

A STUDY OF SEMANTIC VARIANCE IN
RECOMMENDATIONS OF STUDENT
POTENTIAL TO UNIVERSITY STUDENT
PERSONNEL ADMISSIONS OFFICERS

Thesis for the Degree of Ph. D.
MICHIGAN STATE UNIVERSITY
Joyce Murriel Chick
1963



This is to certify that the

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OF STUDENT POTENTIAL TO UNIVERSITY STUDENT
PERSONNEL ADMISSIONS OFFICERS

presented by

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A STUDY OF SEMANTIC VARIANCE IN RECOMMENDATIONS
OF STUDENT POTENTIAL TO UNIVERSITY STUDENT
PERSONNEL ADMISSIONS OFFICERS

By

Joyce Murriel Chick

AN ABSTRACT OF A DISSERTATION

Submitted to
Michigan State University
in partial fulfillment of the requirements
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1963

ABSTRACT

A STUDY OF SEMANTIC VARIANCE IN RECOMMENDATIONS OF STUDENT POTENTIAL TO UNIVERSITY STUDENT PERSONNEL ADMISSIONS OFFICERS

by Joyce Murriel Chick

This study investigated the clarity of communication which occurs among high school counselors and university admissions officers in the use of selected terminology to describe three types of scholars: potentially low-, average-, and exceptional-achieving scholars.

More specifically, the research investigated the degree to which semantic variance was present in the selected terminology used to describe the above three types of scholars among counselors, among admissions officers, and between the two groups. A "Descriptive Word Scale" was designed to measure connotative semantic variance.

The research investigated whether or not the terminology used to describe the three types of scholars could be isolated as invariant for one or more types of scholars for counselors and admissions officers.

Basic theoretical assumptions were drawn from the theories of Miller, Hackett, Berlo, Schramm, and Newcomb. In essence, these theorists hold that communication can occur only to the degree that two different individuals have common knowledge between them.

A sample of three hundred subjects, one hundred fifty counselors and a similar number of admissions officers, was drawn for this investigation from the population of high school counselors and university admissions officers in the seven states in which the "Big Ten Universities" are located.

The sample of admissions officers was the entire one hundred fifty available who met certain set criteria. The counselor sample was selected by a random number technique. Procurement of the sample was accomplished by correspondence. A total return of eighty per cent was obtained for admissions officers and a return of ninety-two per cent for counselors.

Hoyt's Analysis of Variance Technique was used to determine the reliability of the research instrument. Reliability estimates obtained were above the acceptable level. A chi-square analysis was employed to determine a difference in usage of the selected terminology by counselors and admissions officers when used to describe the three types of scholars. Similar techniques were employed to identify words for which there was agreement that the words would not be used to describe the potential scholars.

The major findings of the research investigation, based on the analysis of data, include the following:

1. Significant variability, semantic variance, was found among counselors and among admissions officers in their use of the selected terminology when used to describe each of the three types of scholars.

2. Significant variability, semantic variance, was found between counselors and admissions officers in their use of thirteen of the one hundred seventy-five terms of the selected terminology from the "Descriptive Word Scale" when used in describing the three types of potential scholars.

3. Other indications of semantic variance were found by the identification of terminology which held particular descriptive meaning, or no particular descriptive meaning, and in the terminology that would be used without discrimination to describe any of the three types of potential scholars. It was possible to distinguish which of the terminology might be more dependable for attaining clarity of communication.

4. Agreement, semantic invariance, was found between counselors and admissions officers for one hundred sixty-two terms from the selected terminology that they would or would not use to describe the types of potential scholars. It was possible to construct vocabulary lists of the terminology that would or would not be used to describe each type of potential scholar.

5. Terminology of a more positive connotation was used to describe the potentially low scholar while that of a more positive connotation was applied to the potentially exceptional scholar. A lesser degree of positive-negative differentiation could be drawn for terminology used to describe the potentially average scholar.

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1963

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DEDICATION

Dedicated to the memory of Dr. Clifford E. Erickson,
whose contributions to the guidance movement,
whose inspiration and belief in people,
will long sustain others.

ACKNOWLEDGMENTS

Grateful acknowledgment is expressed to the chairman of the student's committee, Dr. Walter F. Johnson, and to the other committee members: Dr. William Farquahr, Dr. William Kell, Dr. Ernest O. Melby, and Dr. Buford Stefflre. Special gratitude is given to Dr. William Farquahr for his time and consultation and his assistance in the design and construction of the research instrument.

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Final Examination: November 14, 1963, 9:00 A.M.
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to University Student Personnel
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CHAPTER I

THE PROBLEM: NATURE AND SCOPE

The raison d'etre of the student personnel profession is a concern for human welfare and the enhancement of the process of self-actualization for the individual.

If men are to be concerned, as John Dewey cautioned them to be, with the improvement of the quality of human life, they must first of all give attention to the manner in which they talk (and write) about human life and the environment in which it exists.¹ Education, science, human progress in every degree, all depend on expressing an idea clearly and being understood by one's group. Society is cemented together by communication.²

Communication is a power that rests on the more fundamental process of articulation;³ expression with distinctness and clarity. As the services within a discipline

¹Thomas Weiss and Kenneth Hoover, Scientific Foundations of Education (Iowa: Wm. C. Brown Publishers, 1960), p. 44.

²Stuart Chase, The Proper Study of Mankind (New York: Harper and Brothers, 1948), p. 240.

³Heinz Werner, On Expressive Behavior (Massachusetts: Clark University Press, 1955), p. 8.

attempt to join themselves together, to articulate in order to better fulfill their functional purposes, communication becomes a vital factor. Clarity of communication is most essential to the nature and value of the student personnel profession and its services.

A great deal of attention has been paid to the technical language of the scientific fields. However, the connotative terminology that is so frequently used in a descriptive manner in communication interactions has been exceedingly neglected in scientific research in the behavioral sciences.

Linguistic communication has its origins in the ages of time and man's early evolution. Yet, this oldest of man's activities continues to be a plague to man's social interaction and professional growth. Whenever agreement or assent is arrived at in human affairs, it is reached by linguistic processes or it is not reached.¹ Student personnel educators cannot doubt the relevance of effective, clear communication when the raw material of the profession is human life and the main concern is human welfare.

Physical barriers to communication are rapidly disappearing, but the psychological obstacles remain.² These psychological difficulties are in part a function of the very

¹S. I. Hayakawa, Language in Thought and Action (New York: Harcourt Brace, 1949), p. 5.

²Ruben Mehling, "A Study of Nonlogical Factors of Reasoning in the Communication Process, Journal of Communication, IX (Sept., 1959), 126.

nature of language; in part they are due to the emotional character and mental limitations of human beings.¹ If these language barriers to communication are to be even partially overcome, then language must be viewed as a form of behavior and, as such, it must be evaluated as a technique.² When a technique is evaluated, three questions are usually asked: (1) What is it designed to do? (2) How well does it do it? and (3) What are its consequences?³ It is obvious that language is a symbolic technique designed to facilitate communication and that the consequence of its use is not always clear or easily determined. However, attempts can be made to investigate the extent to which communication occurs through the use of language in a particular field of context-- in this instance, the field of context is the student personnel profession.

The Problem

Statement of the Problem

The environment in which the student personnel educator functions demands that he communicate about human behavior as human potential if formal education is to be a continuous process for the individual. To describe human behavior as potential, man's only recourse is to use a symbol system of language, the smallest unit of which is the word.

¹Ibid.

²Wendell Johnson, People in Quandaries (New York: Harper and Brothers, 1946), p. 269.

³Ibid.

If the terminology and key words used in writing recommendations to describe student potential are not the same for both senders and receivers, communication cannot occur. Variance in meaning, resulting in barriers to communication, may lead to misunderstandings and unfounded assumptions. Clarity of communication is, therefore, vital to human welfare.

The Problem of this Study

This investigation examined the clarity of communication which occurs among high school guidance counselors and university student personnel admissions officers in the use of selected terminology when used to describe three types of scholars: a potentially low-, average-, and exceptional-achieving scholar.

More specifically, this research investigated the degree to which connotative semantic variance¹ was present in the selected terminology used to describe the above three types of scholars among high school guidance counselors, among university student personnel admissions officers, and between high school guidance counselors and university student personnel admissions officers.

¹A "Descriptive Word Scale" instrument was designed to measure the degree of connotative semantic variance. See Appendix A.

The research also investigated whether or not the selected terminology used to describe the three types of scholars could be isolated as invariant for one or more types of scholars for counselors and admissions officers.

The Importance of the Problem

It has long been theorized that education for the individual must be a continuous process from the primary level through the completion of the college years. The very nature of the student personnel profession charges its personnel with the responsibility for communication and articulation concerning human potential in the formal educational process. If communication does not occur, these educational experiences for the individual cannot be linked together in one continuous process.

Educational institutions at all levels have a responsibility to the individual student to afford him every possible opportunity for personal growth and development within the limitations of his abilities. Flaws and barriers that exist in the articulation process resulting from a lack of clarity in communication may reverberate with consequences to the individual student and to the educational institution involved. The individual student's future is often shaped by decisions made in institutional communications. The growth of institutions of higher education rests in part on the type of scholar admitted to their educational programs.

Institutions of higher education in America today are continuing to try to cope with the impetus of the swelling numbers of college applicants. Statistically predictive studies concerning future college enrollment point to an unprecedented demand for college entrance, with the tempo increasing, throughout the coming decade.¹ This tremendous boom of college applicants has resulted in the process and procedure of selective college admissions.

Admissions as a function of colleges and universities refers to the standards (requirements and criteria) and the procedures by means of which the institution selects from the applicants for admission: (1) those individuals who are judged qualified to attain a satisfactory level of scholastic success and (2) when there is a surplus of applicants, those whose qualifications are superior.²

When institutions of higher education have surplus numbers of student applicants who seem to be almost equally qualified on a composite of necessary criteria, such as academic grades and test scores, they must seek still other criteria as a basis for judging the strength of scholarly potential that an individual possesses. These criteria are, in the majority of instances, the high school recommendations.

¹United States Department of Health, Education and Welfare, Opening (Fall) Enrollment in Higher Education, Institutional Data Prepared by United States Government Printing Office, Washington, D. C. Vols. 1961-1962.

²G. Lester Anderson, "Colleges and Universities, Admissions and Registration," Encyclopedia of Educational Research, ed. Chester W. Harris (1960), p. 263.

The responsibility for writing student recommendations has shifted more and more from the principal and the teacher to the high school guidance counselor. Ample evidence of this shift in responsibility was found in an examination of several thousand college applications at Michigan State University. The shift is explained by the increasing numbers of professionally trained guidance counselors being employed in the secondary schools.

It is important that student personnel educators have a functional knowledge of the many factors and complexities involved in the use of terminology, the semantics of language, the process of communication and the inherent implications for affecting behavior and decision-making.

Weinberg points out that most of us have been educated to get the facts with little attention paid to the equally important problem of transmitting them to others and the even more important and much more difficult task of trying to discover what they mean to others and to ourselves.¹ Very frequently a writer assumes that his reader "knows what he means" and further assumes that the reader's perceptions are the same as his own. The responsibility for understanding is then shifted from writer to reader. Ziff contends that the written sentence, unlike the spoken word, is an enduring

¹Harry L. Weinberg, Levels of Knowing and Existence (New York: Harper and Brothers, 1957), p. 7.

element and that the written word is fixed fast, not held loosely in the mind.¹ This places great importance on clarity of communication in written recommendations of student potential.

Every communication has the purpose of soliciting some intended and desired response, and what is said about anything affects man's reactions to that which is spoken of in a communication. Language arouses people to feeling and action, not through the intermediary of an associated image or collection of images, but directly by being meaningful in and of itself.² Words orient individuals, not to the words themselves but to a realm of action, whether actual, potential, or purely symbolic.³

Huxley writes that words are magical in the way they affect the minds of those who use them. Words have the power to mould men's thinking, to canalize their feeling, and to direct their willing and acting.⁴ Bridgeman contends that

¹Paul Ziff, Semantic Analysis (New York: Cornell University Press, 1960), p. 3.

²Joseph Church, Language and the Discovery of Reality (New York: Random House, 1961), p. 129.

³Ibid.

⁴Aldous Huxley, Words and Their Meanings (Los Angeles: Jake Zeiflin, 1940), "Cited by" S. I. Hayakawa, Language in Thought and Action (New York: Harcourt Brace, 1949), p. 162.

the true meaning of a term is to be found by observing what a man does with it, not what he says about it.¹ More often than not, our thoughts do not select the words we use; instead, words determine the thoughts we have.²

It is by the use of language and terminology that every action and every event in life are classified, as well as every aspect of behavior. There are few complexities about classifications at the level of dogs and cats, knives and forks, cigarettes and candy, but when it comes to classification at higher levels of abstraction, for example, those describing conduct, social institutions, philosophical and moral problems, serious difficulty occurs.³ It is at this level of inferences, value judgments, and personal perceptions as observations that the language and terminology descriptive of human behavior are found.

Hayakawa supports these contentions, and those of Huxley, Bridgeman and others, by stating that it is by the use of language that individuals classify and it is through

¹P. W. Bridgeman, The Logic of Modern Physics (New York: MacMillan Co., 1927), p. 208.

²Weller Embler, "Metaphor and Social Belief," Language, Meaning and Maturity, ed. S. I. Hayakawa (New York: Harper and Brothers, 1953), p. 125.

³S. I. Hayakawa, "Language, Meaning Symbols and Levels of Abstraction," Readings in Social Psychology, ed. Theodore M. Newcomb and Eugene L. Hartley (New York: Henry Holt and Co., 1947), p. 202.

the process of classification that attitudes and conduct are to a considerable degree determined.¹ For example, when one person kills another, is it an act of murder, an act of temporary insanity, an act of homicide, an accident, or an act of heroism? As soon as individuals classify, they may hang the murderer, lock up the insane, free the victim of circumstances, or pin a medal on the hero.² It seems vitally important that student personnel workers become aware of the power that rests in the choice and meaning of terminology.

Complete intentional agreement in word meaning that would assure flawless communication is a desirable but improbable goal in the behavioral sciences and in the student personnel profession. However, this study may point to a need for an increased emphasis on semantics, linguistics, and the communications process in counselor education programs. An analysis and study of any problem is prerequisite to its possible solution, but there must first exist an awareness of the problem to invite exploration of it.

Ayer contends that an explanation and a detailed account of the work that a concept or word has to do are a critical investigation of the territory that it is supposed to cover.³ A scientific study of language, as opposed to

¹Ibid., p. 202.

²Ibid., p. 22.

³A. J. Ayer, "What is Communication?" Studies in Communication (London: Martin, Secker and Warburg, 1955), p. 1.

speculative discussion, begins with direct observations of communicating individuals and searches for the relation of these observations to the existing body of scientific knowledge.¹ Every field of endeavor has its specialized vocabulary, and competence in any area of learning begins with the mastery of this special language.² Semantics is the study of words--and their meanings and often a clear understanding demands the careful defining of key words and their use.³

The communication process, and the science of semantics and linguistics, is a vastly complex area of study. It is hoped that one outcome of this research will be the creation of an awareness of the degree to which connotative semantic variance is likely to occur in the communications of student personnel educators. An added significance may rest in any strength of this research study to generate other related research in communications and semantics in the student personnel profession.

¹G. A. Miller, Language and Communication (New York: McGraw-Hill, 1951), p. 1.

²B. H. Jarman, "Communication in Administration: Some Why's and How's," Journal of the National Association of Women Deans and Counselors, XXII (January, 1959), 54.

³Ibid.

Limitations and Scope of the Study

The following limitations are acknowledged as inherent in this research, and the scope of its findings are restricted accordingly.

1. The terminology comprising the "Descriptive Word Scale," (the instrument designed for measurement in the study) was extracted by a frequency tabulation from a randomly selected sample of 1,500 high school recommendations. These recommendations were written by high school guidance counselors at large to university student personnel admissions officers at Michigan State University. It must be assumed that the recommendations examined were representative of any that would have been sent by counselors to other institutions of higher education in the United States.

2. The population of high school guidance counselors and university student personnel admissions officers was limited to a sample of 150 individuals for each group--a total sample of 300 subjects. The sample was randomly drawn from the seven states in which the "Big Ten" institutions of higher education are located. A larger sample of wider geographic distribution would have allowed for greater breadth of application and generalization in the research results.

3. A thorough review of previous research in semantics and communications revealed a lack of any previously designed research instruments that seemed appropriate for use in

measurement in this study. Theoretical concept designs that were considered included word association tests, Q-sorts, and Osgood's Semantic Differential. Each of these considerations proved to have limitations for adaptability. These limitations are discussed in appropriate detail in the review of the literature.

4. Previous research studies in communications and semantics in the student personnel field have been confined primarily to the counseling process or the communications problems studied have been unrelated to semantic variance among groups. These factors limited the information and knowledge that could be drawn upon as a basis for theory building and research design.

5. The complex vastness of linguistics, semantics, and the communications process is a signal limiting factor to research. Words must be used to study words; man studies man. A survey of the literature on semantics revealed that some theorists hold a question mark regarding the degree to which language and its use can be separated for study from man's individual personality, personal experiences, perceptions, projections, and his social environment. A word is more than an arbitrary written or spoken sign; it is all that it carries with it in association as well.¹

¹Colin Cherry, On Human Communication (New York: John Wiley and Sons, Inc., 1957), p. 70.

6. Semantic theory considers that words removed from their context may lose their original and intended meaning. The assumption was drawn that the terminology considered in this study was left in its original context to the extent that:

- a. The terminology comprising the Descriptive Word Scale instrument was drawn from the context of counselor's recommendations. It was then submitted back to counselors in a form still applicable to its original purpose to describe a type of potential scholar.
- b. Admissions officers were the originally intended receivers of these communications from high school guidance counselors. One-half of the sample of this study consisted of admissions officers.

7. The time required for respondents to complete the research instrument was undoubtedly a limiting factor in the percentage of returned instruments.

8. The necessity for mailing the instruments to the respondents, rather than direct personal contact in securing the data, is an obvious limitation.

Definitions of Terms

Communication. To make common by informing; precision in the use of language so that words have the same meaning for the sender or writer as they do for the receiver or reader; comprised of three basic elements: a sender (encoder), the message, and a receiver (decoder).

Semantics. The functional or applied level of the meaning of words in a particular context from the standpoint of....their avoidance of ambiguity and misunderstanding. The emphasis is on careful and precise use of words.¹

Connotative Words. Terminology of inter-personal meaning to the user; that of a relatively high degree of semantic abstraction which suggests or implies personal associations.

Denotative Words. Terminology of more exact meaning; words that point out; meaning resides in classifications of objects external to man.

Meaning. Associations called up in the mind by the use of words; what words represent; a reciprocal relationship between a language symbol (word) and that to which it refers (the referent). Either the word or the referent enables the person to call up the same mental association.²

Linguistic Communication. The use of words as a symbol system to convey thoughts, feelings, observations, or actions between senders and receivers of messages.

Semantic Variance. A statistically descriptive low degree of agreement between two raters on word meaning in written communication; the lack of successive approximation

¹Joseph G. Brin, Applied Semantics, Practical Aids In Communication (Boston: Bruce Humphries, Inc., 1951), p. 7.

²Stephen Ullman, Words and Their Use (New York: Philosophical Library, 1951), p. 33.

of word usage; a blockage in communication where words do not mean the same thing for the sender and the receiver.

Semantic Invariance. A statistically descriptive high degree of agreement between two raters on word meaning in written communications; the successive approximation of word usage; clarity of communication where words mean approximately the same thing for the sender and the receiver.

Connotative Semantic Variance. The degree to which lack of agreement occurs for word meaning and usage in the internal interpretation of words in written communication; an obstruction in clarity of communication through personal ambiguity and misunderstanding of word meaning.

Student Potential. The descriptive predicted ability of a student to do college work: a potentially low-, average-, or exceptional-achieving scholar.

Statement of Research Hypotheses

The research hypotheses of this investigation are as follows:

Hypothesis I. Problems of communication exist among high school counselors and among admissions officers because of semantic variance in the terminology used to describe the scholarly potential of students.

Hypothesis II. Problems of communication exist between high school counselors and admissions officers because of semantic variance in the terminology used to describe the scholarly potential of students.

The Plan of the Thesis

Chapter I has introduced the nature and scope of the problem, a statement of the problem, the problem of this study and its importance, limitations of the study, a definition of terms, and the research hypotheses.

The plan of the thesis follows:

- Chapter II. - Review of the literature and related research.
- Chapter III. - Theoretical assumptions and Research Design, The Theory, Basic Theoretical Assumptions, Hypotheses, Design of the Research Instrument.
- Chapter IV. - Methodology and Procedures, Selection and Procurement of the Sample, Treatment of the Data and Statistical Techniques of Analysis.
- Chapter V. - Presentation, Analysis, and Discussion of Results.
- Chapter VI. - Summary, Findings, Conclusions and Implications for Further Research.

CHAPTER II

REVIEW OF THE LITERATURE AND RELATED RESEARCH

Several facets of the investigation dictate the review of literature to be presented here. Previous research suggesting the importance of the written high school recommendation has pertinent implications for the context of the study.

In the delimitations of the study it was pointed out that various theoretical concepts were considered as a means of measuring connotative semantic variance. Each of these theoretical concepts seemed to possess measurement limitations for this particular study. A review of these limitations is dictated by the nature of the research.

The voluminous amount of literature that refers to the broad general aspects of semantics, to linguistics, and to communication theories and models would require a considerable amount of time and space for review. To the other extreme, previous research studies in connotative measurement and semantic variance are extremely sparse and almost nil in the context of the student personnel field. Much of this literature and research is indirectly related to the problem of this study. Only that which is germane to the investigation and its theoretical basis will be presented in this review.

Literature on the High School Recommendation

It is evident from a review of related literature on college admissions that the admissions practice in the majority of institutions of higher education has become a matter of individual selectivity. A composite of criteria is used to select those students who offer promise of scholarly attainment. Ranking high in importance among these criteria is the high school recommendation.

Cosand concluded, in his review of the literature on admissions criteria, that recommendations are one of the top five methods used in selecting students and the method most used by principals. Principals, he found, particularly prefer this method for students somewhat lacking academically but whom they believe are capable of college work.¹ Morrison writes that there is no disagreement among admissions officers about the principal's recommendation's being of value in their weighing of applicants; the only difference is one of degree, some want it more emphatically than others.²

Fine listed eight criteria that might be used in selecting students; third among these was the recommendation of principals or teachers. He contends, as a result of his

¹J. P. Cosand, Jr., "Admissions Criteria: A Review of the Literature," California Journal of Secondary Education, XXVII (January, 1953), 12-21.

²Wilma Morrison, The School Record, Its Use and Abuse, In College Admissions (Princeton, New Jersey: Educational Testing Service Publication, College Entrance Examination Board, 1961), p. 11.

research involving some 450 institutions of higher education, that the trend is towards a greater evaluation of personal characteristics, aptitudes, and the ability of the student to do college work.¹ Dickerson of Dartmouth College supports Fine's conclusion in his statement that the new frontier of college admissions is in the measurement of character and personality. Dickerson contends that this largely unmapped frontier is drawn not on the college campus, or on the threshold of graduate schools, or in placement offices, but in the counseling offices of secondary schools.² Except in smaller schools, the principal's recommendation has long since become the counselor's recommendation and that, in turn, a consensus of the counselor and student's teachers.³

In summarizing his research results, Fine drew nine conclusions concerning the admissions policy. Among these conclusions Fine stated that emphasis is placed on the scholastically intelligent student, although consideration is given to the non-scholastic type of individual who has other qualifications, and that more than half of the colleges in the country stress high school records.⁴

¹Benjamin Fine, Admission to American Colleges (New York: Harper and Brothers, 1946), p. 5.

²Morrison, op. cit., p. 10.

³Ibid., p. 12.

⁴Fine, op. cit., p. 80.

Farwell found, in a review of the literature on admissions practices, that colleges rely heavily on the recommendations of high school personnel. His study on admissions disclosed that, although the high school recommendation is stressed as one of the most important composite factors in the selective admissions process, the high school recommendation reveals itself to be of questionable value. His findings indicate a carelessness and lack of assumed responsibility in the preparation of recommendations. Farwell concluded that this was particularly true in reference to borderline admission cases--the area in which principals felt their recommendations should be given the greatest consideration. Moreover, he found that borderline cases are often considered on the strength and completeness of recommendations.¹

Morrison feels that it is the letters and recommendations from the schools, which explain the test and grade lacks in the records of some students, that are the basis for the selection of students who fall below the seeming cut-off points on the academic ladder.² A former secondary school principal voiced the opinion that what happens many

¹Gail F. Farwell, "An Analysis of Factors and Criteria Related to the Admission of Borderline Cases at Michigan State College, Fall Quarter, 1952" (Unpublished Ed.D. dissertation, College of Education, Michigan State University, 1954), pp. 45 and 172.

²Morrison, op. cit., p. 15.

times is that the school, not wanting to get "out" with the colleges or under fire from the parents, tends to write vaguely in terms that really tell the college nothing about the student.¹ The danger implicit in this situation is that the college applicant will become the victim of confusion and not be admitted to a college or university that will bring out his full potential. This is the common concern.²

Faint's study on "College Admission Factors Other than Testing" revealed that if more school officials were conscientious about making a careful recommendation on the forms submitted by colleges, this item could become more objective and, therefore, of greater value. Faint contends that it is certainly much fairer to the applicant when a full and careful statement is made by a responsible official.³ Dudley of Columbia University highlighted the importance of careful recommendations in Time, 1960, when he wrote: "The problem: 800 middle-group applicants for 400 places. From then on, intangibles were vital. The chief gauge: Finding the kid who looks stronger on incentive....We have to look for every scrap of information we can get."⁴

¹Ibid.

²Ibid., p. 10.

³George R. Faint, "College Admission Factors Other than Testing," Journal of the National Association of Deans of Women, XIII (March, 1950), 136.

⁴Morrison, op. cit., p. 10.

The Illinois Committee on College Admission Requirements pointed out among their recommendations that the high school has a direct responsibility for providing colleges and universities with information about students and, in doing so, enabling these institutions to select prospective students wisely.¹ The information transmitted--the Secondary School Record--is a translation of human interests and abilities, academic and extra-curricular achievements, and personalities into numbers and words. It is a picture of the student that only the high school record can present.²

The literature in the student personnel field is filled with ample evidence of concern for the complex process of student transition from high school to college. The complexity of the transmittal process is a product of the American concept of local educational autonomy and of the diversity of the schools which supply and the colleges which interpret the information transmitted. As a consequence of this diversity, there is no single method of translation, no single standard of interpretation and there is no one process of transmittal nor even agreement on what information should be transmitted.³

¹Illinois Committee Report, Steering Committee, Illinois Secondary School Curriculum Program, "New College Admissions Requirements Recommended," Illinois Secondary School Curriculum Programing, Series A. No. 51 (Springfield, Illinois: Office of the State Superintendent of Public Instruction, February, 1950), p. 27.

²Morrison, op. cit., p. 14.

³Ibid., p. 1.

Clarity of communication seems a vital factor in the transmittal of information on student potential in today's highly selective college admissions market.

Review of Related Research

An exhaustive survey of previous research in semantics revealed Osgood's theoretical concept of the Semantic Differential to be the major advancement that has been acknowledged as a means of measuring connotative meaning.

Meticulous attention and consideration were given to the adaptability of Osgood's Semantic Differential concept as an instrument of measurement of connotative semantic variance in this investigation. It is pertinent, therefore, to review Osgood's theoretical design, to cite previous research utilizing the semantic differential and to relate the conclusions of the present investigator regarding its lack of adaptability for this particular research design.

Osgood's theoretical concept for the measurement of connotative meaning with the Semantic Differential was introduced in 1952. It is described in detail by Osgood, Tannenbaum and Suci in The Measurement of Meaning¹ and in

¹Charles E. Osgood, George J. Suci, and Percy H. Tannenbaum, The Measurement of Meaning (Urbana, Illinois: University of Illinois Press, 1957).

several other publications.^{1, 2, 3}

In essence, the semantic differential is made up of bi-polar adjective pairs bounding a seven-point scale. Concepts are placed above the scale, and subjects are asked to scale the position of the concept by certain bi-polar adjectival dimensions. The main dimensions isolated by Osgood's factor analytic studies are those of (1) evaluative, (2) potency and (3) activity. The average scale position of the concept on each dimension used locates it as a point in semantic space. The semantic differential, as it is currently used, requires separate judgments about single characteristics.⁴

The semantic differential concept has been used in various types of research studies. The first report of an investigation using the semantic differential as a measuring

¹Charles E. Osgood and George J. Suci, "Factor Analysis of Meaning," Journal of Experimental Psychology, 50 (1955), 325-338.

²Charles E. Osgood, "The Nature and Measurement of Meaning," Psychological Bulletin, XXXIX (May, 1952).

³Melvin Manis, "Assessing Communication with the Semantic Differential," American Journal of Psychology, 72 (1959), 111-113.

⁴Charles M. Solley and Samuel J. Messick, "Probability, Learning, the Statistical Structure of Concepts, and the Measurement of Meaning," American Journal of Psychology, LXXX (June, 1957), 165 and 171.

instrument was made in 1958 by Nebergall, who compared listener's receiving connotative meanings with speaker's intended meanings.¹

Manis employed the semantic differential to measure the effectiveness of statements made in terms of similarity between the communicator's views and those of the recipient of the communication. He concluded that the SD² can be profitably employed in assessing the communication of evaluative attitudes (good vs. bad), but in non-evaluative attitudes, such as potency and activity, less satisfactory results are obtained.³

In 1960 Carroll used the SD with other measures to factor analyze the styles of a diverse selection of literary passages and had six factors emerge as dimensions.⁴ McMurray's research in 1958 reflected that the SD ratings of abstract symbols and words were related to judgments by another group of subjects as to which pairs of symbols "best fit" the words.⁵ A study by R. C. Smith (1959) replicated

¹J. Jeffrey Aver and Raymond G. Smith, "Speaking," Review of Educational Research, XXXI (April, 1961), 155.

²The letters "SD" are used by many authors to refer to semantic differential.

³Manis, loc. cit.

⁴Paul M. Kjeldergaard, "The Psychology of Language," Review of Educational Research, XXXI (April, 1961), 122.

⁵Kjeldergaard, loc. cit.

Osgood's factor analytic work with data drawn from the general speech field to yield a research instrument specifically designed for speech.¹ Thomas and Ralph found the evaluative scales to furnish a valid index of attitude shift.²

Yavuz and Bousfield in 1959 demonstrated that subjects retain the connotative meanings of Turkish words, as measured by the good-bad (evaluative) continuum of the semantic differential, even though they had forgotten the English "translation" learned earlier.³

Kumata and Hideya used the semantic differential across three cultures and found that other nationality groups behave in accord with similar dimensions of connotative meaning.⁴ Deutschmann points to several investigations which have also shown the cross-cultural applicability of the semantic differential with Koreans, Japanese and Italians. The results have indicated that, while the location of concepts in semantic space may be quite different from one culture to another, the dimensions appear to be very nearly

¹Aver and Smith, op. cit., 155.

²Ibid.

³Kjeldergaard, op. cit., 122.

⁴Hideya Kumata, "A Factor Analytic Study of Semantic Structure Across Three Selected Cultures," (Unpublished Ph.D. dissertation, University of Illinois, 1958) cited by David K. Berlo, The Process of Communication, An Introduction to Theory and Practice (New York: Holt, Rinehart and Winston, Inc., 1960), p. 297.

constant; thus, the differential is an ideal instrument for studying attitude in cross-cultural situations.¹

Triandis employed the semantic differential technique in two research studies. In one study he used an adaptation of Osgood's technique in an industrial setting to establish profiles for the "ideal manager" and the "ideal workmate" and for the study of differences in the perception of mobs by different groups, etc.² In a second study, Triandis used the semantic differential to test a cognitive similarity hypothesis that cognitive similarity leads to greater communication effectiveness between two people. He measured communication effectiveness by the success of a person in matching the semantic differential of another person to the correct word. Triandis's results reflected that the more similar the semantic profiles of a given concept, as judged by two people, the more likely it is that they will be able to communicate effectively about that concept.³

In reviewing comments relative to the value and use of the semantic differential technique, Berlo writes that

¹Paul J. Deutschmann, "The Semantic Differential and Public Opinion Research," Public Opinion Quarterly, 23 (Fall, 1959), 435.

²Harry C. Triandis, "Some Cognitive Factors Affecting Communication" (Unpublished Ph.D. dissertation, Cornell University, 1958).

³Harry C. Triandis, "Some Determinants of Interpersonal Communication," Human Relations, 13(1960), 286.

the semantic differential holds considerable promise for professional communication. Berlo contends the SD has been used to test possible reactions to advertising campaigns, relative attention value of various titles for books, and the images that students have of their instructors. Berlo supports other writers in his statements that the most significant or powerful connotation dimension is the evaluative dimension which relates our tendency to judge something good or bad and that the SD is used increasingly as an operational definition of people's attitudes.¹

Solley and Messick state the semantic differential may measure only one statistical aspect of the meaning of a concept, whereas other techniques, such as word association or the method of triads, might reflect different statistical aspects of the same concept.²

Deutschmann writes that Osgood's Semantic Differential is an excellent instrument for the measurement of public opinion and attitudes. He contends that the evaluative dimension corresponds to attitude, and he cites references to a number of studies demonstrating high correlations between measurements obtained by the semantic differential and more complex instruments, such as Thurstone's equal-appearing interval scale and the Guttman scales.³

¹David K. Berlo, The Process of Communication, An Introduction to Theory and Practice (New York: Holt, Rinehart and Winston, Inc., 1960), p. 298.

²Solley and Messick, op. cit., 162.

³Deutschmann, op. cit., 435.

Tannenbaum states that several methodological issues are involved in the development of the semantic differential as a research tool. He feels that the semantic differential is more a technique of measurement of social phenomena than a finished instrument per se, that it is more accurate to talk about "a" semantic differential than "the" semantic differential. He states that "as a measuring technique, its application should be made only to situations where the phenomenon being measured is of interest and/or importance." In a review of the selected applications of the semantic differential, Tannenbaum says:

For lack of a better term that which is indexed by the SD is referred to as 'connotative meaning,' as opposed to denotative meaning. Some examples can be presented to illustrate this difference though they do not define it. Thus, if we are concerned with some aspect of connotative meaning, the SD can profitably be applied to index it--however crudely.

In essence, the SD is a combination of association and scaling procedures and its title points quite accurately to its intended operation--to differentiate the (connotative) meanings of objects and concepts.

If nothing else, the semantic differential has a certain merit by virtue of its rather pure empirical development--a fact which to some eyes may also be a major detriment.¹

Kaufman, in a critical appraisal of the semantic differential, points to questions that have been raised about the use of this theoretical technique and then proceeds to a

¹Percy Tannenbaum, "Selected Application of the Semantic Differential," Public Opinion Quarterly, 23 (Fall, 1959), 436.

discussion of these questions from her own point of view.

For example:

1. Can the semantic differential legitimately be used to assess the specific meaning of what is being measured?

As applied in a number of the experiments reported in The Measurement of Meaning, the SD is a measure of how closely and in what way various objects are related to each other, but the meaning of the object itself is not necessarily evaluated. Scales with more relevance to the meaning of what is being measured might be more revealing and still serve the objectives of the SD.

2. Does the semantic differential make sufficient allowance for what is salient to respondents, what they care about in connection with given subject matter?

The scales themselves may not take full account of what is salient and there is no way in which the respondent can add or omit anything. Hence, preliminary research is required to set up relevant and salient scales.

3. Is it always necessary to formulate scales in terms of polar opposites?

Or would it be more useful at times to set up scales which reflect appropriate social and psychological types and categories?

4. Are all scales equally long?

If not, some positive and negatives may be more intense and have a greater weight than others. A plus 3 might have more important implications for some dimensions than others.

Kaufman contends that major assets of the semantic differential include the fact that it requires no verbalization on the part of respondents and that it measures emotional reactions rather than rational or well-reasoned ones. Essentially, she says, it may be regarded as a

projective measure of somewhat the same order as sentence completions or free associations. Kaufman states that it is particularly valuable as a measure of reactions to objects and experiences that are essentially nonverbal in nature; these include, for example, reactions to aesthetic objects such as paintings and sculpture, music, designs, packages, posters, shapes and colors.¹

Church writes of the semantic differential as another technique of obscure theoretical significance but one of considerable empirical promise. He contends that one must remain skeptical about the semantic differential's claim to be a measure of meaning--for although it captures some portion of the connotative meaning of a word, it is difficult to believe that the ten standard dimensions (grouped into three factors of evaluation, potency and activity) exhaust all the major possibilities or that it is sound to use the same set of dimensions for all words. Church holds that some descriptive terms that might prove useful do not fall on any antonymical scale and can only be treated as present or absent; for example, what is the opposite of tinny, brittle, or iridescent? Secondly, he holds that certain antonyms found on the scale are not antonyms at all; sweet and sour are simply different positions

¹Helen J. Kaufman, "The Semantic Differential: A Critical Appraisal," Public Opinion Quarterly, 23 (Fall, 1959), 437-438.

on the taste tetrahedron and red and green are complements rather than antonyms.

Church concludes that, if the semantic differential were fitted out with suitable dimensions, it might prove useful for the description of persons and of things people do and make, such as works of art.¹

Brown, in reviewing The Measurement of Meaning, points out that the authors claim that the semantic differential measures connotative meaning. Brown contends, however, that in terms of any standard semantic analysis the differential must be considered a mixture and a mixture that changes with the problem at hand. Brown believes that there are at least two ways of looking at what is meant by connotative meaning. Such meaning may be a list of attributes that define the class of a thing or object, such as large or small, or soft or hard when describing a boulder; or connotative meaning may be the indication of any non-defining accidental associations of a concept--anything suggested by the concept. The denotation of boulder, for example, would be the population of objects to which it belongs. To Brown, the reason the meaning measured by the differential seems to be designated "connotative" is that "connotation" is a very ambiguous term.²

¹Joseph Church, Language and the Discovery of Reality (New York: Random House, 1961), p. 129.

²Roger W. Brown, "Is a Boulder Sweet or Sour?" Contemporary Psychology, III (May, 1958), 113-115.

Gulliksen, in his review of research on the measurement of meaning that has been conducted by Osgood and his associates over the last ten years, indicates certain critical points that should be carefully explored in subsequent studies. He summarizes these points as follows:

1. It is desirable to use scaling methods that will give better discrimination. Repeat measures should not give more than 20 per cent identical results. This might be accomplished by using a 15 point or 25 point scale or by using other scaling methods.
2. In view of significant concept-scale interaction, the methods of factor analysis may give misleading conclusions regarding dimensionality of the semantic space. Co-variance analysis or multi-dimensional scaling of concepts might be tried that would show low intersubject variance.
3. The development of parallel sets of scales would help to solve the problem of differentiating between low reliability and a change in attitude.
4. Nonsignificant differences found with small numbers of cases should not be interpreted as a reliable indication of similarity of the groups of variables tested until the results have been duplicated with a reasonably large number of cases.
5. Scales which are significantly curvilinearly related to each other cannot be regarded as interchangeable for all purposes even though there is a high correlation between them.¹

After examining the construction of Osgood's semantic differential design, reviewing authors' opinions and previous research utilizing it, and after making a serious endeavor to utilize it in this research, the present investigator concluded, in this case, its lack of adaptability for the

¹Harold Gulliksen, "How to Make Meaning More Meaningful," Contemporary Psychology, III (May, 1958), 115-118.

following reasons:

1. An attempt was made to use the differential technique with the terms employed in this study set up as polar opposites. Most of the terms do not lend themselves to this treatment. For example, the opposites of the following would be difficult to establish: sound sense of values, tactful, limited, aversive, temperamental, genuine and procrastinates.
2. The evaluative dimension of the semantic differential has proved to be the dimension offering the greatest degree of discriminatory power. The activity and potency dimensions have resulted in less satisfactory discrimination.
3. The final instrument of measurement developed for this research contained 175 terms. Respondents were asked to indicate the frequency with which they would use each of these terms to describe three types of scholars.

A semantic differential instrument, utilizing the 175 terms to describe three types of scholars, would have been of inconceivable length.

4. Previous research has shown significant concept-scale interaction in some investigations. For example, the potency and activity scales have been difficult to distinguish.

Other theoretical measurement concepts that were considered for adaptation were the Q-Sort Technique and word association tests. Since the research instrument could not be administered in person, the Q-Sort Technique was not deemed feasible. Word association tests did not seem appropriate for the measurement of semantic variance. Previous research studies which utilized one of the two above techniques were investigations indirectly related to the current research topic and design.

Richards contends that the properties of any apparatus used and the apparatus will include pre-eminently the language of discussion and whatever else one likes to put behind the interpretation of the language. "These enter into the investigation and not only enter into it, but belong essentially to it, contribute to it and form and shape it and I suspect," he says, "confines it."¹ In this statement Richards seems to have summarized well the most serious difficulty and obstacle that researchers face in investigations in the field of semantics and communications--that of studying words with words.

A review of the literature and research reveals that investigations directly or closely related to this study in the field of student personnel work are almost nil.

Shelton's study of certain constructs used in communication by school workers and other professional mental health personnel seems appropriate for review. The purpose of Shelton's study was to examine the range of convenience or generality of a group of descriptive terms of dimensions used by professional workers in the fields of mental health and education to describe children and clients with whom they worked. It was hypothesized that

¹I. A. Richards, "Communication Between Men: The Meaning of Language," Cybernetics, Transactions of the Eighth Conference (New York: Josiah Macy Jr. Foundation, March, 1952), p. 46.

differences in the range of convenience or generality of these terms would appear and that these differences would be barriers to good communication about children. Shelton concluded that these barriers could lead to poor service to children and families whenever service involved the different professional groups. Respondents were asked to select a representative group of children or clients with whom they worked and to apply certain descriptive dimensions to this sample on an adaptation of Kelly's Role Construct Repertory Grid. The grid involved a set of thirty-five bi-polar constructs.

Shelton's main findings indicated no significant differences in range of convenience for these constructs among the mental health professions but that much significant variation existed among the school professions. Between clinic professors and school professors, pair by pair, there were marked significant differences.¹

Weitz expressed a concern regarding labeling students by terms used in describing the students. He emphasizes the importance of the principle of non-identity by drawing on Korzybski's work, which stresses the fact that no two objects or events or conditions are alike. He contends that professional personnel must realize that a diagnostic label

¹Joel Edward Shelton, "A Study of Certain Constructs Used in Communication by School Workers and other Professional Mental Health Personnel," (Unpublished Ph.D. dissertation, The Ohio State University, 1960), p. 125.

is only a considerably removed abstraction of behavior. Diagnosis in counseling should avoid the use of shorthand labels and should, instead, provide extensive descriptions of objects, events, and circumstances. Extensive descriptions of life elements require the identification and labeling of unique behavior of a unique individual under a unique set of circumstances at a specific time in history. Weitz recommends that a number of labels should be selected for use in describing a situation and that these should represent the essential elements in the situation. There should be a number of such terms for each important situation and when used they should be followed by "etc.," which would indicate that, although the description is incomplete, the event is capable of evoking additional labels. These measures, Weitz contends, would provide safe-guards against faulty diagnosis.¹

Jones and Thurstone imply that the difficulties one encounters in attempts to measure meaning may result from failures to restrict the semantic context. They state that it is probably quite true that a word has no unique meaning or, more properly, that the meaning of a word depends upon the context in which it is presented. In the latter sense, a word has an infinite number of meanings, each corresponding

¹Henry Weitz, "Semantics in Diagnosis," Journal of Counseling Psychology, I (1954), 70-73.

to a particular context. If such is the case, it is not possible to determine, either logically or experimentally, the generalized meaning of a word. However, it may be possible to present words in a particular context and to determine their meanings in terms of that imposed context. Jones and Thurstone presented a list of descriptive adjectives on a successive interval schedule and asked subjects to indicate along a nine-point scale, the meaning of each word or phrase in terms of the degree to which each denoted like or dislike for food. The results of this study indicate that it is possible to select suitable descriptive adjectives for use as labels of successive intervals or subsequent preference schedules.¹

A study by Mitos stemmed from the work of Jones and Thurstone in that a psychophysical scaling procedure, in rank-order technique, was applied to a problem of word meanings in a restricted semantic context, that of the communication of behavioral descriptions between and within professional and non-professional groups in a general psychiatric hospital. The essential commonality and specific differences in meaning of psychiatric symptom terms were assessed among psychiatric aides and professional staff members in the specific semantic context of prognostication.

¹Lyle V. Jones and L. L. Thurstone, "The Psychophysics of Semantics: An Experimental Investigation," The Journal of Applied Psychology, XXXIX (1955), 31-36.

Groups of psychiatric aides and professional hospital personnel ranked 30 symptom terms along a 10-point scale in terms of the degree to which each contributes toward favorable prognosis. The results of the study showed commonality of meaning between and within groups but exceptions occurred as symptoms considered threatening to the aide were rated as more serious by aides. Specific differences between groups indicated that the highly trained professional workers tended to diverge from the general semantic norm.¹

Wendell Johnson emphasizes the important effects words can have on the behavioral reactions of people. He contends that records taken by means of the psychogalvano meter, an instrument developed by psychologists which records changes in electrical skin potential, show it is very common, even for so-called "educated people," to undergo changes in electrical skin potential in response to hearing or reading isolated words such as mother, blood, love, etc. Johnson states that this is an example of how people react to words as though the words were the objects. Psychologists have developed tables of norms as to the amount of such organismic reaction that is likely to occur from particular words.²

¹Spiro B. Mitos, "Semantic Aspects of Prognosis," Journal of Abnormal Social Psychology (February, 1959), pp. 137-140.

²Wendell Johnson, People in Quandaries (New York: Harper and Brothers, 1946).

Hackett and Herbert contend that the words which cause the greatest trouble are those which point to attitudes and which generalize about experience or in some way go beyond what we can get at through our senses. They contend that for the sake of simplicity the sender must choose words which are least ambiguous, whose core meanings are the most stable, and words which have the smallest range of meaning.¹

Summary of Review of Literature

A thorough review of the literature and research appears to bear evidence that studies in connotative measurement and semantic variance having a direct bearing on this research investigation are definitely limited in scope and availability. Literature referring to the general field of semantics, linguistics and communications is abundant but indirectly related.

It seems feasible to conclude from a review of the literature on college admissions that a majority of institutions of higher education use a composite of criteria in selecting academically promising students and that the admissions process has become one of individual selectivity.

¹Herbert Hackett, et. al., Understanding and Being Understood (New York: Longmans, Green and Co., 1957), p. 139.

The high school recommendation seems to rank high in importance among the criteria used in student selection by universities and colleges. The literature is filled with evidence of the concern educators have for understanding and improving the complex process of high school to college transition. The high school counselor and the university student personnel admissions officer assume a major responsibility in the student's transition process which in essence rests on the ability to communicate accurately and unsuccessfully a word picture of the student.

Serious consideration was given to the adaptability of Osgood's Semantic Differential concept as an instrument of measurement for this research study. A thorough review of the research and literature led the investigator to conclude that the concept held a lack of adaptability and feasibility for this particular investigation.

Studies by Shelton, Jones and Thurstone, and Mitos were summarized as having the most direct implications for this research investigation. The writings of Weitz, Johnson, and Hackett and Herbert emphasized the importance of the effect that words can have on the behavioral reactions of people.

It would seem that research in this area of the student personnel profession is mandatory if students are not to become the victims of semantic variance in the communication process.

CHAPTER III

THEORETICAL ASSUMPTIONS AND RESEARCH DESIGN

The first section of this chapter is devoted to a discussion of the theory and basic theoretical assumptions of the research investigation. The hypotheses to be tested are stated in the null form and are followed by a description of the design and construction of the research instrument.

The Theory

The term "communication" derives from the Latin, communis (common).¹ The objective of any communication event is to reach some degree of common understanding--to share an idea, thought, feeling, attitude, perception or emotion.²

Written communications are composed of printed symbols. In the American language the symbols are letters arranged into units as words. Words having somewhat common cultural definitions, yet with variations in meaning, act as a stimulus to provoke behavior in thought or action in the

¹Bess Sonnel, A Field Theory (Chicago: The Chicago University Press, 1958), p. 6.

²Paul E. Eiserer, "Communication Process in the Interview," Journal of the National Association of Women Deans and Counselors, XXII (January, 1959), 69.

persons receiving the stimulus. The first stage of the communication process is the encoding of some thought, action or information into symbolic form which the encoder wishes to transmit as a message to a receiver. The written symbols to the receiver are decoded and evaluated according to the shared cultural symbolic meanings and by the receiver's personal interpretations and perceptions. To the degree that the symbolic stimulus (words) means the same thing for the receiver (decoder) that they do for the sender (encoder), the final stage of the process is complete; and communication occurs.

Miller's diagram of "information measurement" explains graphically that communication can occur only to the extent that persons X and Y have common information between them.¹

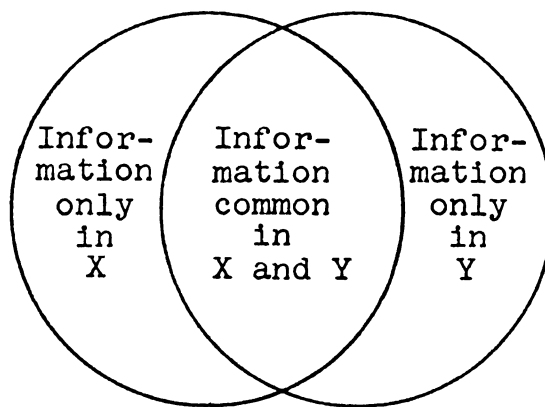


Figure 1.--Miller's Diagram of Information Measurement

Hackett, Andersen, Enden and Hagen contend that when words are used to communicate, all that can be hoped for is

¹G. A. Miller, "What is Information Measurement?" American Psychologist, VIII (1953), 3-11.

that the symbols used will point to an experience in B (the receiver), enough like an experience in A (the sender), that a common understanding will occur and enable communication to take place.

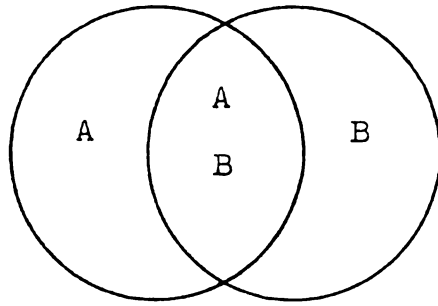


Figure 2.--Hackett's Diagram of
Shared Experiences which
Enable Communication
to Occur

The illustration of Hackett's theory shows that the only possible communication occurs when A and B overlap in AB.¹

Berlo writes that the concept of meaning is central to communication, and to the extent that people have similar meanings they can communicate.²

Schramm diagrams (Figure 3) how the receiver and the sender must be in tune.

¹Herbert Hackett, Martin Andersen, Seth Fess Enden and Lessie Hagen, Understanding and Being Understood (New York: Longmans, Green and Company, 1957), p. 11.

²David K. Berlo, The Process of Communication: An Introduction to Theory and Practice (New York: Holt, Rinehart and Winston, Inc., 1960), p. 169, p. 175.

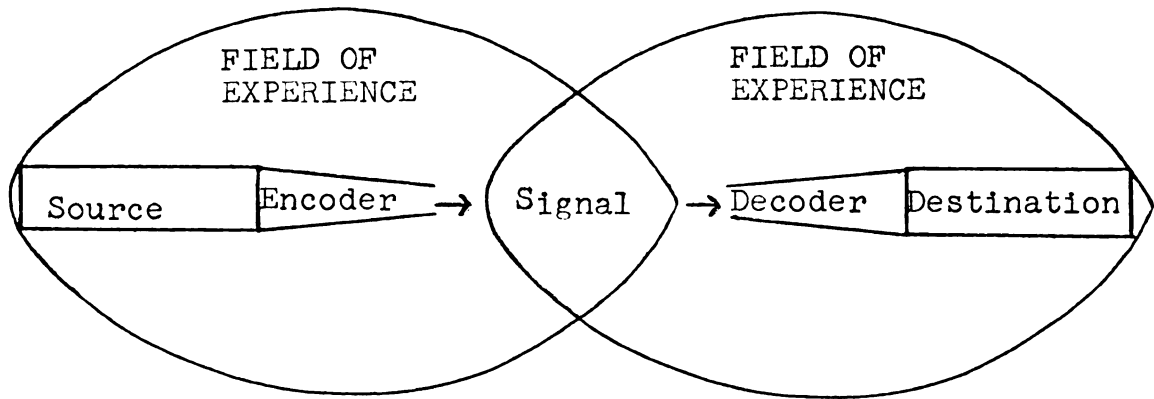


Figure 3.--Schramm's Diagram of
Accumulated Experience in the
Communication Process

The above diagram represents the accumulated experience of the two individuals trying to communicate. The source can encode and the destination decode only in terms of the experience each has had. If the representative circles have larger areas in common, communication can occur more easily. If the area of the two circles overlapping is smaller, the source will have greater difficulty getting the intended message across.¹

Newcomb contends that the initial assumption is that communication among humans performs the essential function of enabling two or more individuals to maintain simultaneous orientation toward one another as communicators and towards objects of communication. He states that

¹Wilbur Schramm, "How Communication Works," The Process and Effects of Mass Communication (Illinois: University of Illinois Press, 1954), pp. 3-26.

every communication act is viewed as a transmission of information, consisting of discriminative stimuli, from a source to a recipient and that discriminative stimuli have a discriminable object as referent. Newcomb describes the simplest possible communication act as one person (A) transmitting information to another (B) about something (X). Such an act is symbolized as A to B re X.

Newcomb's theory is: given X at any time, A and B will be regarded as cathectically alike (++) or different (+- or -+). A and B are assumed to be group members characterized by continued association. Newcomb's theory, in essence, is diagrammed in Figure 4.

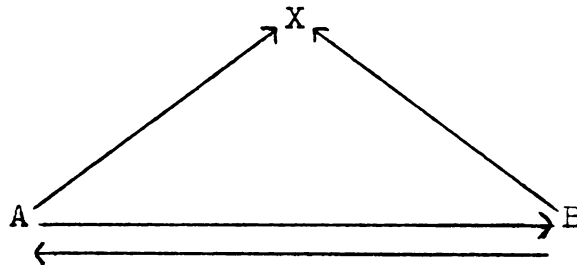


Figure 4.--Schematic Illustration
of Newcomb's Minimal
A-B-X System

In this process both A and B have information about X where only A had it before. In Newcomb's theory "symmetry" has occurred, which means the communication process is complete.¹

¹T. M. Newcomb, "An Approach to the Study of Communication Acts," Psychological Review, 60 (1953), 393-404.

Basic Theoretical Assumptions

The basic theoretical assumptions of this research design are as follows:

1. Communication is vital to the nature and value of the student personnel profession and its services. It is the means by which personnel workers achieve many purposes.¹
2. Communications may be instrumental in producing behavioral reactions towards students among student personnel workers.
3. In order for communication to occur, there must be clarity of meaning. The degree to which clarity of communication occurs depends upon the degree to which words or phrases used represent the same thing for the receiver (decoder) that they do for the sender (encoder).
4. To the extent that words or phrases used do not represent the same thing for the sender and receiver, semantic variance occurs and communication is not facilitated.
5. The context of anything is the field in which it has its place.² The student personnel

¹Eiserer, op. cit., p. 75.

²Hugh R. Walpole, Semantics: The Nature of Words and Their Meanings. (New York: W. W. Norton and Company, 1941), p. 118.

profession is a particular context that can be isolated in which to study semantic variance with terminology used by two types of personnel in the profession: high school guidance counselors and university student personnel admissions officers.

6. It is possible to determine the degree of variance or invariance in the communication process in a particular field of context by (a) isolating the terminology to be used and the variables to be described and (b) constructing an instrument of measurement with sufficient reliability to measure semantic variance among groups of subjects by utilizing the isolated terminology and variables to be described.
7. The degree of variance or invariance can be statistically described by an analysis of variance technique.

Hypotheses

The testable hypotheses of this research investigation, stated here in the null form and tested at the .05 level of significance, for the three types of scholars: a potentially low-, average-, and exceptional-achieving

scholar, are as follows:

Hypothesis I. No differences (semantic variance) exist among counselors with respect to the terminology when used to describe each of the three types of scholars.

Hypothesis II. No differences (semantic variance) exist among admissions officers with respect to the terminology when used to describe each of the three types of scholars.

Hypothesis III. For selected terminology from the "Descriptive Word Scale" on which there is agreement (semantic invariance), among counselors or among admissions officers with respect to their usage of the terms, no differences exist between the two groups regarding their use of these words to describe each of the three types of scholars.

Design of the Research Instrument

The development and design of the research instrument, "A Descriptive Word Scale,"¹ was one of the first major tasks of the study.

Permission was granted by the Director of the Counseling Center at Michigan State University to examine the written

¹See Appendix A for a copy of "A Descriptive Word Scale."

recommendations in the files for the 1962-63 freshman class students. The recommendations were written by high school guidance counselors across the nation. It was assumed, therefore, that the recommendations would be typical of any sent to admissions officers in other colleges and universities in the United States. This preliminary examination of some two hundred recommendations proved to be a most feasible source for the original collection of raw data, the terminology that would be used in constructing "A Descriptive Word Scale."

The second developmental step was the selection of a random sample of 1,500 of the 4,700 freshman class recommendations. The written recommendations were examined for descriptive words and phrases, and each word or phrase was placed on a card for a frequency tabulation of the number of times it appeared in the selected sampling.

The data were then analyzed for descriptive adjectives or adjectival phrases which appeared with a frequency of fifty per cent or more in the recommendations examined.

The descriptive terminology selected was then used to construct a pilot instrument which contained two hundred words and phrases. The pilot instrument carried instructions requesting that respondents indicate the frequency with which they would be likely to use the selected terminology to describe three types of scholars: potentially low-, average-, and exceptional-achieving scholars. Respondents were also

asked to be critical of the mechanical design of the instrument and to comment freely regarding any aspect of its design, development or purpose of use. The pilot instrument was administered to 125 students in guidance, counseling and student personnel classes at Michigan State University. A pure sample of admissions officers was not available to the investigator at the time of the pilot administration.

The pilot study aided the investigator in re-designing the mechanical form of the instrument so that it was more functional and easier for respondents to complete. It also aided in determining and eliminating the most ambiguous and least understood terminology.

The final research instrument, "A Descriptive Word Scale," contains one hundred seventy-five descriptive adjectives or adjectival phrases.

Summary of Theoretical Assumptions and Research Design

The theory underlying the research design is based, in part, on the works of Miller, Hackett, Berlo, Schramm and Newcomb. In essence, these theorists hold that communication can occur only to the degree that two different individuals have common knowledge between them.

Theoretical assumptions of the research design stem from the above theories of the communication process and from the investigator's knowledge of the function of communication in the student personnel profession.

The theoretical assumptions provided the bases for the hypotheses of the study and these are stated in the null.

A description of the development and design of the research instrument, "A Descriptive Word Scale," is related in sequential steps.

CHAPTER IV

METHODOLOGY AND PROCEDURES

A detailed discussion of the methodology and procedures used in any research investigation is mandatory to allow evidence of soundness in approach and design and to allow for replication of the study.

This chapter is a delineation of the selection and procurement of the sample, the treatment of the data and the statistical techniques of analysis.

Selection and Procurement of the Sample

The population selected for this research study consisted of university student personnel admissions officers and high school guidance counselors.

The sample drawn from this population was restricted to the geographic area of the seven states in which the "Big Ten Universities" are located: Minnesota, Michigan, Indiana, Illinois, Iowa, Ohio, and Wisconsin. The selection of this particular geographic location was based on three factors:

1. The large number of colleges and universities located in these states provided an adequate sampling of admissions officers. This was not true for numbers of other states which could have provided an adequate sampling of counselors.

2. The large number of educational institutions, varying in size, in these states seemed to offer the representative sampling desired for the research project.

3. The geographic locale was the area in which the investigator was then located.

The total sample consisted of three hundred individuals: one hundred fifty admissions officers and a similar number of counselors. A larger sample of equal numbers was not available. Admissions officers are employed in smaller numbers than are counselors.

Certain basic criteria were set in the selection of the admissions officers from universities and colleges listed in the 1961-1962 Education Directory of Higher Education. Institutions included in the sample held one or all of the following classifications in the directory:

1. II.j. Bachelor Degrees granted or beyond
in professional degrees.
2. III. Master's Degrees granted.
3. IV. Doctor's Degrees granted.¹

Each institution was also accredited by The North Central Association and classified as coeducational. Institutions classified as I and V, Theological and Special Schools,

¹U. S. Department of Health, Education and Welfare, U. S. Office of Education, Education Directory, 1961-62, Part 3 (Washington: United States Government Printing Office, 1962), pp. 1-9.

were not included on the premise that these schools might have special qualifications; and, therefore, they would not be representative of the total sample desired.

Student enrollment in the institutions selected ranged from five hundred students to twenty thousand and above. Where names of admissions officers were not given in the 1961-62 Education Directory of Higher Education, the writer sought additional information in the 1962 Journal of the American Association of Collegiate Registrars and Admissions Officers.¹

The total number of admissions officers who met the set criteria was one hundred fifty.

In selecting the sampling of high school guidance counselors, it was first necessary to determine the number and names of those employed in guidance positions in the same geographic location which was used for the sampling of admissions officers. Letters were sent to state guidance directors or to state school superintendents requesting listings of their professionally trained high school guidance counselors then currently employed in guidance positions. Personnel in each of the seven states responded immediately with such listings.

¹College and University: The Journal of the American Association of Collegiate Registrars and Admissions Officers, Vol. 37, No. 3 (Published by the Association, Spring 1962).

The number of professionally trained counselors varied for each of the seven states. The number to be included was determined by the proportion of counselors in each state with respect to the total number of counselors in the seven-state area. A table of random numbers was used to identify the subjects for the counselor sample.¹

The procurement of the sample was accomplished by correspondence in which the time and cooperation of the selected subjects were requested. A total of four letters was sent;² the fourth and final letter was timed to arrive immediately after a telegram³ to those subjects who had not in any way responded to the first three letters. A coding system was devised and used for each instrument mailed to the subjects. This enabled the investigator to keep an accurate account of the sample during the process of procuring the data.

A total return of one hundred twenty, or eighty per cent, was obtained for admissions officers; and a total return of one hundred thirty-eight, or ninety-two per cent, was obtained for counselors. Table 1 presents a summary and analysis of the usable returns for the total sample of

¹Wilfred J. Dixon and Frank J. Massey, Jr., Introduction to Statistical Analysis (McGraw-Hill Book Company, Inc., 1951), pp. 350-359.

²See Appendices B, C, D, and E for copies of letters sent to subjects.

³See Appendix F for a copy of the telegram sent to subjects.

TABLE 1

Summary and Analysis of Percentage of Usable Returns
For Counselors and Admissions Officers

| State | C A | Counselor Admissions Officer | First Return | Second Return | Third Return | Fourth Return | Final Return |
|-----------|--------|---------------------------------|-----------------|------------------|-----------------|------------------|-----------------|
| Minnesota | C A | | 57 76 | 29 0 | 7 0 | 7 8 | 100 84 |
| Michigan | C A | | 53 39 | 12 31 | 15 8 | 15 8 | 95 86 |
| Indiana | C A | | 44 45 | 25 18 | 0 0 | 25 10 | 94 73 |
| Wisconsin | C A | | 76 23 | 6 41 | 6 5 | 0 11 | 88 80 |
| Illinois | C A | | 41 38 | 17 38 | 6 0 | 29 4 | 93 80 |
| Iowa | C A | | 42 27 | 8 44 | 33 0 | 8 11 | 91 82 |
| Ohio | C A | | 41 46 | 7 13 | 21 13 | 10 5 | 79 77 |
| Total | C A | | 51 41 | 13 27 | 14 5 | 14 7 | 92 80 |

*Percentages are based on total sample of 150 in each group.

counselors and admissions officers for each of the seven states. Table 2 reflects an analysis of un-usable returns for the total sample. In this instance, "un-usable returns" refers to the following categories:

1. No Response: the subject at no time responded to the correspondence eliciting cooperation nor was the correspondence returned to the sender.
2. Responded but Refused to Cooperate: the subject indicated reasons for his not participating.
3. Responded but the Return was Inadequate: the subject did not follow instructions for completing the instrument or left it incomplete.
4. Deceased: the investigator received word that the subject was deceased.

Treatment of the Data and Statistical Techniques of Analysis

The data were treated separately for counselors and admissions officers when recorded for analysis from the subjects' responses on the research instrument, "A Descriptive Word Scale."

Instructions on the research instrument requested the subjects to indicate the frequency with which they would be likely to use the given terminology to describe each of three types of scholars: potentially low-, average-, and exceptional-achieving scholars. Frequency of use was to be indicated by the subjects' checking a rating of "rarely," "sometimes," "usually," or "almost always." In tabulating the data a numerical value of zero (0) was assigned to the frequencies of "rarely" and "sometimes" and a numerical value of one (1)

TABLE 2

Analysis of Un-Usable Returns for Total Sample*

| Seven States Combined | Total Percentage Usable Returns | No Response (1) | Responded but Refused to Cooperate (2) | Responded but Return Inadequate (3) | Deceased (4) | Percentage of Total Sample Accounted for |
|--------------------------|------------------------------------|-----------------------|---|--|-----------------|--|
| Counselors | 92 | 00 | 04 | 01 | 03 | 100 |
| Admissions Officers | 80 | 08 | 05 | 05 | 02 | 100 |

*Percentages are based on total sample of 150 in each group.

was given to the frequencies of "usually" and "almost always." This procedure allowed for a point of discrimination and for adaptability to machine tabulation. The data were then transferred to I.B.M. cards to facilitate analysis.

Hoyt's Analysis of Variance Technique¹ was used with the returns of fifty counselors and fifty admissions officers, randomly selected, to determine the reliability of the instrument. Following the determination of the reliability, all data cards were processed in such a way as to yield the frequency of use of each word as a characteristic for each of the three types of scholars: potentially low-, average-, and exceptional-achieving scholars.

Any word that was used by the counselors or admissions officers with a frequency of twenty-five per cent or greater was considered for inclusion in the vocabulary that would be used to describe one of the three types of potential scholars. Any word that was used with a frequency of five per cent or less by either counselors or admissions officers was identified as a word that would probably not be used in describing a potentially low-, average-, or exceptional-achieving scholar.

¹Cyril Hoyt, "Test Reliability Estimated by Analysis of Variance," Psychometrika, VI, No. 3 (June 1941), 153-160.

For each word that was considered for inclusion in the vocabulary, a chi-square analysis¹ was used to determine whether there was a difference in usage between counselors and admissions officers. Where no differences were found, the words became a part of the vocabulary list used to describe the potentially low-, average-, or exceptional-achieving scholar.

Similar techniques were used to identify words on which there was agreement between counselors and admissions officers in terms of the word's not being used to describe the particular type of scholar.

Summary

A sample of three hundred subjects, one hundred fifty counselors and a similar number of admissions officers, was drawn for this investigation from the population of high school counselors and university personnel admissions officers in the geographic area of the seven states in which the "Big Ten Universities" are located.

The sample of admissions officers was the entire one hundred fifty available who met certain set criteria. The counselor sample was selected by a random number technique on a proportion basis of the number of counselors per state with respect to the total number of counselors in the seven-state area.

¹Dixon and Massey, op. cit., pp. 184-191.

Procurement of the sample was accomplished by correspondence. A total return of eighty per cent was obtained for admissions officers and a return of ninety-two per cent for counselors.

Hoyt's Analysis of Variance Technique was used to determine the reliability of the research instrument. A chi-square analysis was employed to determine a difference in usage of the given terminology by counselors and admissions officers when used to describe the three types of scholars: potentially low-, average-, and exceptional-achieving scholars. Similar techniques were employed to identify words for which there was agreement that the words would not be used by counselors and admissions officers in describing the three types of potential scholars. These results are summarized in Chapter V.

CHAPTER V

PRESENTATION, ANALYSIS AND DISCUSSION OF RESULTS

This chapter presents the treatment and analysis of the research data, followed by a discussion of the results of the research study.

The treatment and analysis of the data pertaining to the reliability of the research instrument are presented first, followed by the presentation, treatment and analysis of the data for each of the three hypotheses of the study.

Vocabulary lists are presented for the terminology that the counselors and admissions officers would or would not use to describe each of the three types of scholars: the potentially low-, average-, or exceptional-achieving scholar. As a result of the analysis, certain terminology is identified as having particular descriptive significance for the counselors and admissions officers, when used to describe the three types of potential scholars.

A discussion of the research results comprises the final section of the chapter.

Presentation and Analysis of Data Pertaining to the Reliability of the Instrument

Hoyt's Analysis of Variance Technique was used with a randomly selected sample of fifty counselors and fifty

admissions officers to determine the reliability of the instrument. The reliability estimates for the scales range from 0.94 to 0.98. The reliability coefficients are presented in Table 3.

The internal consistency estimates were above the acceptable level and indicate the existence of a reliable measuring instrument.

TABLE 3

Reliability Coefficients of the Instrument Scales
for Counselors and Admissions Officers

| Instrument Scales (Type Potential Scholar) | Reliability Coefficients for Counselors | Reliability Coefficients for Admissions Officers |
|--|--|---|
| Low | 0.97 | 0.94 |
| Average | 0.98 | 0.97 |
| Exceptional | 0.98 | 0.97 |

N = 100

Treatment and Analysis of Data Pertaining to Hypothesis I

Statement of Hypothesis I. No differences (semantic variance)¹ exist among counselors with respect to how they would use the terminology to describe each of the three types of scholars.

An analysis of variance technique was used to test Hypothesis I. The results obtained from the analysis for the

¹The term semantic variance" or "invariance" as used throughout the dissertation refers to "agreement" or "disagreement" and not to the usual statistical usage of "variance."

one hundred thirty-eight counselors for each of the three types of scholars are presented in Tables 4, 5, and 6. The significant F-ratios enabled the rejection of Hypothesis I for each of the three types of scholars.

TABLE 4
Analysis of Variance for Responses of
Counselors to a Potentially
Low Scholar

| Source | d.f. | Mean Sums of Squares | F |
|------------|-------|----------------------|--------|
| Counselors | 137 | 1,53984 | 20.04* |
| Words | 174 | 2,19229 | 28.54 |
| Error | 23838 | 0.07682 | |
| Total | 24149 | 2423.71265 | |

*Significant at .05 level.

TABLE 5
Analysis of Variance for Responses of
Counselors to a Potentially
Average Scholar

| Source | d.f. | Mean Sums of Squares | F |
|------------|-------|----------------------|--------|
| Counselors | 137 | 6,37382 | 53.91* |
| Words | 174 | 3,45513 | 29.22 |
| Error | 23838 | 0.11823 | |
| Total | 24149 | | |

*Significant at .05 level.

TABLE 6

Analysis of Variance for Responses of
Counselors to a Potentially
Exceptional Scholar

| Source | d.f. | Mean Sums of Squares | F |
|------------|-------|----------------------|--------|
| Counselors | 137 | 7.56335 | 56.57* |
| Words | 174 | 10.42731 | 77.99 |
| Error | 23838 | 0.13369 | |

*Significant at .05 level.

Treatment and Analysis of Data Pertaining
to Hypothesis II

Statement of Hypothesis II. No differences (semantic variance)¹ exist among admissions officers with respect to how they would use the terminology to describe each of the three types of scholars.

An analysis of variance technique was employed to test Hypothesis II. The results of the analysis for the sample of one hundred twenty admissions officers for each of the three types of scholars are presented in Tables 7, 8, and 9. The significant F-ratios enabled the rejection of Hypothesis II for each of the three types of scholars.

¹The term "semantic variance" or "invariance" as used throughout the dissertation refers to "agreement" or "disagreement" and not to the usual statistical usage of "variance."

TABLE 7

Analysis of Variance for Responses of
Admissions Officers to a Potentially
Low Scholar

| Source | d.f. | Mean Sums of Squares | F |
|------------------------|-------|----------------------|--------|
| Admissions Officers | 120 | 2.22700 | 28.97* |
| Words | 174 | 1.95466 | 25.43 |
| Error | 20880 | 0.07687 | |
| Total | 21174 | | |

*Significant at .05 level.

TABLE 8

Analysis of Variance for Responses of
Admissions Officers to a Potentially
Average Scholar

| Source | d.f. | Mean Sums of Squares | F |
|------------------------|-------|----------------------|--------|
| Admissions Officers | 120 | 7.56326 | 64.38* |
| Words | 174 | 3.32889 | 28.34 |
| Error | 20880 | 0.11748 | |
| Total | 21174 | | |

*Significant at .05 level.

TABLE 9

Analysis of Variance for Responses of
Admissions Officers to a Potentially
Exceptional Scholar

| Source | d.f. | Mean Sums of Squares | F |
|---------------------|-------|----------------------|--------|
| Admissions Officers | 120 | 9.51436 | 77.99* |
| Words | 174 | 9.21411 | 75.52 |
| Error | 20880 | 0.12200 | |
| Total | 21174 | | |

*Significant at .05 level.

Treatment and Analysis of Data Pertaining
to Hypothesis III

Statement of Hypothesis III. For selected terminology from the "Descriptive Word Scale" on which there is agreement (semantic invariance) among counselors or among admissions officers with respect to their usage of the terms, no differences exist between the two groups regarding their use of these words to describe each of the three types of scholars.

A chi-square analysis technique was used in testing Hypothesis III. Any word that was chosen by twenty-five per cent or more of the counselors or admissions officers was considered for inclusion in the vocabulary of terminology that would be descriptive of one of the three types of potential

3

scholars. Any word that was used with a frequency of five per cent or less by either counselors or admissions officers was identified as a word that probably would not be used in describing a potentially low-, average-, or exceptional-achieving scholar. Four terms that were used with a frequency of six to twenty-four per cent were not considered for the chi-square analysis or inclusion in the vocabulary lists.

For each word that was considered for inclusion in the vocabulary, a chi-square analysis was computed to determine whether there was a significant difference in usage between counselors and admissions officers. Where no differences were disclosed, the words became a part of the vocabulary lists descriptive of the potentially low-, average-, or exceptional-achieving scholar.

Similar techniques were used to identify words for which there was agreement between counselors and/or admissions officers that the terminology would not be used to describe the three types of potential scholars.

The results of the chi-square analysis appear in Table 10. The results obtained enabled the investigator to reject Hypothesis III for thirteen of the terms from the selected terminology where significant differences did appear between counselors and admissions officers in their usage of the terms. The results did not allow for the rejection of

Hypothesis III for one hundred sixty-two of the terms for which significant differences did not appear, which indicates some extent of agreement between counselors and admissions officers in their use of the terminology.

TABLE 10

Number of words for which there was a Significant Difference in Usage between Counselors and Admissions Officers* for each of the Three Types of Potential Scholars

| Instrument Scale (Type Potential Scholar) | Number of Words Chosen by 25% or More of Counselors or Admissions Officers | Numbers of Words Chosen by 5% or Fewer of Counsel- ors or Admissions Officers | Number of X^2 Sig- nificant at .05 Level |
|---|---|---|--|
| Low | 27 | 67 | 2 |
| Average | 94 | 43 | 5 |
| Exceptional | 133 | 22 | 6 |

*Based on 175 words for 138 counselors and 120 counselees.

The results of the chi-square analysis used in testing Hypothesis III enabled identification of the thirteen terms for which there was a significant difference in agreement between counselors and admissions officers regarding their use of the terminology to describe the three types of potential scholars. The terminology on which they disagree is given below for each of the three types of potential scholars.

1. A potentially low scholar:
 - a. Needs testing.
 - b. Level headed.
2. A potentially average scholar:
 - a. Adequately.
 - b. Realistic.
 - c. Sophisticated.
 - d. Driven.
 - e. Typical college student.
3. A potentially exceptional scholar:
 - a. Dependable.
 - b. Highly active in extra-curricula.
 - c. Ambitious.
 - d. Unusual.
 - e. Self-reliant.
 - f. Typical college student.

The term "typical college student" was rejected by disagreement as being descriptive of either the potentially average- or exceptional-achieving scholar.

The terminology comprising the vocabulary lists that counselors and admissions officers would or would not use to describe each of the three types of potential scholars appears in Tables 11, 12, and 13.

TABLE 11

Vocabulary of Terminology Counselors and Admissions
Officers Used or did not Use to Describe
A Potentially Low Scholar

| Used to Describe | Not Used to Describe |
|----------------------------------|-----------------------------|
| 1. friendly | 1. remarkable |
| 2. limited | 2. energetic |
| 3. few aptitudes | 3. keen |
| 4. needs counsel | 4. artistic |
| 5. indecisive | 5. self-reliant |
| 6. lacks confidence | 6. imaginative |
| 7. moral character | 7. analytical |
| 8. needs encouragement | 8. purposive |
| 9. honest | 9. superior |
| 10. courteous | 10. go-far |
| 11. needs occupational goals | 11. assured |
| 12. amiable | 12. influential with peers |
| 13. cooperative | 13. outgoing |
| 14. procrastinates | 14. all-around |
| 15. needs testing | 15. efficient |
| 16. fluctuates | 16. adequately |
| 17. slow | 17. strong |
| 18. avoids | 18. thorough |
| 19. unsure | 19. independent |
| 20. reluctant in self-expression | 20. ambitious |
| 21. follower | 21. responsive |
| 22. good citizen | 22. excellent |
| 23. trustworthy | 23. aggressive |
| 24. pleasant | 24. typical college student |
| 25. integrity | 25. understands self |
| 26. good-natured | 26. eager |
| 27. immature | 27. tenacity |
| | 28. perfectionist |
| | 29. sophisticated |
| | 30. dynamic |
| | 31. enthusiastic |
| | 32. receptive |
| | 33. civic minded |
| | 34. hesitant |
| | 35. inquiring |
| | 36. organized |
| | 37. culturally refined |

TABLE 11--Continued

| Used to Describe | Not Used to Describe |
|------------------|----------------------|
|------------------|----------------------|

| | |
|--|--------------------------|
| | 38. creative |
| | 39. effective |
| | 40. substantial |
| | 41. resourceful |
| | 42. flexible |
| | 43. intense |
| | 44. vivacious |
| | 45. meticulous |
| | 46. solid individual |
| | 47. realistic |
| | 48. poised |
| | 49. able |
| | 50. well-rounded |
| | 51. competitor |
| | 52. dedicated |
| | 53. sticks with |
| | 54. level-headed |
| | 55. leadership qualities |
| | 56. anti-social |
| | 57. aversive |
| | 58. serious |
| | 59. curious |
| | 60. unusual |
| | 61. contributing |
| | 62. intelligent |
| | 63. excitable |
| | 64. driven |
| | 65. desire to get ahead |
| | 66. diligent |
| | 67. perseverance |

TABLE 12

Vocabulary of Terminology Counselors and Admissions
Officers Used or did not Use to Describe
A Potentially Average Scholar

| Used to Describe | Not Used to Describe |
|---------------------------|----------------------|
| 1. dependable | 1. remarkable |
| 2. friendly | 2. vacillating |
| 3. self-reliant | 3. keen |
| 4. wholesome | 4. artistic |
| 5. good citizen | 5. few aptitudes |
| 6. earnest | 6. analytical |
| 7. well-groomed | 7. anti-social |
| 8. emotionally stable | 8. superior |
| 9. industrious | 9. aversive |
| 10. even disposition | 10. flighty |
| 11. sound sense of values | 11. lazy |
| 12. capable | 12. aggressive |
| 13. generally mature | 13. docile |
| 14. socially mature | 14. perfectionist |
| 15. amiable | 15. shy |
| 16. loyalty | 16. sophisticated |
| 17. personable | 17. dynamic |
| 18. responsible | 18. temperamental |
| 19. stable | 19. impulsive |
| 20. adequately | 20. impatient |
| 21. punctual | 21. immature |
| 22. responsive | 22. reluctant |
| 23. trustworthy | 23. hesitant |
| 24. understands self | 24. retiring |
| 25. moderate | 25. over protected |
| 26. moral character | 26. excitable |
| 27. needs encouragement | 27. fluctuates |
| 28. hard working | 28. slow |
| 29. well balanced | 29. intense |
| 30. realistic | 30. avoids |
| 31. pleasant | 31. unsure |
| 32. receptive | 32. a dreamer |
| 33. civic minded | 33. inhibited |
| 34. sincere | 34. in spurts |
| 35. cheerful | 35. go-far |
| 36. active | 36. reserved |
| 37. honest | 37. indecisive |
| 38. courteous | 38. lacks confidence |

TABLE 12--Continued

| Used to Describe | Not Used to Describe |
|--------------------------------------|----------------------------------|
| 39. needs occupational goals | 39. timid |
| 40. reliable | 40. unusual |
| 41. integrity | 41. procrastinates |
| 42. well bred | 42. driven |
| 43. good-natured | 43. reluctant in self-expression |
| 44. inquiring | |
| 45. cooperative | |
| 46. genuine | |
| 47. organized | |
| 48. high ideals | |
| 49. contributing | |
| 50. relaxed | |
| 51. intelligent | |
| 52. highly active in extra-curricula | |
| 53. consistent | |
| 54. pleasing personality | |
| 55. respects authority | |
| 56. sense of humor | |
| 57. well liked by peers | |
| 58. substantial | |
| 59. considerate | |
| 60. strives | |
| 61. resourceful | |
| 62. flexible | |
| 63. interested | |
| 64. good attitude | |
| 65. socially minded | |
| 66. well mannered | |
| 67. conscientious | |
| 68. socially adjusted | |
| 69. capacity | |
| 70. solid individual | |
| 71. desire to get ahead | |
| 72. realistic | |
| 73. poised | |
| 74. able | |
| 75. diligent | |
| 76. self-control | |
| 77. well-adjusted | |
| 78. well-rounded | |
| 79. perseverance | |
| 80. has common sense | |
| 81. sticks with | |

TABLE 12--Continued

| Used to Describe | Not Used to Describe |
|-----------------------------|----------------------|
| 82. middle class values | |
| 83. level headed | |
| 84. popular | |
| 85. motivated | |
| 86. serious | |
| 87. all-around | |
| 88. ambitious | |
| 89. well-developed | |
| 90. typical college student | |
| 91. good insight | |
| 92. effective | |
| 93. determined | |
| 94. methodical | |

TABLE 13

Vocabulary of Terminology Counselors and Admissions
Officers Used or did not Use to Describe
A Potentially Exceptional Scholar

| Used to Describe | Not Used to Describe |
|-------------------------|----------------------|
| 1. remarkable | 1. anti-social |
| 2. energetic | 2. lazy |
| 3. dependable | 3. lacks confidence |
| 4. friendly | 4. shy |
| 5. initiative | 5. hesitant |
| 6. popular | 6. timid |
| 7. leadership qualities | 7. slow |
| 8. keen | 8. avoids |
| 9. artistic | 9. unsure |
| 10. self-reliant | 10. follower |
| 11. imaginative | 11. inhibited |
| 12. wholesome | 12. in spurts |
| 13. analytical | 13. limited |
| 14. purposive | 14. vacillating |
| 15. good citizen | 15. few aptitudes |

TABLE 13--Continued

| Used to Describe | Not Used to Describe |
|-------------------------------|----------------------|
| 16. challenged | 16. flighty |
| 17. superior | 17. reluctant |
| 18. motivated | 18. retiring |
| 19. earnest | 19. procrastinates |
| 20. well-groomed | 20. over-protected |
| 21. emotionally stable | 21. a dreamer |
| 22. go-far | 22. indecisive |
| 23. assured | |
| 24. industrious | |
| 25. tactful | |
| 26. even disposition | |
| 27. sound sense of values | |
| 28. capable | |
| 29. generally mature | |
| 30. socially mature | |
| 31. influential with peers | |
| 32. amiable | |
| 33. gregarious | |
| 34. high aspirations | |
| 35. loyalty | |
| 36. personable | |
| 37. out-going | |
| 38. serious | |
| 39. all-around | |
| 40. responsible | |
| 41. efficient | |
| 42. stable | |
| 43. adequately | |
| 44. punctual | |
| 45. strong | |
| 46. academic | |
| 47. thorough | |
| 48. independent | |
| 49. ambitious | |
| 50. responsive | |
| 51. excellent | |
| 52. strong parental influence | |
| 53. aggressive | |
| 54. typical college student | |
| 55. trustworthy | |
| 56. understands self | |
| 57. eager | |
| 58. tenacity | |
| 59. perfectionist | |
| 60. moral character | |

TABLE 13--Continued

| Used to Describe | Not Used to Describe |
|--------------------------------------|----------------------|
| 61. well-developed | |
| 62. hard working | |
| 63. sophisticated | |
| 64. dynamic | |
| 65. enthusiastic | |
| 66. well-balanced | |
| 67. realistic goals | |
| 68. pleasant | |
| 69. receptive | |
| 70. civic minded | |
| 71. sincere | |
| 72. cheerful | |
| 73. active | |
| 74. honest | |
| 75. courteous | |
| 76. good insight | |
| 77. reliable | |
| 78. integrity | |
| 79. well bred | |
| 80. good-natured | |
| 81. inquiring | |
| 82. curious | |
| 83. cooperative | |
| 84. genuine | |
| 85. unusual | |
| 86. organized | |
| 87. culturally refined | |
| 88. high ideals | |
| 89. contributing | |
| 90. relaxed | |
| 91. creative | |
| 92. intelligent | |
| 93. effective | |
| 94. highly active in extra-curricula | |
| 95. consistent | |
| 96. pleasing personality | |
| 97. respects authority | |
| 98. determined | |
| 99. sense of humor | |
| 100. substantial | |
| 101. well liked by peers | |
| 102. driven | |
| 103. considerate | |

TABLE 13--Continued

| Used to Describe | Not Used to Describe |
|--------------------------|----------------------|
| 104. strives | |
| 105. resourceful | |
| 106. flexible | |
| 107. interested | |
| 108. methodical | |
| 109. good attitude | |
| 110. socially minded | |
| 111. well-mannered | |
| 112. intense | |
| 113. conscientious | |
| 114. socially adjusted | |
| 115. vivacious | |
| 116. meticulous | |
| 117. capacity | |
| 118. solid individual | |
| 119. desire to get ahead | |
| 120. realistic | |
| 121. poised | |
| 122. able | |
| 123. diligent | |
| 124. self-control | |
| 125. well-adjusted | |
| 126. well-rounded | |
| 127. perseverance | |
| 128. competitor | |
| 129. dedicated | |
| 130. has common sense | |
| 131. sticks with | |
| 132. level headed | |
| 133. sensitive | |

The results of the chi-square analysis enabled the distinction of certain terminology of particular descriptive meaning. The counselors and admissions officers would not use the following two terms to describe any one of the three types of potential scholars:

1. Anti-social.
2. Hesitant.

The terminology identified from the analysis and listed below comprises a vocabulary that the counselors and admissions officers would use without discrimination to describe any of the potential scholars:

1. Friendly.
2. Good citizen.
3. Trustworthy.
4. Moral character.
5. Pleasant.
6. Honest.
7. Courteous.
8. Integrity.
9. Good-natured.
10. Cooperative.

The four terms that were used with a frequency of six to twenty-four per cent by the counselors and admissions officers and were not considered for inclusion in the vocabulary lists are given below:

1. Quiet.
2. A plugger.
3. Athletic.
4. Unassuming.

Discussion of Results

The results of this research investigation show that it is possible to construct an instrument of measurement with reliability above the acceptable level to measure semantic variance.

The significant F-ratios obtained in testing Hypotheses I and II, which enabled their rejection, are indicative of the extent of variability that occurred among the counselors and among the admissions officers, as each

professional group used the terminology to describe the three types of potential scholars: potentially low-, average-, and exceptional-achieving scholars. The conclusion is drawn that a significant degree of semantic variance is present in the selected terminology when it is used to describe scholarly potential among the counselors and among the admissions officers.

The results of the chi-square analysis used in testing Hypothesis III indicates significant variability between counselors and admissions officers for thirteen of the terms from the selected terminology when used to describe the three types of potential scholars. The counselors and admissions officers do not agree that terminology such as "needs testing" and "level headed" is descriptive of the potentially low scholar nor do they agree that the terms "adequately," "realistic," "typical college student," "sophisticated," or "driven" describe the potentially average scholar. For the potentially exceptional scholar, they disagree on the use of words such as "dependable," "highly active in extra-curricula," "ambitious," "typical college student," "unusual," and "self-reliant." Counselors and admissions officers should recognize the above terminology as that most likely to create semantic variance and to be the least dependable in attaining clarity in recommendations and communications of student potential.

Further indications of semantic variance existing between counselors and admissions officers in their use of the terminology were evidenced by (1) the identification of ten terms in the vocabulary lists that both groups would use without discrimination for any of the three types of potential scholars and (2) by those terms which were used with a frequency of only six to twenty-four per cent which were not considered for the chi-square analysis and inclusion in the vocabulary lists.

The ten terms of the selected terminology that counselors and admissions officers would use without discrimination for the three types of scholars might be classified as terminology more descriptive of personal traits rather than of academic or scholarly potential. Yet, in the examination of some 1,500 student recommendations written by high school counselors in the counseling files at Michigan State University, such terminology is found with an exceedingly high frequency of occurrence. Admissions officers and counselors should have an awareness of the emotive power of such terminology and distinguish these words from those which are more applicable to academic capabilities. The terminology consisted of words such as "friendly," "good citizen," "trustworthy," "moral character," "pleasant," "honest," "courteous," "integrity," "good-natured," and "cooperative." The fact that these ten words are used without discrimination to describe

all three types of potential scholars indicates their lack of dependability. It should also be recognized that all communications have as their purpose the aim of eliciting some desired response--in this case, the desired response is college admission.

The terminology that was used with a frequency of six to twenty-four per cent by the counselors and admissions officers, which was not considered for the chi-square analysis or inclusion in the vocabulary lists, indicates the likelihood of semantic variance occurring when this terminology is used in communications. Although few in number, the words falling into this frequency range indicate a lack of any predictability regarding their usage to describe the potential of scholars. This terminology included the words "a plugger," "athletic," "quiet," and "unassuming." Such terminology cannot be considered as words that are likely to communicate a measure of student potential.

The results of the analysis obtained in testing Hypothesis III did not allow for the rejection of the hypothesis for one hundred sixty-two of the terms, which indicates that there is some agreement between counselors and admissions officers regarding their use of the terminology to describe the three types of potential scholars. The conclusion is drawn from the construction and analysis of the vocabulary lists that, although semantic variance does exist with the

use of certain terminology between counselors and admissions officers, communication does occur with some degree of clarity by the use of or lack of use of certain terminology. The terminology as the counselors and admissions officers would or would not use it appears in Tables 11, 12, and 13.

The terminology that is used to describe the potentially low scholar is, in the majority of instances, that of a more negative than positive connotation. Terms such as "unsure," "limited," "few aptitudes," "indecisive," "procrastinates," "fluctuates," "slow," "avoids," and "immature" are applied to this type of scholar. Counselors and admissions officers used terminology of a more positive connotation when describing the potentially exceptional scholar. These terms included, for example, "initiative," "keen," "motivated," "superior," "assured," "purposive," and "analytical." A lesser degree of positive-negative differentiation can be made between the terminology used to describe the potentially average and exceptional scholar. A more limited vocabulary is used to describe the potentially low scholar.

For these reasons the counselors and admissions officers should be cognizant of the fact that semantic variance is more likely to occur in the terminology describing the potentially average and exceptional scholar than in the terminology used to describe the potentially low scholar.

The research investigation substantiates the existence of semantic variance among counselors, among admissions officers, and between counselors and admissions officers for certain identified terminology that they would use to describe the potentially low-, average-, and exceptional-achieving scholars. The results show, however, that between counselors and admissions officers semantic invariance does exist to some extent. Counselors and admissions officers do agree on certain terminology that they would or would not use to describe the three types of student potential.

The results of the study emphasize certain terminology that may be considered dependable and the least likely to create semantic variance in communicating student potential. The results also enable the recognition of terminology that is likely to be the least dependable or applicable in describing student potential and, thus, more likely to cause semantic variance.

Summary

In this chapter the treatment and analysis of the research data pertaining to the reliability of the research instrument and the three hypotheses of the study have been presented, followed by a discussion of the research results.

Hoyt's Analysis of Variance Technique was used with a randomly selected sample to determine the reliability coefficients of the research instrument. The internal consistency estimates were above the acceptable level and indicated

the existence of a reliable measuring instrument.

An analysis of variance technique was used to test Hypotheses I and II. The results of the analyses enabled the rejection of both hypotheses for each of the three types of potential scholars: potentially low-, average-, and exceptional-achieving scholars. The results indicated the presence of semantic variance among counselors and among admissions officers in the terminology they would use to describe the three types of potential scholars.

A chi-square analysis technique was used in testing Hypothesis III. The results of the analysis enabled the rejection of the hypothesis for thirteen of the terms from the selected terminology where significant differences did appear between the counselors and admissions officers in their usage of the terminology. The hypothesis could not be rejected for one hundred sixty-two terms of the selected terminology on which counselors and admissions officers agreed that they would or would not use the terminology to describe the potential types of scholars. Vocabulary lists were constructed for the terminology for each of the potential types of scholars.

The results of the chi-square analysis enabled the identification and distinction of certain terminology of particular descriptive meaning and terminology that had no particular descriptive meaning. Terms were identified that

counselors and admissions officers would not use to describe any one of the three types of scholars. Identification was also made of the terms that they would use without distinction as to type of scholar and of the terms that they considered not applicable or lacking descriptive value.

The research investigation substantiated the existence of semantic variance¹ among counselors and among admissions officers and between the counselors and admissions officers for certain identified terminology. It also substantiated that semantic invariance does exist between counselors and admissions officers to some extent. Agreement was found on certain terminology that they would or would not use in describing the three types of student potential.

¹The term "semantic variance" as used throughout the dissertation refers to "agreement" or "disagreement" and not to the usual statistical usage of "variance."

CHAPTER VI

CONCLUSIONS AND RECOMMENDATIONS

Summary

The Problem

The environment in which the student personnel educator functions and the nature of the student personnel profession demand communication about human behavior as human potential if formal education is to be a continuous process for individuals.

If the terminology and key words used in writing recommendations to describe student potential are not the same for both senders and receivers, communication cannot occur. Variance in meaning, resulting in barriers to communication, may lead to misunderstandings and unfounded assumptions. Clarity of communication is, therefore, vital to human welfare.

This investigation examined the clarity of communication among high school guidance counselors and university student personnel admissions officers in the use of selected terminology to describe the student potential of three types of scholars: potentially low-, average, and exceptional-achieving scholars.

More specifically, this research study investigated the degree to which connotative semantic variance was present in the selected terminology used to describe the three types of potential scholars among high school guidance counselors, among university student personnel admissions officers, and between high school guidance counselors and university student personnel admissions officers.

The research also investigated whether or not the selected terminology used to describe the three types of scholars could be isolated as invariant for one or more types of scholars for counselors and admissions officers.

A "Descriptive Word Scale" instrument was designed to measure the degree of connotative semantic variance. The final research instrument contained one hundred seventy-five descriptive adjectives or adjectival phrases.¹

Theory, Methodology and Procedures

The theoretical foundations of the research design are based, in part, on the works of Miller,² Hackett,³ Berlo,⁴ Schramm,⁵ and Newcomb.⁶ In essence, these theorists hold

¹See Appendix A for a copy of the "Descriptive Word Scale" instrument.

²Miller, op. cit.

³Hackett, op. cit.

⁴Berlo, op. cit.

⁵Schramm, op. cit.

⁶Newcomb, op. cit.

that communication can occur only to the degree that two different individuals have common knowledge between them. Other theoretical assumptions were drawn from the investigator's knowledge of the function of communications in the student personnel profession.

A sample of three hundred subjects, one hundred fifty counselors and a similar number of admissions officers, was drawn for this investigation from the geographic area of the seven states in which the "Big Ten Universities" are located.

The sample of admissions officers was the total one hundred fifty available by the criteria set in the research design. The counselor sample was selected by a random number technique on a proportion basis of the number of counselors per state with respect to the total number of counselors in the seven-state area.

Procurement of the sample was accomplished by correspondence. A total return of eighty per cent was obtained for admissions officers and a return of ninety-two per cent for counselors.

Hoyt's Analysis of Variance Technique was used to determine the reliability estimates of the research instrument. A chi-square analysis was employed to determine a difference in usage of the given terminology by counselors and admissions officers when used to describe the three types of scholars: potentially low-, average-, and exceptional-achieving scholars.

Similar techniques were employed to identify words for which there was agreement that the words would not be used by counselors and admissions officers in describing the three types of potential scholars.

Findings

The findings of this research investigation, based on the analysis of data presented in Chapter V, are as follows:

1. It was possible to construct an instrument to measure semantic variance with reliability estimates above the acceptable level.

2. Significant variability was found among the high school counselors and among the admissions officers sampled in their use of the selected terminology to describe each of the three types of scholars: potentially low-, average-, and exceptional-achieving scholars. The significant F-ratios obtained enabled the rejection of Hypotheses I and II. The results indicated the presence of semantic variance among counselors and among admissions officers in their use of the selected terminology.

3. The results of the chi-square analysis used in testing Hypothesis III indicated significant variability between the counselors and admissions officers sampled in their use of thirteen of the terms from the selected terminology when used to describe the three types of potential scholars. These results enabled the rejection of Hypothesis III for

the thirteen terms. Hypothesis III was accepted for one hundred sixty-two terms from the selected terminology for which there was agreement between counselors and admissions officers that they would or would not use the terminology to describe the three types of potential scholars. From these results, it was possible to construct vocabulary lists of the terminology that the counselors and admissions officers would or would not use to describe each of the three types of potential scholars.

4. The results of the chi-square analysis enabled the identification and distinction of certain terminology that held particular descriptive meaning, or no particular meaning, for the counselors and admissions officers. Terminology was also distinguished which they would use without discrimination to describe any of the three types of scholars. The identification of the terminology made it possible to distinguish certain terms that were more dependable than others for clarity of communication in describing the types of potential scholars.

5. The results of the study revealed that terminology of a more negative connotation was used to describe the potentially low scholar, while that of a more positive connotation was applied to the potentially exceptional scholar. A lesser degree of positive-negative differentiation could be made in the terminology used to describe the potentially average- and exceptional-achieving scholar.

6. The study substantiated the existence of semantic variance among the counselors, and among the admissions officers in their use of the selected terminology to describe the three types of potential scholars. Semantic variance was also found in certain terminology when it was used between the counselors and the admissions officers to describe the three types of potential scholars; however, semantic invariance was also indicated for other identified terminology.

Conclusions and Implications for Further Research

Certain conclusions can be drawn and implications for further research indicated on the basis of the findings in this research investigation.

From the results of this research investigation, it is suggested that the following research studies be given consideration:

1. Research studies that might further substantiate these results on a larger scale and with wider geographic scope and that might explore the existence and inclusion of other terminology that would be used with a high frequency by counselors and admissions officers.

2. A research project which would investigate the meaning, application and degree of semantic variance present in terminology that could be characterized as descriptive of personality traits and to determine which of this terminology might be associated with types of potential scholars.

3. An investigation to determine the extent to which student personnel educators will abstract meanings and implications from information and data given regarding student potential. A research study of this type could be extended into a third project to investigate the extent of abstraction that would occur regarding personality and character traits.

4. A research study to investigate the terminology which low-, average-, and exceptional-achieving scholars would use to describe themselves.

5. Research studies that would explore the degree to which semantic variance or invariance occurs in the communications between the student personnel profession and other related professions, for example, between counselors and psychologists, or between counselors and social welfare personnel.

6. A research design that might further substantiate the results of the present investigation by presenting word profiles of unidentified types of scholars to respondents and requesting them to identify the type of scholar described in the profiles. The terminology used in the profiles would be the selected terminology of this investigation.

The investigator concludes that the significant variability found in the use of the terminology among high school counselors and among student personnel admissions officers may be defined as semantic variance existing within each of these two professional groups.

An implication inherent in this research finding of the existence of semantic variance in the two professional groups is the lack of emphasis given to semantics and the communication process in counselor education programs. The investigator contends that counselors and student personnel educators, such as admissions officers, are taught how to obtain student data; but they are not taught the many complexities involved in communicating with clarity. Relatively few textbooks for counselor educators give any attention to this facet of counselor training. The investigator contends that first there must be an awareness of the problem before any movement can occur towards its solution or its existence to a lesser degree. It is recognized that flawless communication is, although desirable, an improbable goal in the behavioral sciences, and more especially in the student personnel profession; however, clarity of communication is a goal which should be strived for if only to be partially attained. If greater clarity and semantic invariance is to be attained within the student personnel profession, it must first be attained to a greater degree within the student personnel member groups. The importance of this goal can be recognized by bringing into focus the fact that the student personnel profession exists on the foundation of a concern for human welfare.

It seems pertinent to recommend that increased attention be given to the semantic aspect of the communication

process in counselor training programs and to its importance in the articulation and transition of information concerning human potential from the high school to the institution of higher education.

The investigator concludes that counselors and admissions officers should have an awareness of terminology that is more descriptive of personal traits and characteristics than of academic potential and should recognize the limited value in using such terminology when attempting to communicate the intellectual capabilities of students.

A final conclusion drawn from this investigation is the need for increased attention to be given to the study of semantics and the communications process, not only in counselor training programs, but in professional research, in writings and publications, and in the inclusion of the subject on programs of professional associations. It must be recognized that an interdisciplinary approach, drawing on the knowledge of semanticists, psychologists, specialists in communications, among others, might generate greater progress, understanding and knowledge than educators can hope to attain if the research is isolated in their own field.

It must be recognized that the findings and conclusions of this investigation are restricted in scope by the limitations set forth earlier in the study. Generalizations and inferences drawn should be restricted accordingly. In conclusion, the major value of this study will rest in any future research motivated by its reading.

APPENDIX A

Descriptive Word Scale

JOYCE M. CHICK

The following instrument is a "Descriptive Word Scale." The terms used in this scale were drawn from 1,500 recommendations written by high school counselors to admission officers at Michigan State University.

The purpose of this scale is to determine which terms you are most likely to use to describe certain types of students. In this instance, the interest is in the terms you would be most likely to use to describe a Potentially Low, Average and Exceptional Achieving Scholar.

DIRECTIONS

PLEASE READ THE COMPLETE DIRECTIONS BEFORE YOU BEGIN WORK

Words you are asked to consider are listed under the column labeled "TERMS." Think of your own vocabulary and how often you would use these TERMS in writing a recommendation to describe a Potentially Low, Average, or Exceptional Achieving Scholar.

There are four frequencies to choose from: RARELY, SOMETIMES, USUALLY and ALMOST ALWAYS. First, please rate each of the TERMS on the left side of the page by indicating the frequency (by placing a check in the appropriate circle ☒) with which you would use the TERM to describe a "Potentially Low Achieving Scholar."

When you have finished Leaflet 1, lift the tab to Leaflet 1-A and again rate all the TERMS for a "Potentially Average Achieving Scholar." Then lift the tab and do page 1 with the same TERMS for a "Potentially Exceptional Achieving Scholar." Continue in the same manner until you have completed the booklet. Do not spend too much time on any one TERM.

Remember — you will rate each TERM three separate times to indicate the frequency with which you would use the term to describe the three types of scholars.

IT IS PERMISSIBLE TO USE THE SAME FREQUENCY TO RATE A TERM FOR MORE THAN ONE TYPE OF SCHOLAR.

For example, you may RARELY use the TERM aptitude to describe a Potentially Low and a Potentially Average Achieving Scholar and ALMOST ALWAYS use it to describe a Potentially Exceptional Achieving Scholar. In some cases, you may want to use the same frequency to describe all three types of scholars.

Remember — work rapidly!

APPENDIX B

MICHIGAN STATE UNIVERSITY EAST LANSING

COLLEGE OF EDUCATION

We know you are concerned that all qualified scholars who desire a college education be given an equal opportunity for such an experience. In order for this to occur there must be clarity of communication between high school counselors and university admissions officers in writing and interpreting student recommendations.

A research project currently in progress at Michigan State University has included the examination of 1,500 student recommendations written by high school counselors to university admissions officers. This study is concerned with examining the terminology that these two professional groups frequently use to describe the expected achievement of three types of scholars: potentially low-, average-, and exceptional-achieving.

The enclosed instrument, "A Descriptive Word Scale," is the principal part of this study. Your assistance in completing the information requested in the instrument and returning it at your earliest convenience in the enclosed self-addressed stamped envelope will assure the success of this project.

At your request, I shall be glad to furnish a summary of the research results.

Your cooperation will be greatly appreciated.

Sincerely yours,

Joyce M. Chick
Assistant Instructor

JMC:kk

Encls: 2

APPENDIX C

MICHIGAN STATE UNIVERSITY EAST LANSING

COLLEGE OF EDUCATION

Some weeks ago a letter was sent to you asking your cooperation in completing a "Descriptive Word Scale." This instrument is a part of a research project currently in progress at Michigan State University under the direction of Dr. Walter F. Johnson, former President of the American Personnel and Guidance Association.

It may be that the letter did not reach you and your cooperation is urgently needed for the success of this project. A limited number of participants were selected upon the basis of their professional qualifications so it is imperative to seek the return of every individual's response.

The study is primarily concerned with the clarity of communication between high school counselors and university admissions officers in writing and interpreting student recommendations. It has been based on the examination of 1,500 student recommendations written by high school counselors to university admissions officers at Michigan State University. The concern is with examining the terminology these two professional groups frequently use to describe the expected achievement of three types of scholars: potentially low -, average -, and exceptional achieving.

In the event that you did not receive the first letter and instrument or that you have possibly misplaced them, a second instrument is enclosed for your completion with a self-addressed postage-paid envelope.

Your cooperation will be greatly appreciated and a summary of the research results will be available upon your request.

Sincerely yours,

Joyce M. Chick
Assistant Instructor

JMC:ejp

Encls: 2

APPENDIX D

THE FLORIDA STATE UNIVERSITY
TALLAHASSEE

SCHOOL OF EDUCATION

December 3, 1962

DEPARTMENT OF
GUIDANCE AND COUNSELING

:::
:::
:::

Dear:

Last summer I wrote to you from Michigan State University during the months of June and August requesting your cooperation in a research project under the direction of Dr. Walter F. Johnson, former President of the American Personnel and Guidance Association. I realize that both of these requests no doubt reached your desk at a very busy time or perhaps when you were away on vacation. Since this summer I have moved to Florida and I am continuing to conduct the research from this location. I am writing to you again because I am still in urgent need of your cooperation in order to complete this project.

You will recall that this study is primarily concerned with the clarity of communication between high school counselors and university admissions officers in writing and interpreting student recommendations. It has been based on the examination of 1,500 student recommendations written by high school counselors to university admissions officers at Michigan State University. The concern is with examining the terminology these two professional groups frequently use to describe the expected achievement of three types of scholars: potentially low-, average-, and exceptional achieving.

In the event that you did not receive the other two letters and instruments, or that you have misplaced them, a third instrument is enclosed for your completion with a self-addressed postage paid envelope.

I recognize that the completion of the instrument will take about thirty minutes of your time, but your cooperation will be greatly appreciated. A summary of the research results will be available upon completion of this project.

Sincerely yours,

Joyce M. Chick
Assistant Professor

JMC:oh
Encls: 2

APPENDIX E

THE FLORIDA STATE UNIVERSITY
TALLAHASSEE

SCHOOL OF EDUCATION
OFFICE OF THE DEAN

February 13, 1963

:
:
:

Dear

As my telegram stated, I am still greatly in need of your response to the "Descriptive Word Scale" Instrument that was mailed to you the middle of December.

You will recall that this study deals with the clarity of communication between high school counselors and university admissions officers in writing and interpreting student recommendations. It has been based on the examination of 1,500 student recommendations written by high school counselors to university admissions officers at Michigan State University. The concern is with examining the terminology these two professional groups frequently use to describe the expected achievement of three types of scholars: potentially low-, average-, and exceptional achieving.

I urgently need your help. May I please hear from you within the week?

In the event that you have misplaced the instrument I am enclosing one for your completion and a self-addressed postage paid return envelope. A summary of the research results will be sent to you upon completion of the project.

Sincerely yours,

Joyce M. Chick
Assistant Professor

JMC:oh
Encls: 2

APPENDIX F

*This is a reproduction of the original telegram.

| DOMESTIC SERVICE | |
|--|--|
| Check the class of service desired; otherwise this message will be sent as a fast telegram | |
| TELEGRAM | |
| DAY LETTER | |
| NIGHT LETTER | |

\$
S
E

WESTERN UNION TELEGRAM

1206 (4-55)

W. P. MARSHALL, PRESIDENT

| INTERNATIONAL SERVICE | |
|---|--|
| Check the class of service desired; otherwise the message will be sent at the full rate | |
| FULL RATE | |
| LETTER TELEGRAM | |
| SHORE SHIP | |

| NO. WDS.-CL. OF SVC. | PD. OR COLL. | CASH NO. | CHARGE TO THE ACCOUNT OF | TIME FILED |
|----------------------|--------------|----------|--------------------------|------------|
| | | | | |

Send the following message, subject to the terms on back hereof, which are hereby agreed to

Urgently need your assistance in response to
 "Descriptive Word Scale" instrument sent you. Letter
 follows-with another enclosure and postage. Thank you
 for your cooperation.

Joyce M. Chick
 Assistant Professor
 311-College of Education

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