THE EFFECT OF PERSONALITY NEED VARIABLES ON TALKATIVENESS IN SMALL GROUP DISCUSSION

A Thesis

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CHAPTER I

THE PROBLEM AND DEFINITIONS OF TERMS USED

Much empirical and experimental data on the behavior of humans in groups has been amassed in the last three decades. The study of "group dynamics" as an academic and scientific field of research had its inception primarily in Kurt Lewin, who established the Research Center for Group Dynamics currently located at the University of Michigan, although "an interest about the psychological and social forces associated with groups has motivated intellectual activities of thoughtful people for centuries."[1] Lewin's concept of human behavior is well known as the field theory.

Bonner sums up the Lewinian theory in this way:

> The dynamic group, from this point of view, is always a system--a complex of two or more individuals in symbolic or affective interaction. It cannot be accounted for only in terms of the pre-existing characteristics of its individual members; it is to be explained more adequately in terms of the dynamic relations which the individuals bear to one another. The group constituted by this mutual or interactive relationship is not a "steady state" merely, nor a self-contained equilibrium, but a continuous process of adaptation of individuals to one another and to their mutual problems.[2]

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[1]Dorwin Cartwright, and Alvin Zander, Group Dynamics Research and Theory (second edition; Evanston, Illinois: Row, Peterson, and Company, 1960), p. 4.

[2]Hubert Bonner, Group Dynamics (New York: The Ronald Press Company, 1959), p. 19.

One controversial aspect of the Lewinian theory is in the principle that the group and situation at any given time are the sole determinants of the individual's behavior, and that premeasures of personality variables are not very helpful in predicting the individual's behavior in a group.[3] This assumption has been neither verified nor rejected by research and awaits further experimental study and observation.

I. THE PROBLEM

Statement of the Problem. Riecken, in his study, "The Effects of Talkativeness on Ability to Influence Group Solutions to Problems," stated:

> It seems reasonable to conclude . . . that it is probably not the superiority of the top man's information, suggestions, or opinions as such that lead him to be seen as having contributed most to the solution. Rather, his influentiality seems to be the result of his status as the most frequent talker in the group or of some personal attribute associated with this status.[4]

The purpose of this study is to discover any correlations which may exist between certain personality need variables of individuals as indicated by the Edwards Personal

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[3]Ibid., p. 25.

[4]Henry W. Riecken, "The Effects of Talkativeness on Ability to Influence Group Solutions of Problems," Sociometry, 21:309-321, December, 1958.

Preference Schedule (E.P.P.S.) and "talkativeness" in small group discussion.

Scheidel, Crowell, and Shepherd[5] found that the personality variable Dominance was evinced by effective discussants to a significant degree. Riecken[6] found that talkativeness played a major part in determining effective discussants as judged by the discussant's peers in the group. On the basis of these two findings, it would be logical to predict a positive correlation between Dominance and talkativeness in small group discussion.

The personality variable Achievement, because it is described in terms of one who wants "to do one's best, to be successful, to accomplish tasks requiring skill and effort, . . ."[7] could be predicted to correlate positively with talkativeness in a problem-solving group discussion.

The variable Exhibition indicates a person who has the need "to say witty and clever things, to tell amusing jokes and stories, to talk about personal adventures and

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[5]Thomas M. Scheidel, Laura Crowell, and John R. Shepherd, "Personality and Discussion: A Study of Possible Relationships," Speech Monographs, 25:261-267, November, 1958.

[6]Riecken, loc. cit.

[7]Allen L. Edwards, "Manual, Edwards Personal Preference Schedule" (New York: The Psychological Corporation, 1954), p. 14.

experiences . . ."[8] and would therefore be assumed to correlate positively with talkativeness in small group discussion.

Endurance, because it is described as the need "to keep at a job until it is finished, to stick at a problem even though it may seem as if no progress is being made,"[9] would probably correlate positively with talkativeness in group discussion.

A negative correlation between Affiliation and talkativeness would be predicted on the basis of Scheidel, Crowell, and Shepherd's study already cited, in which they found a negative correlation between Affiliation and effective discussants significant at the .05 level of confidence.

It would not be predicted for the personality variables Deference, Order, Autonomy, Intraception, Succorance, Abasement, Nurturance, Change, Heterosexuality, and Aggression to correlate with talkativeness in small group discussion. Reference to the trait definitions given in Chapter III should help clarify for the reader the reasoning behind the predictions. An explanation may help elucidate the reasoning behind the prediction on Aggression. As Scheidel, et. al., point out, "the aggression variable in

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[8] Ibid.

[9] Ibid.

the Edwards test would not seem to contribute to the type of individual prominence that discussion theorists would consider conducive to leadership."[10] Since the description of Aggression as used in the Edwards test includes the need "to blame others when things go wrong, to read newspaper accounts of violence,"[11] this need could not be predicted to be consistently correlated with talkativeness in small group discussion.

Briefly, the purpose of the study seeks answers to the following three questions:

(1) Is there a positive relationship between talkativeness in small group discussion and the personality variables Dominance, Achievement, Exhibition, and Endurance?

(2) Is there a negative relationship between talkativeness in small group discussion and the personality variable Affiliation?

(3) Is there any relationship between talkativeness in small group discussion and the personality variables Deference, Order, Autonomy, Intraception, Succorance, Abasement, Nurturance, Change, Heterosexuality, and Aggression?

Importance of the Study. The effect of talkativeness on the amount of influence which a member has in the group

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[10]Scheidel, et. al., op. cit., p. 265.

[11]Edwards, op. cit., p. 14.

was established in a research study by Riecken in 1958.[12] Dickens also noted that "individual differences usually follow a normal curve and that extremes of either wordiness or brevity reduce the effectiveness of a discussion group."[13]

Group discussion is sometimes thought to be a tedious, time-consuming, and inefficient method of solving problems, and yet it is a process which is inseparable from the democratic method. Since it has been found that either wordiness or brevity reduces the effectiveness of this democratic process, knowledge about the causes of these extremes may prove to be of some value.

While not attempting to minimize the influence of the group and the situation as determinants of leadership in terms of talkativeness, Gibb points out that

> individual differences clearly affect the social perception of some individuals by others, and consequently play an important part in giving structure to the situation for those who are a part of it.[14]

Bonner elaborates on this when he states that

> every person reflects in his own personality the structure of the group; and all groups are to some extent

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[12]Riecken, op. cit., pp. 309-321.

[13]Milton Dickens, "A Statistical Formula to Quantify the 'Spread-of-Participation' in Group Discussion," Speech Monographs, 22:28-30, March, 1955, p. 30.

[14]Cecil A. Gibb, "Leadership," Handbook of Social Psychology, ed. by Gardner Lindzey (Cambridge, Mass.: Addison-Wesley Publishing Company, Inc., 1954), p. 886.

affected by the personalities of their members. Group dynamics and personality dynamics, like other individual and social phenomena, are inseparable.[15]

Although it is not yet known precisely what effect different types of personalities have upon small groups, some work has been done in this area in an attempt to isolate various factors. Research studies, as will be pointed out in the next chapter, conflict as to findings in this area. It is the hope of the researcher that the findings of this experiment will help to answer some of the questions which have been raised by researchers in group dynamics and social psychology.

Limitations of the Study. This paper is limited to finding what effect, if any, certain personality variables have on talkativeness of individual discussants in small group discussion. This study does not attempt to measure the syntality of the group, or the total group productivity or efficiency. The effect of spread of participation on the efficiency of small group discussion is a highly complex and somewhat controversial issue,[16] and will not be considered in this paper.

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[15]Bonner, op. cit., p. 408.

[16]Dickens, op. cit., pp. 29-30.

Dickens states, however, that

> the comparative extent to which the members of a group share the talking, would seem to be a reasonably valid measure of one aspect of the over-all effectiveness of a discussion.

This "measurement has the additional advantage that . . . it is completely quantitative and objective."[17]

No attempt was made to determine either the quality of individual contributions or the direction of communicative attempts. The quality of contributions would, of necessity, be subject to value judgments on the part of the observer; and directions of communication in small group discussion have been the subject of many research studies, and is a legitimate area of study in itself.

The researcher recognizes that the situation and group structure will have some effect on individual contributions, and that these factors are, to a certain extent, uncontrollable. This complexity of the nature of group dynamics in relation to personality dynamics should not, however, stop a researcher from endeavoring to find those individual variables which can be isolated through experimental studies.

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[17] Ibid., p. 28.

II. DEFINITIONS OF TERMS USED

Group dynamics. "A group exists when two or more people are aware of one another, when they are in some important way interrelated." A group is not the same as an aggregate, which is simply a "collection, a population, or a class." The interaction of the members of a group distinguishes a group from an aggregate. Dynamics implies a continuously changing and adjusting relationship. Group dynamics is

> that division of social psychology which investigates the formation and change in the structure and functions of the psychological grouping of people into self-directing wholes.* A dynamic group is thus in a continuous process of restructuring, adjusting, and readjusting members to one another for the purpose of reducing the tensions, eliminating the conflicts, and solving the problems which its members have in common.[18]

Personality need variables. Personality need variables are the

> secondary, or psychogenic needs, which are presumably dependent upon and derived from the primary needs . . . They stand for common reaction systems and wishes. It is not supposed that they are fundamental, biological drives, though some may be innate.[19]

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*Italics are the writer's.

[18]Bonner, op. cit., pp. 4-6.

[19]Henry A. Murray, Explorations in Personality (New York: Oxford University Press, 1938), p. 80.

The personality need variables used in this study are those found in the Edwards Personal Preference Schedule, and are listed as follows:

Achievement	Dominance
Deference	Abasement
Order	Nurturance
Exhibition	Change
Autonomy	Endurance
Affiliation	Heterosexuality
Intraception	Aggression
Succorance	

These fifteen personality need variables will be defined at greater length in Chapter III.

Group discussion. Group discussion is arbitrarily defined as a process in which two or more persons interact orally, with group orientation, to seek an answer to a group problem. The purpose of a group is either enlightenment or problem-solving, to distinguish it from debate, which is primarily concerned with the advocacy of specific propositions.

Leaderless group discussion. Leaderless group discussion is operationally defined as a discussion without the presence of a designated leader. The leadership arises from the situation and from the individual personality variables of the discussion members. "The purpose is to assess leadership tendencies among its members as they participate in a

free discussion . . ."[20] Bonner indicates that this type of discussion does have validity in the assessment of potential leadership.

Talkativeness. Talkativeness, as an operational definition, is the amount of time spent in talking during the discussion, in relation to the average amount of time which a discussant would be expected to participate. This will be explained more fully in Chapter III. The term "talkativeness" as used in this paper does not provide for variations in rates of speech, and therefore does not allow for the possibility of differences in actual quantity of words in a given amount of time. However, because of the cost and time involved in recording and transcribing discussions, Dickens states that two other methods of measuring talkativeness are of value:

> (1) counting the number of speeches rather than the number of words, and
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> (2) timing contributions with a stop watch, thus substituting number of minutes for number of words.[21]

A combination of these two methods was used in determining the talkativeness of group members who participated in this study.

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[20]Bonner, op. cit., p. 195.

[21]Dickens, op. cit., p. 30.

CHAPTER II

REVIEW OF THE LITERATURE

Studies which have been done in the area of personality and group dynamics, and small group discussion in particular, will be the concern of this chapter. Conclusions drawn from experimental research studies and empirical observations of psychologists about the behavior of individuals in groups will be discussed.

Benne points out that

> all human behavior is directed toward the satisfaction of needs. From birth to death the individual is engaged in a constant attempt to satisfy his varied, complex, and sometimes conflicting needs. Any given behavior is a resolution of forces arising in part within him and in part in the environmental situation.[1]

This, as Benne states, is the group dynamicist's point of view of human behavior. Much of the conflict which arises about the behavior of persons in groups stems from this old controversy concerning the extent of influence of the individual's inherent characteristics as opposed to the extent of influence of the group and situation. This conflict has not yet been resolved.

Borg, in a review of studies made in this area, concluded:

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[1]Kenneth D. Benne and Bozidar Muntyan, Human Relations in Curriculum Change (New York: The Dryden Press, 1951), p. 21.

> Several studies have been reported that are concerned with relationships between personality and small group behavior. Some of these have analyzed small group observational data so as to yield personality factors. Some have explored relationships between peer or supervisor evaluations and small group behavior. Only a few, however, have attempted to predict small group behavior from personality test scores.[2]

In a study designed to find correlations between effective discussants as determined by the peers in the discussion group and certain personality need variables, Scheidel concluded that

> these data would suggest that the effective discussants can be characterized by a need to be leader, to be independent, to be self-confident, and by a lack of concern for social contact and affiliation. These subjects evince a high value in and personality need for self-sufficiency and personal influence.[3]

Scheidel's most statistically significant finding in the study was the high personality need for Dominance evinced by the effective discussants. On the other hand, effective discussants tended to score lower on the personality needs of Affiliation, Succorance, and Abasement. It should be emphasized that effective discussants were determined from subjective evaluations by the other members of the group.

In attempting to predict small group role behavior from personality variables, Borg found that Assertiveness as

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[2]Walter R. Borg, "Prediction of Small Group Role Behavior from Personality Variables," Journal of Abnormal and Social Psychology, 60:112-116, January, 1960, p. 114.

[3]Scheidel, et. al., op. cit., p. 264.

measured by three personality tests correlated significantly with all six role scores as indicated by the discussant's peers in a discussion group. Assertiveness as a personality variable correlated most significantly with being assertive, being creative, and showing leadership as determined by the discussant's peers. The six role scores used in the peer analysis were Popular-social, Assertive, Rigid, Creative, Leader, and Good follower.[4] His findings generally supported him major hypothesis that role behavior can be predicted from personality tests.

Although small group discussion was not involved in another study of leadership, Richardson and Hanawalt had found that both men and women college leaders are reliably more dominant than are non-leaders or the average student.[5]

Research studies attempting to correlate personality need variables with individual behavior in small groups have not reached the same conclusions. Cattell and Stice, for example, have recently found no significant differentiation between leaders and non-leaders in terms of dominance.[6]

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[4]Borg, op, cit., p. 114.

[5]H. M. Richardson and N. G. Hanawalt, "Leadership as Related to the Bernreuter Personality Measures," Journal of Social Psychology, 17:237-267, May, 1943.

[6]Scheidel, loc. cit.

A study of the effect of individual personality differences on participation in group discussion must also take into consideration the effect of the group on the individuals involved. Bonner explains that the small group does exert pressure upon the attitudes and behavior of people. Attitudinal changes and performance on the part of the individuals will tend toward conformity to the group's standards. "The data show that every normal individual is conscious of the presence of others and adjusts his behavior to their expectations."[7] Simpson, for example, showed that small group discussion produced significant shifts in attitude on the part of the individual members in two respects: "(1) Toward certainty of the rightness of individual positions on issues considered, and (2) toward disagreement with the statements discussed."[8]

Although the field theory emphasizes the importance of the effect of the group upon the actions of individuals, the healthy personality

> finds satisfaction and self-esteem in attitudes and actions that are internally consistent. He can participate and discharge his obligations in a group most effectively and gratifyingly if he can be true to himself.[9]

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[7]Bonner, op. cit., p. 416.

[8]Ray H. Simpson, "Attitudinal Effects of Small Group Discussion," The Quarterly Journal of Speech, 46:415-418, December, 1960.

[9]Bonner, op. cit., p. 422.

This would imply, then, that an individual's personality needs will be reflected in his behavior in a group, and that the pressures of the group to conform will be resisted if such conformacy is inconsistent with the person's self-image.

Gibb, however, in a summary of research studies done in the area of personality traits and leadership, states:

> Numerous studies of the personalities of leaders have failed to find any consistent pattern of traits which characterize leaders . . . Secondly, there is abundant evidence that member personalities do make a difference to group performance.[10]

He concludes:

> Since individual personality characteristics are . . . very stable, it is to be expected that group leadership . . . will be fluid and will pass from one member to another along the line of those particular personality traits which, by virtue of the situation and its demands, become, for the time being, traits of leadership.[11]

The psychologist Bonner states that "research has shown that it is difficult to predict the behavior of persons in a group from premeasures of personality variables."[12]

On the other hand, however, Borg suggests that

> it seems reasonable to conclude from the success in predicting the leadership composite that predictions of

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[10]Cecil A. Gibb, "Leadership," Handbook of Social Psychology, Vol. II, ed. by Gardner Lindzey (Cambridge, Massachusetts: Addison-Wesley Publishing Company, Inc., 1954), p. 889.

[11]Ibid., p. 902. [12]Bonner, op. cit., p. 20.

> certain roles and behavior patterns in small group activity can be achieved by further developing predictor instruments along the lines indicated by this study.[13]

The predictor instruments used by Borg consisted of three personality tests, used in combination, to determine the salient personality characteristics of individuals.

Scheidel, on the basis of the study already cited, offers this hypothesis:

> Certain personality need and value structures can be directly related to behaviors of individual prominence in small group discussion; such structures cannot be consistently related to behaviors of group goal facilitation and group sociability, for these latter factors involve more fully the interactional elements of the situation.[14]

Scheidel assigns some of the personality need variables found on the Edwards Personal Preference Schedule into the three categories mentioned above:

Individual Prominence	Group Goal Facilitation	Group Sociability
achievement	achievement	affiliation
exhibition	order	nurturance
autonomy	endurance	
dominance		
abasement		
endurance		

Scheidel did recognize that factors within the group beyond the individual's inherent personality characteristics might cause leaders to emerge.

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[13]Borg, op. cit., p. 115.

[14]Scheidel, op, cit., p. 266.

> In our search for some consistent personality configuration, a field interpretation is needed, involving a person in a situation. The importance of the situation in producing the leader must never be slighted . . . In a narrowly defined area, such as small group problem-solving discussion, leadership certainly is not entirely situationally defined.[15]

One final area of research which should be included in a review of literature concerning this study would be the effect of talkativeness on small group discussion. Riecken, for example, confirmed an earlier study by Bales concerning the effect of talkativeness on the ability to influence group solutions of problems. Riecken and Bales both found that "the higher the individual ranks in amount of interaction initiated, the higher he is ranked in terms of his contribution to the solution of the problem,"[16] and amount of interaction initiated is directly related to talkativeness as defined in this study.

Krech and Crutchfield, in Theory and Problems of Social Psychology, add this to the subject of the effect of personality need variables on leadership in group discussion:

> Other things being equal, those persons who have insistent needs for dominance, power, and prestige may be expected to have higher potentiality for leadership. And this is particularly true to the extent to which these persons have developed personalities that are

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[15]Scheidel, op. cit., p. 261.

[16]Riecken, op. cit., pp. 309-321.

characterized by certain ways of satisfying these needs, viz., in dominating interpersonal relations with others.[17]

Like any member, the leader seeks achievement of the group goal and seeks also the satisfaction of personal or accessory needs. But what marks off the leader from the non-leader is the urgency of certain kinds of needs that are especially well served by the leadership role. Such needs are those of dominance, power, and prestige.[18]

In summary then, research studies in the area of correlating personality need variables with leadership, which has been shown to be related to the amount of contributions of individuals, have been inconsistent and relatively inconclusive. The one exception is in the personality variable Dominance, which seems to be a frequently recurring factor in studies of leadership. Scheidel, et. al.; Borg; and Richardson and Hanawalt reported success in predicting small group role behavior from personality need variables; however, other researchers have been unable to discover any consistent correlations between the two factors.

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[17] David Krech and Richard S. Crutchfield, Theory and Problems of Social Psychology (New York: McGraw-Hill, 1948), p. 437.

[18] Ibid., p. 436.

CHAPTER III

THE GROUPS SELECTED AND MATERIALS USED

This chapter will be devoted to explaining the planning and preparation of the experiment used in obtaining the data for this study. Included in this chapter will be a description of the basic structure of the experiment, the groups involved, the selection and training of observers, the discussion questions used, and the other information pertinent to the design of the experiment. Possible weaknesses, apparent to the researcher, will also be noted.

Selection of subjects. Eighty students from five Fundamentals of Speech classes at Kansas State Teachers College, Emporia, participated in the experiment. Of the original 80 subjects, six could not be used in the analysis because personality scores were either unobtainable or not valid due to inconsistancy on the test. The remaining 74 students (41 males and 33 females) served as the experimental subjects for this study. The distribution of subjects by sex is presented in Table I. These subjects were, for the most part, seventeen and eighteen years of age and freshmen in college. The classes were selected at random from the total Fundamentals of Speech program during the Spring semester, 1962. The researcher recognized that the

TABLE I

DISTRIBUTION OF SUBJECTS BY SEX

	Males	Females
Number of subjects	41	33

results of this experiment, based upon this incidental sample with a limited range of age and educational background, could be safely projected only to groups of similar composition.

Group size. The subjects were assigned to eighteen discussion groups consisting of four to five members. Two groups of four members had a subject missing because of unexpected illness, reducing the size of these two groups to three members. Because of the nature of the experiment, and the method used in determining talkativeness, this had no adverse effect on the validity of these groups in the experiment.

The size of the groups was determined after considering completed experimental studies in this area. Utterback, in his research report, "Experimental Studies of Motivated Group Discussion," used the term "small group" as one consisting of three to six members.[1] Harnack[2] and

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[1]William E. Utterback and Wallace C. Forthringham, "Experimental Studies of Motivated Group Discussion," Speech Monographs, 25:268-277, November, 1958.

[2]R. Victor Harnack, "An Experimental Study of the Effects of Training in the Recognition and Formulation of Goals upon Intra-Group Cooperation," Speech Monographs, 22:31-38, March 1955.

Wischmeier[3] also used groups ranging in size from four to six members. Lerea and Goldberg, in their study "The Effects of Socialization upon Group Behavior," used groups composed of five members.[4]

Bonner states that

> since optimum size is still a controversial issue, we may logically assume that the "ideal" size would be a group in which every member has an opportunity to contribute according to his maximum ability to the solution of a group's problem.[5]

Thelen also discusses this particular aspect of determining group size. He asserts that in a problem-solving group

> in which a wide range of social skills is required to keep the problem in front of the group and to build on all the suggestions offered, and to have a sufficient range of ideas to begin with, a . . . group, perhaps from four to eight, may be found necessary.[6]

Group composition. The groups of four and five subjects were matched within the individual classes on the basis of general ability scores, so any differences in talkativeness which could be attributed to the intelligence

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[3]Richard R. Wischmeier, "Group Centered and Leader-Centered Leadership: An Experimental Study," Speech Monographs, 22:43-48, March, 1955.

[4]Louis Lerea and Alvin Goldberg, "The Effects of Socialization Upon Group Behavior," Speech Monographs, 28:60-64, March, 1961.

[5]Bonner, op. cit., p. 215.

[6]Herbert A. Thelen, "How Large Should a Group Be?", Human Relations in Curriculum Change, Kenneth D. Benne and Bozidar Muntyan, editors (New York: The Dryden Press, 1951), pp. 134-35.

factor would be at a minimum. The general ability scores of the individuals were derived from the Schrammel General Ability Test, which is an adaptation and revision of the Army Alpha Intelligence Test. Through extensive correlations between different forms of the test and also between scores on the test and grades made by high school seniors, it was found that "the test ranks high in respect to both reliability and validity."[7]

Table II presents the range of general ability scores within each group. The subjects ranged on the scores from 63 at the bottom to 143 at the top. The range within individual groups varied from a difference of two points in one group to a difference of 26 points between the high and low individuals in another group. The mean range for all groups was 12.4 points. A later correlation of general ability scores and talkativeness was not significant.

The students had been in class approximately nine weeks before the discussions were held. Since no student was assigned to a group outside his class, the groups were assumed to be somewhat socially oriented. No attempt was made to include or exclude friends from groups by use of

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[7]H. E. Schrammel, Manual of Directions, Schrammel General Ability Test, (published by Bureau of Educational Measurements, Kansas State Teachers College, Emporia, 1959), p. 2.

TABLE II

RANGE OF GENERAL ABILITY SCORES WITHIN EACH DISCUSSION GROUP

Discussion Group Number	Number in Group	General Ability Range Within Each Group
1	4	89-101
2	4	102-109
3	3	112-113
4	4	116-123
5	4	63- 89
6	5	89-104
7	5	105-110
8	5	115-128
9	5	72- 92
10	3	100-104
11	4	105-116
12	4	119-132
13	5	81- 96
14	5	99-117
15	5	118-137
16	5	77-102
17	5	108-116
18	4	118-143
Total	80	

sociograms, and any matchings on this factor were purely by chance.

Because of the limited size of the individual classes, the groups could not be matched on the basis of sex. Table III presents the composition of the discussion groups by sex. Matched on the basis of general ability scores, two groups, by chance, were composed of all girls; three groups were composed of all boys; and thirteen groups were mixed.

Selection of discussion topics. The final selection of discussion topics was made on the basis of (1) topics which would require no research or preparation on the part of the discussants, (2) topics which had some degree of inherent interest to college students, and (3) topics which would lend themselves to discussions for the allotted length of time. The discussion topics selected were:

1. What should be done to improve school spirit at Emporia-State?

2. What are some ways in which the Student Union at Emporia-State could be improved?

3. What should the college student's attitude be about drinking?

4. What should be the influence of the Student Council in determining school policy at Emporia-State?

Length of discussions. Four discussions of fifteen minutes in length were held for each group, or a total of

TABLE III

COMPOSITION OF DISCUSSION GROUPS BY SEX

Number of groups with each sex combination	Group Composition		Total in each Group
	Males	Females	
1	5		5
1	4		4
1	3		3
4	4	1	5
1	3	1	4
3	3	2	5
1	2	3	5
3	1	3	4
1	1	4	5
1		3	3
1		4	4
Totals 18	46	34	

seventy-two discussions. The discussions were held on two different days during the regular class meeting time, and the two sessions were five days apart.

Fifteen minutes was chosen as the time limit because Bonner found that "given a limited period of time--an average of about fifteen minutes--a group of five feels that it has enough time for discussion."[8]

Utterback also came up with an interesting conclusion based on the findings of his experiment. He states that:

> In discussion of five minutes or less, there is little time to explore the argument and majority influence is strong, . . . when nine minutes are available for discussion, many arguments are presented and criticized, majority influence wanes, thinking becomes confused, and the quality of judgment declines. If still another four minutes are available, confusion is dissipated, the better argument wins over the poorer, and the quality of judgment reaches its maximum point.[9]

The students were given the discussion topic and allowed two minutes to think of possible solutions to the problem.[10] Then they were told to begin discussing the problem. No member was designated as leader, and any member could initiate the discussion and contribute as he so desired or the situation permitted. As a motivational

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[8]Bonner, op. cit., p. 214.

[9]Utterback and Fotheringham, op. cit., pp. 268-277.

[10]The specific instructions read to each group are included in Appendix A.

influence, the members were informed that they would be traded on the discussion, that each individual's grade would be based upon the functioning of the group as a totality, and that this grade would be used by the instructor as a regular speech grade. To help make the discussants more aware of the group problem-solving aspect of the discussion, the observer told them when three minutes were left in the discussion time in order to use the final moments to reach some sort of agreement as to the best solution or answer to the discussion problem. At the end of the discussion, the students were asked to write a short report of what the group had accomplished.

At times the groups would cease discussing before the allotted time had elapsed. In this case, the observer would give the discussants an opportunity to discuss the points on which agreement could be reached, and then would officially stop the discussion. A corrected time, based upon the total time used in talking by all members in the group, was used on each individual discussion in the determination of the proportionate participation for each discussant.[11]

Selection and training of observers. The observers in charge of the individual discussion groups and who were

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[11]"Proportionate participation" is discussed later in this chapter.

responsible for recording the participants' contributions were a speech faculty member, three graduate speech students, and a junior speech major. All observers had either completed a senior class in group discussion techniques or else had had some practical experience in managing or participating in group discussions where they were aware of the discussion process.

A practice discussion session was held which gave the observers some practical experience in timing contributions with a stop watch. This practice session served a two-fold purpose: (1) It gave the observers an opportunity to familiarize themselves with the experimental situation which they would encounter, and (2) it gave the researcher a means of determining, first, if the experiment were feasible, and secondly, the reliability of the observers in accurately recording correct times on the participation record.[12]

The results of the practice session indicated the method was functional. Not only did all the observers record the same number of contributions for each discussant, but the individual timings were extremely close. As a typical example, Participant #3 in the practice discussion was timed as follows by the five observers:

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[12]A sample of the participation record devised for this study is included in Appendix B.

Observer 1	180 seconds
Observer 2	174 seconds
Observer 3	169 seconds
Observer 4	178 seconds
Observer 5	192 seconds
Tape timing	192 seconds

Further, the observer who recorded the shortest time, 169 seconds, was consistently shorter in his recordings, so that the proportionate participation was not seriously affected. A tape recording of the discussion was later timed, and timings from the tape were found to co-incide within a few seconds of the timings made during the discussion. The slight variation in times which did exist was not enough to have any significant effect on the per cent of proportionate participation used in the correlation.

Timing contributions. The observers were instructed to time with a stop watch the individual contributions of the discussants. If a contribution was of such short duration that a timing was impossible to obtain, a mark was made to indicate that a communication had been initiated. The first instruction called for a specific timing of any contribution of five seconds or more in length, and a mark made for any contribution which was shorter than five seconds. It was found, however, that in many cases, contributions of three and four seconds could be accurately timed after the observers had become familiar with the experimental procedure.

It was also found through experimental timings of short contributions that two seconds was the average time for the contributions indicated by a mark on the participation record; therefore, this figure was used in determining the total time of each participant.

Method of determining talkativeness. Because of the differences in the size of the groups, and also because of the differences in the total corrected times of the discussions, some method had to be devised in order to equate the amount of talking of various individuals in different situations. A discussant's "per cent of proportionate participation" was the answer.

In a discussion group of five members, each member theoretically would be allotted twenty per cent of the total time to fill. In a group of four, each member would theoretically have twenty-five per cent. The extent to which each member filled this allotted time, then, could be considered as a measurement of talkativeness. For example, if a member of a five member discussion group talked one-fifth of the total time, this member's per cent of proportionate participation would be 100 per cent. If another member of this same group talked one-tenth of the total time, his per cent of proportionate participation would be 50 per cent.

With this method, all seventy-four subjects could be arranged in rank order in one group, and it also provided a

means of correlating the results of the experiment on a scatter diagram.

Personality test used. The Edwards Personal Preference Schedule, validated as an instrument of psychological research, was employed in this experiment. The subjects were given the test as a part of a large scale testing program of all the Fundamentals of Speech students enrolled in the spring semester, 1962.

The E.P.P.S., by means of 225 personal choice selections of one of a pair of statements which the subject considers to be more representative of himself, measures fifteen personality need variables. These variables, as described in the Edwards Manual, are:

1. ach Achievement: To do one's best, to be successful, to accomplish tasks requiring skill and effort, to be a recognized authority, to accomplish something of great significance, to do a difficult job well, to solve difficult problems and puzzles, to be able to do things better than others, to write a great novel or play.

2. def Deference: To get suggestions from others, to find out what others think to follow instructions and do what is expected, to praise others, to tell others that they have done a good job, to accept the leadership of others, to read about great men, to conform to custom and avoid the unconventional, to let others make decisions.

3. ord Order: To have written work neat and organized, to make plans before starting on a difficult task, to have things organized, to keep things neat and orderly, to make advance plans when taking a trip, to organize details of work, to keep letters and files according to some system, to have meals organized and a definite time

for eating, to have things arranged so that they run smoothly without change.

4. exh Exhibition: To say witty and clever things, to tell amusing jokes and stories, to talk about personal adventures and experiences, to have others notice and comment upon one's appearance, to say things just to see what effect it will have on others, to talk about personal achievements, to be the center of attention, to use words that others do not know the meaning of, to ask questions others cannot answer.

5. aut Autonomy: To be able to come and go as desired, to say what one thinks about things, to be independent of others in making decisions, to feel free to do what one wants, to do things that are unconventional, to avoid situations where one is expected to conform, to do things without regard to what others may think, to criticise those in positions of authority, to avoid responsibilities and obligations.

6. af Affiliation: To be loyal to friends, to participate in friendly groups, to do things for friends, to form new friendships, to make as many friends as possible, to share things with friends, to do things with friends rather than alone, to form strong attachments, to write letters to friends.

7. int Intraception: To analyze one's motives and feelings, to observe others, to understand how others feel about problems, to put one's self in another's place, to judge people by why they do things rather than by what they do, to analyze the behavior of others, to analyze the motives of others, to predict how others will act.

8. suc Succorance: To have others provide help when in trouble, to seek encouragement from others, to have others be kindly, to have others be sympathetic and understanding about personal problems to receive a great deal of affection from others, to have others do favors cheerfully, to be helped by others when depressed, to have others feel sorry when one is sick, to have a fuss made over one when hurt.

9. dom Dominance: To argue for one's point of view, to be a leader in groups to which one belongs, to be regarded by others as a leader, to be elected or appointed chairman of committees, to make group

decisions, to settle arguments and disputes between others, to persuade and influence others to do what one wants, to supervise and direct the actions of others, to tell others how to do their jobs.

10. aba Abasement: To feel guilty when one does something wrong, to accept blame when things do not go right, to feel that personal pain and misery suffered does more good than harm, to feel the need for punishment for wrong doing, to feel better when giving in and avoiding a fight than when having one's own way, to feel the need for confession of errors, to feel depressed by inability to handle situations, to feel timid in the presence of superiors, to feel inferior to others in most respects.

11. nur Nurturance: To help friends when they are in trouble, to assist others less fortunate, to treat others with kindness and sympathy, to forgive others, to do small favors for others, to be generous with others, to sympathize with others who are hurt or sick, to show a great deal of affection toward others, to have others confide in one about personal problems.

12. chg Change: To do new and different things, to travel, to meet new people, to experience novelty and change in daily routine, to experiment and try new things, to eat in new and different places, to try new and different jobs, to move about the country and live in different places, to participate in new fads and fashions.

13. end Endurance: To keep at a job until it is finished, to complete any job undertaken, to work hard at a task, to keep at a puzzle or problem until it is solved, to work at a single job before taking on others, to stay up late working in order to get a job done, to put in long hours of work without distraction, to stick at a problem even though it may seem as if no progress is being made, to avoid being interrupted while at work.

14. het Heterosexuality: To go out with members of the opposite sex, to engage in social activities with the opposite sex, to be in love with someone of the opposite sex, to kiss those of the opposite sex, to be regarded as physically attractive by those of the opposite sex, to participate in discussions about sex, to read books and plays involving sex, to listen to or to tell jokes involving sex, to become sexually excited.

15. agg Aggression: To attack contrary points of view, to tell others what one thinks about them, to criticize others publicly, to make fun of others, to tell others off when disagreeing with them, to get revenge for insults, to become angry, to blame others when things go wrong, to read newspaper accounts of violence.

General discussion procedures and comments. The subjects in the individual discussion groups were not told the specific purpose for the discussions in terms of the experimental factors involved. Although the students were aware that they were being used in an experiment, they also were conscious of the fact that a grade would be given on the group's performance, and that, in this sense, the discussions were a part of their regular class work.[13]

The discussions were held in a separate room for each group, with only the group members and the observer present. The observer was instructed to give the students the necessary information to get the discussions started, and then to remain as inconspicuous as possible during the actual discussion.

The researcher recognizes that the composition of the groups in terms of personality combinations could have an effect on individual contributions in different groups. The response of a submissive person, for example, in a group of

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[13]The explanation read to the subjects the class meeting before the discussions began is included in Appendix C.

other submissive persons would logically be quite different than this same person's response in a group of aggressive or dominating personalities. Certain other personality combinations could conceivably have an effect on the talkativeness of different individuals. It was assumed, however, that with the number of subjects used, if the personality need variables did have any effect on the amount of talkativeness, these characteristics would predominate enough to be statistically significant.

CHAPTER IV

PRESENTATION AND INTERPRETATION OF DATA

This chapter will present and interpret the data obtained from the discussion experiments. Items which will be considered are the correlation of personality variables and talkativeness, the effect of intelligence on this correlation, and observed effects of sex differences as applied to talkativeness in small group discussion.

Data used in study. The scores to be correlated were those discussed in the Chapter III; that is, the individual's per cent of proportionate participation and the raw scores from the Edwards Personal Preference Schedule which indicated the personality need variables of individuals. Pearson's product-moment coefficient of correlation was used for correlating each personality need variable with talkativeness.

The *a priori* predictions made by the researcher between the personality variables and talkativeness are summarized in Table IV.

The results of the correlations of the fifteen personality variables with talkativeness in small group discussion are listed in Table V.

The major purpose of this study was divided into three questions. Each of these will be considered individually.

TABLE IV

A PRIORI PREDICTIONS OF RESEARCHER REGARDING PERSONALITY NEED VARIABLES AND TALKATIVENESS

Personality need variable	Anticipated relationship with talkativeness*
Achievement	+
Deference	0
Order	0
Exhibition	+
Autonomy	0
Affiliation	-
Intraception	0
Succorance	0
Dominance	+
Abasement	0
Nurturance	0
Change	0
Endurance	+
Heterosexuality	0
Aggression	0

*+ indicates an anticipated positive relationship
- indicates an anticipated negative relationship
0 indicates no anticipated correlation

TABLE V

CORRELATION OF PERSONALITY NEED VARIABLES WITH TALKATIVENESS IN SMALL GROUP DISCUSSION

Personality need variable	Pearson r
Achievement	.09
Deference	.01
Order	.11
Exhibition	.00
Autonomy	.03
Affiliation	- .08
Intraception	- .34**
Succorance	- .18
Dominance	.33**
Abasement	- .10
Nurturance	- .04
Change	.02
Endurance	.18
Heterosexuality	.08
Aggression	.14

**significant at the .01 level of confidence

Question 1. Is there a positive relationship between talkativeness in small group discussion and the personality variables Dominance, Achievement, Exhibition, and Endurance?

The personality variable Dominance showed a positive correlation of .33 with talkativeness in small group discussion. This is significant at the .01 level of confidence. The other three variables showed no significant relationship, although the positive correlation between Endurance and talkativeness of .18 approached the .05 level.

The Dominance correlation with talkativeness confirmed an earlier finding of Scheidel, Crowell, and Shepherd concerning Dominance as a trait of effective discussants, and verified the predicted correlation with talkativeness as stated in the problem.

A correlation of Dominance and talkativeness with intelligence held constant disclosed a positive correlation of .32, which was also significant at the .01 level of confidence.

The formula used in holding the intelligence variable constant was:[1]

$$r_{12.3} = \frac{r_{12} - r_{13}\, r_{23}}{(1 - r^2_{13})\quad(1 - r^2_{23})}$$

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[1]J. P. Guilford, Fundamental Statistics in Psychology and Education (New York: McGraw-Hill Book Co., 1950), p. 345.

where

$r_{12.3}$ is the correlation of the personality variable and talkativeness with intelligence held constant;

r_{12} is the correlation of the personality variable and talkativeness;

r_{13} is the correlation of the personality variable and intelligence;

r_{23} is the correlation of talkativeness and intelligence.

The correlations used in this formula are found in Table VI.

To hold the personality variable constant while correlating intelligence and talkativeness, the same formula was used, with 1 and 2 representing the variables being correlated and 3 representing the variable held constant.

A correlation of intelligence and talkativeness with Dominance held constant was not significant.

Dominance had been defined as the need "to be regarded by others as a leader, . . . to make group decisions, to settle arguments and disputes between others, to persuade others to do what one wants . . ."[2] This need, then, can evidently be satisfied through talkativeness in small group discussion.

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[2]Edwards, loc. cit.

TABLE VI

CORRELATIONS USED IN FORMULA TO HOLD INTELLIGENCE VARIABLE CONSTANT

Variables correlated	Coefficient of correlation
Dominance and Talkativeness	+.33**
Intraception and Talkativeness	-.34**
General Ability and Talkativeness	+.07
Dominance and General Ability	+.12
Intraception and General Ability	+.05

**significant at .01 level of confidence

Question 2. Is there a negative relationship between talkativeness in small group discussion and the personality variable Affiliation?

The correlation between Affiliation and talkativeness, although it was negative, was not significant.

On the basis of this finding, the hypothesis must be rejected. Although Affiliation was defined as the need "to participate in friendly groups,"[3] the participation can evidently be of a passive nature and is not related to the amount of talking done by the member. This finding does not substantiate an earlier finding by Scheidel, et. al., which showed a significant negative correlation between Affiliation and effective discussants.

Question 3. Is there a relationship between talkativeness in small group discussion and the personality variables Deference, Order, Autonomy, Intraception, Succorance, Abasement, Nurturance, Change, Heterosexuality, and Aggression?

There were no significant correlations between Deference, Order, Autonomy, Succorance, Abasement, Nurturance, Change, Heterosexuality, and Aggression and talkativeness in small group discussion. The negative

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[3]Ibid.

correlation between Succorance and talkativeness of .18 approached the .05 level.

One value judgement finding which was significant at the .01 level, and which had not been predicted, was the negative correlation of .34 between the personality variable Intraception and talkativeness in small group discussion. The correlation of Intraception and talkativeness with intelligence held constant was also significant at the .01 level. The correlation of intelligence and talkativeness with Intraception held constant was not significant.

With the exception of the correlation between Intraception and talkativeness, the null hypothesis can be accepted.

The unpredicted negative correlation of Intraception and talkativeness should be of concern to people working in the area of small group discussion, for one of the points stressed in many discussion books is that discussants should attempt to understand the other individuals in the group. In either speaking or listening, assuming the other person's point of view may help eliminate needless misinterpretation and misunderstanding. Howell and Smith, however, emphasize that the discussant must go beyond the "wanting" to identify with the other person, but fulfill, as much as possible, those desires.[4]

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[4]William S. Howell and Donald K. Smith, Discussion (New York: Macmillan Company, 1956), p. 23.

Braden and Brandenburg point out that good listening, also, is more than just keeping quiet while the other fellow is speaking; it includes attempting to understand the speaker's point of view and reasoning.[5]

The positive relationship of Dominance and the negative relationship of Intraception with talkativeness were the major influences found; however, two other correlations, although not statistically significant, might be noted. A positive correlation of .18 between Endurance and talkativeness and a negative correlation of .18 between Succorance and talkativeness were mentioned earlier. These personality variables were predicted to have effects on talkativeness which were only slightly indicated by the correlations found.

> Whenever a relationship between two variables is established beyond reasonable doubt, the fact that the correlation is small may merely mean that the measurement situation is contaminated by many things uncontrolled or not held constant. One can readily conceive of an experimental situation in which, if all irrelevant factors had been held constant, the r might have been 1.00 rather than .20.[6]

The difficulties involved in holding all variables constant with the exception of the experimental factors in

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[5]Waldo W. Braden and Earnest Brandenburg, Oral Decision Making: Principles of Discussion and Debate (New York: Harper and Brothers, 1955), p. 260.

[6]Guilford, op. cit., p. 166.

small group discussion were discussed in the preceding chapter. Many of the interactional elements of a group are not only uncontrollable, but also highly unpredictable. Perhaps as experimental discussion techniques are perfected, means will be found to hold more of the variables constant.

Talkativeness and sex. Sex differences as an influence on talkativeness, while not considered of major importance in this paper, might also be mentioned. No conclusions can be made on the basis of this data, but the findings do suggest an area for further research.

One aspect noted here was the high percentage of male subjects who ranked high in talkativeness in comparison with the female subjects. Of the twenty-five students in the high talkative group,[7] twenty-one were males and only four were females; whereas in the low talkative group,[8] only ten were males and fifteen were females. These data are summarized in Table VII.

It should also be noted that of the four females who ranked in the high talkative group, two were in groups composed only of females, and the other two were in groups

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[7]The high talkative group is the upper 34% (25 subjects) in talkativeness.

[8]The low talkative group is the lower 34% (25 subjects) in talkativeness.

containing only one male discussant each; so all groups in which females ranked as high talkers were predominantly female.

Of the twenty-one male subjects who ranked high in talkativeness, eighteen were in groups predominantly composed of males, while the other three were in groups composed predominantly of females. It must also be noted, however, that sixty-four per cent of all the subjects were in groups which were predominantly male, and only thirty-six per cent of all the subjects were in groups which were predominantly female. There were no groups containing an equal number of each sex.

Hoffman found that sex can influence group member attraction to other members when combined with personality heterogeneity. He concluded:

> Heterogeneity, either of personality or sex alone, appears to have no direct affect on the attraction of group members to each other . . . When, however, sex heterogeneity is combined with personality heterogeneity, a sharp drop in attraction occurs.[9]

From this conclusion, one could hypothesize that sex differences in a group, or an interaction of sex and personality, has some effect on talkativeness in problem-solving discussion. One hypothesis that is suggested on the basis

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[9]L. Richard Hoffman, "Similarity of Personality: A Basis for Interpersonal Attraction?" Sociometry, 21:300-308, December, 1958, pp. 305-306.

TABLE VII

NUMBER OF MALES AND FEMALES RANKING HIGH AND LOW IN TALKATIVENESS

Talkativeness	Male	Female
High*	21	4
Low*	10	15
Average	10	14
Totals	41	33

*High talkative group is the upper 34% (25 Subjects) in talkativeness. Low talkative group is the lower 34% (25 Subjects) in talkativeness.

of this data is that a discussant will tend to talk more in a group predominantly composed of members of the same sex than in a group predominantly composed of members of the opposite sex.

In summary, the results of this study support the hypothesis that a talkative member of a small group discussion will evince a personality need for Dominance on the E.P.P.S.

The findings do not support the predicted positive correlations of talkativeness and Achievement, Exhibition, and Endurance with any degree of significance. The predicted negative correlation between talkativeness and Affiliation was not significantly substantiated by the findings of this study.

No correlations were predicted between talkativeness and Deference, Order, Autonomy, Succorance, Abasement, Nurturance, Change, Heterosexuality, and Aggression; and these were verified by the findings.

The one result which was not predicted was the negative correlation of talkativeness and Intraception in small group discussion. This finding indicates that the widespread philosophy of inquiry which is promulgated in nearly every discussion book may not, in reality, be as much a part

of problem-solving group discussion as the discussion authorities would consider desirable.[10]

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[10] See Dean C. Barnlund and Franklyn S. Haiman's The Dynamics of Discussion (Boston: Houghton Mifflin Company, 1960), pp. 265-272.

Also, Halbert E. Gulley's Discussion, Conference, and Group Process (New York: Henry Holt and Co., 1960), pp. 113-126.

Rupert L. Cortright and George L. Hinds's Creative Discussion (New York: The Macmillan Company, 1959), pp. 6-9.

Braden and Brandenburg, op. cit., pp. 257-262.

CHAPTER V

SUMMARY, CONCLUSIONS, AND IMPLICATIONS FOR FURTHER RESEARCH

I. SUMMARY

The first chapter of this study discussed the problem and defined the major terms used. The importance of the study and limitations were also stated.

The purpose of this study was to discover any correlations which may exist between certain personality need variables of individuals as indicated on the Edwards Personal Preference Schedule and talkativeness in small group discussion. The hypotheses were in three forms: (1) a positive correlation was predicted for talkativeness and Dominance, Achievement, Exhibition, and Endurance; (2) a negative correlation was predicted for talkativeness and Affiliation; and (3) no correlation was predicted for talkativeness and Deference, Order, Autonomy, Intraception, Succorance, Abasement, Nurturance, Change, Heterosexuality, and Aggression.

Chapter II presented a review of the literature regarding the effect of personality on individual behavior in small group discussion. It was found that research studies in the area of correlating personality variables with leadership, which was shown to be related to the

talkativeness of group members, have been relatively inconsistent and inconclusive.

Chapter III discussed the groups selected and materials used in the experiment.

Eighty students from five sections of Fundamentals of Speech at Kansas State Teachers College, Emporia, took part in the experiment. Six students were eliminated from the analysis because their personality scores were either unobtainable or not valid due to inconsistency on the test. The remaining seventy-four subjects consisted of thirty-three females and forty-one males. Eighteen discussion groups, composed on the basis of general ability scores to keep the intelligence variable constant, were formed using four or five members per group.

Each group discussed four different topics for a total of seventy-two group discussions of fifteen minutes duration. A trained observer was present at each discussion to time each individual's contributions with a stop watch. From this raw time, the discussant's per cent of proportionate participation was figured, and this was then correlated with the raw scores from the E.P.P.S.

Chapter IV presented and analyzed the data obtained from the experiment.

II. CONCLUSIONS

Conclusions reached in this study are valid only when considered within the conditions of the experiment. These conditions were:

1. The group members were approximately the same age and had similar educational backgrounds.
2. The students were required to participate to earn grade credit in speech class.
3. The students were in the same class for approximately nine weeks before the experiment.
4. An observer was present for each discussion.

The following conclusions seem justified on the basis of the findings:

1. Since Dominance correlates significantly with talkativeness in small group discussion, it seems that talkativeness in discussion groups is one means of satisfying this need.
2. A significant negative correlation existed between Intraception and talkativeness indicating that the person who talks more has less need for attempting to understand the other members of the group.
3. There were no significant correlations between talkativeness in small group discussion and the

personality variables Achievement, Deference, Order, Exhibition, Autonomy, Affiliation, Succorance, Abasement, Nurturance, Change, Endurance, Heterosexuality, and Aggression.

4. Two correlations, although not statistically significant, were noted. A negative correlation between Succorance and talkativeness, and a positive correlation between Endurance and talkativeness were high enough to indicate the possibility of significance. More research is necessary to verify or reject these findings.

5. Intelligence had no significant effect on talkativeness within the groups as structured in the experiment.

6. Discussants tended to talk more in groups predominatly composed of members of the same sex.

III. IMPLICATIONS FOR FURTHER RESEARCH

1. What factors in addition to the individual personality need variables found in this study have an affect on talkativeness? Further research may reveal causes still unknown or are now only guesses.
2. What influence does intelligence have on the personality's affect on talkativeness in terms of high and low ability groups? An enlarged experiment similar to the present study could be conducted, with high and low level groups correlated separately in regards to personality need variables and talkativeness.
3. How could personality profiles, as opposed to individual personality need variables, be used in determining causes of talkativeness?
4. How does homogeneity or heterogeneity of personality affect talkativeness of individuals in small group discussion?
5. If further research confirms the correlation of low Intraception and talkativeness, what steps can group members take to compensate for or overcome this?
6. What influence, if any, do Endurance and Succorance have on talkativeness in small group

discussion? Further research using more stringent control techniques may modify the findings indicated in this study.

7. What influence does sex difference, or an interaction of sex difference and personality, have on talkativeness in small group discussion?

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APPENDICES

APPENDIX A

APPENDIX A

DIRECTIONS FOR OBSERVERS

Arrange the groups in a numerical order as listed on the Participation Record from left to right in a semi-circle. This will facilitate the timing of each individual member.

During the discussion, take a seat facing the group at the back of the room. Be as inconspicuous as possible once the discussion starts.

Read the following to the group before the first discussion:

> the purpose of this discussion group is to find the best possible s olution to the problemwhich you will be given. At the end of the discussion, each of you will be asked to submit a written consensus of the group's opinion as to the best solution to the problem. This will be due at the next class meeting. You will be graded as a group on the discussion.
>
> Each of you will be given a copy of the problem and allowed two (2) minutes to think of possible solutions.
>
> Then, when I say to begin the discussion, you will have ____ minutes to discuss the problem as a group. I will tell you when three (3) minutes are left in the allotted time so that you will have a chance to reach some sort of an agreement.
>
> After the discussion, you will be given four (4) minutes to jot down notes to use in writing your summary.
>
> Here is the first problem.

Keep the times as indicated in the directions, and keep the groups informed as noted. Record the individual times as

stated on the Participation Record, and if a group stops discussion or reaches agreement before the allotted time limit, indicate the total time which was used in the space provided on the Participation Record.

Read the following to the group before the second discussion:

> Here is the second discussion problem. Again you will be allowed two (2) minutes to think of possible solutions. Then you will be given_____minutes to discuss. I will inform you when to begin discussing, andwill let you know when three (3) minutes are left to give you an opportunity to reach some agreement on the solution to the problem.
>
> At the end of the discussion, each of you will be required to write a short paragraph of the group's decision, which will be handed in at the next class meeting. If no agreement is reached, this should be indicated.

Give them the problems, and keep the necessary times indicated above and on the Participation Record.

Give the group a grade (A, B, C, D, F), using your own value judgments as to how well they performed as a group, and record this on the second Participation Record. This grade will be based upon both group discussions.

APPENDIX B

APPENDIX B

PARTICIPATION RECORD

Observer _____

Group No. _____
Class _____
Instructor _____
Time _____
Room _____

Discussion No. _____

Time limit _____ minutes
(actual discussion time allowed)

Corrected time_____min._____sec.

Group Grade_____(A, B, C, D, F)

Participants:
1.
2.
3.
4.
5.
6.

INSTRUCTIONS:

Make sure the members are arranged numerically as listed above from left to right in a semi-circle arrangement at the front of the room. This will facilitate the timing of each member. Use the spaces below to keep a record of all contributions made by each individual. If a discussant's contribution is less than five (5) seconds in length, simply make a mark to indicate that a contribution was made. If the contribution is more than five seconds, record, to the best of your ability, the time in <u>seconds</u> of the length of the contribution.

Read the directions on the attached page very carefully.

PARTICIPANT 1	PARTICIPANT 2	PARTICIPANT 3	PARTICIPANT 4	PARTICIPANT 5
TOTALS:				

APPENDIX C

APPENDIX C

INSTRUCTIONS TO BE READ TO EXPERIMENTAL CLASSES THE CLASS MEETING PRECEDING GROUP DISCUSSIONS

Next (Wed., Thurs.) and (Mon., Tues.) you are going to be taking part in small group discussions which are part of an experiment being conducted in some of the Fundamentals of Speech classes. You will not need any advanced preparation for these discussions, but it is highly important that you do take part. You will be graded on these discussions, and there will be no way of making this grade up if you cannot be present on the days assigned.

Either I or a graduate speech student will be present during the discussion, and he or I will arrange you and tell you what to do. He will also serve as an observer, and will be keeping a record of certain phases of the discussion.

You will be given two problems to discuss, and then, you, as a group, will discuss various solutions to these problems. Your goal will be to arrive at the best possible solution to the problem.

Your individual grades will be based upon the functioning of the entire group, which means that everyone in the group will receive the same grade. Since the total group grade depends upon the presence of all members of the

group, it is extremely important that no one is absent. If you cannot be present on either of the two days, let me know immediately after class.

Here are the groups and the rooms where you will meet (Wed., Thurs.,) and (Monday, Tuesday). Do not report here, but go directly to your assigned rooms at (indicate the time the class meets). The observer will take roll and will provide you with all the necessary information. You will need to bring pencil and paper.

APPENDIX D

X: Per cent of Proportionate Partic

Y: Raw scores of Personality Need Variable Change

	0-15	16-30	31-45	46-60	61-75	76-90	91-105	106-120	121-135	136-150	151-165	166-180	181-195	196-210	211-225	22 21
27-28																
25-26				1				2								
23-24						1				1		1				
21-22				1	1	1		2								
19-20			2	3	3	1	1	1	2	2						
17-18				1	1	1	3	1	2	4						
15-16		1			3	2	2	1		1						
13-14			1	1			1	1	1	1						
11-12			1	1		2		1							1	
9-10		1	1		2				1			1				
7-8			1					1								
5-6		1			1						1					
3-4									1							
1-2																
fx		3	6	8	11	8	7	9	7	9	1	2			1	
x'		-5	-4	-3	-2	-7		1	2	3	4	5	6	7	8	9
fx'		-15	-24	-24	-22	-8		9	14	27	4	10			8	
fx^2		75	96	72	44	8		9	28	81	16	50			64	
xy' +		40	40	9	22	4		19	12	36		20				
xy' -			10	45	20	10		5	20	3	20	15			16	

X: Per cen

Y: Raw scores of Personality Need Variable Aggression

	0-15	16-30	31-45	46-60	61-75	76-90	91-105	106-120
27-28								
25-26								
23-24								
21-22								
19-20						1		2
17-18				1			1	1
15-16			2		2	1	1	
13-14					2	1		
11-12			2			2		
9-10		1		4	3	1	1	1
7-8		1	1	1	2	1	3	2
5-6			1		1	1	1	2
3-4		1			1			1
1-2				2				
fx		3	6	8	11	8	7	9
x'		-5	-4	-3	-2	-1		1
fx'		-15	-24	-24	-22	-8		9
fx^2		75	96	72	44	8		9
+ xy'		20	12	27	14	3		14
-			32	12	20	12		9

X: Per cent

Y: Raw scores of Personality Need Variable Achievement

	0-15	16-30	31-45	46-60	61-75	76-90	91-105	106-120	1
27-28									
25-26									
23-24									
21-22		1							
19-20				1		1			1
17-18			1		1	1	1		1
15-16			2	1	3			3	
13-14				1	3			2	1
11-12		1	2	2	3	2	2	3	1
9-10				1		1	1	1	
7-8				1	1	1	2		
5-6			1	1		2	1		
3-4		1							
1-2									
fx		3	6	8	11	8	7	9	
x'		-5	-4	-3	-2	-1		1	
fx'		-15	-24	-24	-22	-8		9	1
fx^2		75	96	72	44	8		9	2
xy' +		30	24	33	12	15		3	1
xy' −		20	16	12	10	5		5	

X: Per cent of Proportionate Partici

Y: Raw scores of Personality Need Variable Order

	0-15	16-30	31-45	46-60	61-75	76-90	91-105	106-120	121-135	136-150	151-165	166-180	181-195	196-210	211-225	226-240
27-28																
25-26																
23-24																
21-22																
19-20										1						
17-18								1								
15-16						1	1	2	2			1				
13-14			2	3	1				2	1						
11-12			2	2	1	2	3	3	1	1		1				
9-10		1	1		8		1	1		1						
7-8				2	1	2	1	1		2	1					
5-6		2	1			1		1	1							
3-4				1		2	1			3					1	
1-2									1							
fx		3	6	8	11	8	7	9	7	9	1	2			1	
x'		-5	-4	-3	-2	-1		1	2	3	4	5	6	7	8	9
fx'		-15	-24	-24	-22	-8		9	14	27	4	10			8	
fx^2		75	96	72	44	8		9	28	81	16	50			64	
xy' +		20	8	15	2	10		13	22	24		20				
xy' -			24	24	6	5		3	12	33	4				24	

X: Per cent

Y: Raw scores of Personality Need Variable Succorance

	0-15	16-30	31-45	46-60	61-75	76-90	91-105	106-120	12
27-28		1							
25-26									
23-24									
21-22			1			1			
19-20				1	1	1		1	
17-18			1	1	1		1		
15-16					2	1	1	2	
13-14				1	3	1			
11-12			2	3	3		2	2	
9-10				2				1	
7-8		1	1		1	3	1	2	
5-6		1					1	1	
3-4			1			1			
1-2									
fx		3	6	8	11	8	7	9	
x'		-5	-4	-3	-2	-1		1	
fx'		-15	-24	-24	-22	-8		9	1
fx^2		75	96	72	44	8		9	
+ xy'		25	24	6	4	10		8	
-		10	32	24	28	12		8	

X: Per cent

Y: Raw scores of Personality Need Variable Endurance

	0-15	16-30	31-45	46-60	61-75	76-90	91-105	106-120
27-28								
25-26								
23-24						1		1
21-22			1			1		
19-20		1		1		2		
17-18			1				1	3
15-16					2	1	2	1
13-14			1		2	1		2
11-12		1	1	2	1		3	1
9-10			2	3	3			
7-8				1	1	1		1
5-6				1	1	1	1	
3-4		1			1			
1-2								
fx		3	6	8	11	8	7	9
x'		-5	-4	-3	-2	-1		1
fx'		-15	-24	-24	-22	-8		9
fx^2		75	96	72	44	8		9
+ xy'		30	20	45	38	7		12
−		15	22	9	4	16		4

X: Per cent

Y: Raw scores of Personality Need Variable Abasement

	0-15	16-30	31-45	46-60	61-75	76-90	91-105	106-120
27-28					1			
25-26			1					1
23-24				1		1	1	
21-22			1		4	1		1
19-20				1	1	2	2	1
17-18			1	2				2
15-16		2	3	2	2	2		1
13-14				1	1		2	1
11-12				1			2	1
9-10					1			1
7-8		1			1			
5-6						2		
3-4								
1-2								
fx		3	6	8	11	8	7	9
x'		-5	-4	-3	-2	-1		1
fx'		-15	-24	-24	-22	-8		9
fx^2		75	96	72	44	8		9
+ xy'		20		9	16	10		12
-			36	24	40	11		6

X: Per c

Y: Raw scores of Personality Need Variable Nurturance

	0-15	16-30	31-45	46-60	61-75	76-90	91-105	10 1
27-28								
25-26					1			1
23-24			1		1	2		
21-22		1		2		1		1
19-20			2		3			1
17-18			1	2	1	2	1	2
15-16			1	2	1		3	1
13-14				2	1			
11-12					1	2	1	2
9-10			1		2		2	
7-8		1				1		1
5-6								
3-4		1						
1-2								
fx		3	6	8	11	8	7	9
x'		-5	-4	-3	-2	-1		1
fx'		-15	-24	-24	-22	-8		9
fx^2		75	96	72	44	8		9
+ xy'		50	12	6	18	6		12
-		15	36	24	32	13		8

X: Per ce

Y: Raw scores of Personality Need Variable Intraception	0-15	16-30	31-45	46-60	61-75	76-90	91-105	106-120
27-28								
25-26		1						
23-24			2	1	2			
21-22			1	3	1	1		
19-20		1		2	1	1	1	1
17-18			2			1	2	1
15-16			1	2	2	2	2	4
13-14					1	2		1
11-12		1			2	1		
9-10							1	1
7-8					2		1	
5-6								
3-4								
1-2								
fx		3	6	8	11	8	7	9
x'		-5	-4	-3	-2	-1		1
fx'		-15	-24	-24	-22	-8		9
fx^2		75	96	72	44	8		9
+ xy'		10			26	6		3
-		35	52	51	26	6		4

X: Per cent

Y: Raw scores of Personality Need Variable Affiliation

	0-15	16-30	31-45	46-60	61-75	76-90	91-105	106-120	12
27-28									
25-26			1	1			1		
23-24				2		1		2	
21-22		1		1	3	1		1	
19-20			1	1	2	2	1		
17-18			1	1	2		1	2	
15-16			1		2	1	3	1	
13-14		1	1		2			1	
11-12			1	1		3	1	1	
9-10		1		1					
7-8								1	
5-6									
3-4									
1-2									
fx		3	6	8	11	8	7	9	
x'		-5	-4	-3	-2	-1		1	
fx'		-15	-24	-24	-22	-8		9	
fx^2		75	96	72	44	8		9	
$x'y'$ +		30	24	21	12	10		8	2
$x'y'$ -		10	20	39	16	7		11	1

X: Per cent

Y: Raw scores of Personality Need Variable Heterosexuality

	0-15	16-30	31-45	46-60	61-75	76-90	91-105	106-120	12 1
27-28									
25-26			1						
23-24					1				
21-22				2		1	1		
19-20						1		1	1
17-18		1	2		3		1	2	
15-16				2	1	1	2		2
13-14			1	1	1	2	1	1	
11-12				1	1		1		
9-10				1		1	1	1	2
7-8		1	1	1				2	1
5-6					1	2			1
3-4					2			2	
1-2		1	1		1				
fx		3	6	8	11	8	7	9	7
x'		-5	-4	-3	-2	-1		1	2
fx'		-15	-24	-24	-22	-8		9	1
fx^2		75	96	72	44	8		9	28
+ xy'		55	48	30	54	25		4	14
-		5	28	18	14	5		24	3

X: Per cent

Y: Raw scores of Personality Need Variable Autonomy

	0-15	16-30	31-45	46-60	61-75	76-90	91-105	106-120	1
27-28									
25-26						1			
23-24									
21-22					1				
19-20			1			1			
17-18			1	1	1			1	
15-16				3		1	2	1	
13-14		2	1	1	2	1	2	1	
11-12			2	1	2		1		
9-10		1		1	2	2	1		
7-8				1	3	1	1	3	
5-6								3	
3-4			1			1			
1-2									
fx		3	6	8	11	8	7	9	
x'		-5	-4	-3	-2	-1		1	
fx'		-15	-24	-24	-22	-8		9	1
fx^2		75	96	72	44	8		9	
+ xy'		10	28	18	30	12		3	
-			20	15	12	10		21	

X: Per cen

Y: Raw scores of Personality Need Variable Dominance

	0-15	16-30	31-45	46-60	61-75	76-90	91-105	106-120
27-28								
25-26								
23-24								
21-22						1		
19-20		1					3	1
17-18				2	1		2	
15-16		1	1		1	1		
13-14			1		1	2		1
11-12		1	1	1	4			1
9-10				1	2	2		5
7-8			1	3	1	1		
5-6			1		1			1
3-4			1	1		1		
1-2								
fx		3	6	8	11	8	7	9
x'		-5	-4	-3	-2	-1		1
fx'		-15	-24	-24	-22	-8		9
fx^2		75	96	72	44	8		9
+ xy'		5	52	51	30	12		3
-		20	4	12	6	5		15

X: Per ce

Y: Raw scores of Personality Need Variable Exhibition

	0-15	16-30	31-45	46-60	61-75	76-90	91-105	106-12
27-28								
25-26								
23-24								
21-22					1			1
19-20			1		2	2	1	
17-18			1	1	1	1	1	1
15-16			1	2	3	1	1	3
13-14		2	2	1	2	2	2	
11-12		1	1	4	1	1		4
9-10					1		1	
7-8							1	
5-6						1		
3-4								
1-2								
fx		3	6	8	11	8	7	9
x'		-5	-4	-3	-2	-1		1
fx'		-15	-24	-24	-22	-8		9
fx^2		75	96	72	44	8		9
xy' +		5	4	12	6	5		[illegible]
xy' -			24	12	30	9		4

X: Per

Y: Raw scores of Personality Need Variable Deference

	0-15	16-30	31-45	46-60	61-75	76-90	91-105
27-28							
25-26							
23-24							
21-22							
19-20				1			
17-18					1	1	1
15-16			1	1	2	1	1
13-14		1	1	2	5	1	1
11-12			2	2	1	2	1
9-10		1	1	2	1	1	2
7-8			1		1		
5-6		1				2	
3-4							
1-2							
fx		3	6	8	11	8	7
x'		-5	-4	-3	-2	-1	
fx'		-15	-24	-24	-22	-8	
fx^2		75	96	72	44	8	
+ xy'		20	12	6	6	7	
-		5	12	24	24	6	

have requested that teachers keep themselves abreast of the times on educational trends and improved teaching techniques. School Boards are cognizant of this important phase of teacher training, and in many areas have made additional training mandatory.

With such a strong emphasis on teacher growth it is imperative that all the in-service agencies work together to provide an in-service program that will meet the needs of each individual teacher or group concerned with additional proficiency.

Limitations of the study. This study is limited to certain selected school systems in the North Central Association which have a population range of 25,000 to 100,000. This includes only those systems that have a strong in-service program. It is believed that the study could be strengthened by limiting the survey to those systems that are more aware of this important phase of teachers' growth.

This investigation is concerned primarily with the various in-service activities which are required, with a rating of in-service activities to determine which are most valuable, and with opinions on the relative effectiveness and satisfaction of the in-service programs of those systems involved in the study.

The data received was based on the opinions of superintendents and administrators. There was no attempt to

discover the opinions of teachers as to what activities they felt were most valuable to them. There was no attempt to discover why a particular in-service program was satisfactory or unsatisfactory.

Methods and devices used. In preparation for this study, related literature pertaining to such features of in-service education as their objectives, their content, and desired results were reviewed and studied to form a background.

Criteria of desirable in-service programs were established through extensive studies of pertinent materials such as prior theses, various reports of surveys and experiments, and current professional publications.

The list of school systems to be studied was secured by writing to each of the State Departments of Instruction of the nineteen states in the North Central Association. Sixty-five school systems were suggested as schools having a strong in-service program.

An inquiry form to measure effectively the in-service activities of the selected schools was developed. The purpose of the study was explained by an introductory letter, and enclosed with the letter was an inquiry form and a self-addressed stamped envelope.

Forty replies were received promptly. A follow-up letter brought nine additional responses. A third request by

postal card produced one more response, bringing the total to fifty, or 76.9 per cent of the total number of selected school systems which were contacted.

Criteria. The study of literature on in-service education as to underlying principles, objectives, planning, activities, trends, and methods of evaluating provided the following criteria for evaluating the ~~fifty selected school systems and the Hutchinson~~ school system:

1. Supervision, curriculum planning, and in-service education should work together to provide opportunities for teachers to grow on the job. It is the responsibility of the school administrators to work closely with the curriculum director, area supervisors, and consultants to organize and expedite the program.

2. Individual teachers and administrators must accept the obligation of improving themselves personally and professionally. The in-service program should begin with the "felt needs" of those involved. Teachers have individualized problems. This requires flexibility for an effective in-service program. A system-wide in-service program must be organized to provide opportunities for all subject area teachers to gain instructional benefits.

3. The objectives for the in-service program should be clearly stated. It should be specific enough so that it can be easily interpreted, yet flexible enough to provide

opportunities for each teacher to participate. The objectives should be in printed form and in the hands of each teacher. The objectives should serve as an evaluative tool to determine how well the prescribed activities are meeting the needs of each teacher.

4. The in-service activities should be cooperatively planned by all those involved and the types of activities should be determined by the needs of the participants. Each staff member should be given the opportunity to participate at certain points and to a certain degree in many arrangements, yet it is the responsibility of the administrators to correlate the activities into meaningful experiences.

5. Although the in-service program is designed to provide opportunities for each teacher to become more competent in the area in which he feels most deficient, yet there are broad areas of concern which involve all teachers. These broad centers of concern should include the following: improving instruction, improving staff relations, improving teacher-pupil relations, and improving community relations.

6. The in-service program should be based on the philosophy that every teacher needs to grow. It is the responsibility of the administrative staff to provide opportunities for all the teachers to become more proficient in their total teaching experiences. This includes elementary, junior high, and high school teachers.

7. Many activities should be provided for the teachers. Some should be required, because of their inevitable value, other activities should be encouraged, and can only be encouraged because of other factors such as time, experience, and finances. The following activities should be required:

a. Continuing with an advanced degree program, the Bachelor's degree should be mandatory, and sabbatical leaves should be granted to those who are working on additional degrees

b. Participating in curriculum planning

c. Attending workshops on specific aspects of teaching

d. Planning and carrying out a series of faculty meetings

e. Participating in individual conferences

f. Visiting schools to observe other members of the profession at work

g. Participating in civic activities of the community

The following activities can only be encouraged because of other factors such as time, experience, and finances:

a. Continuing with advanced study in a particular subject area

b. Attending institutes and conferences in terms of special interests and needs

c. Assuming responsibilities in committee and professional organizations

d. Doing professional writing and speaking

e. Traveling planned for specific purposes

f. Serving as an exchange teacher

g. Conducting research in and applying research findings to local situations

h. Working on special projects

8. The in-service program should be continuously evaluated in the light of sound educational principles. The program should be evaluated to determine how satisfactorily it serves the following areas of concern:

a. Do the activities improve the quality of instruction?

b. Do the activities provide opportunities for the professional growth of teachers through group activities and group participation?

c. Are the activities flexible enough to meet the needs which are brought about by the rapid changes in the fields of present knowledge and research?

d. Do the activities promote pleasant "working relations" between the administrators and staff?

e. Does the in-service program meet the increased demands which are placed on teachers to "grow on the job?"

CONCLUSIONS

The conclusions which follow are based on the inquiry form responses and are believed to be representative of the Hutchinson and fifty selected school systems.

Over four-fifths (84 per cent) of the school systems existing in cities with a population range of 25,000 - 100,000, employ a curriculum director who serves as a coordinator and director of the instructional department of education. In school systems where personnel are not employed for this service, the school superintendent is responsible for the in-service program. In this event, the program suffers because he considers the operational matters more impelling than the instructional matters. Very few subject area supervisors or consultants are employed in school systems where there is no director of curriculum. The data infer that strong system-wide programs exist only in those cities where additional instructional personnel are utilized.

A comparative small majority (32 per cent) of the school systems have clearly stated objectives in printed form placed into the hands of each teacher. Many school systems are in no position to evaluate their in-service program because they have failed in identifying their aims and purposes by which they can measure growth. It can be concluded that school systems will experience unsatisfactory

results from their in-service program until objectives and goals are embodied into their total program.

It has been shown by this study that the in-service program is the responsibility of the curriculum director. However, a relatively large sector (70 per cent) of the school systems have their in-service program planned by the curriculum director, subject area supervisors or consultants, administrators, and teachers. There is a growing interest in providing more and varied activities so that more of the teachers' unique problems are acknowledged.

Many (96 per cent) school administrators are interested in providing in-service activities which will be beneficial to the teachers' competence in improving the quality of instruction. The data indicates that they are mostly concerned about this phase of education and have failed in recognizing the ultimate values of improving staff relations, improving teacher-pupil relations, and improving community relations. This is especially true of school-community relationships.

A large per cent of the teachers are actively engaged in in-service activities. This can probably be attributed to two factors, either the teachers are cognizant of their deficiencies and feel secure enough to seek additional growth or the in-service activities are imposed upon them by administrative personnel. The pleasant responses to the

inquiry forms leads to the conclusion that the former is true in most systems. There is no substantial difference between the enthusiasm of the high school and elementary teachers toward in-service education.

Only a few in-service activities are actually required by a large per cent of the selected school systems. The nature of the activities indicates that in-service is required only to the extent that the teachers are asked to participate rather than participate or lose a contract or experience a decrease in salary. The following activities were checked most frequently as being required:

1. Planning and carrying out a series of faculty meetings
2. Participating in individual conferences
3. Working on special projects
4. Participating in curriculum planning
5. Attending workshops on specific aspects of teaching

The large number (over 80 per cent) of school systems which encourage many activities, indicates that educators are aware of the needs of teachers and are endeavoring to provide opportunities for them to grow. The following activities are often encouraged by school systems:

1. Participating in civic activities of the community
2. Continuing with an advanced degree program
3. Attending institutes and conferences in terms of special needs and interests

4. Visiting schools to observe other members of the profession at work
5. Assuming responsibilities in committee and professional organizations
6. Continuing with advanced study in a particular subject area
7. Conducting research in and applying research findings to local situations

One of the primary aims of the study was to determine what in-service activities were considered to make the greatest contribution to the teachers' growth. From the rating given by the respondents, it can be concluded that the activities should appear in the following descending order:

1. Participating in curriculum planning
2. Continuing with advanced study in a particular subject area
3. Attending workshops on specific aspects of teaching
4. Attending institutes and conferences in terms of special interests and needs
5. Continuing with an advanced degree program
6. Participating in individual conferences
7. Conducting research in and applying research findings to local situations
8. Working on special projects
9. Assuming responsibilities in committee and professional organizations

10. Planning and carrying out a series of faculty meetings
11. Visiting schools to observe other members of the profession at work
12. Participating in civic activities of the community
13. Doing professional writing and speaking
14. Traveling planned for specific purposes
15. Serving as an exchange teacher

The data point out that many of the activities which were given a high rating were neither required nor encouraged by a large per cent of the superintendents. It is possible that many school administrators are still undecided as to what activities are most valuable and also what activities they should require or encourage. The low rating given to traveling planned for specific purposes and to serving as an exchange teacher can be attributed to the monetary factor. This is especially true of international travel and service as an exchange teacher in other countries.

A large majority of the school systems are fairly well satisfied with their existing in-service program, while only a few are entirely satisfied or entirely dissatisfied with their program. It is concluded that a large per cent of the in-service programs are providing opportunities which improve the quality of instruction of teachers, provides opportunities for the professional growth of teachers through group

activities and group participation, meets the needs of the rapid changes in the fields of present knowledge and research, promotes pleasant "working relations" between the administrators and staff, and meets the increased demands which are placed on teachers to "grow on the job." Although administrators are vitally concerned about the improvement of instruction, there is still some dissatisfaction expressed among them as to the effectiveness of their program for providing this additional growth.

RECOMMENDATIONS

The conclusions resulting from this study provide evidence that supports the following general recommendations which are applicable to school systems in the designated population range.

Directors of curriculum, or whatever title may be selected, should be employed by all school systems to coordinate and direct the instructional phases of education. Additional area supervisors should be secured to assist teachers in overcoming their areas of weakness in instruction. A system-wide in-service program should be maintained which is broad yet specific enough to recognize the "felt needs" of each teacher.

School systems which are conducting in-service programs without clearly defined objectives should carefully study

their program and prepare an in-service bulletin which specifically states their objectives. This bulletin should be placed in the possession of each teacher.

An in-service steering committee should be appointed to plan and expedite all the activities for a school year, with the director of curriculum and superintendent serving in an administrative capacity.

More interest should be demonstrated and additional activities provided which will directly aid in specific areas of public relations such as improving staff relations, improving teacher-pupil relations and improving school-community relations.

Increased effort should be exhibited by administrators to provide time as part of the regular assignment for teachers to engage in activities that are characterized by inevitable value. Teachers should be required to participate in activities which provide their basic preparations, and in such activities as are needed because of problems affecting the whole school. This would include the following:

1. Continuing with an advanced degree program--the bachelor's degree should be required, and sabbatical leaves should be granted to those working on additional degrees
2. Continuing with advanced study in a particular area
3. Participating in curriculum planning

4. Attending institutes and conferences in terms of special interests and needs
5. Attending workshops on specific aspects of teaching
6. Participating in individual conferences

Additional activities should be strongly encouraged due to their contributions to the public relations factor and the general broadening of the teachers' experiences:

1. Planning and carrying out a series of faculty meetings
2. Assuming responsibilities in committee and professional organizations
3. Doing professional writing and speaking
4. Visiting schools to observe other members of the profession at work
5. Traveling planned for specific purposes
6. Serving as an exchange teacher
7. Participating in civic activities of the community
8. Conducting research in and applying research findings to local situations
9. Working on special projects

The in-service program should be continuously evaluated by the steering committee and administrative personnel. Recommendations should be formulated and necessary adjustments corrected, thereby experiencing a greater degree of satisfaction in the total in-service program as it specifically improves the quality of instruction of each teacher.

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APPENDIXES

South Hutchinson, Ks.
212 East Forest Avenue
March 2, 1960

Dear Sir:

For my Master's thesis I am making a study of the in-service program of the Hutchinson School System.

At the present time I am an elementary teacher in the Hutchinson system, and I would like to compare and evaluate our program with other systems of the North Central Association. My study will be limited to cities with a population range of 25,000--100,000.

Would you please send me the names of 3 or 4 cities in your state (those that are in the designated population range) who have an unusually strong in-service program?

By limiting my study to the most aggressive systems I will be able to give my report more depth.

Enclosed is a self addressed envelope and there is ample space on the bottom of this sheet for you to list the cities. Thank you!!

Sincerely yours,

Herman Diener

APPENDIX B

212 E. Forest Ave.
So. Hutchinson, Ks.
Nov. 28, 1960

As part of the requirements for the Master of Science Degree in Education at the State Teachers College in Emporia, Kansas, I am conducting a study based on a comparison of the present in-service program of the Hutchinson School System with that of sixty-five selected school systems in the North Central Association.

Enclosed, you will find an "inquiry form" which has been prepared with the help of Dr. Marvin Schadt, my research advisor at Emporia State Teachers College, and Mr. Linus Noll, director of curriculum and instruction of the Hutchinson Public Schools. In order for this study to be of real value, I am sending the enclosed form only to school systems in the North Central Association which have strong and active in-service programs. Your school system was among those suggested by your State Department of Education as an example of those having a good in-service program.

This research is to determine whether the in-service activities in Hutchinson are satisfactory in meeting the increased demands that are put on teachers to "grow on the job," and also determine what activities should be initiated or eliminated to increase the serviceability of our present program.

Along with the enclosed questionnaire, I have also enclosed a self-addressed, stamped envelope. It will be greatly appreciated if you (or someone who may be closer to your in-service program) will fill out the enclosure and return it to me at your earliest convenience. All information received will be held confidential.

Upon your request, I would be pleased to share with you any pertinent information which I will receive from this study.

Sincerely yours,

Herman Diener

Herman Diener

APPENDIX C

INQUIRY FORM
for
A Study of In-Service Activities

_____ name of school system

_____ address

_____ name of person reporting

_____ title of position held

Directions: Please encircle the word or place a check in the appropriate space that applies in your case.

1. Does your school system employ a curriculum director? ---------- Yes No

2. Does your school system employ subject area supervisors? ------- Yes No

3. Is your program of in-service training associated with a system-wide program? ---------- Yes No

4. How are objectives for the in-service program stated? (check one)

   a. Objectives are clearly stated and in printed form. ---------- ( )
   b. Objectives are clearly stated but are not in printed form. ------ ( )
   c. Objectives are not clearly defined. ---------- ( )

5. Who is responsible for planning the in-service program? (check one)

   a. Planned by curriculum director ---------- ( )
   b. Planned by subject area supervisors ---------- ( )
   c. Planned by administrators ---------- ( )
   d. Planned by teachers ---------- ( )
   e. Planned by all of these ---------- ( )
   f. Others _____ ---------- ( )
      please identify

6. What are the chief centers of concern in your program of in-service at the present time?

	immediate concern	later concern	little concern
a. Improving instruction ----------			
b. Improving staff relations ----------			
c. Improving teacher-pupil relations ----			
d. Improving community relations --------			
e. Others _____ ----			
_____ ----			

please identify

7. Who participates in the in-service activities?

	all	few	none
a. High School teachers			
b. Junior High teachers			
c. Elementary teachers			
d. Others _____ (please identify)			

8. What activities do you use for in-service growth?
(Please check in the columns on the right-hand side whether these activities are "required", or "encouraged", or "neither required nor encouraged")

	required	encour-aged	neither
a. Continuing with an advanced degree program			
b. Continuing with advanced study in a particular subject area			
c. Participating in curriculum planning			
d. Attending institutes and conferences in terms of special interests and needs			
e. Attending workshops on specific áspects of teaching			
f. Planning and carrying out a series of faculty meetings			
g. Assuming responsibilities in committee and professional organizations			
h. Doing professional writing and speaking			
i. Participating in individual conferences (e.g. area supervisor with teacher)			
j. Visiting schools to observe other members of the profession at work			
k. Traveling planned for specific purposes (local or international)			
l. Serving as an exchange teacher (in buildings, systems, or countries)			
m. Participating in civic activities of the community			
n. Conducting research in and applying research findings to local situations			
o. Special projects (adoption of textbooks, etc.)			
p. Others _____ (please identify)			

9. What in-service activities do you consider to be of greatest value in contributing to teachers' growth and development in your particular system?
(Please rate each item, on a scale from 5 to 0, by placing, in the space to the right of each item, a numeral as follows: 5 if the activity is considered to be of great value, 4 if the item is considered to be of some value, 3 if the activity is considered to be of less value, 2 if little value, 1 if no apparent value, and 0 if the activity is not used in your system.

a. Continuing with an advanced degree program ---------- _____
b. Continuing with advanced study in a particular subject area ---------- _____
c. Participating in curriculum planning ---------- _____
d. Attending institutes and conferences in terms of special interests and needs ---------- _____
e. Attending workshops on specific aspects of teaching ---------- _____
f. Planning and carrying out a series of faculty meetings ---------- _____
g. Assuming responsibilities in committee and professional organizations ---------- _____
h. Doing professional writing and speaking ---------- _____
i. Participating in individual conferences (e.g. area supervisor with teacher) ---------- _____
j. Visiting schools to observe other members of the profession at work ---------- _____
k. Traveling planned for specific purposes (local or international) ---------- _____
l. Serving as an exchange teacher (in buildings, systems, or countries) ---------- _____
m. Participating in civic activities of the community ---------- _____
n. Conducting research in and applying research findings to local situations ---------- _____
o. Special projects (adoption of textbooks, etc.) ---------- _____
p. Others _____ ---------- _____
_____ ---------- _____
_____ ---------- _____
please identify

10. How satisfactory are your in-service activities for improving the quality of instruction of your teachers?

a. Entirely satisfactory ---------- ( )
b. More satisfactory than unsatisfactory ---------- ( )
c. Unsatisfactory ---------- ( )

11. How satisfactory are your in-service activities for providing opportunities for the professional growth of teachers through group activities and group participation?

a. Entirely satisfactory ---------- ( )
b. More satisfactory than unsatisfactory ---------- ( )
c. Unsatisfactory ---------- ( )

12. How satisfactory are your in-service activities for meeting the needs of the rapid changes in the fields of present knowledge and research? e.g. Science

a. Entirely satisfactory ---------- ( )
b. More satisfactory than unsatisfactory ---------- ( )
c. Unsatisfactory ---------- ( )

13. How satisfactory are the "working relations" between the administrators and the staff? (Assuming that a good in-service program is the outgrowth of the teachers' desire to improve, and the encouragement by the administrators and supervisors.)

a. Entirely satisfactory ---------- ( )
b. More satisfactory than unsatisfactory ---------- ( )
c. Unsatisfactory ---------- ( )

14. How would you evaluate your in-service program in relation to it meeting the increased demands, which are placed on teachers, to "grow on the job?"

a. Entirely satisfactory ---------- ( )
b. More satisfactory than unsatisfactory ---------- ( )
c. Unsatisfactory ---------- ( )

I would appreciate your sending me, under separate cover, any printed and mineographed materials that have been prepared and used in initiating and maintaining your in-service program.

212 E. Forest Ave.
So. Hutchinson, Kansas
January 6, 1961

On November 28, 1960, you were sent an "inquiry form" which is the basis for a study being conducted for my Master of Science Degree at the State Teachers College in Emporia, Kansas.

This research is to determine whether the in-service activities in Hutchinson are satisfactory in meeting the increased demands that are put on teachers to "grow on the job," and also determine what activities should be initiated or eliminated to increase the serviceability of our present program.

Enclosed you will find another "inquiry form" which I hope you can give your immediate attention.

Since I am anxious to make this study one that will be based on valid data, it is imperative that you reply. May a reply be expected from you by January 20? Thank you!!

Sincerely yours,

Herman Diener