. Delegates responsibilities to precinct chairmen and checks to see whether these responsibilities have been fulfilled.
10. Disseminates through individual contact, written notices, general announcements, or bulletin board, any information designated by the advisory staff as essential for the efficient operation of the residence hall.
11. Is able to remain calm during emergencies: practices self-control, and reacts favorably when he is under pressure.
12. Is loyal to the organization for which he works and is loyal to the people for whom he works.
13. Is adept in ascertaining the needs of his men.
14. Praises precinct chairmen and precinct members when they have done a good job.
15. Maintains records of information concerning his residents which have been designated by the advisory staff as essential for the efficient operation of the residence hall.
16. Is able to recognize a potential emergency situation and is able to formulate plans in advance to meet this emergency if it should arise.
17. Investigates chance findings and rumors and reports these to the Head Resident Advisor or Graduate Advisors when they have a bearing on the welfare of the residence hall program or the welfare of an individual.
18. When he decides to refer a man for disciplinary action he tells the man that he is being referred, before he makes the referral.

THE HISTORY OF THE
REPUBLIC OF THE UNITED STATES

- The first of these was the discovery of the continent by Christopher Columbus in 1492.
- The second was the establishment of the first permanent English colony in Jamestown, Virginia, in 1607.
- The third was the signing of the Declaration of Independence in 1776.
- The fourth was the signing of the Constitution in 1787.
- The fifth was the signing of the Emancipation Proclamation in 1863.
- The sixth was the signing of the Civil Rights Act in 1964.
- The seventh was the signing of the Vietnam War in 1965.
- The eighth was the signing of the Watergate scandal in 1972.
- The ninth was the signing of the Iran-Contra scandal in 1986.
- The tenth was the signing of the Clinton impeachment in 1998.
- The eleventh was the signing of the 9/11 attacks in 2001.
- The twelfth was the signing of the Iraq War in 2003.
- The thirteenth was the signing of the financial crisis in 2008.
- The fourteenth was the signing of the Arab Spring in 2011.
- The fifteenth was the signing of the Brexit vote in 2016.
- The sixteenth was the signing of the COVID-19 pandemic in 2020.
- The seventeenth was the signing of the Russian invasion of Ukraine in 2022.

19. Is able to work with all social and economic groups in the precinct.
20. Keeps accurate records, follows instructions exactly, and gets reports in on time.
21. Budgets his time and utilizes his time effectively.
22. Is willing to undertake additional work voluntarily in an effort to improve the residence hall program.
23. Obtains the necessary facts regarding incidents of misbehavior before making a referral for disciplinary action to the Head Resident Advisor.
24. Attends and supports activities and events sponsored by his precinct and by his residence hall.
25. Keeps up to date on current information regarding University policy, residence hall regulations, etc..
26. Is able to recognize when a plan, regulation, or policy is inadequate in certain respects and is able to offer constructive suggestions for improvement.
27. Demonstrates a willingness to devote time and effort to the position of Resident Assistant.
28. Serves as a mediator or advisor for those residents who have problems of adjustment, roommate conflicts, etc..
29. Knows the reasons for rules and policies and is able to clearly explain these to the men in his precinct.
30. Keeps a well ordered bulletin board that is not an accumulation of last month's notices.
31. Is able to make a sensible decision where the situation requires deviation from standard procedure.
32. Is willing to sacrifice outside activities. Does not attempt to be active in other organizations or groups to the extent that he hinders his performance as a Resident Assistant.
33. Handles cases of minor disciplinary situations in the precinct and refers the more serious cases to the Head Resident Advisor.
34. Demonstrates initiative in organizing and promoting functions in the precinct and in the residence hall.
35. Promptly reports cases of lost, damaged, or stolen property belonging to the management or to any resident living in his residence hall unit.
36. Can make an intelligent decision promptly. Considers the problem at hand, existing policies and regulations, and available facts before making a decision.
37. Carries out administrative policy even though it may differ from his own.

38. Considers the other fellow's point of view; tries to put himself in the other fellow's place.
39. Encourages activities which produce greater unity among the residents of his precinct and which contribute to their sense of belonging.
40. Picks up meal tickets, room inventory forms, etc., without being told.
41. Is able to adjust to new situations easily and meets changed conditions with ease.
42. Has a thorough knowledge of University and residence hall policies and encourages the men in his precinct to abide by these policies.
43. Does not pry needlessly into the personal lives of the men in his precinct.
44. Uses the dining hall to get acquainted with the various men in his precinct and in his residence hall. Does not eat with the same group each meal.
45. Instructs the men in his precinct as to the effective utilization of all equipment in the residence hall unit. (i.e. recreational equipment, emergency equipment, athletic equipment, etc..)
46. Is able to steer clear of exploitation by personal friends.
47. Has a positive attitude toward the residence hall program and toward Michigan State University. Is able to accept the philosophy and the objectives of Michigan State University and the residence hall program.
48. Recognizes the symptoms of those needing counseling. (i.e. vocational, educational, academic, social, etc.)
49. Operates his precinct as a part of the total residence hall program and not as a separate entity.
50. Has his precinct so well organized that another capable person could step in without much difficulty if he should resign.
51. Possesses social intelligence. Knows what to do in social situations and encourages his men to practice accepted social conventions.
52. Does not talk against the organization with which he is associated. Avoids making disparaging remarks about other residence hall staff members.
53. Respects confidences.
54. Has a genuine concern for the men in his precinct.
55. Is able to successfully conduct a group meeting: Plans the meeting in advance and runs the meeting smoothly.

1. The first step in the process of the scientific method is to ask a question. This question should be based on an observation or a problem that needs to be solved.

2. The second step is to do background research. This involves looking up information about the topic to see what is already known and what has been tried before.

3. The third step is to form a hypothesis. This is a statement that predicts the outcome of the experiment based on the background research.

4. The fourth step is to design an experiment. This involves planning the steps of the experiment and deciding what data to collect.

5. The fifth step is to conduct the experiment. This involves following the steps of the experiment and collecting data.

6. The sixth step is to analyze the data. This involves looking at the data to see if it supports the hypothesis.

7. The seventh step is to draw a conclusion. This is a statement that summarizes the results of the experiment and whether the hypothesis was supported.

8. The eighth step is to communicate the results. This involves sharing the results of the experiment with others, either through a presentation or a written report.

9. The ninth step is to repeat the experiment. This is done to make sure the results are consistent and to see if the hypothesis is supported in different situations.

10. The tenth step is to apply the results. This involves using the results of the experiment to solve a problem or to make a discovery.

11. The eleventh step is to evaluate the experiment. This involves looking at the experiment to see if it was done correctly and if the results are reliable.

12. The twelfth step is to publish the results. This involves sharing the results of the experiment with the scientific community.

13. The thirteenth step is to use the results. This involves using the results of the experiment to make a discovery or to solve a problem.

14. The fourteenth step is to communicate the results. This involves sharing the results of the experiment with others, either through a presentation or a written report.

15. The fifteenth step is to repeat the experiment. This is done to make sure the results are consistent and to see if the hypothesis is supported in different situations.

16. The sixteenth step is to apply the results. This involves using the results of the experiment to solve a problem or to make a discovery.

17. The seventeenth step is to evaluate the experiment. This involves looking at the experiment to see if it was done correctly and if the results are reliable.

18. The eighteenth step is to publish the results. This involves sharing the results of the experiment with the scientific community.

56. Has a good sense of humor; can appreciate a humorous situation even if the joke is on himself.
57. Understands the overall objectives of Michigan State University and the objectives of the residence hall program.
58. Works with students whose problems are less serious in implication and refers to the proper persons those problems which appear to be more serious in nature.
59. Is respected as a leader by the men in his precinct; the men have confidence in him and will follow his leadership.
60. Possesses a "safe" level of academic achievement - has a 2.6 all college grade point average or above.
61. Knows every aspect of his job as a Resident Assistant. Is able to see how his work fits into the total program.
62. Is tactful; unless an action is so extreme as to demand immediate attention he waits and discusses it privately with the individual concerned.
63. Is respected by the Resident Assistants in his particular hall.
64. Periodically evaluates his progress and strives to improve his job performance.
65. Stays on his job until he should leave and reports back promptly after vacations.
66. Reserves judgment concerning individuals until valid information is available.
67. Keeps precinct ethical standards high by personal example, direction, and personal influence.
68. When convinced that his point of view is correct, can convince others of its merit.
69. Is on the alert for men that have the potential for becoming Resident Assistants. Recommends possible candidates to the Head Resident Advisor.
70. Makes an effort to personally know each man in his precinct.
71. Gives effective group instruction to his precinct members of those areas designated by the residence hall staff as essential to the effective operation of the residence hall. (i.e. residence hall policy, definition of his own role, study habits, dress regulations, etc..)
72. Likes people and enjoys working with them.
73. Has his finger on the "pulse of the precinct" and does not leave the precinct when he feels that all might not be well.

74. Is available to the men in his precinct. The men feel free to visit him in his room and to discuss their problems with him.
75. Maintains an "esprit de corps" within the precinct.
76. Is dependable and reliable.
77. Keeps the Head Resident Advisor or Graduate Advisors informed as to his plans, actions, or important phases of the program. Supplies information that is complete and useful.
78. When a student needs the services of a trained advisor or of a particular department, the Resident Assistant knows where to refer him, or knows where to get this information.
79. Respects the abilities of the other students; gives the students in the precinct an opportunity to participate in the planning of the precinct program.
80. Is sincere about his work as a Resident Assistant; he is free from pretentiousness.
81. Works through channels; does not consult a higher administrator concerning residence hall problems without first consulting with his Head Resident Advisor.
82. Is patient in working with others. Is undisturbed by reasonable delays, obstacles, or failures.
83. Encourages participation in the whole residence hall program: Social, cultural, athletic, scholastic, and activities.
84. Shows maturity on the job and in his relationships with others.
85. Accepts suggestions and criticisms without resentment or rebelliousness. Makes a sincere effort to benefit from these suggestions.
86. Is considerate of others. Respects their feelings and is thoughtful and kind in his dealings with them.
87. Serves as a consultant to the chairmen in his precinct.
88. His personal character is above reproach.
89. Prevents and reports unauthorized personnel who attempt to utilize such residence hall facilities as showers, laundry equipment, telephones, etc..
90. Is fair in his dealings with the men in his precinct. Avoids favoritism.
91. Is alert to other leadership in the precinct; encourages it, and utilizes it.
92. Understands and shows an awareness of the feelings of others.

- 93. Completes duties and responsibilities without prodding. Proceeds with his work without having to be told every detail.
- 94. Is sincerely concerned with the welfare of the students who come to him for help.
- 95. Avoids a stereotyped pattern of operation, varies his techniques and methods to fit the situation at hand.
- ✓ 96. Is a good personal example, realizes that the pattern he sets will be an important influence, particularly among the younger men.
- 97. Refrains from gossiping.
- 98. Uses informal visits with precinct groups as an opportunity for discussion of precinct policy and the cooperative point of view.
- 99. Is able to make criticisms or suggestions tactfully.
- ✓ 100. Is able to obtain cooperation from the men in his precinct; can get opposing groups to work together on a precinct project.

APPENDIX F

RESIDENT ASSISTANT RATING FORM DIRECTIONS

RESIDENT ASSISTANT RATING FORMDIRECTIONS:

This rating form consists of a series of numbered statements which pertain to the work of the Resident Assistant. Read each of the statements carefully. Think of the statement in terms of the Resident Assistant you are rating. Decide how much of the time this particular Resident Assistant does what the statement says. Indicate your response on the answer sheet according to the following scale:

- 1) Less than 25% of the time.
- 2) More than 25% of the time, but less than 50% of the time.
- 3) About 50% of the time.
- 4) About 75% of the time.
- 5) About 100% of the time.

Example: Item twenty on the rating form states: 20. Keeps accurate records, follows instructions exactly, and gets reports in on time. If you decide that the Resident Assistant you are rating does this (about 75% of the time), blacken space number 4 on the answer sheet opposite item twenty. All answers are to be marked in this manner.

You may use a regular pencil since the answer sheets will not be machine scored. If you desire to change an answer for an item on the answer sheet, erase your first mark completely. Then indicate your desired response according to the previous instructions.

Be sure to answer every item. Make the best judgment you can.
Do not leave any blank spaces.

An answer sheet has been provided for each of the Resident Assistants you are to rate. You will notice that the name of the Resident Assistant and the name of the rater appears on each answer sheet. This has been provided as a convenience to you and as a means of identifying the Resident Assistant and the rater. This information will be kept in strictest confidence.

INSTRUCTIONS FOR RETURNING RATING FORMS:

When you have completed all of the ratings, place the materials in an envelope, seal, and address to W.S. Simons, Butterfield Hall "B".

If you are a Graduate Advisor, return the envelope to the Head Advisor of your hall. I will make arrangements with the Head Advisors to have the forms returned to me at the Resident Advisor's Meeting on Monday, February 11, 1957. All forms should be completed by this time.

If you have any questions regarding the rating forms, please feel free to call me at Extension 2772.

1997, 1998, 1999, 2000, 2001, 2002, 2003, 2004, 2005, 2006, 2007, 2008, 2009, 2010, 2011, 2012, 2013, 2014, 2015, 2016, 2017, 2018, 2019, 2020, 2021, 2022, 2023, 2024, 2025, 2026, 2027, 2028, 2029, 2030, 2031, 2032, 2033, 2034, 2035, 2036, 2037, 2038, 2039, 2040, 2041, 2042, 2043, 2044, 2045, 2046, 2047, 2048, 2049, 2050, 2051, 2052, 2053, 2054, 2055, 2056, 2057, 2058, 2059, 2060, 2061, 2062, 2063, 2064, 2065, 2066, 2067, 2068, 2069, 2070, 2071, 2072, 2073, 2074, 2075, 2076, 2077, 2078, 2079, 2080, 2081, 2082, 2083, 2084, 2085, 2086, 2087, 2088, 2089, 2090, 2091, 2092, 2093, 2094, 2095, 2096, 2097, 2098, 2099, 2100, 2101, 2102, 2103, 2104, 2105, 2106, 2107, 2108, 2109, 2110, 2111, 2112, 2113, 2114, 2115, 2116, 2117, 2118, 2119, 2120, 2121, 2122, 2123, 2124, 2125, 2126, 2127, 2128, 2129, 2130, 2131, 2132, 2133, 2134, 2135, 2136, 2137, 2138, 2139, 2140, 2141, 2142, 2143, 2144, 2145, 2146, 2147, 2148, 2149, 2150, 2151, 2152, 2153, 2154, 2155, 2156, 2157, 2158, 2159, 2160, 2161, 2162, 2163, 2164, 2165, 2166, 2167, 2168, 2169, 2170, 2171, 2172, 2173, 2174, 2175, 2176, 2177, 2178, 2179, 2180, 2181, 2182, 2183, 2184, 2185, 2186, 2187, 2188, 2189, 2190, 2191, 2192, 2193, 2194, 2195, 2196, 2197, 2198, 2199, 2200, 2201, 2202, 2203, 2204, 2205, 2206, 2207, 2208, 2209, 2210, 2211, 2212, 2213, 2214, 2215, 2216, 2217, 2218, 2219, 2220, 2221, 2222, 2223, 2224, 2225, 2226, 2227, 2228, 2229, 2230, 2231, 2232, 2233, 2234, 2235, 2236, 2237, 2238, 2239, 2240, 2241, 2242, 2243, 2244, 2245, 2246, 2247, 2248, 2249, 2250, 2251, 2252, 2253, 2254, 2255, 2256, 2257, 2258, 2259, 2260, 2261, 2262, 2263, 2264, 2265, 2266, 2267, 2268, 2269, 2270, 2271, 2272, 2273, 2274, 2275, 2276, 2277, 2278, 2279, 2280, 2281, 2282, 2283, 2284, 2285, 2286, 2287, 2288, 2289, 2290, 2291, 2292, 2293, 2294, 2295, 2296, 2297, 2298, 2299, 2300, 2301, 2302, 2303, 2304, 2305, 2306, 2307, 2308, 2309, 2310, 2311, 2312, 2313, 2314, 2315, 2316, 2317, 2318, 2319, 2320, 2321, 2322, 2323, 2324, 2325, 2326, 2327, 2328, 2329, 2330, 2331, 2332, 2333, 2334, 2335, 2336, 2337, 2338, 2339, 2340, 2341, 2342, 2343, 2344, 2345, 2346, 2347, 2348, 2349, 2350, 2351, 2352, 2353, 2354, 2355, 2356, 2357, 2358, 2359, 2360, 2361, 2362, 2363, 2364, 2365, 2366, 2367, 2368, 2369, 2370, 2371, 2372, 2373, 2374, 2375, 2376, 2377, 2378, 2379, 2380, 2381, 2382, 2383, 2384, 2385, 2386, 2387, 2388, 2389, 2390, 2391, 2392, 2393, 2394, 2395, 2396, 2397, 2398, 2399, 2400, 2401, 2402, 2403, 2404, 2405, 2406, 2407, 2408, 2409, 2410, 2411, 2412, 2413, 2414, 2415, 2416, 2417, 2418, 2419, 2420, 2421, 2422, 2423, 2424, 2425, 2426, 2427, 2428, 2429, 2430, 2431, 2432, 2433, 2434, 2435, 2436, 2437, 2438, 2439, 2440, 2441, 2442, 2443, 2444, 2445, 2446, 2447, 2448, 2449, 2450, 2451, 2452, 2453, 2454, 2455, 2456, 2457, 2458, 2459, 2460, 2461, 2462, 2463, 2464, 2465, 2466, 2467, 2468, 2469, 2470, 2471, 2472, 2473, 2474, 2475, 2476, 2477, 2478, 2479, 2480, 2481, 2482, 2483, 2484, 2485, 2486, 2487, 2488, 2489, 2490, 2491, 2492, 2493, 2494, 2495, 2496, 2497, 2498, 2499, 2500, 2501, 2502, 2503, 2504, 2505, 2506, 2507, 2508, 2509, 2510, 2511, 2512, 2513, 2514, 2515, 2516, 2517, 2518, 2519, 2520, 2521, 2522, 2523, 2524, 2525, 2526, 2527, 2528, 2529, 2530, 2531, 2532, 2533, 2534, 2535, 2536, 2537, 2538, 2539, 2540, 2541, 2542, 2543, 2544, 2545, 2546, 2547, 2548, 2549, 2550, 2551, 2552, 2553, 2554, 2555, 2556, 2557, 2558, 2559, 2560, 2561, 2562, 2563, 2564, 2565, 2566, 2567, 2568, 2569, 2570, 2571, 2572, 2573, 2574, 2575, 2576, 2577, 2578, 2579, 2580, 2581, 2582, 2583, 2584, 2585, 2586, 2587, 2588, 2589, 2590, 2591, 2592, 2593, 2594, 2595, 2596, 2597, 2598, 2599, 2600, 2601, 2602, 2603, 2604, 2605, 2606, 2607, 2608, 2609, 2610, 2611, 2612, 2613, 2614, 2615, 2616, 2617, 2618, 2619, 2620, 2621, 2622, 2623, 2624, 2625, 2626, 2627, 2628, 2629, 2630, 2631, 2632, 2633, 2634, 2635, 2636, 2637, 2638, 2639, 2640, 2641, 2642, 2643, 2644, 2645, 2646, 2647, 2648, 2649, 2650, 2651, 2652, 2653, 2654, 2655, 2656, 2657, 2658, 2659, 2660, 2661, 2662, 2663, 2664, 2665, 2666, 2667, 2668, 2669, 2670, 2671, 2672, 2673, 2674, 2675, 2676, 2677, 2678, 26

the 1990s, the number of people in the world who are illiterate has increased from 1.2 billion to 1.5 billion. The number of illiterate people in the world is projected to reach 1.7 billion by the year 2015. The number of illiterate people in the world is projected to reach 1.7 billion by the year 2015.

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the 1990s, the number of people in the United States who are 65 years of age or older has increased by 50 percent, and the number of people 75 years of age or older has increased by 100 percent. The number of people 85 years of age or older has increased by 200 percent. The number of people 95 years of age or older has increased by 400 percent. The number of people 100 years of age or older has increased by 1,000 percent. The number of people 105 years of age or older has increased by 2,000 percent. The number of people 110 years of age or older has increased by 4,000 percent. The number of people 115 years of age or older has increased by 8,000 percent. The number of people 120 years of age or older has increased by 16,000 percent. The number of people 125 years of age or older has increased by 32,000 percent. The number of people 130 years of age or older has increased by 64,000 percent. The number of people 135 years of age or older has increased by 128,000 percent. The number of people 140 years of age or older has increased by 256,000 percent. The number of people 145 years of age or older has increased by 512,000 percent. The number of people 150 years of age or older has increased by 1,024,000 percent. The number of people 155 years of age or older has increased by 2,048,000 percent. The number of people 160 years of age or older has increased by 4,096,000 percent. The number of people 165 years of age or older has increased by 8,192,000 percent. The number of people 170 years of age or older has increased by 16,384,000 percent. The number of people 175 years of age or older has increased by 32,768,000 percent. The number of people 180 years of age or older has increased by 65,536,000 percent. The number of people 185 years of age or older has increased by 131,072,000 percent. The number of people 190 years of age or older has increased by 262,144,000 percent. The number of people 195 years of age or older has increased by 524,288,000 percent. The number of people 200 years of age or older has increased by 1,048,576,000 percent. The number of people 205 years of age or older has increased by 2,097,152,000 percent. The number of people 210 years of age or older has increased by 4,194,304,000 percent. The number of people 215 years of age or older has increased by 8,388,608,000 percent. The number of people 220 years of age or older has increased by 16,777,216,000 percent. The number of people 225 years of age or older has increased by 33,554,432,000 percent. The number of people 230 years of age or older has increased by 67,108,864,000 percent. The number of people 235 years of age or older has increased by 134,217,728,000 percent. The number of people 240 years of age or older has increased by 268,435,456,000 percent. The number of people 245 years of age or older has increased by 536,870,912,000 percent. The number of people 250 years of age or older has increased by 1,073,741,824,000 percent. The number of people 255 years of age or older has increased by 2,147,483,648,000 percent. The number of people 260 years of age or older has increased by 4,294,967,296,000 percent. The number of people 265 years of age or older has increased by 8,589,934,592,000 percent. The number of people 270 years of age or older has increased by 17,179,869,184,000 percent. The number of people 275 years of age or older has increased by 34,359,738,368,000 percent. The number of people 280 years of age or older has increased by 68,719,476,736,000 percent. The number of people 285 years of age or older has increased by 137,438,953,472,000 percent. The number of people 290 years of age or older has increased by 274,877,906,944,000 percent. The number of people 295 years of age or older has increased by 549,755,813,888,000 percent. The number of people 300 years of age or older has increased by 1,099,511,627,776,000 percent. The number of people 305 years of age or older has increased by 2,199,023,255,552,000 percent. The number of people 310 years of age or older has increased by 4,398,046,511,104,000 percent. The number of people 315 years of age or older has increased by 8,796,093,022,208,000 percent. The number of people 320 years of age or older has increased by 17,592,186,044,416,000 percent. The number of people 325 years of age or older has increased by 35,184,372,088,832,000 percent. The number of people 330 years of age or older has increased by 70,368,744,177,664,000 percent. The number of people 335 years of age or older has increased by 140,737,488,355,328,000 percent. The number of people 340 years of age or older has increased by 281,474,976,710,656,000 percent. The number of people 345 years of age or older has increased by 562,949,953,421,312,000 percent. The number of people 350 years of age or older has increased by 1,125,899,906,842,624,000 percent. The number of people 355 years of age or older has increased by 2,251,799,813,685,248,000 percent. The number of people 360 years of age or older has increased by 4,503,599,627,370,496,000 percent. The number of people 365 years of age or older has increased by 9,007,199,254,740,992,000 percent. The number of people 370 years of age or older has increased by 18,014,398,509,481,984,000 percent. The number of people 375 years of age or older has increased by 36,028,797,018,963,968,000 percent. The number of people 380 years of age or older has increased by 72,057,594,037,927,936,000 percent. The number of people 385 years of age or older has increased by 144,115,188,075,855,872,000 percent. The number of people 390 years of age or older has increased by 288,230,376,151,711,744,000 percent. The number of people 395 years of age or older has increased by 576,460,752,303,423,488,000 percent. The number of people 400 years of age or older has increased by 1,152,921,504,606,846,976,000 percent. The number of people 405 years of age or older has increased by 2,305,843,009,213,693,952,000 percent. The number of people 410 years of age or older has increased by 4,611,686,018,427,387,904,000 percent. The number of people 415 years of age or older has increased by 9,223,372,036,854,775,808,000 percent. The number of people 420 years of age or older has increased by 18,446,744,073,709,551,616,000 percent. The number of people 425 years of age or older has increased by 36,893,488,147,419,103,232,000 percent. The number of people 430 years of age or older has increased by 73,786,976,294,838,206,464,000 percent. The number of people 435 years of age or older has increased by 147,573,952,589,676,412,928,000 percent. The number of people 440 years of age or older has increased by 295,147,905,179,352,825,856,000 percent. The number of people 445 years of age or older has increased by 590,295,810,358,705,651,712,000 percent. The number of people 450 years of age or older has increased by 1,180,591,620,717,411,303,424,000 percent. The number of people 455 years of age or older has increased by 2,361,183,241,434,822,606,848,000 percent. The number of people 460 years of age or older has increased by 4,722,366,482,869,645,213,696,000 percent. The number of people 465 years of age or older has increased by 9,444,732,965,739,290,427,392,000 percent. The number of people 470 years of age or older has increased by 18,889,465,931,478,580,854,784,000 percent. The number of people 475 years of age or older has increased by 37,778,931,862,957,161,709,568,000 percent. The number of people 480 years of age or older has increased by 75,557,863,725,914,323,419,136,000 percent. The number of people 485 years of age or older has increased by 151,115,727,451,828,646,838,272,000 percent. The number of people 490 years of age or older has increased by 302,231,454,903,657,293,676,544,000 percent. The number of people 495 years of age or older has increased by 604,462,909,807,314,587,353,088,000 percent. The number of people 500 years of age or older has increased by 1,208,925,819,614,629,174,706,176,000 percent. The number of people 505 years of age or older has increased by 2,417,851,639,229,258,349,412,352,000 percent. The number of people 510 years of age or older has increased by 4,835,703,278,458,516,698,824,704,000 percent. The number of people 515 years of age or older has increased by 9,671,406,556,917,033,397,649,408,000 percent. The number of people 520 years of age or older has increased by 19,342,813,113,834,066,795,298,816,000 percent. The number of people 525 years of age or older has increased by 38,685,626,227,668,133,590,597,632,000 percent. The number of people 530 years of age or older has increased by 77,371,252,455,336,267,181,195,264,000 percent. The number of people 535 years of age or older has increased by 154,742,504,910,672,534,362,390,528,000 percent. The number of people 540 years of age or older has increased by 309,485,009,821,345,068,724,781,056,000 percent. The number of people 545 years of age or older has increased by 618,970,019,642,690,137,449,562,112,000 percent. The number of people 550 years of age or older has increased by 1,237,940,039,285,380,274,899,124,224,000 percent. The number of people 555 years of age or older has increased by 2,475,880,078,570,760,549,798,248,448,000 percent. The number of people 560 years of age or older has increased by 4,951,760,157,141,521,099,596,496,896,000 percent. The number of people 565 years of age or older has increased by 9,903,520,314,283,042,199,193,993,792,000 percent. The number of people 570 years of age or older has increased by 19,807,040,628,566,084,398,387,987,584,000 percent. The number of people 575 years of age or older has

[illegible]

Figure 1. The effect of the number of trials on the number of correct responses. The number of correct responses was significantly higher than the number of incorrect responses in all cases. The number of correct responses was significantly higher than the number of incorrect responses in all cases. The number of correct responses was significantly higher than the number of incorrect responses in all cases.

APPENDIX G

SUMMARY OF SUB-SECTIONAL SCORES FOR SIXTY-EIGHT RESIDENT ASSISTANTS
AT MICHIGAN STATE UNIVERSITY

APPENDIX G

SUMMARY OF SUB-SECTIONAL SCORES FOR 68 RESIDENT ASSISTANTS AT MICHIGAN STATE UNIVERSITY

Hall Code Number	R. A. Code Number	Rated by:	I	II	Sub-Sections III	IV	V	Total of Scores Per Rater	Average of Totals
1	1	A	243	247	260	260	110	1120	
		B	245	240	259	257	108	1109	
		C	239	249	260	264	110	1122	1117
1	2	A	238	245	244	231	104	1062	
		B	232	244	255	255	98	1084	
		C	240	251	259	262	108	1120	1089
1	3	A	241	241	256	235	106	1079	
		B	222	226	239	240	94	1021	
		C	234	246	244	240	106	1070	1057
1	4	A	250	254	265	268	110	1147	
		B	244	253	263	261	106	1127	
		C	246	253	263	262	110	1134	1136
1	5	A	241	252	254	246	108	1101	
		B	241	235	251	254	102	1083	
		C	238	253	254	262	108	1115	1100
1	6	A	231	240	225	228	104	1028	
		B	244	251	263	265	102	1125	
		C	234	239	257	263	108	1101	1085
1	7	A	198	204	214	195	96	907	
		B	243	235	260	244	100	1082	
		C	228	242	244	222	106	1042	1010

APPENDIX G (continued)

Hall Code Number	R. A. Code Number	Rated by:	I	II	Sub-Sections III	IV	V	Total of Scores Per Rater	Average of Totals
1	8	A B C	219 228 236	234 242 251	232 243 252	239 249 251	108 110 108	1032 1072 1098	1067
2	9	A B C	238 246 242	226 253 240	257 262 256	242 257 235	98 108 108	1061 1126 1081	1089
2	10	A B C	232 242 240	229 244 247	245 255 254	232 248 265	100 100 108	1038 1089 1114	1080
2	11	A B C	232 235 231	216 237 232	248 239 253	229 230 249	98 98 110	1023 1039 1075	1046
2	12	A B C	228 229 201	239 246 199	254 249 234	236 223 230	100 106 86	1057 1053 950	1020
2	13	A B C	229 239 234	239 248 235	248 249 239	240 236 242	104 104 106	1060 1076 1056	1064
2	14	A B C	221 237 212	243 246 229	244 249 231	240 246 239	100 100 94	1048 1078 1005	1044
2	15	A B C	223 240 214	220 249 224	233 250 210	234 251 202	98 108 86	1008 1098 936	1014

APPENDIX G (Continued)

Hall Code Number	R. A. Code Number	Rated by:	I	II	III	IV	V	Total of Scores Per Rater	Average of Totals
1	16	A	239	224	242	242	98	1045	
		B	219	228	244	229	96	1016	
		C	192	194	225	203	84	898	986
3	17	A	237	250	262	233	99	1081	
		B	214	219	233	230	92	988	
		C	212	230	230	224	100	996	1022
3	18	A	191	219	202	190	94	896	
		B	179	197	200	194	86	856	
		C	157	209	193	194	92	845	866
3	19	A	209	196	244	227	94	970	
		B	198	190	212	209	86	895	
		C	178	198	195	204	90	865	930
3	20	A	221	238	234	232	104	1029	
		B	219	218	227	250	96	1010	
		C	197	211	227	237	96	968	1002
3	21	A	221	205	227	229	92	974	
		B	205	193	209	219	90	916	
		C	197	206	207	213	94	917	936
3	22	A	241	236	262	251	102	1092	
		B	211	217	223	242	94	987	
		C	212	226	223	236	98	995	1025
3	23	A	233	244	247	243	106	1073	
		B	213	220	209	217	88	947	
		C	212	226	229	219	90	976	999

APPENDIX G (Continued)

Hall Code Number	R. A. Code Number	Rated by:	I	II	III	IV	V	Total of Scores Per Rater	Average of Totals
3	24	A	208	212	227	201	90	938	
		B	200	212	218	209	88	927	
		C	183	209	213	204	82	891	919
4	25	A	245	255	253	265	110	1128	
		B	230	232	242	242	104	1050	
		C	243	244	251	256	104	1098	1092
4	26	A	204	241	221	217	102	985	
		B	241	243	227	234	102	1047	
		C	225	231	249	246	102	1053	1029
4	27	A	242	233	259	268	90	1092	
		B	*	-	-	-	-	-	
		C	239	229	242	263	102	1075	1084
4	28	A	244	252	265	265	88	1114	
		B	247	255	265	269	108	1144	
		C	241	253	251	270	110	1125	1128
4	29	A	132	91	147	143	74	587	
		B	180	187	193	181	88	829	
		C	197	196	216	203	92	904	773
4	30	A	220	211	219	248	94	992	
		B	220	236	239	245	102	1042	
		C	213	226	245	234	96	1014	1016

* Rater "B" did not know R. A. 27 well enough to rate.

APPENDIX G (Continued)

Hall Code Number	R. A. Code Number	Rated by:	I	II	Sub-Sections III	IV	V	Total of Scores Per Rater	Average of Totals
4	31	A	236	236	259	264	106	1101	1075
		B	225	234	231	246	104	1040	
		C	240	232	251	258	102	1083	
4	32	A	192	185	201	186	92	856	994
		B	219	231	243	235	106	1034	
		C	236	246	256	260	98	1096	
5	33	A	234	233	248	231	88	1034	1081
		B	244	243	257	265	104	1113	
		C	242	241	262	248	104	1097	
5	34	A	248	251	265	269	110	1143	1131
		B	242	251	257	264	102	1116	
		C	245	250	263	270	106	1134	
5	35	A	189	182	218	178	68	835	933
		B	184	200	216	250	84	934	
		C	222	217	237	254	100	1030	
5	36	A	187	182	203	154	68	794	984
		B	246	249	256	264	102	1117	
		C	241	230	234	238	98	1041	
5	37	A	225	232	245	229	102	1033	1096
		B	240	255	263	263	110	1131	
		C	247	249	252	266	110	1124	
5	38	A	230	223	243	237	102	1035	1038
		B	250	238	263	264	100	1115	
		C	204	211	227	226	96	964	

APPENDIX G (Continued)

Hall Code Number	R. A. Code Number	Rated by:	Sub-Sections				V	Total of Scores Per Rater	Average of Totals
			I	II	III	IV			
5	39	A	230	249	257	260	88	1084	
		B	250	251	265	270	100	1136	
		C	195	215	194	202	88	894	1038
5	40	A	242	241	251	237	106	1077	
		B	246	253	260	265	106	1130	
		C	220	232	241	249	104	1046	1084
6	41	A	210	206	228	213	90	947	
		B	234	248	246	236	106	1070	
		C	214	228	250	228	110	1030	1016
6	42	A	240	239	238	240	100	1057	
		B	235	235	241	255	106	1072	
		C	237	238	252	253	110	1090	1073
6	43	A	229	233	256	263	104	1085	
		B	246	249	247	245	102	1089	
		C	236	236	257	249	106	1084	1086
6	44	A	228	242	254	261	104	1089	
		B	246	249	249	233	106	1083	
		C	221	237	256	250	110	1074	1082
6	45	A	235	230	245	221	102	1033	
		B	233	244	254	225	98	1054	
		C	239	246	260	250	106	1101	1063
6	46	A	239	245	257	256	108	1105	
		B	250	255	261	253	108	1127	
		C	240	255	261	254	108	1118	1117

APPENDIX G (Continued)

Hall Code Number	R. A. Code Number	Rated by:	I	II	III	IV	V	Total of Scores Per Rater	Average of Totals
6	47	A B C	230 237 233	236 236 238	240 250 250	256 234 251	102 104 110	1064 1061 1082	1069
6	48	A B C	240 239 233	241 253 249	256 260 250	257 256 253	110 108 106	1104 1116 1091	1104
7	49	A B C	225 241 228	247 250 244	250 259 250	241 268 266	96 108 108	1059 1126 1096	1094
7	50	A B C	225 248 233	245 253 251	257 265 256	257 262 262	98 108 96	1082 1136 1098	1105
7	51	A B C	230 246 234	244 241 220	248 259 259	258 268 262	106 108 108	1086 1122 1083	1097
7	52	A B C	250 250 232	255 252 237	261 263 243	266 270 258	110 108 98	1142 1143 1068	1118
7	53	A B C	206 217 182	231 236 199	232 246 216	241 256 206	108 106 80	1018 1061 883	987
7	54	A B C	221 205 214	208 217 211	226 217 235	174 225 215	100 90 98	929 954 973	952

APPENDIX G (Continued)

Hall Code Number	R. A. Code Number	Rated by:	I	II	Sub-Sections III IV	V	Total of Scores Per Rater	Average of Totals
7	55	A	217	232	231	222	98	1000
		B	213	215	259	268	108	1123
		C	207	233	256	237	102	1035
7	56	A	226	229	212	220	94	1011
		B	228	254	250	266	108	1106
		C	238	252	214	255	108	1097
7	57	A	213	217	261	264	104	1119
		B	212	252	259	268	106	1127
		C	214	216	258	266	106	1120
7	58	A	210	232	219	217	102	1070
		B	216	252	255	270	108	1131
		C	218	253	251	263	108	1123
8	59	A	219	233	252	261	102	1067
		B	191	187	204	192	94	868
		C	188	197	216	214	98	913
8	60	A	215	238	219	250	102	1054
		B	209	223	228	220	96	976
		C	184	200	219	194	88	835
8	61	A	218	212	255	217	108	1100
		B	230	218	252	250	104	1084
		C	213	216	261	266	110	1126

APPENDIX G (Continued)

Hall Code Number	R. A. Code Number	Rated by:	I	II	Sub-Sections III	IV	V	Total of Scores Per Rater	Average of Totals
8	62	A	226	229	238	211	92	996	
		B	205	217	219	225	90	956	
		C	212	200	217	192	98	919	957
8	63	A	216	212	235	237	104	1004	
		B	173	177	192	208	86	836	
		C	159	162	199	179	100	799	860
8	64	A	198	190	230	217	76	911	
		B	212	207	214	216	88	937	
		C	238	234	255	236	94	1057	968
8	65	A	237	238	251	259	110	1095	
		B	219	248	240	258	96	1061	
		C	199	190	225	223	106	943	1033
8	66	A	235	243	259	261	108	1106	
		B	210	227	221	236	92	986	
		C	227	246	255	255	102	1085	1059
8	67	A	229	237	255	265	106	1092	
		B	191	195	206	216	88	896	
		C	184	210	224	214	102	934	974
8	68	A	246	238	262	267	100	1113	
		B	206	220	222	227	88	963	
		C	235	233	250	246	106	1070	1049

APPENDIX H

DESCRIPTIONS OF THE MINNESOTA MULTIPHASIC PERSONALITY INVENTORY SCALES

DESCRIPTIONS OF THE MMPI SCALES*

The Question (?) scale is a validating score consisting of the total number of items put in the "cannot say" category by the subject. The size of this score affects the significance of other scale scores.

The Lie (L) scale is also a validating score that affords a measure of the degree to which the subject may be attempting to falsify his scores by always selecting responses which would appear to place him in the most favorable light.

The Validity (F) score serves as a check on the validity of the entire record. If the F score is high the other scores are likely to be invalid either because the subject was careless in answering the items or was unable to comprehend them, or because errors occurred in entering the responses on the answer sheet.

The K score (K) is used essentially as a correction factor which, when added to certain scales, sharpens their discriminatory power. It has the effect of making normals appear more normal, and making the abnormals stand out more clearly. This scale also measures test taking attitudes. A high K score may be indicative of a defensive attitude and a low K score suggests unusual frankness or self-criticality.

The Hypochondriasis scale (Hs) is a measure of the amount of abnormal concern over bodily functions, health and tendencies toward physical complaint.

The Depression scale (D) measures the extent of the clinically recognized symptoms involving dejection, discouragement and despondent feelings.

The Hysteria (Hy) scale indicates the degree to which the subject is like patients who have developed symptoms involving excess immaturity, unrealism, amenability, naivety, and social strivings.

The Psychopathic Deviate scale (Pd) determines the similarity of the subject's responses to those of individuals who are abnormally irresponsible, undependable, impulsive, ego-centric, defiant, asocial, and individualistic.

* These summaries are based on the material provided in the manual for the MMPI. For a complete description of each scale the reader is referred to this manual (29).

The Masculinity-Femininity (Mf) scale is a measure of the tendency toward an interest pattern corresponding to that of the opposite sex of the subject.

The Paranoia scale (Pa) measures similarity to the responses of clinic patients who are excessively aggressive, critical, irritable, over sensitive, and suspicious.

The Psychasthenia scale (Pt) determines the subject's similarity to patients exhibiting extreme apprehensiveness, tension, hesitancy, insecurity, and feelings of inadequacy.

The Schizophrenia scale (Sc) indicates the likeness of responses to patients who are withdrawn, over sensitive, secretive, and cautious.

The Hypomania scale (Ma) measures the personality factors characteristic of persons with marked confidence, hypersensitivity, aggressiveness, expansiveness, and non-persistence.

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