
$x^{*}{ }^{-}$
This dissertation has been 65-8505
microfilmed exactly as received
MCALLISTER, Vernon Felix, 1925-
A STUDY OF LEADERSHIP ROLE PERCEPTS AS VIEWED BY TEACHERS, SCHOOL ADMINISTRATORS, AND SCi_OOL BOARD MEMBERS.

The University of Oklahoma, Ed. D. , 1965
Education, administration

University Microfilms, Inc., Ann Arbor, Michigan

# -THE UNIVERSITY OF OKLAHOMA 

## GRADUATE COLLEGE

# A STUDY OF LEADERSHIP ROLE PERCEPTS AS VIEWED BY TEACHERS, SCHOOL ADMINISTRATORS, AND SCHOOL BOARD MEMBERS 

A DISSERTATION SUBMITTED TO THE GRADUATE FACULTY in partial fulfillment of the requirements for the degree of DOCTOR OF EDUCATION

BY
VERNON MCALLISTER Norman, Oklahoma

1965

A STUDY OF LEADERSHIP ROLE PERCEPTS AS VIEWED BY TEACHERS, SCHOOL ADMINISTRATORS, AND SCHOOL BOARD MEMBERS


## ACKNOWLEDGMENT

The writer wishes to express his appreciation and indebtedness to Dr. William Monahan who served as major advisor and as chairman of the doctoral committee, for his invaluable suggestions and criticisms, for the generosity of his time; and to Dr. Mary Clare Petty, Dr. O. D. Johns, and Dr. William B. Ragan for serving on the doctoral committee and for reading and criticizing the dissertation.

The writer is further indebted to Dr. Robert Ohm who devised the description of the leadership styles used in this study. Also, to Mr. Raymond Harvey who secured the photographs of the subjects used in the study.

## TABLE OF CONTENTS

Page
LIST OF TABLES ..... vi
Chapter

1. INTRODUCTION ..... 1
Statement of Purpose ..... 2
Background of Theory and Research. ..... 3
Methodology. ..... 15
2. LITERATURE ON RELATED STUDIES ..... 18
3. ANALYSIS OF DATA ..... 46
Testing the Hypotheses ..... 70
IV. SUMMARY, CONCLUSIONS, AND RECOMMENDATIONS ..... 78
Findings ..... 80
Conclusions ..... 88
Recommendations ..... 91
BIBLIOGRAPHY ..... 94
APPENDIX
A. LETTER TO ADMINIṠTRATORS WHOSE PHOTOGRAPHS WERE USED IN THE STUDY ..... 100
B. LETTERS TO TEACHERS, ADMINISTRATORS, AND SCHOOL BOARD MEMBERS ..... 102APPENDIXPage
C. TABLES SHOWING THE RANKINGS OF THE LEADERSHIP ROLES BY THE JUDGES ..... 104

## LIST OF TABLES

Table Page

1. Ranks by Teachers from a Description ..... 54
2. The Coefficient of Concordance on the Four Questions when Ranked from a Description only ..... 56
3. The Coefficient of Concordance on the Four Questions when Ranked from the Combination of Description and Photograph ..... 58
4. The Coefficient of Concordance on the Four Questions when Ranked from a Photo- graph only ..... 59
5. A Table of lst Rąnks from the Groups which Rated from a Description only. ..... 60
6. A Table of Last Ranks from the Groups which Rated from a Description only. . ..... 61
7. A Table of lst Ranks from the Groups which Rated from a Description and Photo ..... 62
8. A Table of Last Ranks from the Groups which Rated from a Description and Photo ..... 63
9. Table of lst Ranks from the Groups which Rated from a Photograph only ..... 64
10. A Table of Last Ranks from the Groups which Rated from a Photograph only ..... 65
Table Page
11. Number of lst Ranks by Teachers ..... 66
12. Number of Last Ranks by Teachers ..... 67
13. Number of lst Ranks by Administrators. . ..... 68
14. Number of Last Ranks by Administrators ..... 68
15. Number of lst Ranks by Board Members ..... 69
16. Number of Last Ranks by Board Members. . ..... 69
17. The Coefficient of Concordance on the Four Questions when Ranked from Description only ..... 72
18. Agreement/non agreement on the four Questions from the Description ..... and Photograph Among the Teachers, Adminis- trators, and Board Members ..... 73
19. Agreement/non agreement on the four Questions when the Method of Rating is from a Photograph only ..... 74
20. Comparison of Percentages of First Rankings by Description and Description with Photograph. ..... 76

## A STÜDY OF LEADERSHIP ROLE PERCEPTS AS VIEWED BY

 TEACHERS, SCHOOL ADMINISTRATORS, AND SCHOOL BOARD MEMBERS
## CHAPTER 1

## INTRODUCTION

For any school administrator to function successfully, he must understand and use sound basic principles of effective leadership. If as stated by many writers education is the most important performance required of government, educational leadership necessitates the best possible leadership available. Since the educational enterprise is one which deals solely with people, certain skills in leadership ability are utmost in importance. The skills are many and varied, but one of the most important has to do with the interpersonal relations that exist between the administrator and the staff and also the relations that exist between the staff and the students. Stogdill has noted that it is not especially
${ }^{1}$ Ralph M. Stogdill, "Leadership, Membership, and Organization," Psychological Bulletin, Vol. XLVll, (1950), pp. 1-14.
difficult to find leaders, but it is quite difficult to place these persons in different situations where they will be able to function as leaders. The effectiveness of a leader, according to Cattell ${ }^{2}$ is to be measured in terms of the groups under him, that is, the syntality changes which the leader is able to produce. The effectiveness of a school administrator then is measured in a behavioral context of teachers and students.

## Statement of Purpose

It is the purpose of this investigation to study leadership percepts as determined by three different groups of people: school administrators, teachers, and school board members. Entailed in the problem is searching for answers to three specific questions:

1. How would each group rate five different types of leadership roles from a description characterizing school administrators?
2. How would each group rate these same five types of leadership roles when the description of each role is accompanied by a photograph?

[^0]3. Finally, how would the different groups rate the five different administrators from only a photograph?

## Definitions

As used in this study the following terms have been identified.

An "elementary teacher" is one who teaches in any of the grades from kindergarten through six.

- A "secondary teacher" is one who teaches in any of the grades from seven to twelve.

An "administrator" is one who works in the supervision or administration of the public schools.
"Syntality" of the group is analogous to personality of the individual and refers to the way the group behaves as a whole -- its decisions, performance, and internal interactions, whether effective or desirable or not. ${ }^{3}$
"Synergy" is a convenient term referring to dynamics factors, the sum total of energy the group can command for self maintenance and effective action. ${ }^{4}$

## Background of Theory and Research

To provide a perspective for the problem to be examined, it is necessary to note certain aspects of

[^1]leadership theories and some concepts of the leader. Leadership has been defined in various ways in earlier studies. A close look at these varied views can do much to crystallize an acceptable viewpoint of leadership in general and the leader in particular.

Leadership. Pigors has defined leadership as the situation where one, or at most a very few personalities are placed in the environment so that his or their, "will, feeling, and insight direct and control others in the pursuit of a cause."5 Leadership has often been thought of as a specific attribute of personality that is possessed by some people and not by others, or at least some achieve little or none. Gibb ${ }^{6}$ holds that leadership is not viewed as an attribute of personality, but rather the quality of his role within a particular and specified social system. He further asserts that leadership is a function of both the social situation and the personality, therefore, it is the result of the interaction between the two. This idea infers that while there can be potential leaders, this potentiality can not directly be known without

[^2]social interaction. Leadership is usually not an enduring role but rather is in a fluid state in which the present leader is that person who is able to contribute most to attainment of the group goal.

Group behavior observed in this manner also suggests that leadership is not an attribute of personality but rather a social role which is dependent upon abilities, traits, and the specific situation. A person in the same group may be a temporary leader or follower as the group goal changes. Usually a leader is chosen for his ability with interpersonal achievement in a given situation. However, Du Vall ${ }^{7}$ has pointed out that a person of all around superiority is usually in situations in which he can make a contribution.

Gibb ${ }^{8}$ has developed three principles of leadership theory.

1. Leadership is always relative to the situation. A group must be confronted with a common problem that is in the process of being solved through communication and interaction before any leadership can be displayed.

[^3]2. Leadership is always directed toward some group goal. It is the quality that comes out as the group moves about together. Since leadership is a quality demonstrated by one who acts as a leader, Cowley's ${ }^{9}$ idea of a leader supports this second principle. He suggests a leader is one who has a program and is marching toward an objective with his group in a definite manner. The objective must be of common interest to the leader and the follower.
3. The last principle is an outgrowth of the second in that leadership is a process of mutual stimulation. The leader must be a member of the group with the same objectives in mind. He can be superior to the group but he can not differ too greatly from the followers. He must have many of the qualities of the followers. He must, as Gibb ${ }^{10}$ explains, have group membership character. La Piere and Farnsworth ${ }^{l l}$ make the point that because there is so much close interaction between the leader and the follower it is difficult to determine who affects whom and to what extent.
$9^{\text {William H. Cowley, "Three Distinctions in the Study }}$ of Leaders," The Journal of Abnormal and Social Psychology, Vol. XXIII, (July-September, 1928), pp. 144-57.
${ }^{10} \mathrm{Gibb}$ loc. cit., pp. 67-75.
${ }^{11}$ Richard T. La Piere and Paul R. Farnsworth, Social Psychology, 2d. ed., (New York: McGraw-Hill, 1935).

In a study by $\operatorname{Smith}^{12}$ on the summary of the literature on leadership, there are three different headings:
A. Leadership as a myth and fiction. The conception that the leader was a person endowed with some magical powers was a popular one among many early writers. This concept held that some men were set apart to be leaders. They were gifted witt special attributes in some magical fashion.
B. Leadership as a composite of traits in the individual. Larson ${ }^{13}$ says leadership is a composite of personality traits, training, and experience while Cowley 14 argues leadership is a complex of many traits fashioned together in a unity. He states that traits required in one situation are not the same as those required in another. The successful leader must possess those traits which are demanded by the particular situation in which they function. Bingham ${ }^{15}$ states that the leader is usually the person who

[^4]possesses the greatest number of desirable character traits or who can make the greatest improvement in these traits through training and experience. Real leadership has been described by Nash ${ }^{16}$ as the ability of an individual to change the conduct of other people.

These definitions emphasize the conception that leaders are born and not made. These early writers were somewhat limited by virtue of the knowledge then available on the subject and later investigations tend to focus new insights that alter many early views of leadership.
C. Leadership as the result of interstimulation between the group and the leader. This concept places the chief emphasis in leadership upon the relationship which exists between the leader and the group. Bernard ${ }^{17}$ described leadership as essentially a process of focusing the attention and releasing the energies of the followers in a desired direction. The leader is stimulated by the activities of the followers; hence the relationship is one of inter-stimulation. As pointed out earlier, La Piere and Farnsworth ${ }^{18}$ suggest that because there is so much
${ }^{16}$ Jay B. Nash, "Leadership," The Phi Delta Kappan, Vol. XLV, (June, 1929), pp. 24-25.
${ }^{17}$ L. L. Bernard, "Leadership and Propoganda," in Jerome Davis \& Harry Elmer Barnes, (New York: D. C. Health \& Co., 1927.)
${ }^{18}$ La Piere and Farnsworth, loc. cit.
close interaction between the leader and the led it is difficult to determine who affects whom and to what extent.

The more recent literature on the subject of leadership refutes the earlier common belief that leaders are born, not made. Inherited traits much be supplemented by environmental factors which develop these abilities. The demand is becoming more insistent upon training that is planned and coordinated. Society demands leaders trained by the home, school, and church in areas of knowledge and skills are essential in every leadership situation. Also, moral character is essential in almost every leadership situalion. Even so, the trend today in all types of leadership training is in the direction of specific training for a specific type of situation.

The Leader. As stated earlier there are two concepts of the leader. One is that the leader is endowed with magical powers of leadership abilities while the other purports that the leader places emphasis upon the circumstances under which groups of people interact and organize their activities toward group objectives. Leadership in this manner becomes a dynamic relationship.

Knickerbocker ${ }^{19}$ feels one reason the first view is held so strongly is because of the relationship that people had with their father. He was a prestige figure to the child and offered complete security. Since people need security all through life, perhaps they continue to look for the father symbol in the leader.

The dynamic view of leadership is supported by Stogdill ${ }^{20}$ when he points out that leadership must be understood in terms of the interaction of variables which are in constant flux and change. He further views the personal characteristics of the leader and follower as relatively stable. It is the persistence of individual patterns of human behavior in the face of constant situational change that appears to be a major obstacle not only in the practice of leadership but in the selection and placement of leaders. It becomes clear that an adequate analysis of leadership involves not only the study of leaders but also situations. The above evidence suggests that leadership is a relation that exists between persons in a social situation, and that persons who are leaders

[^5]in one situation may not necessarily be leaders in other situations.

Stogdill ${ }^{21}$ cautions the student to clearly distinguish between leader and figurehead. Leadership is always associated with the attainment of goals or group objectives. It implies activity, movement, and getting work done. Cowley ${ }^{22}$ insists a similar distinction be made between leaders and headmen. He defines a leader as one who has a program and is marching toward an objective with his group in a definite manner while a headman is merely an administrator of men. He is elected for qualities other than leadership. He is merely holding office and marking time with no program to offer.

Leaders use many techniques to secure and hold their positions as leaders and also to solidify and promote the interests of their group. Some devices such as ridicule, gossip, and threats are largely negative while others like praise, persuasion, advertising, and slogans are more positive and have better possibilities of directing the group toward a desired objective. The skillful leader must know how to use just enough of these devices to

[^6]accomplish his purpose $w \perp$ thout spoiling the end result through over use of any of them.

Smith ${ }^{23}$ feels there are a number of characteristics which seem to be requisite for leaders in most situations. He characterizes the successful leader as possessing a reasonably high degree of such personality traits as initiative, enthusiasm, imagination, knowledge, originality, persistence, speed of decision, and purpose. His relations with his followers are characterized by sympathy, tact, patience, faith, prestige, and ascendance-submission. Roff, ${ }^{24}$ in a study of combat leadership in the Air Force, found that characteristics such as sincerity, impartiality, and lack of concern for personal advantage were as effective in discriminating officers who were considered good leaders as items relating to combat flying proficiency. These viewpoints support strongly the notion that successful human relations bear heavily upon successful leadership activities.

Of course, a leader may also be defined as one who is perceived as such by another who may be affected.

23
Smith, Ioc. cit.
24
Merrill Roff, "A Study of Combat Leadership in the Air Force by Means of a Rating Scale: Group Differences," in Clarence Browne, The Study of Leadership, (Danville: Interstate Printers, 1958), pp. 158-169.

## Limitations for Study

Certain factors circumscribed this study. The study was limited to teachers, administrators, and school board members in the public school systems of Oklahoma County. The sample was further limited to thirty teachers, thirty administrators, and thirty school board members. It was limited still further by the rating devices and by those to which all value judgments are subject.

## Hypotheses to be Tested

Through the use of the rating devices this study proposed to investigate what effect the appearance of the leader had upon the rating of his leadership ability as perceived by teachers, school administrators, and school board members. The study also proposed to determine if leadership roles are perceived in the same vein by teachers, school administrators, and school board members.

It was assumed that the introduction of a photograph with the description of the leadership role would affect the rating of the different roles and the same effect would take place when the rating was done from a photograph only and from a description only. On the basis of these assumptions the following null hypotheses were made.

1. There is no statistically significant agreement in the rating of leadership roles among the teachers, school administrators, and school board members when the menner of rating is done by a combination of a description of each role which is accompanied by a photograph.
2. There is no statistically significant agreement in the rating of leadership roles among the teachers, school administrators, and school board members when the manner of rating is selecting from a photograph only.
3. The person chosen by the teachers from a description only would not be the same as the choice of the teachers' rating from the combination of a description and a photograph. The method of selecting the choice would be the greatest number of first place ranks.
4. The person chosen by the administrators from a description only would not be the same as the choice of the administrators' rating from the combination of a description and a photograph. The method of selecting the choice would be the greatest number of first place ranks.
5. The person chosen by board members from a description only would not be the same as the choice of the board members rating from the combination of a description and a photograph. The method of selecting the choice would be the greatest number of first place ranks.

In addition to these specific hypotheses, this study also attempted to shed some additional light on the nature of leadership roles in schools as perceived by teachers, administrators, and board members.

## Methodology

Selection of the Sample. Stratafication was used in the selection of the sample. According to Moser stratification is a method for increasing precision of a random sample. Fe writes:

Stratification is a means of using knowledge of the population to increase the representativeness and precision of the sample. Stratification does not imply any departure from the principle of randomness. All it means is that, before any selection takes place, the population is divided into a number of strata; then a random sample is selected within each stratum.

Stratification is merely a way of dividing the population into a-number of sub-populations. Once this is done, the sampling begins and. we would select the number of individuals required in an region from the entire list for that region.

Teachers directories were used to secure the names of all teachers employed in the public schools of Oklahoma County during the school year 1963-64. The names

[^7]of the teachers were then divided into two groups. The names of those teaching in the elementary school were put into one pile and those teaching in junior high and senior high schools were put into the other pile. The population of administrators was similarly stratified into three categories, elementary principals, secondary principals, and superintendents or assistant superintendents. The school board members were not stratified because of the smaller number involved and the lack of diversity in the official school duties. The method used for assigning the sample for each group was made according to that described by Moser, "selection with probability proportionate to size." 27

Each list of names of thirty teachers, thirty school administrators, and thirty school board members were then randomly divided into three different lists with ten names on each list. The teachers on one list rated the five different leadership roles from the description of these roles while another list of ten teachers rated the five different leadership roles from the description of the roles when each role was accompanied by a photograph. The third list of ten teachers was asked to rate the

$$
{ }^{27} \text { Ibid. }
$$

leadership roles from a photograph only. The process was then repeated with the ten school administrators on each of the three lists and also with the ten school board members on each list.

The statistical technique used to test the hypotheses was Kendall's coefficient of concordance and tables of first and last ranks.

## CHAPTER 11

LITERATURE ON RELATED STUDIES
The study of leadership represents a study of relationships; of variables in interaction. According to Pigors ${ }^{1}$ a study of leadership must consider: (1) the leader, (2) the members as individuals, (3) the group as a functioning organization, and (4) the situation. A comprehensive study of all facets of leadership would focus upon these four variables. This review of the literature will attempt to review studies as they relate to these four variables and their interaction.

- Responsibility variables define the duties that the members are expected to perform. The responsibilities of a given position may be far different from the work actually performed by the occupant of that position. Seldom are two people likely to agree unanimously on the responsibilities and work performance of a particular task. For

[^8]example, one individual may accept a position previously held by another individual. The responsibilities may remain the same, but the tasks performed and the manner of their performance may differ greatly. The leader, to be successful, must perceive the responsibilities and work performance of his duties in a similar manner that they are perceived by the members of the organization.

Group organization defines and delimits leadership by questioning how far one ought to go and beyond which one ought not to go. Organization in defining the responsibilities and.working relationships of its members sets up barriers to participation as well as facilitating it. Each member also has limits such as capacity to discharge responsibilities and capacity to interact with others. This suggests that the leader being dedicated to achievement of group goals is seldom free to do as he pleases. If he ignores the welfare of the group, he is likely to lose their following. If he ignores the welfare of society, he is likely to lose the group through external forces. Thus leadership is bound by forces both external and internal.

Hemphill ${ }^{2}$ believes a view of leadership should be

[^9]taken which stresses the situacional nature of the leader's behavior ard which gives a sound foundation for practical programs in the selection and training of those who guide group activities. He writes:

From the situational viewpoint it would seem futile to search for a leadership trait which would distinguish among individuals likely to be good or bad leaders in all situacions. ${ }^{3}$

Hemphill also found that emphasis of most studies of leadership has been placed upon the personal characteristics of the individual designated as the leader. This is but one aspect of the problem. The social situation in which the leader functions deserves a considerable amount of study.

Sanford ${ }^{4}$ in writing on the follower's role found the relationship determined by leadership is a result of the psychological factors in the follower and the leader. The follower has problems that the leader must solve. He has certain standards by which he judges the leader's effectiveness. The follower also has situationally determined needs. These needs amount to the achieving of the
$3^{3}$ Ibid., p. 101.
4Fillmore $H$. Sanford, "The Follower's Role in Leadership Phenomena," in Guy E. Swanson (Ed.) Readings In Social Psychology, (New York: Henry Holt and Company, 1952), pp. 328-341.
group goal. Sanford states it in the form of a hypotheses: "The more psychologically significant the group goal, the greater the follower's emphasis on the leader's competence to assist in achieving the goal." Sanford ${ }^{5}$ theorizes the converse of this hypothesis is also true, that is when the goal is unimportant there will be a preference for a leader that can fulfill the psychological needs instead of any immediate needs of the group. In situations such as this the "nice guy" is often selected as the leader, but when there is a pressing need or a challenging goal he is often bypassed for someone who can assume the leadership whether or not he is a "nice guy."

Just as there are many different needs to be met for the followers, there are also the needs of the leader to be considered. Some leaders are regarded as nice guys and have difficulty meeting the demands when strong authority is required. Likewise an authoritarian leader is greatly handicapped when trying to lead a group that encourages self expression and group will. The leaderfollower relation most likely to exist in a free society is one that is reciprocally satisfying to both follower and leader.

## $5_{\text {Ibid. }}$

In studying the different types of leadership the authoritarian-democratic continuum has generally been used to designate opposing areas. Most authorities agree that the essential difference between the two forms is in their sources of power.

Gibb ${ }^{6}$ in a study of democratic vs. authoritarian leadership found that even with an adequate reward people often object to the loss of autonomy that results from authoritarian leadership. Since the antithesis of such leadership is leadership through democratic behavior, it becomes associated with relationships in which there are shared satisfactions and a mutual respect of leader and led for one another. The democratic leader has the task of giving satisfaction to the individual, protecting the group as a whole, and satisfying his own needs and aspirations. Kreech and Crutchfield write on their idea. of the democratic leader.

> The democratic leader seeks to evoke the maximum involvement and the participation of every member in the group activities and in the determination of objectives. He seeks to spread responsibility rather than concentrate it. He seeks to encourage and reinforce interpersonal contacts and relations throughout the group structure so as to strengthen it. He seeks to
${ }^{6}$ Cecil A. Gibb, "Leadership," in Gardner Lindzey (Ed.), Handbook of Social Psychology, Vol. II, (Cambridge, Massachusetts: Addison-Wesley, 1954), pp. 887-917.
reduce intragroup tension and conflict. He seeks to avoid hierachial group structure in which special privilege and status differentials predominate. 7

Since leadership is regarded as a means instead of an end, the evaluation of the leadership technique must be concerned with the group goals and values. No matter what leadership technique is used, it must be accepted by the followers. Many writers feel that democratic leadership has distinct advantages, but they are quick to point out it does have its limitations. Sanford's ${ }^{8}$ study, for example, found that authoritarian personalities prefer status-laden leadership, accept strongly directive leadership, and regard the authoritarian leadership as better than his democratic counterpart. Studies of the German culture have shown that authoritarian leadership is more highly valued in an authoritarian culture.

Gibb ${ }^{9}$ demonstrates that one of the main advantages of democratic leadership is the maximum involvement of all group members. People understand more fully thoughts and ideas if they have participated in their development.

${ }^{8}$ Sanford, loc. cit., pp. 328-341. $9_{\mathrm{Gibb}}$ loc. cit., pp. 877-917.

Many educators have maintained that students grasp much more meaning from a discussion in which they have participated than from a well prepared lecture. Group participation also elicits more solid support of decisions than those that are handed down by an upper authority. Countless studies in industry and business have confirmed the effectiveness of group decision.

Democratic leadership is further explained by Gibb ${ }^{10}$ as an attempt to broaden the base of participation and to make the maximum use of the individual differences that exist. It draws creativity from the group members because it transfers power and influence to those who have the most to offer for the immediate goal. This technique is impossible in authoritarian leadership. It should be noted that the participation by all members of the group, while declared by many to be superior, is often one of less efficiency than is directed leadership. Dashiel1 ${ }^{11}$ in a study of jury reports found that the reports of the jury were often less complete than those of individual
${ }^{10}$ Ibid.
${ }^{11}$ J. F. Dashiell, "Experimental Studies of the Influence of Social Situations on the Behavior of Individual Human Adults," in C. Murichson (Ed.), Handbook of Social Psychology, (Worchester: Clark University Press, 1935), pp. 1097-1158.

Received without paree(s) 25

Filmed as received.

University Microfilms, Inc.
type of leader. Those groups that had had experience with a democratic leader became frustrated and resistive when they encountered an authoritarian leader.

In a study on the effects of participating leadership as compared with supervisory leadership by Preston and Heintz, ${ }^{14}$ evidence was shown to further separate the extremes of the leadership continuum. The subjects consisted of several laboratory classes which were divided into small groups where each member was asked to rank twelve potential presidential nominees according to their individual preference. Leaders were then elected by the groups and these leaders were then taken aside for further instructions. Half of the leaders were instructed to work with their group in a participatory manner while the other half was instructed to work with their group in a supervisory manner. The participating leaders were instructed to have their followers agree upon an order of ranking the twelve presidential possibilities. They were further instructed to participate with the group in this ranking with all the followers endeavoring to help with the solution of the task. The supervisory leaders were to have their followers rank

[^10]the same twelve men, but the leader was to refrain from participating with the exception of giving instructions. After this task was completed all groups were dissolved, and the class went on with routine matters.

Twenty-four hours later the entire group was asked individually to rank these same twelve men again to find out how their rankings compared to the two previously done.

Correlations between initial and final rankings provide evidence that group activity under participatory subjects departed from their initial rankings to a greater extent than did supervisory subjects as a result of group deliberation. Conversely, subjects withstood the opinions of the group to a greater degree when interacting under supervisory leadership. While no differences appear between participatory leaders and supervisory followers. The final rankings of supervisory leaders correlate high with their own initial rankings. This is probably a consequence of the supervisory's leaders fack of identification with his group's work. 15

Subjects were asked whether they found the task worthwhile and interesting. Of the subjects who responded, the evaluation shows that participatory subjects tended to regard it as interesting and worthwhile, while supervisory subjects tended to regard it as not interesting and not worthwhile. ${ }^{16}$

The results show that participatory leadership is more effective than supervisory leadership as a technique for effecting changes in

[^11]attitudes. . . The final rankings of participatory subjects were found to correlate higher witt. group rankings than with their own initial rankings. The final rankings of supervisory subjects, on the other hand, were found to correlate higher with their own initial rankings than with the rankings formilated in their group discussions.

Kutner ${ }^{18}$ in writing on problems of democratic leadership concludes that the final authority in any democratic group must rest with the membership. The group in organizing itself must set the limits of authority that its leader must possess. It is impossible for every question to be brought before the entire membership. Nevertheless, the responsibility for critical examination of decisions and actions must not be abandoned by the group. It is very easy to become an efficient organization in which the decisions are made for expediting purposes instead of working toward the group goals. Evidence is available to demonstrate that democracy must first be taught and learned to be practiced. ${ }^{19}$

The leader must represent the group through the
${ }^{17}$ Ibid., p. 322.
18 Bernard Kutner, "Elements and Problems of Democratic Leadership," in Alvin W. Gouldner (Ed.), Studies in Leadership, (New York: Harper, 1950), pp. 459-467.

19 A. Bavelas and K. Lewin, "Training in Democratic Leadership," Journal of Abnormal and Social Psychology, Vol. XXXVII, (1942), pp. 115-119.
group organization. The organization must design and limit the channels through which this representation must operate. Another task of the leader is to serve as a liaison between his group and outside organizations. While it is expected that the leader be allowed a certain amount of initiative and freedom, he must also consider his actions as representative of and subject to the membership of the organization.

In a study on the possibility of the selections of leadership through scientific methods, Eaton ${ }^{20}$ found that tests have been widely used to fill positions in the lower echelons of industry and civil service, but when an opening in positions requiring leadership exists a different form of selection is used. There are usually rigid standards for the selection of a clerical worker, but the supervisor of this same worker is subject to little or no set standards.

One reason scientific selection of leaders is so difficult is that leadership is a group value judgment differing with each group and each circumstance. It is the interactions between the members and the one assuming
${ }^{20}$ Joseph W. Eaton, "Is Scientific Leadership
Selection Possible?" In Alvin W. Gouldner, (Ed.), Studies in Leadership, (New York: Harper, 1950), pp. 615-643.
leadership. Jennings sums it aptly when she writes that
The why of leadership appears not to reside in any personality trait considered singly, not even in a constellation of related traits, but in interpersonal contributions of which the individual becomes capable, in a specific setting eliciting such contributions from him.

Before any scientific selection of leadership can be used, some decisions must be made on whose values will guide the selection. The two main differences in the selection is whether it is made by-an individual or group of individuals in a hierachy or whether the group to be led does the selection. Although the methods of selection seen in direct contrast to each other, it is only a matter of degree. When the hierachy does the selection, as in the case of the selection of a school principal, they are interested in selecting one who can relate with the membership in such a way that the group goals can be-accomplished.

Since it appears that there is some basis for persistence of leadership traits to be present in most types of leadership roles, the value of leadership. testing deserves a closer look. Courtenay ${ }^{22}$ studied a group of one

[^12]hundred women who had demonstrated leadership through being selected to the Senior Girls Council. This group was compared with a group of non leaders whose background, education, and scholastic records were comparakle. Seventy-two of the leaders sought higher education as compared to twenty-nine of the non leaders. The leaders also. attended college for a longer period, held more professional jobs, earned higher salaries, and took a more active part in community affairs. It seems feasible that selection tests for leadership would be effective when previous tests for similar leadership roles have been validated. Most positions of leadership require some knowledge of technical skills. A principal of a school must know certain fundamentals of curriculum, teacher preparation, principles of learning, etc. The manager of a department store must be knowledgeable about buying, selling, etc. These technical skills are to some degree measurable. Tests devised to measure technical skills give those with superior technical knowledge a greater than even chance of being selected.

- These tests do not measure in any way the performance of an individual in his interactions with other people. The personality traits of the individual and the social climate in which the leader operates and the inter-
action of these two are the quantities that have largely defied satisfactory measurement. Most employers have utilized the oral interview in lieu of such testing. The great amount of emotional stress on the part of both the interviewer and the interviewee limits the usefulness of this technique, especially, if the list of names to be interviewed is quite long. Eaton ${ }^{23}$ lists two types of sociological tests that are being used to fill the gap between testing for technical skills and the oral interview. They are sociodramatic and sociometric tests.

Sociodramatic tests are tests to evaluate the total personality of a subject. They are usually performance tests in a social setting. Such tests are constructed so that they require proficiency in as many components as possible such as technical skills, muscular ability. and social adjustment.

Sociometric tests are concerned with the quantative treatment of every kind of interhuman relations, especially, with those involving ratings of individuals by their co-workers, inferiors, and superiors. These ratings were used by the United States Army in its officer candidate programs. Eaton reports the tests thusly: "The test
$23_{\text {Eaton, }}$ loc. cit., pp. 615-643.
procedures and methods of scoring were highly subjective. The data often raise more questions than they answer." 24 Murray and MacKinnon ${ }^{25}$ in reporting on the use of sociodramatic and sociometric tests used in the screening of over five thousand agents for the Office of Strategic Services during World War II found methods were used that were borrowed from those developed by the British. The O.S.S. Assessment Staff in summarizing the results of the tests given to O.S.S. candidates stated:

Considerable weight was given to the sociometric findings in deciding the final ratings on social relations, since it was felt that the ultimate test was the man's cathexis (valuation) in the minds of his associates." 26 .

Scientific measurement has become a skillful
predictor of the success or failure of a certain individual in many job positions today, but leadership selection is not so highly refined. Sociological tests have been useful in leadership selection of the extreme cases, and perhaps later improvements on these tests will further increase the validity and value. But, as Eaton points out, "The most ${ }^{24}$ Ibid., p. 615.
${ }^{25}$ Henry A. Murray and Donald W. MacKinnon, "Assessment of O.S.S. Personnel," Journal of Consulting Psychology, Vol. X, (March-April, 1946), pp. 76-80.

Ibid.
important single factor in selection of leadership is the value judgment of those selecting the leader." 27

Leighton ${ }^{28}$ in writing on leadership in a stress situation found that when there is a stress upon a group, the problem of the administration is introducing remedial change. Thise does not necessarily mean great change, especially, in the beginning. It is often better to introduce small unobtrusive changes than to upset the equilibrium of the entire sroup because many unpredictable things can happen and these are often disastrous to the new leader.

The remedial changes of the new leader should be planned in successive stases over a period of time. While it is virtually impossible to have an exact blueprint of the desired changes, it is necessary that these changes be carefully planned and communicated to the group in such a fashion that they see their value and merit. In proposing change the leader must be wiliing to admit error when it happens because a group is more likely to follow an honest leader than one who tries to convince his members that he is incapable of making mistakes.

[^13]In bringing about changes the administration must locate and work with the basic subgroups of the overall membership. A subgroup is composed of individuals who have strong and close ties with each other. In a school staff they misht be those who work in close harmony with each other. In a school district the possibilities are multiplied many times. A subgroup in this overall group might consist of a certain religious group or a certain social group. There are always many of these subgroups in our complex culture, but the successful administrator must know how to work effectively with each of these units. Leighton ${ }^{29}$ compares an administrator who tries to put into effect large plans without resard to the basic suksroups as bein, like a man tryins to put up a circus tent all alone in a high wind.

According to Leighton, ${ }^{30}$ the administrator who undertakes to lead a group that is under stress will find the individual can undergo greater changes at this time than in normal times, but the action must be carefully timed and well executed. The administrator should exercise caution because an early blunder will damage, perhaps permanently, his impression upon the members.
$30_{\text {Ibid. }}$.

Leighton ${ }^{31}$ found that when the leader is attempting change the people will be moved more by appeals of the feeling man than of the rational man. While the leader may pride himself on the fact that he takes a scientific approach to the solution of the problem, he must recognize that a leader can not lead unless he has followers, and that he can not have followers unless they can empathize with each other. The administrator possesses many techniques for obtaining the empathy of the group and he should use them for advantage when possible, but he can never successfully ignore them.

Perhaps the greatest tools available to the new leader are communication and education. No matter how good a plan might be, it has no value until the membership perceive its reality. Many good ideas are buried in the past because they were not conveyed to the group or when conveyed were not understood. The leader must be sure that channels of communication are always open in both directions because to want the group to understand his motives and desires is not enough, he must be sure that he understands their wishes and feelings as well.

Leighton sums up what should be the desire of every leader when he writes:
$31_{\text {Ibid. }}$.

No administration can avoid some errors and none can avoid misrepresentation. Truth, on the other hand, makes an exceedingly strong appeal for fair judgment. There is more hope for progress if the fear of leaving a mistake on the record is replaced by the desire to record improvement. 32

In discussing considerations in innovating leadership, Dexter writes: "The most important instrument with which the leader has to work is himself -- his own personality and the impression which he creates on other people." ${ }^{33}$ People who think new and different ideas are to some extent nonconformist to the existing social scene. A person assuming leadership will discover that many things enter into his effectiveness or ineffectiveness. His behavior, gestures, mannerisms, and style of clothing all become part of the impression he gives to his group. This means that one who would innovate must realize that changing situations may call for a change in roles. A successful leader in one situation does not have a guarantee of success in a changed atmosphere.

Dexter ${ }^{34}$ explains if studies were made of many

organizations to see who was promoted and why, they would show those who do things in the accustomed manner will rise to the top. To encourage potential ieaders to suggest change they deem necessary, a look should be taken at why new ideas meet with so much opposition and what changes in this method of presentation might have helped convince the membership of the value of the idea.

Dexter ${ }^{35}$ suggests that the new leader be conscious of two realities before he advances recommended chanses. The first is that he recognize the possibility the changes which he proposes are faulty. While the change itself may be good, the present arrangement may have been done for a certain reason. It behooves the leader to know why things are done as they are before he proposes an alternate procedure. Changes are often desperately needed, but the membership of the group must recognize the need of the change. . before they will accept it. A leader who realizes he cannot lead unless he has followers will slowly use a democratic educational process to set the group members to alter their views and values.

Secondly, the new leader must realize that no new approach can stand on its own merits. Influence and pressure are just as important for promoting ideas as they
${ }^{35}$ Ibid.
are for promotion of anything new and different. The leader must have a plan to successfully put the idea into use instead of merely suggestins that he believes it has value and merit. To the school leader this suggests that proposals for chanse should not be forthcoming until he has made an analysis of the situation and prepared a plan of action. He must also know what the next step is after the proposal has been made.

A review of the leadership roles as they are perceived by the members of the group needs to look also at the interpersonal perception of the group. Fiedler writes: "The area of interpersonal perception concerns itself with the judjments which one person makes of another and with the influence which sociocultural and personality variables have on his judgment."36

Fielder ${ }^{37}$ conducted a study concerning the interpersonal relations within sroups as they affected the operatins efficiency of the groups. The study dealt with different kinds of groups. They ranged from informal groups represented by army tank crews and work groups in a
$36_{\text {Fred E F Fiedler, "Interpersonal Perception and }}$ Group Effectiveness," in Alvin W. Gouldner (Ed.), Studies In Leadership, (New York: Harper, 1950), pp. 243-257.

37 Ibid.
steel mill. The study also included more complex organizations where one group was responsible for policy and plans carried out by another sroup. This group was represented by a farm supply cooperative.

The study demonstrated that the interpersonal relations were different in good and poor groups and that the interpersonal relations can be measured. It was further concluded that some progress was made toward the development of a theory which will allow the prediction of group effectiveness as well as some of the determinants of group effectiveness. He summarizes by writing:

Our studies do make clear that psychological distance between leaders and followers is an important determinant of group effectiveness and can be used for its prediction. Interpersonal perception scores have thus been shown to be important predictors of external criteria. 38
Heider ${ }^{39}$ in studyins perception found that there is a tendency for a person to see only the positive traits in a person he likes: If one hears that a person he likes has done something that he does not approve of, there is the tendency to refuse to believe the action was performed. He writes:

38 Ibid., p. 256.
$39_{\text {Fritz }}$ Heider, "Perceiving the Other Person," in Renato Taguiri and Luigi Petrullo (Eds.), Person Perception and Interpersonal Behavior, (Stanford: Stanford University Press, 1958), pp. 22-26.

We have a means for predicting how experiences will be fitted, not only into a world of neutral objects, but also into a world of persons, sociad acts, or intentions full of significant values.

Secord, in writing on facial features and relation to perception, concluded:

There are enough data to suggest that commonly agreed upon facial expressions account for some portion of the personality impressions which are formed in looking at photographs. ${ }^{41}$
Woodworth ${ }^{42}$ found, in his study, that as a whole judjes of emotions from posed photographs do exceedingly well. Heider in discussing this problem found:

We recognize a person's traits, and especially his wishes, sentiment, or intentions from what he does and says and we know considerably less when we are limited 4 to what we can see of him as a static object. 43
Secord ${ }^{44}$ found that a person is rarely aware of the bases of his judgments of other people. When viewing a photograph the perceiver can easily regard a momentary

40
Ibid., p. 26.
${ }^{41}$ Paul F. Secord, "Facial Features and Inference Processes in Interpersonal Perception," in Renato Taguiri and Luigi Petrullo (Eds.), Person Perception and Interpersonal Behavior, (Stanford: Stanford University Press, 1958), p. 304.
$42_{R}$. S. Woodworth, Experimental Psychology, (New York: Henry Holt, 1938).
$43_{\text {Heider, }}$ loc. cit., p. 23.
44 Secord, loc. cit., p. 304.
characteristic such as a smile as an enduring trait of a warm, friendly person while the opposite effect may occur when a photograph portrays one in perplexing thought or when the eyelids are blinking. In summarizing his findings, Secord states that

More emphasis should also be placed on the point that perceiver attributes are not projected indiscriminately to other persons. Characteristics of the object person, situational factors present in the social environment, and contemporary behavior sequences on the part of the perceiver are essential factors in the attribution of perceiver characteristics to object persons. More research is needed on the precise manner in which these conditional factors affect interpersonal perception. 45
Bruner and Taguiri ${ }^{46}$ found that certain ways of expressing a specific emotion as appropriate for a situation are learned in the process of living in a culture. The learning operates not only for the expressor of the emotion but also for the individual who must judge the emotional expression. These authors question whether or not one can judge emotions accurately when all the information has been withheld with the exception of a still photograph of a force.

45 Ibid., p. 314.
$46_{\text {Jerome }}$ S. Bruner and Renato Taguiri, "The Perception of People," in Gardner Lindzey (Ed.), Handbook of Social Psychology, (Cambridge, Massachusetts: AddisonWesley Publishing Company, 1954).

The halo effect noted by Thorndike 47 is one in which the judges tended to rate the subjects on several traits in terms of goodness or badness. This effect was found to be most marked when the traits to be judged are vague in behavioral expression and when they have moral implications. The halo effect seems to increase with increased acquaintance.

Fiedler, Warrington, and Blaisdell ${ }^{48}$ found that subjects assume greater similarity between themselves and their positive choices than between themselves and their negative choices. Green ${ }^{49}$ obtained a correlation of .74 between accuracy in estimating one's own leadership (as established by pooled judgment of others) and ability to judse leadership in others.

Rank or status differential also has a bearing upon the ratings of the judgments required. Williams and

[^14]Leavitt 50 found fellow officer candidates were better predictors of combat performance than were training officers. Bruner and Taguiri ${ }^{51}$ believe leaders may attain their status because of their superior capacity to judge group opinion while Hemphill ${ }^{52}$ considers that a leader exerts a strong influence upon the group's opinions.

Bender and Hastorf 53 think projection plays an important part in the judgments of others' opinions which would result in the leaders judgment coming closer than anyone else to the opinion of the group. This accuracy of the leader's judgment of group opinion has been called social sensitivity. This accuracy is perhaps a combination of projection by the leader and the similarity between the leader and the group along with empathy. Bruner and Taguiri 54 remove much of the obscurity and bring the problem sharply into focus when they write:

50 . B. Williams and H. J. Leavitt, "Group Opinion as a Predictor of Military Leadership." Journal Consultant Psychology, Vol. XI, (1947), pp. 283-291.
$51_{\text {Bruner }}$ and Taguiri, loc. cit.
$52_{\mathrm{J}}$. K. Hemphill, Situational Factors in Leadership. (Columbus, Ohio: Ohio State University, Bureau Educational Research Monograph; No. 32, XII, 1950).

53 I. E. Bender and A. H. Hostorf, "On Measuring Generalized Empathic Ability (Social Sensitivity)," Journal of Abnormal and Social Psychology, (1953), pp. 503-506.
$5^{54}$ Bruner and Taguiri, loc. cit.

45
The first step in reacting to another is forming an impression of him. For this reason far more effort must be expended on discovering how people come to perceive other people as they do.

## CHAPTER III

## ANALYSIS OF DATA

## Composition of the Samples

The sample of thirty teachers was randomly picked from the total of three thousand nine hundred thirty seven teachers in Oklahoma County. Elementary teachers comprise $55 \%$ of the total while $45 \%$ are secondary teachers. The sample was stratified in such a manner as to insure the same percentage of teachers in the sample as there were proportions of elementary and secondary teachers in Oklahoma County. The study sample comprised 16 elementary teachers and 14 secondary teachers; 6 of them were men teachers and 24 were women. Ten school districts were represented in the sample of teachers, and the number of buildings represented was twenty-four.

The administrators were also randomly selected from the total population of administrators in the public schools of Oklahoma County. Eleven of the twenty school districts had representation in the sample. The thirty
administrators represented twenty-eight school buildings. Seventeen were elementary administratnrs, ten were secondary administrators, and three were superintendents. Twentyfive of the administrative sample were men and five were women.

The thirty school board members represented seventeen of the twenty school districts in Oklahoma County, and all of them were men.

## Description and Photographs of the Subjects

Each group of teachers, administrators, and board members were randomly divided into three subgroups for the purpose of rating five typologies of principals by the different methods. The description of the typologies was rated by one subgroup of judges while the combination of description and photograph was rated by a second subgroup of judges, and the third subgroup rated the five men from a photograph only.

This set of typologies was developed by Dr . Robert E. Ohm, Associate Professor of Education, University of Oklahoma, and consisted of the basis on which the judges in this study made their rankings. The typological descriptions follow:

Five Principal Typologies
I. Brown is tall, clean cut, friendly and energetic. He does little tings that make it pleasant to be a member of the faculty. He looks out for the personal welfare of individual group members.

He is conscientious and efficient and goes to all the meetings he feels the school!s public relations require. He schedules work to be done and maintains definite standards of performance. He knows exactly the type of school he wants and lets his faculty know.

Teachers know where they stand with Brown; he tells them. Staff meetings are short and to the point with a minimum of time wasting discussion.

The teacher's manual; developed by Brown in consultation with his teachers spells out the rules and resulations in detail. Brown knows the manual and school policies so well that he is never at a loss in dealing with the problems and questions that arise. Deadlines are met and teachers are called to task when necessary with appropriate consultation and explanation. Though invariably pleasant and considerate, the staff is comfortable with the reasonable distance, Brown seems to maintain between himself and the staff.
II. White is well groomed, likeable, cordial, and full of enthusiasm. Faculty members find it easy to talk over their problems with him. He has formed strons friendships with some members of the staff.

White is a student of group process and conducts faculty meetinss so as to ensure group consensus. Agendas are compiled by an appointed committee that works closely with White. Any proposal for action brought up from the floor is senerally referred to the appropriate committee for consideration and recommendation so that White has a chance to provide the guidance needed.

Major problems are discussed with influential constituents and/or staff members prior to their consideration by the staff or community groups. Timing and strategy play an important part in the formal consideration process. White manages to get support for most of his proposals and decisions prior to formal
action, or, if a decision has been made, he is able to get formal backing of the actions taken.

White believes that, as chief administrator, he has more responsibility than other staff members in determining what is to be done. His knowledge of the informal organization enables him to guide the staff into doing the things that are necessary even though some individuals may be in fundamental disagreement with him.
III. Green is slender, well dressed, smokes a pipe and has a warm and ready smile for everyone. His office is always open and he is always ready and willing to consult on any matter. People get the feeling that he really listens to what they are sayins and find themselves telling more than they might have originally intended. His responses are generally in the form of questions or comments that help the individual to clarify his thinking.

Green avoids giving value judgments or directive statements since he believes that staff and students should be given as much freedom as possible within a framework of necessary rules and expectations in order to create their own roles in the organization. He sees his job as creating an environment in which teachers can teach in the best way they know how.

Staff meetings are open discussions in which everyone participates freely. The agenda may be ignored in order to get at what Green feels are the real problems of the staff or school. Faculty meetings are seen as a way of developing insights and gaining understandings that will guide teachers in their work.

Green expresses a firm commitment to selfrealization as an important aim of administration. He leaves his staff alone unless they come to him seeking help. He encourages them to grow professionally, primarily by giving them increased responsibility and encouraging them to take leadership in their areas of competence.
IV. Black is quiet, unassuming, and open with an implicit strength that induces liking and respect.

Black spends much of his time in planning and evaluation sessions with groups and individuals that have accepted responsibility for the development of some part of the school program or solution to a school problem. Teachers know where they stand with Black and he knows where he stands with them. They tell each other as they evaluate their work in conferences and meetings.

Black works well as either a leader or member of the group as the occasion demands. Despite the fact that group leadership and community representation is shared among the faculty, Black is seen as having influence with his superiors and with important groups in the community.

Black sees his role as one of developing, clarifying, or reaffirming purposes and objectives. Important decisions are checked with relevant individuals and groups in order to get as much information as possible on alternatives and the consequences of the decision before formal action is taken.

When conflicts arise, Black tries to resolve them by reference to the aims and philosophy of the school. He tries to get both sides of the issue and persuade those concerned to arrive at a consensus on the course of action to take. When necessary, Black will make the decision. He will, however, evaluate the consequences of his unilateral decisions with his staff.
V. Cardinal is tall and has a personal magnetism that produces instant liking, trust, and respect in the people he meets and with whom he works. Teachers come to him with their problems despite the fact that he is sometimes so busy that he is not always available to give the help they have come to expect from him. He initiates many of the innovations and improvements in the school prosram through his ability to take decisive and vigorous action based on planning that sets and clarifies the role expectations of those involved.

Faculty meetings are generally satisfying because his personality and ideas almost always produce group agreement on the plans and actions he has suggested. The faculty have come to depend on him and he sees his job as being worthy both of the trust of the faculty and confidence of his superiors. His superiors rate him as
a dynamic and decisive leader in control of his organization. Few problems or conflicts get past him. Consequently, he does much more informing of his superiors than he does consulting. He belongs to a number of the important community organizations. He is often in demand as a speaker for community events and club meetings.

Though he would like to have other members of the staff take some decision making responsibility and has tried to decentralize some of the administrative activity, the staff has come to feel that he has the most information and is in the best position to determine what needs to be done. Consequently, they resist efforts to involve them in administration, preferring rather, to concentrate on their teaching.

## Photographic Factor

The photographs on the following page were attached to the descriptions above and constituted the second operation in this study wherein another set of three subgroups ranked the typologies from both a photograph and a description.

Still a third set of three subgroups ranked the principal from these photographs alone.

## The Measure of Agreement Among the Raters

Kendall's coefficient of concordance was used to measure the degree of agreement in the various groups who rated the five men by the three different methods. This coefficient has a value ranging from zero to one. Maximum agreement is represented by a coefficient of l.o. Such a

case would register perfect agreement of all judges on every ranking made. Maximum disagreement is represented by 0.0 in which case there would be complete randomness of the judges' selections. It is readily observable that the closer the coefficient approaches 1.0 the more agreement there is among the judges.

The fact that the coefficient may be high does not necessarily mean that the order established by the rankings is correct. This measure of agreement simply tells whether or not there is agreement among the raters. Since the raters were rating the subjects in attributes for which there is no direct measure, the main area of agreement or disagreement would be primarily opinions and value judgments. This coefficient of concordance reveal whether or not similar opinions and value judgments are held by the raters.

If $W_{c}$ represents the coefficient of enncordance, then according to Kendall and Smith ${ }^{1}$

m
where $m$ is the number of judges and sum of squares between

[^15]columns is represented by

Between $=\frac{j=1}{n} \begin{cases}n \\ M & \left.x_{i j}\right)^{2} \\ M & \frac{-m n(n+i)^{2}}{4}\end{cases}$
and total sum of squares represents

$$
\text { Total }+\frac{M\left(N^{3}-N\right)}{12}
$$

where n is the number of subjects to be ranked.

Test of Agreement Among Raters by Description only From the data in table 1 substitution can be made into the formula.

TABLE 1
Ranks by teachers from a description only.

|  |  |  |  |  |
| :--- | :---: | :---: | :---: | :---: | :---: |

TABLE 1
(continued)


By reference to the proper table ${ }^{l}$ we find that values of $W_{c}$ equal to or greater than .307 would occur 1 per cent of the time or less when $m=10$ and $n=5$. Since
${ }^{1}$ Edwards, Allen L., Statistical Methods for the Behavioral Sciences, (New York: Rinehart \& Company, 1954), p. 514.
the observed value of .336 exceeds .307 , it must be concluded that the agreement among the teachers is sufficiently good that it cannot be accounted for by chance.

Table 2 lists the coefficient of concordance for all rankings made by each group ranking from the descriptions only.* The ten teachers who received the description only of the five principals were in agreement on one of the four questions to such a degree that it cannot be accounted for by chance. Question one is the only one on which there was agreement.**

TABLE 2
The Coefficient of concordance on the four questions when ranked from description only.

| Question | Teachers | Administrators | Board | Members |
| :---: | :---: | :---: | :---: | :---: |
| 1 | . 336 | . 314 |  | 178 |
| 2 | . 134 | . 326 |  | 070 |
| 3 | . 248 | . 218 |  | 176 |
| 4 | . 134 | . 310 | Did | not apply |
| The ten administrators who received the descripof the five principals were in agreement on three |  |  |  |  |
| *Raw data are included in Appendix $C$. <br> *See Page 81 for text of questions. |  |  |  |  |

of the four questions. Question 3 was the only one lacking agreement.

The ten board members rated the five principals on only three areas, but they failed to reach agreement on any of the three questions.

Looking at the questions from the view of the different raters, it is noted that question 1 receives agreement from the teachers and administrators but not board members. Question 11 receives agreement from the administrators only while Question 111 does not receive agreement by any group. Question IV, which was not answered by board members, did receive agreement from administrators but not from teachers.

Test of agreement among raters who received the
combination of the description and a photograph
Table 3 lists the coefficient of concordance of all rankings made by each group ranking from the combination of description and photograph. The ten teachers who received the combination of the description accompanied by a photograph (table 3) were in somewhat more agreement than those who rated the five principals from the description only. The ones who received the combination were in agreement on two of the four questions. Questions 1 and iV received agreement while Questions 11 and 111 did not.

## TABLE 3

The coefficient of concordance on the four questions when ranked from the combination of description and photograph.

| Question | Teachers | Administrators | Board Members |
| :---: | :---: | :---: | :---: |
| 1 | .466 | .324 | .190 |
| 2 | .130 | .410 | .130 |
| 3 | .182 | .184 | .278 |
| 4 | .382 | .094 | Did not apply |

The ten administrators receiving the combination of description and photograph also were in agreement on two of the questions, but their areas of agreement were Questions 1 and 1l. This compares with three questions the administrators agreed upon from the description only.

The ten school board members who rated the combination of description and photograph did not reach agreement on their choices. These men rated the subjects on only three questions as did the board members who rated from the description only.

Test of Agreement Among Raters from the Photographs.
Table 4 lists the coefficient of concordance for all rankings made by each group ranking from a photograph only. The ten teachers who rated the five principals from a photograph only (table 4) were not in agreement on any
of the four questions. Only on question 111 did they even approach any semblance of agreement.

The ten administrators rating the five principals from a photograph only also were not in agreement on any of the questions. In fact, the randomness of their selection was quite apparent.

The ten board members who rated the five principals from a photograph only were consistent with the teachers and administrators by not reaching any agreement on their choices.

TABLE 4
The coefficient of concordance on the four questions when ranked from a photograph only.

| Question | Teachers | Administrators | Board Members |
| :---: | :---: | :---: | :---: |
| 1 | .154 | .306 | .270 |
| 2 | .266 | .194 | .294 |
| 3 | .306 | .206 | .186 |
| 4 | .176 | .292 | Did not apply |

Distribution of First and Last Place Rankings
Since this study was interested in more than a test of agreement among the raters, it was necessary to view the ratings from another aspect. To determine if the
judges chose a certain person first more often than any other, tables of first and last place rankings were made for each question. The total number of first place ranks and the total number of last rankings were then computed for each group of judges. If each subject rated received about the same number of first. place rankings, it could be assumed that the group of judges did not have a preference among the five choices. On the other hand if one subject received considerably more first place rankings, it would suggest he was the leading choice of the various groups of raters.

TABLE 5
A TABLE OF IST RANKS FROM THE GROUPS WHICH RATED FROM A DESCRIPTION ONLY.

| Teachers |  |  |  |  |  | Administrators |  |  |  |  | Board Members |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Q1 | Br | W | G | B1 | C | Br | W | G | B1 | C | Br | W | G | B1 | C |
| Q1 | 2 | 1 | 2 | 5 | 0 | 3 | 0 | 0 | 7 | 0 | 4 | 0 | 3 | 3 | 0 |
| Q2 | 1 | 2 | 0 | 5 | 2 | 1 | 1 | 1 | 5 | 2 | 1 | 1 | 3 | 3 | 2 |
| Q3 | 2 | 1 | 0 | 5 | 2 | 1 | 2 | 1 | 5 | 1 | 3 | 0 | 2 | 3 | 2 |
| Q4 | 3 | 1 | 1 | 3 | 2 | 3 | 1 | 0 | 6 | 0 |  |  | n | $t$ a | ply |
| Total | 8 | 5 | 3 |  | 6 | 8 | 4 | 2 | 23 | 3 | 8 | 1 | 8 | 9 | 4 |
|  | As shown in table 5 which is a table of lst |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| rank | c f | om | th | gr | up |  |  |  |  |  | scri |  |  |  |  |

Black was ranked first eighteen times by the teachers, twenty-three times by the administrators, and nine times by the board members. According to this table Black received more first place rankings than any other leader. Teachers and administrators rated him first considerably more times than did the board members.

TABLE 6

> A TABLE OF LAST RANKS FROM THE GROUPS WHICH RATED FROM A DESCRIPTION ONLY.

|  | Teachers |  |  |  |  | Administrators |  |  |  |  |  | Board Members |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Br | W | G | Bl | C | Br | W | G | Bl |  | c | Br | W | G | BI | C |  |
| Q1 | 1 | 4 | 1 | 0 | 4 | 4 | 3 | 2 | 0 |  | 1 | 1 | 2 | 2 | 1 | 4 |  |
| Q2 | 3 | 2 | 4 | 1 | 0 | 3 | 3 | 4 | 0 |  | 0 | 0 | 4 | 1 | 3 | 2 |  |
| Q3 | 3 | 1 | 4 | 0 | 2 | 5 | 2 | 2 | 0 |  | 1 | 1 | 3 | 2 | 1 | 3 |  |
| Q4 | 2 | 2 | 2 | 0 |  | 3 | 3 | 2 | 0 |  | 2 |  | oes | not | $t$ | p |  |
| otals | 9 |  | 11 | 1 | 10 |  | 11 | 0 | 0 |  |  | 2 | 9 | 5 | 5 | 9 |  |

Table 6 which is a table of last ranks from the groups which rated from a description only shows that Black received one last place vote by the teachers, no last place votes by the administrators, and five last place votes by the board members. He received fewer last place ranks than any other subject from the teachers and administrators while the board members ranked Brown with the least number of last ranks. As pointed out earlier there was agreement
according to Kendall's coefficient of concordance on one of the questions rated by the teachers while the administrators had agreement on three of the questions, but the board members did not reach agreement on any of their ratings.

TABLE 7
A TABLE OF IST RANKS FROM THE GROUPS WHICH RATED FROM A DESCRIPTION AND PHOTO.

|  | Teachers |  |  |  |  | Administrators |  |  |  |  | Board Members |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Br | W | G | Bl | c | Br | W | G | B1 | C | Br | W | G | B1 | C |
| Q1 | 4 | 0 | 3 | 3 | 0 | 0 | 0 | 1 | 8 | 1 | 6 | 0 | 1 | 2 | 1 |
| Q2 | 2 | 1 | 1 | 4 | 2 | 1 | 0 | 0 | 7 | 2 | 3 | 1 | 1 | 2 | 3 |
| Q3 | 1 | 1 | 2 | 4 | 2 | 2 | 0 | 0 | 5 | 3 | 0 | 0 | 1 | 5 | 4 |
| Q 4 | 3 | 0 | 4 | 3 | 0 | 5 | 0 | 3 | 2 | 0 |  | oes | no | a | ply |
| tals | 10 |  | 10 |  | 4 | 8 | 0 |  | 22 | 6 | 9 | 1 | 3 | 9 | \% |

Table 7 which indicates the number of first rankings from those people who rated from the combination of description and photograph also demonstrates the various groups' preference for Black. The teachers chose Black for first place fourteen times while they chose him last only three times (Table 8). The administrators chose Black first twenty-two different times and placed him last only two times.

The school board members again did not have as clear cut a choice as did the teachers and administrators. Black and Brown each received nine first rankings while Cardinal was first choice eight times.
table 8
A table of last ranks from the groups which RATED FROM A DESCRIPTION AND PHOTO.

|  | Teachers |  |  |  |  | Administrators |  |  |  |  | Board Members |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Br | W | G | B1 | C | Br | W | G | Bl | C | Br | W | G | Bl | C |
| Q1 | 0 | 6 | 1 | 0 | 3 | 2 | 4 | 2 | 1 | 1 | 1 | 2 | 5 | 0 | 2 |
| Q2 | 1 | 4 | 2 | 1 | 2 | 1 | 3 | 5 | 0 | 1 | 1 | 1 | 6 | 0 | 2 |
| Q3 | 1 | 5 | 1 | 1 | 2 | 3 | 3 | 1 | 1 | 2 | 1 | 1 | 6 | 0 | 2 |
| Q4 | 1 | 6 | 1 | 1 | 1 |  | 1 | 2 | 0 | 4 |  | Does | no | t ap | ply |
| tals | 3 | 21 | 5 | 3 | 8 |  | 11 | 10 | 2 | 8 | 3 | 4 | 17 | $\bigcirc$ |  |

On the number of last rankings (Table 8) Black received three last rankings by the teachers, two last place rankings by the administrators, and no last place rankings by the board members. On Kendall's coefficient of agreement the teachers reached agreement on two of the four questions as did the administrators. The board members again failed to reach agreement on any of the questions. It is apparent that adding a photograph to the description makes practically no difference. This
strongly suggests that the description anchors the value judgment and the photograph is accepted, but this is a question that deserves additional research.

TABLE 9
TABLE OF 1ST RANKS FROM THE GROUPS WEICH RATED FROM A PHOTOGRAPH ONLY


The number of first place rankings from those who rated the principals from a photograph only had little resemblace to the previous rankings (Table 9). Black was the choice of the teachers as he received 16 first rankings while the administrators chose Brown with twenty-two first place ballots. The board members likewise selected Brown with eighteen first ballots.

The teachers who rated the photographs only rated Black twice on last ranks (Table 10) for the least number of last ranks and the administrators gave Brown the least
number of last ranks with no last place selections. Cardinal had no last ranks among the board members. As one might expect there was no agreement as measured by Kendall's coefficient of concordance on any of the groups that rated from the photographs only. Psychologists have pointed out that visual perception without other stimuli is more what is in the perceiver rather than what is in the stimuli.

TABLE 10
A TABLE OF LAST RANKS FROM THE GROUPS WHICH RATED FROM A PHOTOGRAPH ONLY.

|  | Teachers |  |  |  |  | Administrators |  |  |  |  | Board Members |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Br | W | G | Bl | C | Br | W | G | Bl | C | Br | W | G | Bl | C |
| Q1 | 2 | 3 | 2 | 1 | 2 | 0 | 3 | 2 | 1 | 4 | 1 | 0 | 5 | 1 | 3 |
| Q2 | 2 | 1 | 5 | 0 | 2 | 0 | 3 | 2 | 1 | 4 | 1 | 0 | 4 | 1 | 4 |
| Q3 | 1 | 2 | 5 | 0 | 2 | 0 | 2 | 3 | 2 | 3 | 1 | 0 | 4 | 1 | 4 |
| Q4 | 3 | 1 | 2 | 1 | 3 | 0 | 3 | 3 | 1 | 3 |  | es | not | app |  |
| tals | 8 |  | 14 | 2 | 7 |  |  | 10 | 5 | 14 |  |  | 13 | 3 | 11 |

A look at first and last ranks is also important from the standpoint of ratings by the three independent groups of teachers, three independent groups of administrators, and the three independent groups of board members. Tables 11 and 12 reveal these rankings from the teachers. Black received eighteen first ranks from the first group
of teachers while these same teachers gave him the lowest number of last ranks with one. The second group of teachers (rating from the combination of description and photograph) also rank Black highest with fourteen first ranks and gave him only three last rankings which tied him with Brown for the least number of last rankings. The third group of teachers (rating from the photograph only) chose Black again with the most first rankings with sixteen and only two last rankings for the least number of last ranks. This was a chance factor as far as can be determined. There was no statistically significant agreement.

TABLE 11
NUMBER OF IST RANKS BY TEACHERS

|  | Description |  |  |  |  | Description \& Photo |  |  |  |  |  | Photo |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Br | W | G | B1 | c | Br | W | G | B1 | c | Br | W | G | B1 | C |
| Q1 | 2 | 1 | 2 | 5 | 0 | 4 | 0 | 3 | 3 | 0 | 4 | 1 | 0 | 4 | 1 |
| Q2 | 1 | 2 | 0 | 5 | 2 | 2 | 1 | 1 | 4 | 2 | 1 | 2 | 0 | 4 | 3 |
| Q3 | 2 | 1 | 0 | 5 | 2 | 1 | 1 | 2 | 4 | 2 | 1 | 3 | 0 | 4 | 2 |
| Q 4 | 3 | 1 | 1 | 3 | 2 | 3 | 0 | 4 | 3 | 0 | 3 | 1 | 1 | 4 | 1 |
| tals | प | 5 | 3 | 18 | 6 | 10 | 2 | 10 | 14 | 4 | 9 | 7 | 1 | 16 | 7 |

TABLE 12
NUMBER OF LAST RANKS BY TEACHERS

|  | Description |  |  |  |  | Description \& Photo |  |  |  |  | Photo |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Br | W | G | B1 | C | Br | W | G | B1 | C | Br | W | G | Bl | c |
| Q1 | 1 | 4 | 1 | 0 | 4 | 0 | 6 | 1 | 0 | 3 | 2 | 3 | 2 | 1 | 2 |
| Q2 | 3 | 2 | 4 | 1 | 0 | 1 | 4 | 2 | 1 | 2 | 2 | 1 | 5 | 0 | 2 |
| Q3 | 3 | 1 | 4 | 0 | 2 | 1 | 5 | 1 | 1 | 2 | 1 | 2 | 5 | 0 | 2 |
| Q4 | 2 | 2 | 2 | 0 | 4 | 1 | 6 | 1 | 1 | 1 | 3 | 1 | 2 | 1 | 3 |
| tals | 9 | 9 | II | 1 | 10 | 3 | 21 | 5 | 3 | 8 | 8 |  | 14 | 2 | 7 |

The administrators ranking the principals by the three different methods had similar choices. The administrators who ranked from the description gave Black 23 lst place ranks with no last choices (tables $13 \& 14$ ). The same table reveal that those administrators who ranked the five men from the combination of description and photograph chose Black as a first choice 22 times and last only 2 times. Those administrators who ranked the men from a photograph only gave Brown as their first choice 22 times with no last place choices.

TABLE 13
NUMBER OF IST RANKS BY ADMINISTRATORS

|  | Description |  |  |  |  | Description \& Photo |  |  |  |  | Photo |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Br | W | G | Bl | c | Br | W | G | Bl | C | Br | W | G | Bl | c |
| Q1 | 3 | 0 | 0 | 7 | 0 | 0 | 0 | 1 | 8 | 1 | 5 | 1 | 0 | 4 | 0 |
| Q2 | 1 | 1 | 1 | 5 | 2 | 1 | 0 | 0 | 7 | 2 | 5 | 2 | 0 | 2 | 1 |
| Q3 | 1 | 2 | 1 | 5 | 1 | 2 | 0 | 0 | 5 | 3 | 5 | 3 | 0 | 2 | 0 |
| Q4 | 3 | 1 | 0 | 6 | 0 | 5 | 0 | 3 | 2 | 0 | 7 | 0 | 0 | 2 | 1 |
| Totals | 8 | 4 | 2 | 23 | 3 | 8 | 0 | 4 | 22 | б | 22 | 6 | 0 | 10 | 2 |

TABLE 14
NUMBER OF LAST RANKS BY ADMINISTRATORS

Description Description \& Photo Photo
$\begin{array}{lllllllllllllll}\mathrm{Br} & \mathrm{W} & \mathrm{G} & \mathrm{Bl} & \mathrm{C} & \mathrm{Br} & \mathrm{W} & \mathrm{G} & \mathrm{Bl} & \mathrm{C} & \mathrm{Br} & \mathrm{W} & \mathrm{G} & \mathrm{Bl} & \mathrm{C}\end{array}$

| Q1 | 4 | 3 | 2 | 0 | 1 | 2 | 4 | 2 | 1 | 1 | 0 | 3 | 2 | 0 | 4 |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| Q2 | 3 | 3 | 4 | 0 | 0 | 1 | 3 | 5 | 0 | 1 | 0 | 3 | 2 | 1 | 4 |
| Q3 | 5 | 2 | 2 | 0 | 1 | 3 | 3 | 1 | 1 | 2 | 0 | 2 | 3 | 2 | 3 |
| Q4 | 3 | 3 | 2 | 0 | 2 | 3 | 1 | 2 | 0 | 4 | 0 | 3 | 3 | 1 | 3 |

Totals $15 \begin{array}{llllllllllllll}11 & 10 & 0 & 4 & 9 & 11 & 10 & 2 & 8 & 0 & 11 & 10 & 5 & 14\end{array}$

Tables 15 \& 16 which show the first and last
choices of the board members indicate inconsistency in their selections. Those who selected the men from the description
only gave Black only 9 first place votes while they ranked Brown with the fewest last place votes with 2. Those rating from the combination gave Brown \& Black each nine first place ranks and Black received no last place votes. The board members selecting their choices from a photograph made Brown their choice with 18 first ranks while White received the lowest number of last ranks with none.
table 15
NUMBER OF IST RANKS BY BOARD MEMBERS


## Testing the Hypotheses

The study was concerned with agreement or non agreement among the raters on the three methods of rating the subjects and whether or not the addition of a photograph had any bearing upon their first choice selections. It was assumed that there would be no significant agreement among the raters and that the introduction of a photograph with the description of the role would affect the groups' selections. On these bases the following null hypotheses were formulated. They were:

1. There is no statistically significant agreement among the three groups when the method of rating is from a description only.
2. There is no statistically significant agreement among the three groups when the method of rating is from a combination of a photograph and a description of the role.
3. There is no statistically significant agreement among the three groups when the method of rating is from a photograph only.
4. The person chosen as the choice of the teachers rating from a description would not be the same as the choice of the teachers rating from the combination of the description accompanied by a photograph.
5. The person chosen as the choice of the administrators rating from a description would not be the same as the choice of the administrators rating from the combination of the description accompanied by a photograph.
6. The person chosen as the choice of the board members rating from a description would not be the same as the choice of the board members rating from the combination of the description accompanied by a photograph.

Each hypothesis is presented with a discussion of its findings. Inferences are made where differences are shown to exist, but no attempt is made to establish the underlying variables.

## Testing of Hypotheses

Hypothesis number 1: There is no statistically significant agreement among the three groups when the method of rating is from a description only. Table 17 presents the coefficient of concordance for the three groups who rated the subjects from the description only. A coefficient value of .307 or greater at the . 01 level was necessary to reach significant agreement. On the basis of these figures the teachers reached agreement on one question of the four asked while the administrators attained agreement on three of the four questions, but the board members failed to reach agreement on any question.

The null hypothesis for the teachers is rejected on question 1 while it is accepted on question 2, 3, and 4. The hypothesis for the administrators is rejected on question 1,2 , and 4 while it is accepted on question 3. The hypothesis is accepted on all questions asked the board members.

TABLE 17
The Coefficient of concordance on the four questions when ranked from description only.

| Question | Teachers | Administrators | Board Members |
| :--- | :---: | :---: | :---: |
| 1 | .336 | .314 | .178 |
| 2 | .134 | .326 | .070 |
| 3 | .248 | .218 | .176 |
| 4 | .134 | .310 | Did not apply |

the four questions.

Agreement/non agreement on the four questions from the description and photograph among the teachers, administrators, and board members.

| Question | Teachers | Administrators | Board Members |
| :---: | :---: | :---: | :---: |
| 1 | A | A | NA |
| 2 | NA | A | NA |
| 3 | NA | NA | NA |
| 4 | A | NA | Did not apply |

A = agreement based on coefficient of concordance $N A=$ non agreement based on coefficient of concordance agreement is based on the . Ol level of confidence.

The hypothesis is rejected for question 1 and 4 among the teachers while questions 1 and 2 are rejected among the administrators. On all other questions from this method of rating the hypothesis is accepted. Mention should be made of the fact that teachers and administrators both again reach agreement on question 1. Also it should be noted that the baard did not reach agreement on any question.

Hypothesis Number 3. There is no statistically significant agreement among the raters when the method of
rating while table 19 illustrates areas of agreement or non agreement.

TABLE 19
Agreement/non agreement on the four questions when the method of rating is from a photograph only.

| Question | Teachers | Administrators | Board Members |
| :---: | :---: | :---: | :---: |
| 1 | NA | NA | NA |
| 2 | NA | NA | NA |
| 3 | NA | NA | NA |
| 4. | NA | NA | Did not apply |

$N A=$ non agreement based on coefficient of concordance at the . Ol level of confidence.

The hypothesis is accepted for all questions with this method of rating. Table 4 shows the apparent randomness of their selections. This might be expected in view of the fact that psychologists have pointed out that in face of ambiguous stimuli, response is determined more by what is in the perceiver than by what is in the stimulus.

Fypothesis Number 4: The person chosen as the choice of the teachers rating from a description would not be the same as the choice of the teachers rating from the combination of a description accompanied by a photograph.

Table 11 indicates that Black received more first place rankings than did any other subject when the teachers rated from the description only while those teachers who rated from the description and photograph combined also gave Black more first place rankings than they did any one else although the margin was as greater in the latter method. Therefore, the null hypothesis is rejected because both independent groups of teachers selected the same subject on the basis of first ranks.

Eypothesis number 5: The subject chosen as the choice of the administrators rating from a description would not be the same as the choice of the administrators rating from the description and photograph combined. From the information given in table 13, Black was given a majority of first rankings from the first group of administrators with 23 first ranks while the second group of administrators also made Black their choice with 22 first place votes. From these figures the null hypothesis is rejected because both groups chose the same subject. It, is concluded-that the addition of the photograph made little difference in their selection.

Eypothesis number 6: The subject chosen as the choice of the board members rating from a description only would not be the same as the choice of the board members
rating from the combination of a description accompanied by a photograph. Table 15 graphically illustrates the somewhat random selection of both groups of board members. There is only one first rank separating the top three choices in both groups. The addition of the photograph did not lower the number of first ranks that the leader (Black) received; however, the number of first ranks changed considerably between two other subjects.

TABLE 20
Comparison of Percentages of first rankings by Description and Description With Photograph.
ieachers Administrators

| Subject | Descript. | Photo \& Descript. | Subject | Descript. | Photo \& Descript. |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Brown | 20\% | 25\% | Brown | 20\% | 20\% |
| White | 12.5\% | 5\% | White | 10\% | $0 \%$ |
| Grėen | 7.5\% | 25\% | Green | 5\% | 10\% |
| Black | 45\% | 35\% | Black | 57.5\% | 55\% |
| Cardinal | 15\% | 10\% | Cardinal | 7.5\% | 15\% |
| Totals | 100\% | 100\% | Totals | 100\% | 100\% |

All Judges Combined

| Subject | Descript. | Photo \& Descript. | Subject | Descript. | Photo \& Descript |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Brown | 26.7\% | 30\% | Brown | 22.2\% | 25\% |
| White | 3.3\%. | 3.3\% | White | 8.6\% | 2.8\% |
| Green | 26.7\% . | 10.0\% | Green | 13.1\% | 15\% |
| Black | 30\% | 30\% | Black | 44.2\% | 40\% |
| Cardinal | 13.3\% | 26.7\% | Cardinal | 11.9\% | 17.2\% |
| Totals | 100\% | 100\% | Totals | 100\% | 100\% |

Table 20 further illustrates the effects of adding a photograph to the description. This table presents the percentage of first ranks that each subject received from the description from each group of teachers, administrators, and board members and also the percentage of first place rankings from the combined total of all raters who rated the subjects by the two methods.

It is obvious from the information in this table that the introduction of a photograph had little bearing upon the percentages of first ranks that each. subject received. The subject (Black) with the most first ranks received 4.2 per cent less first ranks from the judges who rated from the combination than he did from the judges who rated from the description only.

## CHAPTER IV

SUMMARY, CONCLUSIONS, AND RECOMMENDATIONS
The purpose of the study was to investigate school leadership percepts as determined by three different groups of school-connected persons. The study proposed to determine if leadership roles are perceived in the same vein by teachers, school administrators, and school board members. Three particular questions were pursued:

1. How would each group rate five different types of leadership roles from a description of each role as it is characterized in a school administrator?
2. How would each group rate these same five types of leadership roles when the description of each role is accompanied by a photograph?
3. Finally, how would the different groups rate the five different administrators from only a photograph? The rating devices consisted of a description of five leadership roles;* and a photograph of five men who *See page 47.
were acting school administrators but these five men, whose photographs were used, were not known to the writer or the judges who rated them. Each group of judges (teachers, administrators, and board members) consisted of thirty people. Each group of thirty was then randomly divided in three subgroups of ten each. The population then consisted of three subgroups of teachers, three subgroups of administrators, and three subgroups of board. members. One subgroup was asked to rate the subjects from a description only while another subgroup was asked to rate the subjects from the combination of a description accompanied by a photograph. The last subgroup of judges rated the subjects from a photograph only.

It was assumed with the introduction of a photograph that there would be no significant agreement among the raters, and that the introduction of a photograph with the description of the leadership role would alter the groups' selections. On the basis of these assumptions the following null hypotheses were formulated:

1. There is no statistically significant agreement among the three groups when the method of räting is from a description only.
2. There is no statistically significant agreement among the three groups when the method of rating is
from a combination of a photograph and a description of the role.
3. There is no statistically significant agreement among the three groups when the method of rating is from a photograph only.
4. The person chosen as the choice of the teachers rating from a description would not be the same as the choice of the teachers rating from the combination of a description accompanied by a photograph.
5. The person chosen as the choice of the administrators rating from a description would not be the same as the choice of the administrators rating from the description accompanied by a photograph.
6. The person chosen as the choice of the board members rating from a description would not be the same as the choice of the board members rating from the combination of the description accompanied by a photograph.

Kandall's coefficient of concordance and tables of first ranks were the statistical techniques used in testing the hypotheses.

## Findings

Since each group was asked to rate the subjects on several questions, it is necessary to present agreement non-agreement on all questions asked. The teachers and
administrators ranked the subjects on four questions while the board members ranked them on three questions. The questions asked each group of judges are listed as follows: ADMINISTRATORS

1. If you were a superintendent, and these five were principals in your school system, list them in order from best to worst.
lst choice -
2nd choice -
3rd choice -
4th choice -
5th choice -
2. A situation has to come to a head in a school in which the "old timers" are aligned against the group that wanted to make some radical changes in the school program. The split is creating a morale problem and causing difficulties in carrying on an educational program. The incumbent principal has been removed. In what order would you rate the five as being best qualified to take over the vacant position?
list choice -
2nd choice -
3rd choice -
4th choice -

5th choice -
3. A considerable part of the community has become concerned
about the teaching of controversial materials in the
schools. The situation has reached a point where the
incumbent principal has resigned. In what order would you
rate the five as being best qualified to take over the
vacant position?
lst choice -
2nd choice -
3rd choice -
4th choice -
5th choice -
4. Rank the fıve in the order that you think would operate from most like you to least like you.
lst choice
2nd choice -
3rd choice -
4 th choice -
5th choice -.

TEACHERS

1. If you were a teacher, choose from these five principals, the one you would best like to work with. List them in order from best to worst.
lst choice -
2nd choice -

- 

3rd choice -
4th choice -
5th choice -
2. A situation has come to a head in a school in which the "old timers" are aligned against the group that wanted to make some radical changes in the school program. The split is creating a morale problem and causing difficulties in carrying on an educational program. The incumbent principal has been removed. In what order would you rate the five as being best qualified to take over the vacant position?
lst choice -
2nd choice -
3rd choice -
4th choice -
5th choice -
3. A considerable part of the community has become concerned about the teaching of controversial materials in the schools. The situation has reached a point where the incumbent principal has resigned. In what order would you rate the five as being best qualified to take over the vacant position?
lst choice -
2nd choice -
3rd choice -
4th choice -
5th choice -
4. If you were to become an administrator at some later
time, rank the five in the order that you think would operate from most like you to least like you.
lst choice -
2nd choice -
3rd choice -
4th choice -
5th choice -

SCHOOL BOARD MEMBERS

1. If you were a member of a board of education, and were selecting a superintendent from the group which of the five would you appoint?
lst choice -
2nd choice -
3rd choice -
4 th choice -
5th choice -
2. A situation has come to a head in a school in which the

## 85

"old timers" are aligned against the group that wanted to make some radical changes in the school program. The split is creating a morale problem and causing difficulties in carrying on an educational program. The incumbent principal has been removed. In what order would you rate the five as being best qualified to take over the vacant position?
lst choice -
2nd choice -
3rd choice -
4 th choice -
5th choice -
3. A considerable part of the community has become concerned about the teaching of controversial materials in the schools. The situation has reached a point where the incumbent principal has resigned. In what order would you rate the five as being best qualified to take over the vacant position?
lst choice -
2nd choice -
3rd choice -
4 th choice -
5th choice -
The null hypothesis (when the manner of rating is from a description only) is rejected on question 1 while
it is accepted on questions 2, 3, and 4. The hypothesis for the administrators is rejected on questions 1,2 , and 4 while it is accepted on question 3 . The hypothesis is accepted on all questions asked the board members. Simply stated this means the teachers reached agreement only on the first question, and the administrators reached agreement on questions 1,2 , and 4 , while board members did not reach agreement on any question.

The hypothesis when the manner of rating is from a description accompanied by a photograph is rejected among the teachers for questions 1 and 4 while questions 1 and 2 are rejected among the administrators. On all other questions from this method of rating the hypothesis is accepted. It should be noted that the board members did not reach agreement on any question.

The hypothesis when the manner of rating is from a photograph only is accepted for all questions with all groups. The selections of the different groups indicated no agreement would be reached among the judges since a person who had been chosen as an administrator would not likely be rejected from his appearance. This somewhat randomness of the ratings points out that no subjects were rejected by the group. Also, psychologists have pointed out that in face of ambiguous stimuli, response is determined
more by what is in the perceiver than by what is in the stimulus.

Hypothesis number "4" was rejected. It was assumed the person chosen by the teachers rating from the description only would not be the same as the person chosen by the teachers rating from a description accompanied by a photograph. The teachers who rated from the description only gave their first choice (Black) 45 per cent of the first ranks while those teachers who rated from combination of description and photograph also chose Black with the most first ranks (35 per cent).

Hypothesis number five was rejected. The assumption was that the person chosen by the administrators rating from a description only would not be the same person chosen by the administrators rating from the combination of a description and a photograph. Those administrators rating from the description made Black their choice with 57.5 per cent of the first ranks.

The assumption from which hypothesis number six was formulated was not reinforced in as strong a fashion from the board members as it was with the teachers and administrators. The board members made Black their choice, but he received only 30 per cent of first ranks from both methods of rating. There was very little difference in
the percentage of first ranks since 3.3 per cent was the margin of difference in the ratings of the top three subjects. The ratings by the board members tended to be more randomized than did the ratings by the teachers and administrators.

The ratings of all judges revealed that Black received 44.2 per cent of all first ranks when the rating was done from a description only while he received 40 per cent of first ranks when the rating was done from the combination of description and photograph.

## Conclusions

From the results of rating by first ranks it was concluded that a photograph had very little influence upon the choice of the judges. Although this study was too limited in scope to make sweeping generalities, certain pointed conclusions can be drawn from the findings. It seems realiable to say that the study raised more questions than it answered. An attempt will be made to enumerate not only the specific conclusions that can be derived, but the direction some general conclusions tend to take.

The data tend to support the notion that board members were not for a singular opinion th such a degree that they could agree upon a rating of the leadership roles. Their selections tended to be more of a random nature. The
same thing was true of the teachers and administrators in some areas of the rating, however, in other areas their agreement was quite consistent.

The teachers and administrators reached agreement on the first question in all instances except when the rating was from a photograph only. Since question 1 asked what type of person they wanted to furnish leadership for a school in which they were associated, and since the teachers and administrators not only reached agreement in this area, but also chose the same person as calculated by tables of first ranks on both methods of rating (description and combination of description and photograph), it would appear that ample evidence is available to support the notion that teachers and administrators recognize the type of leadership that they belleve is best for schools. The corresponding data from the ratings made by the board members tend to indicate that board members as a group do not agree on the type of leadership role that they believe is best for schools. Some account should be taken of the different frames of reference that educators and board members use when selecting leadership roles. The teachers and administrators seemed to take many of their perceptual cues from the notion of achieving the goals of the school since their choice (Black) was a goal
oriented person. The school board member while being aware of these same cues is perhaps as much or more aware of other stimuli because frequently selected leadership roles that were oriented toward a different view. However, on the basis of this study the writer feels there is ample evidence to support the notion that board members have very little basis for discriminating among administrative types.

The data tend to support the conclusion that the introduction of a photograph to the description of the leadership roles had little or no bearing upon the rating of the different roles. The lack of agreement as measured by the coefficient of concordance testifies to the randomness of their selections. A random selection was evidence of the acceptance of the visual cues of the subjects by the judges. Since the photographs were photographs of practicing administrators, it seems reasonable to assume that they would not be rejected as representing an administrator. The data from question four which asked the raters to rank the subjects from operating most like himself (the rater) to least like himself was not consistent with the data in question one. There was agreement on the first question by board teachers and administrators from rating by description and combination of description and photograph, but on question number four there was agreement on only half of their ratings. Likewise from the tables of
first ranks the person rated highest on question number one received fewer first ranks in every instance when the judges rated them on question number four. This suggests the possibility that teachers and administrators recognize the possibility that they do not always operate as ideally as they would like. Since the descriptions dealt largely in areas of interpersonal relations and since teachers and administrators do not always operate as ideally as they recognize they should, it would seem that the potential for successful interpersonal relations has yet to be utilized to its fullest.

## Recommendations

Since this study raised many more questions than it answered, some thought should be given to the unanswered questions as well as areas that were not explored. The study dealt purposely with a small population because of the expense involved in securing photographs of the subjects; however, some consideration should be given to an expanded population to more solidly confirm or refute the findings of this study. In view of the foregoing statements and the findings of this study the following recommendations are suggested.

1. This study made no mention whether ur not the subjects were principals of elementary or secondary schools.

It is recommended that a similar study be conducted to determine if leadership roles are perceived in the same manner by both elementary and secondary personnel.
2. The method used in this study to rate the subjects was to use a different subgroup for each manner of rating. It is suggested that a lapsed time study be conducted to which the same group of raters rate the subjects from a description and then at some prescribed later date rate the subjects from a combination of description and photograph.
3. One of the outcomes of this study was the more apparent agreement between teachers and administrators while board members tended to select random choices. In light of this it is suggested that a study be conducted in which the population consists of teachers, principals, and superintendents.
4. The findings of this study are based on the views of people whose frame of reference largely deals with situations in metropolitan area. It is recommended that a similar study be made whose sample would be composed of people from smaller communities. Such a study would make possible broader generalities about the leaderrelationships of principals and those with whom he associates.
5. It is suggested that a similar study be undertaken in which the raters are asked to rate the subjects on one question only. The raters in this study rated the subjects by answering four questions. Since the notion of leadership perception in a school would come from the person the raters perceived as being the best one to furnish leadership for the school, it would not be necessary to rate the subjects except from the standpoint of the first question the raters received in this study.

As a final note it is emphasized that the leadership role is a complex one in which the leader must become proficient in several areas. Perhaps one of the most important is the interpersonal relations that exist among himself, the staff, the student body, and the community. Invariably disagreements will arise among various members of these groups. Results of this study tend to support the notion that the successful leader will resolve these differences consistent with the goals of the group.

BIBLIOGRAPHY

## BIBLIOGRAPHY

Bavelas, A., and Lewin, K. "Training in Democratic Leadership," Journal of Abnormal and Social Psychology, Vol XXXVII, (1942), pp. 115-119.

Bender, I. E., Hostorf, A. H. "On Measuring Generalized Empathic Ability (Social Sensitivity)," Journal of Abnormal and Social Psychology, Vol. XLVIII, (1953), pp. 503-506.

Bernard, L. L. "Leadership. and Propoganda," in Jerome Davis and Harry Elmer Barnes, An Introduction to Sociology. New York: D. C. Heath \& Co., 1927, pp. 484-491.

Bingham, Walter V. "Leadership," in Henry C. Metcalf, The Psychological Foundations of Management. New York: A. W. Shawn Co., 1927, pp. 244-60.

Bruner, Jerome S., and Taguiri, Renato. "The Perception of People." In Gardner Lindzey, (Ed.), Handbook of Social Psychology. Cambridge, Massachusetts: Addison-Wesley Publishing Company, 1954, pp. 634649.

Cattell, Raymond B. "Determining Syntality Dimensions as a Basis for Morale and Leadership Measurement," in Harold S. Guetzkow, Leadership and Men. Pittsburgh: Carnegie Press, 1951, pp. 16-17.

Courtenay, Ethel. "Persistence of Leadership," in School Review, Vol. XIVI, (February, 1938), No. 2, pp. 97TOT.

Cowley, William $\underset{\|}{ } \mathrm{E}$. "Three Distinctions in the Study of Leaders," Journal of Abnormal and Social Psychology, Vol. XXIII, (July-September, 1928), pp. 144-157.

Dashiell, J. F. "Experimental Studies of the Influence of Social Situations on the Behavior of Individual Human Adults," in C. Murichson (Ed.), Handbook of Social Psychology. Worchester: Clark University Press, 1935, pp. 1097-1158.

Dexter, Lewis A. "Some Strategic Consideration on Innovating Leadership," in Alvin W. Gouldner, (Ed.). Studies in Leadership. New York: Harper, 1950, pp. 592604.

Du Vall, E. W. Personality and Social Group Work. New York: Association Press, 1943.

Eaton, Joseph W. "Is Scientific Leadership Selection Possible?" In Alvin W. Gouldner (Ed.), Studies in Leadership. New York: Harper, 1950, pp. 615-643.

Edwards, Allen L. Statistical Methods for the Behavioral Sciences. New York: Rinehart \& Company, 1945.

Fielder, Fred E. "Interpersonal Perception and Group Effectiveness," in Alvin W. Gouldner (Ed.), Studies in Leadership. New York: Harper, 1950, pp. 243257 .

Fiedler, F. F., Warrington, W. G., and Blaisdell, F. J. "Unconscious Attitudes as Correlates of Sociometric Choice in a Social Group." Journal Abnormal and Social Psychology, Vol. XLVII, (1952), pp. 790-796.

Gibb, Cecil A. "The Principles and Traits of Leadership," in C. G. Browne (Ed.), The Study of Leadership. Danville: Interstate Printers, 1958, pp. 67-75.

Gibb, Cecil A. "Leadership," in Gardner Lindzey (Ed.) Handbook of Social Psychology. Vol. II, Cambridge: Addison-Wesley, 1954, pp. 887-917.

Green, G. H. "Insight and Group Adjustment." Journal Abnormal and Social Psychology, Vol. XLIII, (1948), pp. 49-61.

Heider, Fritz. "Perceiving the Other Person," in Renato Taguiri and Luigi Petrullo (Eds.), Person Perception and Interpersonal Behavior. stanford: Stanford University Press, 1958, pp. 22-26.

Hemphill, John K. Situational Factors in Leadership. Ohio State University: Columbus, 1949.

Hemphill, J. K., Situational Factors in Leadership. Columbus, Ohio: 0nio State University, Bureau Educational Research Monograph, No. 32, XII, 1950.

Jennings, Helen Hall. Leadership and Isolation. New York: David McKay, 1943.

Kendall, M. G., and Smith, B. B. "The Problem of m Rankings," Ann. Math Statist., Vol. X, (1939), pp. 275-287.

Knickerbocker, Irving. "A Conception and Some Implications," in Clarence Brown (Ed.), The Study of Leadership. Danville: Interstate Printers, 1958, pp. 3-11.

Kreech, D., and Crutchfield, R. S. Theory and Problems for $\frac{\text { Social }}{426}$ Psychology. New York: McGraw Hill, 1948, p. 426.

Kutner, Bernard. "Elements and Problems of Democratic Leadership, "in Alvin W. Gouldner (Ed.), Studies in Leadership. New York: Harper and Brothers, 195 , pp. 459-467.

La Piere, Richard T., and Farnsworth, Paul R. Social Psychology. 2d. ed.; New York: McGraw-Hill, 1935.
Larson, Emil L. "Leadership and Ideal of Phi Delta Kappan," $\frac{\text { The }}{\text { pp. }} \frac{\text { Phi }}{41-45 \text { Delta Kappan, Vol. XLV, (August, 1929), }}$

Leighton, Alexander H. "Leadership in a Stress Situation," in Alvin W. Gouldner (Ed.), Studies in Leadership. New York: Harper, 1950, pp. 605-614.

Lippitt, Ronald, and White, Ralph. "An Experimental Study of Leadership and Group Life," in Guy E. Swanson and Others (Eds.), Readings in Social Psychology. New York: Holt, 1952. pp. 340-354.

Moser, C. A. Survey Methods in Social Investigations. London: William Heinemann, Ltd. i959, p. 78.

Murray, Henry A., and MacKinnon, Donald W. "Assessment of O.S.S. Personnel," Journal of Consulting Psychology, Vol. X, (March-April, 1946), pp. 76-80.

Nash, Jay B. "Leadership," The Phi Delta Kappan, Vol. XLV, (June, 1929), pp. 24-25.

Pigors, Paul. Leadership or Domination. New York: houghton Miflin, 1935.

Preston, Malcolm G., and keintz, Roy K. "Effects of Participatory vs. Supervisory Leadership on Group Judgment," in C. G. Brown (Ed.), The Study of Leadership. Danville: Interstate, 1958, pp. 310-323.

Roff, Merill. "A Study of Combat Leadership in the Air Force by Means of a Rating Scale: Group Differences," in Clarence Br?wne (Ed.), The Study of Leadership. Danville: Interstate Printers, 1958, pp. 158-169.

Sanford, Fillmore H. "The Follower's Role in Leadership Phenomena," in Guy E. Swanson (Ed.) Readings in Social Psychology. New York: Henry Holt and Company, 1952, pp. 328-341.

Secord, Paul F. "Facial Features and Inference Processes in Interpersonal Perception," in Renato Taguiri and Luigi Petrullo (Eds.), Person Perception and Interpersonal Behavior. Stanford: Stanford University Press, 1958, p. 340.

Smith, K. L., and Krueger, L. M. "A Brief Summary of Literature on Leadership," Bloomington: Bull. School of Education, Indiana University, 1933. Vol. IX, No. 4.

Stogdill, Ralph M. "Leadership, Membership, and Organization," Psychological Bulletin, XLVII, (1950), pp. $3-14$.

Thorndike, E. L. "A Constant Error in Psychological Ratings," Journal Applied Psychology, Vol. IV, (1920), pp. 25-29.

Trow, William Clark. "Group Processes," in Chester W. Harris, Encylopedia of Educational Research. 3d. Ed.; New York: Mac Millan, 1960, p. 605.

Williams, S. B., and Leavitt, H. J. "Group Opinion as a Predictor of Military Leadership." Journal Consulting Psychology, Vol. XI, (1947), pp. 283291.

Woodworth, R. S. Experimental Psychology. New York: Henry Holt, 1938.
APPENDIX ALETTER TO ADMINISTRATORS WEOSEPHOTOGRAPHS WERE USED IN THE STUDY

Dear Mr.
I am making a study of leadership roles as they are viewed by members of the profession and the laymen. The roles are of five different types of leadership roles when these roles describe five different school administrators. One portion of the study will require a photograph attached to each administrator described. The description nor the photograph will not be used to identify any certain person so no actual names will be used. The purpose of the photograph is to determine if the looks of a person has any bearing upon the rating of leadership.

It is therefore necessary for the photographs to be unknown to the raters. Since the raters will be educators and laymen in Oklahoma County, it will be necessary to get photographs of administrators who are relatively unknown to most educators and school board members in the above mentioned county.

Mr. Raymond Harvey, County Superintendent of Oklahoma County, suggested your name as a possibility for one of the photographs of school administrators. If you would be kind enough to consent to the use of your photograph for such purposes, it would be greatly appreciated. All photographs sent will be returned, and any expense involved will be refunded to you if you do not now have such a photograph. A billfold size photograph will be suitable for this study.

If you agree to the use of your photograph for this study will you please sign the enclosed statement authorizing such use. A stamped self-addressed envelope is also included.

I would like to thank you for your time and consideration.

Yours truly,

Vernon McAllister

## APPENDIX B

LETTERS TO ADMINISTRATORS, TEACHERS, AND SCHOOL BOARD MEMBERS

March 13, 1964

Dear Colleague:
To satisfy requirements for the Doctor of Education degree, I am making a study of leadership role percepts as viewed by members of the profession and members of board of education. Your name has been randomly selected from the list of teachers in Oklahoma County.

The purpose of this letter is to request your assistance in this study. It will require a time expenditure of less than thirty minutes. If you will be kind enough to participate in the study, I will mail you a description of five different kinds of leadership roles as characterized by a school principal. You will answer a few questions about these descriptions and then mail them back to me. There will be no expense to you because I will furnish self-addressed, stamped envelopes.

The results will not reveal how individual teachers rated the different roles, but rather how the entire group rated them. It is my hope that you will be able to find time to take part in this study. Would you please indicate your response on the enclosed card and send it to me by return mail. If you have any questions, I would be happy to discuss them with you because it is quite important that everyone selected take part in the study, if at all possible.

I shall be looking forward to hearing from you.
Yours truly,

Vernon McAllister, Principal Crutcho School

## APPENDIX C

TABLES SHOWING THE RANKINGS OF THE LEADERSHIP ROLES BY THE JUDGES

RATINGS BY TEACHERS

$$
\text { QUESTION } 1
$$

| Description |  |  |  |  | Description \& Photo |  |  |  |  | Photo |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Br | W | G | B1 | C | Br | W | G | B1 | C | Br | : | G | Bl | C |
| 3 | 1 | 4 | 2 | 5 | 1 | 5 | 4 | 2 | 3 | 1 | 2 | 4 | 3 | 5 |
| 4 | 3 | 1 | 2 | 5 | 1 | 5 | 2 | 3 | 4 | 5 | 2 | 3 | 1 | 4 |
| 1 | 4 | 2 | 3 | 5 | 2 | 5 | 3 | 1 | 4 | 1 | 5 | 4 | 2 | 3 |
| 1 | 2 | 5 | 4 | 3 | 1 | 4 | 3 | 2 | 5 | 1 | 2 | 3 | 5 | 4 |
| 5 | 4 | 2 | 1 | 3 | 1 | 3 | 2 | 4 | 5 | 2 | 3 | 4 | 1 | 5 |
| 3 | 5 | 2 | 1 | 4 | 3 | 5 | 1 | 2 | 4 | 3 | 2 | 5 | 1 | 4 |
| 2 | 5 | 3 | 1 | 4 | 4 | 3 | 1 | 2 | 5 | 4 | 3 | 5 | 2 | 1 |
| 2 | 5 | 4 | 1 | 3 | 3 | 4 | 5 | 1 | 2 | 5 | 1 | 3 | 2 | 4 |
| 2 | 4 | 1 | 3 | 5 | 2 | 5 | 3 | 1 | 4 | 3 | 5 | 4 | 1 | 2 |
| 3 | 5 | 2 | 1 | 4 | 4 | 5 | 1 | 2 | 3 | 1 | 5 | 2 | 4 | 3 |

RATINGS BY TEACHERS
QUESTION 2

| Description |  |  |  |  | Description \& Photo |  |  |  |  | Photo |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Br | W | G | Bl | C | Br | W | G | Bl | C | Br | W | G | Bl | C |
| 4 | 1 | 2 | 5 | 3 | 3 | 5 | 2 | 1 | 4 | 5 | 3 | 4 | 2 | 1 |
| 2 | 4 | 5 | 3 | 1 | 1 | 3 | 2 | 4 | 5 | 4 | 2 | 5 | 3 | 1 |
| 2 | 5 | 3 | 1 | 4 | 3 | 5 | 4 | 1 | 2 | 3 | 5 | 4 | 1 | 2 |
| 1 | 3 | 5 | 2 | 4 | 1 | 4 | 3 | 2 | 5 | 2 | 1 | 5 | 4 | 3 |
| 5 | 4 | 3 | 1 | 2 | 3 | 2 | 4 | 5 | 1 | 4 | 3 | 2 | 1 | 5 |
| 5 | 3 | 2 | 1 | 4 | 3 | 5 | 1 | 2 | 4 | 3 | 2 | 4 | 1 | 5 |
| 4 | 1 | 5 | 2 | 3 | 5 | 1 | 3 | 2 | 4 | 4 | 2 | 5 | 1 | 3 |
| 2 | 5 | 3 | 1 | 4 | 3 | 4 | 5 | 1 | 2 | 5 | 1 | 3 | 2 | 4 |
| 5 | 4 | 3 | 1 | 2 | 3 | 4 | 5 | 1 | 2 | 2 | 4 | 5 | 3 | 1 |
| 2 | 3 | 5 | 4 | 1 | 4 | 5 | 2 | 3 | 1 | 1 | 4 | 5 | 2 | 3 |

RATINGS BY TEACHERS
QUESTION 3

| Description |  |  |  |  | Description \& Photo |  |  |  |  |  | Photo |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Br | W | G | B1 | C | Br | W | G | Bl | C | Br | W | G | Bl | C |
| 3 | 1 | 4 | 2 | 5 | 4 | 5 | 3 | 1 | 2 | 4 | 3 | 5 | 1 | 2 |
| 1 | 3 | 5 | 4 | 2 | 2 | 3 | 1 | 4 | 5 | 4 | 2 | 5 | 1 | 3 |
| 2 | 4 | 3 | 1 | 5 | 3 | 5 | 4 | 1 | 2 | 3 | 5 | 4 | 2 | 1 |
| 1 | 2 | 5 | 3 | 4 | 1 | 4 | 3 | 2 | 5 | 2 | 1 | 5 | 3 | 4 |
| 5 | 4 | 3 | 1 | 2 | 2 | 1 | 3 | 5 | 4 | 3 | 2 | 4 | . 1 | 5 |
| 5 | 3 | 2 | 1 | 4 | 3 | 5 | 1 | 2 | 4 | 3 | 1 | 4 | 2 | 5 |
| 3 | 5 | 4 | 2 | 1 | 5 | 3 | 4 | 2 | 1 | 4 | 3 | 5 | 1 | 2 |
| 3 | 2 | 5 | 1 | 4 | 3 | 4 | 5 | 1 | 2 | 5 | 1 | 3 | 2 | 4 |
| 5 | 3 | 4 | 2 | 1 | 2 | 5 | 3 | 1 | 4 | 1 | 3 | 5 | 2 | 4 |
| 4 | 3 | 5 | 1 | 2 | 4 | 5. | 3 | 2 | 1 | 2 | 5 | 3 | 4 | 1 |

RATINGS BY TEACHERS QUESTION 4

| Description |  |  |  |  | Description \& Photo |  |  |  |  | Photo |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Br | W | G | B1 | C | Br | W | G | B1 | C | Br | W | G | Bl | C |
| 5 | 1 | 2 | 3 | 4 | 1 | 5 | 2 | 3 | 4 | 1 | 3 | 4 | 2 | 5 |
| 4 | 3 | 5 | 2 | 1 | 1 | 5 | 2 | 3 | 4 | 5 | 3 | 2 | 1 | 4 |
| 1 | 5 | 2 | 3 | 4 | 1 | 5 | 3 | 2 | 4 | 1 | 5 | 4 | 2 | 3 |
| 1 | 2 | 4 | 3 | 5 | 2 | 4 | 3 | 1 | 5 | 1 | 2 | 3 | 5 | 4 |
| 5 | 2 | 4 | 1 | 3 | 2 | 3 | 1 | 5 | 4 | 2 | 3 | 5 | 1 | 4 |
| 3 | 4 | 2 | 1 | 5 | 3 | 5 | 1 | 2 | 4 | 3 | 1 | 4 | 2 | 5 |
| 1 | 3 | 4 | 2 | 5 | 5 | 2 | 1 | 3 | 4 | 4 | 3 | 5 | 1 | 2 |
| 2 | 5 | 3 | 1 | 4 | 3 | 4 | 5 | 1 | 2 | 5 | 3 | 1 | 2 | 4 |
| 4 | 2 | 1 | 3 | 5 | 2 | 5 | 3 | 1 | 4 | 2 | 4 | 3 | 1 | 5 |
| 4 | 3 | 5 | 2 | 1 | 4 | 5 | 1 | 2 | 3 | 5 | 2 | 4 | 3 | 1 |

RATINGS BY ADMINISTRATORS QUESTION 1

| Description |  |  |  |  | Description \& Photo |  |  |  |  | Photo |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Br | W | G | Bl | C | Br | . W | G | BI | C | Br | W | G | BI | C |
| 5 | 3 | 2 | 1 | 4 | 5 | 3 | 4 | 1 | 2 | 3 | 2 | 4 | 1 | 5 |
| 5 | 4 | 2 | 1 | 3 | 5 | 4 | 3 | 1 | 2 | 2 | 4 | 3 | 1 | 5 |
| 5 | 2 | 3 | 1 | 4 | 4 | 5 | 2 | 1 | 3 | 1 | 5 | 4 | 2 | 3 |
| 1 | 5 | 3 | 2 | 4 | 2 | 5 | 4 | 1 | 3 | 1 | 2 | 4 | 3 | 5 |
| 1 | 5 | 2 | 3 | 4 | 3 | 5 | 4 | 1 | 2 | 4 | 5 | 3 | 1 | 2 |
| 3 | 2 | 4 | 1 | 5 | 3 | 5 | 2 | 1 | 4 | 1 | 2 | 3 | 5 | 4 |
| 1 | 5 | 4 | 3 | 2 | 2 | 3 | 5 | 4 | 1 | 2 | 1 | 5 | 3 | 4 |
| 5 | 3 | 2 | 1 | 4 | 2 | 4 | 3 | 1 | 5 | 1 | 3 | 2 | 4 | 5 |
| 2 | 4 | 5 | 1 | 3 | 4 | 3 | 5 | 1 | 2 | 2 | 5 | 3 | 1 | 4 |
| 2 | 4 | 5 | 1 | 3 | 3 | 4 | 1 | 5 | 2 | 1 | 4 | 5 | 3 | 2 |

## RATINGS BY ADMINISTRATORS

QUESTION 2

| Description |  |  |  |  | Description \& Photo |  |  |  |  | Photo |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Br | W | G | Bl | C | Br | W | G | Bl | C | Br | W | G | Bl | C |
| 5 | 3 | 2 | 1 | 4 | 4 | 5 | 3 | 2 | 1 | 3 | 1 | 4 | 2 | 5 |
| 3 | 5 | 4 | 2 | 1 | 1 | 2 | 5 | 4 | 3 | 2 | 4 | 3 | 1 | 5 |
| 5 | 3 | 1 | 2 | 4 | 5 | 2 | 4 | 1 | 3 | 1 | 5 | 4 | 2 | 3 |
| 1 | 5 | 3 | 2 | 4 | 2 | 5 | 4 | 1 | 3 | 1 | 2 | 5 | 3 | 4 |
| 4 | 5 | 3 | 2 | 1 | 3 | 4 | 5 | 1 | 2 | 4 | 5 | 3 | 1 | 2 |
| 4 | 2 | 5 | 1 | 3 | 3 | 5 | 2 | 1 | 4 | 1 | 2 | 3 | 5 | 4 |
| 3 | 4 | 5 | 1 | 2 | 3 | 2 | 5 | 1 | 4 | 2 | 1 | 3 | 4 | 5 |
| 5 | 1 | 3 | 2 | 4 | 2 | 3 | 4 | 1 | 5 | 1 | 3 | 2 | 4 | 5 |
| 4 | 3 | 5 | 1 | 2 | 3 | 4 | 5 | 2 | 1 | 1. | 5 | 4 | 3 | 2 |
| 2 | 4 | 5 | 1 | 3 | 2 | 4 | 5 | 1 | 3 | 3 | 2 | 5 | 4 | 1 |

## RATINGS BY ADMINISTRATORS QUEESTION 3

| Description |  |  |  |  | Description \& Photo |  |  |  |  | Photo |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Br | W | G | B1 | C | Br | W | G | B1 | C | Br | W | G | B1 | C |
| 5 | 3 | 2 | 1 | 4 | 4 | 5 | 3 | 2 | 1 | 4 | 3 | 5 | 1 | 2 |
| 5 | 4 | 2 | 1 | 3 | 5 | 4 | 3 | 2 | 1 | 1 | 4 | 2 | 3 | 5 |
| 4 | 1 | 2 | 3 | 5 | 5 | 2 | 3 | 1 | 4 | 1 | 5 | 4 | 2 | 3 |
| 1 | 5 | 3 | 2 | 4 | 3 | 4 | 5 | 2 | 1 | 2 | 1 | 4 | 5 | 3 |
| 2 | 5 | 3 | 4 | 1 | 5 | 3 | 4 | 1 | 2 | 4 | 5 | 3 | 1 | 2 |
| 5 | 2 | 3 | 1 | 4 | 4. | 3 | 2 | 1 | 5 | 2 | 1 | 3 | 5 | 4 |
| 3 | 1 | 5 | 2 | 4 | 1 | 3 | 2 | 5 | 4 | 2 | 1 | 5 | 4 | 3 |
| 5 | 3 | 1 | 2 | 4 | 2 | 4 | 3 | 1 | 5 | 1 | 2 | 3 | 4 | 5 |
| 5 | 2 | 4 | 1 | 3 | 4 | 5 | 3 | 1 | 2 | 1 | 3 | 4 | 2 | 5. |
| 2 | 4 | 5 | 1 | 3 | 1 | 5 | 2 | 4 | 3 | 1 | 3 | 5 | 4 | 2 |

RATINGS BY ADMINISTRATORS QUESTION 4

| Description |  |  |  |  | Description \& Photo |  |  |  |  | Photo |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Br | Vi | G | B1 | C | Br | W | G | B1 | C | Br | W | G | Bl | C |
| 5 | 3 | 2 | 1 | . 4 | 3 | 4 | 1 | 2 | 5 | 1 | 3 | 5 | 2 | 4 |
| 4 | 1 | 3 | 2 | 5 | 5 | 3 | 2 | 1 | 4 | 1 | 4 | 3 | 2 | 5 |
| 5 | 3 | 2 | 1 | 4 | 5 | 4 | 1 | 3 | 2 | 1 | 5 | 4 | 2 | 3 |
| 1 | 5 | 3 | 2 | 4 | 1 | 5 | 4 | 2 | 3 | 1 | 2 | 5 | 3 | 4 |
| 1 | 5 | 4 | 2 | 3 | 1 | 2 | 4 | 3 | 5 | 4 | 5 | 3 | 1 | 2 |
| 4 | 3 | 2 | 1 | 5 | 3 | 4 | 2 | 1 | 5 | 1 | 2 | 3 | 5 | 4 |
| 2 | 4 | 5 | 1 | 3 | 1 | 2 | 5 | 4 | 3 | 1 | 2 | 4 | 3 | 5 |
| 5 | 3 | 2 | 1 | 4 | 1 | 4 | 3 | 2 | 5 | 1 | 3 | 2 | 4 | 5 |
| 2 | 4 | 5 | 1 | 3 | 1 | 2 | 5 | 4 | 3 | 2 | 5 | 3 | 1 | 4 |
| 1 | 5 | 4 | 2 | 3 | 5 | 3 | 1 | 4 | 2 | 4 | 2 | 5 | 3 | 1 |

RATINGS BY BOARD MEMBERS

## QUESTION 1

| Description |  |  |  |  | Description \& Photo |  |  |  |  | Photo |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Br | W | G | Bl | C | Br | W | G | B1 | C | Br | W | G | Bl | C |
| 2 | 5 | 1 | 4 | 3 | 5 | 4 | 1 | 3 | 2 | 1 | 4 | 5 | 3 | 2 |
| 3 | 4 | 1 | 2 | 5 | 1 | 5 | 3 | 4 | 2 | 1 | 3 | 5 | 2 | 4 |
| 1 | 4 | 2 | 3 | 5 | 3 | 4 | 5 | 2 | 1 | 1 | 4 | 3 | 2 | 5 |
| 1 | 2 | 3 | 4 | 5 | 1 | 5 | 4 | 2 | 3 | 1 | 4 | 2 | 5 | 3 |
| 1 | 4 | 3 | 5 | 2 | 1 | 2 | 5 | 4 | 3 | 1 | 3 | 5 | 4 | 2 |
| 4 | 2 | 3 | 1 | 5 | 4 | 2 | 5 | 1 | 3 | 1 | 3 | 5 | 2 | 4 |
| 3 | 5 | 4 | 1 | 2 | 1 | 4 | 5 | 3 | 2 | 1 | 4 | 2 | 3 | 5 |
| 2 | 3 | 5 | 1 | 4 | 4 | 2 | 3 | 1 | 5 | 2 | 1 | 3 | 4 | 5 |
| 1 | 4 | . 5 | 2 | 3 | 1 | 4 | 2 | 3 | 5 | 5 | 4 | 1 | 2 | 3 |
| 5 | 3 | 1 | 2 | 4 | 1 | 4 | 5 | 2 | 3 | 2 | 1 | 5 | 4 | 3 |

RATINGS BY BOARD MEMBERS
QUESTION 2

| Description |  |  |  |  | Description \& Photo |  |  |  |  | Photo |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Br | W | G | Bl | C | Br | W | G | Bl | C | Br | W | G | Bl | C |
| 2 | 5 | 1 | 4 | 3 | 5 | 4 | 2 | 3 | 1 | 2 | 4 | 3 | 1 | 5 |
| 3 | 5 | 1 | 2 | 4 | 3 | 5 | 1 | 2 | 4 | 1 | 3 | 5 | 2 | 4 |
| 2 | 4 | 3 | 1 | 5 | 2 | 4 | 5 | 3 | 1 | 2 | 4 | 3 | 1 | 5 |
| 2 | 4 | 1 | 5 | 3 | 1 | 4 | 3 | 2 | 5 | 1 | 4 | 2 | 5 | 3 |
| 4 | 2 | 3 | 5 | 1 | 3 | 4 | 5 | 1 | 2 | 1 | 3 | 5 | 4 | 2 |
| 3 | 2 | 4 | 1 | 5 | 4 | 1 | 5 | 3 | 2 | 1 | 3 | 5 | 2 | 4 |
| 4 | 5 | 3 | 2 | 1 | 1 | 3 | 5 | 4 | 2 | 1 | 4 | 2 | 3 | 5 |
| 2 | 5 | 4 | 1 | 3 | 4 | 3 | 5 | 2 | 1 | 1 | 3 | 2 | 4 | 5 |
| 1 | 4 | 5 | 2 | 3 | 1 | 3 | 2 | 4 | 5 | 5 | 4 | 1 | 2 | 3 |
| 3 | 1 | 4 | 5 | 2 | 2 | 3 | 5 | 1 | 4 | 3 | 2 | 5 | 1 | 4 |

FATINGS BY BOARD MEMBER
QUESTION 3

| Description |  |  |  |  | Description \& Photo |  |  |  |  | Photo |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Br | W | G | 31 | C | Br | W | G | BI | C | Br | W | G | B1 | C |
| 2 | 5 | 1 | 4 | 3 | 5 | 4 | 2 | 3 | 1 | 2 | 4 | 3 | 2 | 5 |
| 3 | 4 | 1 | 2 | 5 | 3 | 5 | 2 | 1 | 4 | 1 | 3 | 5 | 2 | 4 |
| 2 | 4 | 3 | 1 | 5 | . 3 | 4 | 5 | 2 | 1 | 3 | 2 | 1 | 4 | 5 |
| 1 | 5 | 2 | 4 | 3 | 2 | 4 | 3 | 1 | 5 | 1 | 4 | 2 | 5 | 3 |
| 1 | 3 | 4 | 5 | 2 | 2 | 4 | 5 | 1 | 3 | 1 | 3 | 5 | 4 | 2 |
| 2 | 3 | 5 | 1 | 4 | 4 | 3 | 5 | 1 | 2 | 1 | 3 | 5 | 2 | 4 |
| 5 | 3 | 4 | 2 | 1 | 4 | 3 | 5 | 2 | 1 | 1 | 4 | 2 | 3 | 5 |
| 2 | 5 | 4 | 1 | 3 | 4 | 3 | 5 | 1 | 2 | 3 | 2 | 1 | 4 | 5 |
| 2 | 4 | 5 | 3 | 1 | 2 | 3 | 1 | 4 | 5 | 5 | 4 | 1 | 2 | 3 |
| 1 | 3 | 2 | 4 | 5 | 4 | 3 | 5 | 2 | 1 | 3 | 2 | 5 | 1 | 4 |


[^0]:    ${ }^{2}$ Raymond B. Cattell, "Determining Syntality Dimensions as a Basis for Morale and Leadership Measurement," in Harold S. Guetzkow, Leadership and Men. Pittsburgh: (Carnegie Press, 1951), pp. 16-27.

[^1]:    $3_{\text {William Clark Trow, "Group Processes," in Chester }}$ W. Harris, Encyclopedia of Educational Research. (3d. ed. New York: Mac Millan, 1960), p. 605.
    ${ }^{4}$ Ibid.

[^2]:    5P. Pigors, Leadership or Domination, (London: Harragr, 1935).
    ${ }^{6}$ Cecil A. Gibb, "The Principles and Traits of Leadership," in C. G. Browne, The Study of Leadership, (Danville: Interstate Printers, 1958), pp. 67-75.

[^3]:    $7_{\text {E. W. Du Vall, Personality }}$ and Social Group Work, (New York: Association Press, 1943). $8_{\text {Gibb, }}$ loc. cit., pp. 267-284.

[^4]:    ${ }^{12} \mathrm{~K}$. L. Smith and L. M. Krueger, A Brief Summary of Literature on Leadership, (Bloomington: Bull. School of Education, Indiana University, 1933), Vol. IX, No. 4.
    $13_{\text {Emil }}$ L. Larson, "Leadership and Ideal of Phi Delta Kappan," The Phi Delta Kappan, Vol. XLV, (August, 1929), pp. 41-45.
    ${ }^{14}$ Cowley, loc. cit., pp. 144-157.
    $15_{\text {Walter }}$ V. Bingham, "Leadership," in Henry C. Metcalf, The Psychological Foundations of Management, (New .York: A. W. Shawn Co., 1927), pp. 244-60.

[^5]:    ${ }^{19}$ Irving Knickerbocker, "A Conception \& Some Implications," in Clarence Brown, The Study of Leadership, (Danville: Interstate Printers, 1958), pp. 3-11.
    ${ }^{20}$ Ibid.

[^6]:    ${ }^{21}$ Ibid.

    $$
    { }^{22} \text { Cowley, loc. cit., pp. 144-57. }
    $$

[^7]:    ${ }^{25}$ C. A. Moser, Survey Methods in Social Investigations, (London: William Heinemann, Ltd. 1959), p. 78. ${ }^{26}$ Ibid. p. 79.

[^8]:    ${ }^{1}$ Paul Pigors, Leadership or Donimation, (New York: Houghton Miflin, 1935).

[^9]:    ${ }^{2}$ John K. Hemphill, Situational Factors in Leadership, (Ohio State University: Columbus, 1949).

[^10]:    14 Malcolm G. Preston and Roy K. Heintz, "Effects of Participatory vs. Supervisory Leadership on Group Judgment," in C. G. Brown and Thomas S. Cohn (Ed.), The Study of Leadership, (Danville: Interstate, 1958), pp. 310-323.

[^11]:    ${ }^{15}$ Ibid., p. 317.
    16 Ibid., p. 320.

[^12]:    $21_{\text {Helen Hall Jennings, Leadership }}$ and Isolation, (New York: David McKay, 1943), p. 205.

    22 Ethel Courtenay, "Persistence of Leadership," in School Review, Vol. XLVI, (February, 1938), N . 2, pp. 97-107.

[^13]:    ${ }^{27}$ Eaton, loc. cit., pp. 615-643.
    28 Alexander $H$. Leighton, "Leadership in a stress Situation," in Alvin W. Gouldner (Ed.), Studies in Leadership, (New York: Harper, 1950), pp. 605-614.

[^14]:    47E. L. Thorndike, "A Constant Error in Psychological Ratings." J. Applied Psychology, Vol. IV, (1920), pp. 25-29.

    48 F. F. Fiedler, W. G. Warrington, and F. J. Blaisdell, "Unconscious Attitudes as Correlates of Sociometric Choice in a Social Group." Journal Abnormal and Social Psychology, Vol. XLVII (1952), pp. 790-796.

    49G. H. Green, "Insight and Group Adjustment." Journal Abnormal and Social Psychology, Vol. XLIII (1948), pp. 49-61

[^15]:    ${ }^{1}$ M. G. Kendall and B. B. Smith, "The Problem of m Rankings," Ann. Math Statist, Vol. X (1939), pp. 275-287.

