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AN ANALYSIS OF
THE SELECTIVE PERCEPTIONS OF PROFESSIONAL EDUCATORS REGARDING
VARIOUS ASPECTS OF GUIDANCE SERVICES IN SELECTED OHIO HIGH SCHOOLS

DISSERTATION

Presented in Partial Fulfillment of the Requirements
for the Degree Doctor of Philosophy in the
Graduate School of The Ohio State University

By

Charles Edward Weaver
B.S., A.M.

The Ohio State University
1961

Approved by

[Signature]
Adviser
Department of Education
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CHAPTER I

THE PROBLEM

The guidance movement in education, although only a little more than fifty years of age, is experiencing tremendous growth during the decade of the sixties. Enhanced by the encouragement of our nation's legislators through their mandates in the National Defense Education Act of 1958, schools now are provided some financial assistance for testing and counseling services. In addition, the Act authorized the establishment of training institutes to improve the qualifications of people who are or will be engaged in guidance in the secondary schools. This indicates the nation's concern for more and better trained school counselors.

Authorities such as James Bryant Conant have declared the importance of counselors in Education today. In his 21 recommendations for improving public secondary education, Number 1 was the improvement of "The Counseling System." It stated:

In a satisfactory school system the counseling should start in the elementary school, and there should be good articulation between the counseling in the junior

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2 United States Congress, National Defense Education Act of 1958, Title V.


4 Ibid., pp. 41-76.
and senior high schools if the pattern is 6-3-3 or between the counseling in the elementary school and the high school if the system is organized on an 8-4 basis. There should be one full-time counselor (or guidance officer) for every two hundred fifty to three hundred pupils in the high school. The counselors should have had experience as teachers but should be devoting virtually full-time to the counseling work; they should be familiar with the use of tests and measurements of the aptitudes and achievement of pupils. The function of the counselor is not to supplant the parents but to supplement parental advice to a youngster. To this end, the counselor should be in close touch with the parent as well as the pupil. Through consultation, an attempt should be made each year to work out an elective program for the student which corresponds to the student's interest and ability as determined by tests of scholastic aptitude, the record achievement as measured by grades in courses, and by teachers' estimates. The counselors should be sympathetic to the elective programs which develop marketable skills; they should also understand the program for the slow readers and be ready to cooperate with the teachers of this group of students.\(^5\)

Concern for each individual student was expressed by the Honorable Michael V. DiSalle, Governor of Ohio, in his Special Message on Education to the Members of the 104th General Assembly, on February 21, 1961, as follows:

A student is our most important asset and his training will determine the quality of civilization which he will enjoy during the years ahead. Consequently, we must emphasize first the quality of opportunity. This means not merely the opportunity for the extremely gifted student but the opportunity for those not so gifted; vocational training for those whose abilities lie along those lines; arts and sciences for those best qualified in those areas. Ample opportunity to develop skills in the professions by those who are talented in those fields. This equality must be extended to both the male and female student. This will insure educational opportunities which will appeal to the female seeking higher skills.

\(^5\)Ibid., pp. 44-45.
We must give each the opportunity to develop to his full intellectual capacity without skimping in the area inhabited by our under-privileged. Here there must be special attention for here we find the children who will need the most care and the greatest kind of encouragement. We must continue our research in order that we can salvage whatever talent exists. Our society will be no stronger than the total sum of our skills and each in his own way must be given the opportunity to improve skills that are peculiarly his and will fit in the total requirements of our people.

This will require early guidance along proper educational lines. It will make mandatory a constant review of curriculum in order to keep it abreast with the needs. One of the most pathetic situations we have today is youngsters attaining the age when they must enter colleges and then find that they are not prepared. . . . We know that unless education fulfills its objective for Americans and, particularly, our responsibility — Ohioans — we will not have a society that will enable the individual to know what to do with his time in terms of skill and interest nor to understand the world around him and make his own contribution to the general welfare.6

From the Office of State Superintendent of Public Instruction, Olympia, Washington, Louis Bruno, State Superintendent, stated his concern for each individual and suggested a cooperative involvement of counselors, teachers, and parents. He reported that,

The fundamental concept of American education, its fervent spirit and its final goal, is the fullest development of each future citizen in socially responsible self-direction. It is, therefore, vital that trained personnel be provided to counsel youth, to consult with teachers and to inform parents of career and educational opportunities.

The need for improved guidance services in our schools today is an accepted fact. The counselor must be the catalyst binding the educative process to the needs of the individual. His responsibility can only be discharged by depth of training; understanding of the

6 The Honorable Michael V. DiSalle, Governor of Ohio, Special Message on Education to the 104th General Assembly (Columbus, Ohio) February 21, 1961, pp. 7-8 and pp. 11-12.
needs, capabilities and ultimate potential of the individual student; knowledge of the economic, educational and social structure surrounding him, and a dash of dedication of the task involved.\textsuperscript{7}

Peters emphasized the importance of guidance services at the secondary school level by stating:

Because the junior-senior high school pupil is growing, maturing, forming, choosing, selecting, and becoming a known self, there is need for a continuing guidance program with counseling to assist the pupil in these processes. To leave this to chance is to take a great risk with our most important resource.\textsuperscript{8}

In describing the present push-button, electronic, hydrogen decade of automation as one of change, Lovett stated that: "We are dealing with --- and will increasingly deal with --- such things as earth satellites, space ships, and interplanetary travel. We are shoving the students of today into a world of memory machines, supersonic aircraft, electronic microscopes, and cyclotrons."\textsuperscript{9}

The Second Report to the President\textsuperscript{10} by a Committee appointed by President Eisenhower, is somewhat typical of the general reactions


concerning the guidance programs of the schools by various investigators and groups. The Report stated that: "The Committee urges all school systems to strengthen their guidance and counseling services, and urges colleges and universities to expand and improve their programs for training well-qualified counselors."\(^{11}\)

Approximately four hundred people representing the members of the Council of National Organizations on Children and Youth met in Washington on September 21 and 22, 1959, to formulate the main questions they hoped to have answered at the Golden Anniversary White House Conference on Children and Youth. The work group on Education "spelled out" its major concern: "How can our educational system help children develop a sense of personal worth and a sound value concept?"\(^{12}\) A list of Recommendations in answers to their educational concerns are contained in the final Conference Report.\(^{13}\) Recommendations 190-194 show the concern of the 11,600 participants for guidance as follows:

190. That guidance and counseling programs be strengthened, expanded, and coordinated at all levels; and that the role of the guidance and counseling program be clearly defined.

\(^{11}\)Ibid., p. 9.


191. That guidance and counseling begin in the elementary school with educational and vocational planning based on early, continuous, and expanding testing and diagnostic appraisal of each child, in order to identify abilities, weaknesses, and problems—mental, physical, and emotional.

192. That every secondary school have sufficient trained professional counselors to deal with adolescent problems; that each adolescent be counseled throughout the secondary years by the same staff advisor, acceptable to him; that school planning for adolescents be based on awareness of individual differences in skills and capacities; that community counseling services be made more widely available to youth and their parents; and that coordination between school and community services be emphasized.

193. That school resources for identification and guidance of the gifted, limited, and otherwise exceptional child, as well as for the average and normal youth, be expanded and improved.

194. That vocational counseling and guidance programs be provided with adequate financial support from federal, state, and local sources; that school personnel, boards, and parents interpret to taxpayers the need of increased and improved guidance services; and that these services cooperate closely with government, employment services; industries, labor unions, armed services, trade and service organizations, higher educational institutions, and other community groups.14

Talent development of each individual is emphasized in "The Rockefeller Report" on Education by saying that, "A Free Society cannot commandeer talent; it must be true to its own vision of individual liberty. And yet at a time when we face problems of desperate gravity and complexity, an undiscovered talent, a wasted skill, a

14 Ibid., pp. 25.
misapplied ability is a threat to the capacity of a free people to survive."\(^\text{15}\)

Policies adopted by the North Central Association of Colleges and Secondary Schools in 1960, setting the ratio of students to qualified guidance personnel of approximately three hundred to one, indicated that professional educators share the national concern and interest for guidance in our public secondary schools.\(^\text{16}\)

On January 26, 1961, thirty-five hundred Ohioans met in Columbus in groups of a dozen around discussion tables as a climax following two local meetings held earlier in over five hundred school districts in the State. These delegates brought with them answers to two questions: (1) "What do we want from our schools?" (2) "How do we get what we want?" The Conference Report listed a summary of the improvements delegates believed were most needed today to improve the typical Ohio public school program.\(^\text{17}\) Following in second place after an "adequate supply of well-qualified teachers" was the need for "testing and guidance programs."\(^\text{18}\) Two years earlier in 1959 a similar meeting was held. In that Conference Report the ranking and


\(^\text{18}\) Ibid., p. 37.
order of attention given to educational concerns following the need for an adequate supply of qualified teachers were these: "Special programs for the gifted, adequate testing and guidance, better school public relations, and an emphasis for academic achievement on a par with athletics."\(^{19}\)

The State of Ohio Minimum Standards for Guidance passed in 1957 require that "each school shall have a comprehensive and workable program of guidance services."\(^{20}\) These Standards became formally enforceable, beginning with the 1960-61 school year. According to Hummel\(^{21}\) these Ohio Standards are the first in the state's educational history to require that each school have a program of guidance services.

Membership in the American Personnel and Guidance Association, the professional association for guidance workers, increased in Ohio from six hundred and seventy-one in 1959\(^{22}\) to seven hundred and sixty in 1961.\(^{23}\) Ohio, with six hundred and ninety-four APGA members in 1960, ranked third among the states in the nation, and experienced

\(^{19}\)Mary McGarey, The People Speak (Columbus, Ohio: published by the State House Conference on Education, January 1959), pp. 22-23.


an increase of more than 150 per cent over the Ohio membership figures of 1950. Attendance records for the All Ohio Guidance Conference indicate an increase in attendance from one hundred and sixty in 1956 to over six hundred in 1960.

Hence, it may be postulated that growth of interest in guidance at the beginning of the decade of the sixties has been demonstrated by (1) concerns expressed by the Congress of the United States in their passage of the National Defense Education Act; (2) statements by recognized authorities and educators; (3) recommendations of national, regional, and state study groups; (4) the establishment of State of Ohio Minimum Standards for Guidance, and (5) the unprecedented growth of professional interest among Ohio school counselors. This increased support for guidance has given rise to more and more questions about the nature of the guidance programs by professional educators and parents.

Statement of the Problem

The purpose of this investigation was to find relationships, if any, among the selective perceptions of professional educators regarding various aspects of guidance services in certain Ohio high

\textsuperscript{24}Hummel, op. cit., p. 10.

\textsuperscript{25}Records of the Division of Guidance and Testing, State Department of Education (Columbus, Ohio).
schools. By selective perceptions is meant responses made by educators to questions where they were guided in their responses by their background and experiences. It was also believed necessary for counselor educators to determine how guidance is perceived by those who use its services. Answers to the following questions were desired: In the opinion of administrators, counselors, and selected teachers, what are their selective perceptions of various aspects of guidance services in their own secondary schools? More specifically, is there a difference in these selective perceptions among professional educators who are staff members in schools that are receiving reimbursement under Title V-A of the National Defense Education Act and professional educators who are not staff members in such schools? How do the selective perceptions of professional public school educators differ from those of ten Ohio counselor educators?

The writer decided to investigate the selective perceptions of professional educators in the following five areas. The first four area groups were related to the extent to which guidance services contribute to their overall school instructional program. A fifth area was related to the perceptions of professional educators concerning the awareness of, and support for, guidance services by parents.

1. What is the contribution of guidance services to their ongoing school program? As a result of the emphasis of guidance services do the professional educators believe that among their students there has been better course selection; better use of
educational information; increased knowledge of the guidance and
counseling services that are available; an attempt made to prevent,
identify, and correct maladjustments in students' relationships with
other persons; time utilized to discuss, via group procedures,
problems that are common to all; an elimination of inferior com-
plexes; the creation of the feeling that someone is interested in
them; encouragement of progressive self-direction and not prescrip-
tion; improvement in school behavior; personal-social information
included as a part of the guidance program; decrease in the drop-out
rate; use of guidance information in planning curriculum; testing
results explained; provisions of guidance services for all; and the
encouragement of providing private rooms for individual counseling.

2. What is the contribution of guidance to the self-
actualization of students? This question relates to the student's
realization of his potential, improvement of his study habits, and
his understanding of self. The study sought to learn whether, as a
result of guidance services, there was a greater number performing
close to potential; increased self-referral by individual students;
better use of personal-social information; the realization that
everyone cannot excel in every field; and satisfactory and socially
acceptable adjustment in living and working with others and to the
opposite sex.

3. What is the contribution of guidance services in maintaining
and disseminating occupational information with evidence of concomi-
tant positive results? Representative items were selected to determine
the answer to this question. Is there earlier and better planning for the future by the student; better use of vocational information; provision for follow-up of individuals who enter occupations after graduation, or who do not finish high school, or who enter colleges, business schools, and trade schools; increased awareness of the importance of selecting an occupation in harmony with the strongest interests and most outstanding abilities of the pupils; information about the factors which should be considered in making an occupational choice; knowledge of major vocational trends; and a greater knowledge of scholarships and loans available to secure the preparation necessary for the vocational choice?

4. **What is the contribution of guidance services in greater numbers of students being realistic in their desire to seek higher education?** Does it seem to the professional educators that among their students there is a more realistic choice of college; knowledge of finances needed to further their education?

5. The fifth area grouping of selective perceptions of professional educators was related to this question: **What is the contribution of guidance services to the awareness of, support for, and expectancies of guidance services by parents?** Does it seem to the professional educators that parents have a better understanding of the abilities and interests of their child? Is there a realization among parents that there are dangers in choosing a definite occupation for their children?
Importance of the Study

Since the first successful launching of the earth satellite by the Russians, laymen, professional writers, and educators have been saying much more than previously about the education of young people. This has been especially true at the secondary school level. With the increased interest in our high schools, guidance programs have become a popular subject for considerable discussion. These discussions have rocketed the high school counselor into the recognized key position of assisting the student and his parents in making realistic educational and vocational plans suitable to the student's needs, interests, and aptitudes. Dr. James B. Conant, in an article stressing the vital part the guidance staff plays in any school system, stated: "Only through careful and continuous guidance by trained counselors can a pupil and his parents be helped to plan anything like a coherent and logical program of studies."26

Guidance Concerns

Since the importance of the counselor's role has been stressed by national, state, and local leaders plus a popular topic of the press, it is important to understand the selective perceptions of professional educators regarding various aspects of guidance services in their own school systems. Does guidance contribute to their on-going school program? Does guidance contribute to the self-actualization of students? What is the contribution of guidance

services in maintaining and disseminating occupational information with evidence of concomitant positive results? What is the contribution of guidance services in greater numbers of students being realistic in their desire to seek higher education? What is the contribution of guidance services to the awareness of, support for, and expectancies of guidance services by parents? Such a knowledge of the relationships between administrators', teachers', and counselors' judgments on the extent and use of guidance services may help to develop procedures that will further extend guidance services to more of our Ohio students. This study may also yield information that will be useful to guidance counselors in high schools as they interpret the purposes of guidance services to the schools' administrative and instructional staffs.

With an increased knowledge of how administrators, counselors, and teachers rate present guidance programs, counselor educators may be helped to extend or refine present counselor education programs. This study may also serve as a basis for justifying increased expenditure of funds for extending guidance services. In addition this study may serve as a stimulus for further research in the general area of high school guidance. Since there are no studies which show how professional educators perceive guidance services in Ohio schools through both deductive reasoning and statistical procedure, this investigation should prove to be most valuable.

*Parents' Concerns*

The importance of parental perception of guidance was recognized
and included through a section in the study to determine how professional educators perceive the understanding by parents of the guidance function. It has been assumed that the major responsibility in guiding children is still that of the parents, and that the counselor's responsibility, while important, is still secondary to that of the parents.

This is one of several studies that have been made on the perceptions that various people have of guidance, counseling, and the role of school counselors. These studies are significant to the present investigation in that they show a continued interest in securing the evaluation of guidance functions and of the role of counselors from people who are directly and indirectly affected by guidance and counseling programs.

**Definition of Terms**

For the purposes of this investigation the following definitions of terms apply.

**Guidance services.** Guidance services refer to that group of experiences that will provide systematic assistance for knowledge of self to assist students in realistic planning in promoting their fullest educational progress, career development and personality fulfillment.

**Guidance.** Guidance is thought of both as a point of view and in terms of services. Philosophically, guidance is a concept which recognizes the dignity and worthwhileness of each pupil and his need
for the good life. Procedurally speaking, guidance is an organized program of individual student assistance that will assist each student to learn to know and understand himself, his interests, feelings, abilities, aptitudes, limitations, and to plan intelligently how to fulfill his immediate and future needs in line with this understanding.

Welfare. Welfare refers to the discovery and exploration of ways of correcting vision, hearing, and speech defects, and/or nutrition deficiencies, as well as the provision of suitable home conditions.

Development. Development concerns itself with both mental and physical attributes. This can be achieved through encouraging students to select an academic program in keeping with capabilities, encouraging health development, encouraging each student to participate in at least one extra-curricular activity, and encouraging teachers to provide a relaxing, wholesome classroom climate.

Assistance. Assistance refers to encouraging the development of each student's capabilities and potentials. This in turn serves as the basis for a testing program to assist each student to assess his aptitudes, achievements, and interests. Through self-understanding, a student should be able to make realistic choices and decisions, including wise course selection and career planning. Provision should be made for the needs of both the slow learner and the academically talented.
Selective perceptions. Selective perceptions, according to Good\textsuperscript{27} are responses in which the observer's set or purpose and background of experience become the major determiners of the stimuli to which he responds. The stimuli in this research are the five following area groupings of questions concerning the selective perceptions of principals, teachers, and counselors:

1. What is the contribution of guidance services to their on-going school program?
2. What is the contribution of guidance to the self-actualization of students?
3. What is the contribution of guidance services in maintaining and disseminating occupational information with evidence of concomitant positive results?
4. What is the contribution of guidance services in greater numbers of students being realistic in their desire to seek higher education?
5. What is the contribution of guidance services to the awareness of, support for, and expectancies of guidance services by parents?

An amplification of these five area groupings of questions will be developed in Chapter III of this research report.

\textbf{NDEA Participating.} Schools that meet the requirements of Title V-A, National Defense Education Act, and are accepting its financial assistance.

Non-NDEA participating. Schools that are not accepting Title V-A, National Defense Education Act assistance. These schools may or may not be meeting requirements for financial assistance.

Professional Educators

Professional educators are those possessing certificates declaring that they have met the State of Ohio Department of Education requirements in training and experience required for practicing in their particular fields of endeavor, namely, principals, teachers, counselors, and counselor educators.

Principal. The principal is the administrative officer in each school that has the most direct responsibility for both staff and student relations.

Teacher. A teacher is one who has full-time instructional responsibilities. In this study three groups of teachers have been included. The first were 9th or 10th, and 11th or 12th grade English teachers chosen because English is a required subject and, therefore, all students must come in contact with English instructors. A second group of teachers were men and women teaching physical education but having health teaching assignments, for a student's welfare, growth, and future is primarily determined by the status of his health. A third group of teachers were those teaching agriculture, home economics, or industrial arts, chosen because many of their student relationships exist as a result of some form of guidance coming from either part-time employer, parents or other relatives, counselors, teachers, and/or close friends.
Counselor. A counselor, for the purpose of this study, may be either a certificated professional person having full or part-time guidance responsibilities, or be eligible under the Minimum Ohio Secondary School Standards of 1957\(^{28}\) to have up to half-time guidance responsibilities if he possesses a minimum of six semester hours of graduate training in guidance, one course of which must be "Introduction to Guidance," or possessing a Permanent Life Certificate thus being eligible to assume guidance responsibilities under the "Grandfather Clause."

Counselor educator. A counselor educator is a qualified instructor or professor teaching guidance and counseling courses in one of the thirteen counselor training institutions of higher learning in Ohio.

Limitations of the Study

This research study was designed to determine how guidance services are perceived in selected Ohio high schools by comparing what professional educators from the administrative, teaching, and counseling staffs indicate they are doing in their school systems. Because the sample is selective and limited in number, the relationships found cannot be taken as definitive, but suggest hypotheses for further research.

\(^{28}\)Ohio High School Standards, op. cit., p. 36.
Relationships in this study are limited to replies submitted on the 148 item questionnaire and may not be all-inclusive of guidance services in every school system.

Errors probably exist due to the attitude, feeling, or personal bias of the professional educator at the time of completing the questionnaire as well as his past experiences, extent and type of training, and the philosophy of the school in which presently employed.

The Survey Questionnaire developed for use in this study is valid in that it was used to measure what professional guidance workers have indicated is important in an on-going guidance program but has never been compared with a validated instrument.

Limitations are inherent in all statistical methods available for use, and therefore, limitations exist in those used in this study.

Organization of this Report

The present chapter included an introduction to the subject of the investigation, followed by a number of statements indicating the importance of the problem, definitions of terms, and limitations of the study. The second chapter contains a review of the related literature on the role of counselors, teachers, administrators, and parents. The third chapter describes the procedures used in the study, the hypotheses, the statistical procedures used, the population and the scope of the study.

Chapter IV contains the findings of the investigation obtained from an analysis of the responses of professional educators in fifty
(50) schools, twenty-five (25) which are NDEA participating schools, and twenty-five (25) which are Non-NDEA participating schools.

Chapter V contains a summary of the information obtained from the investigation. Conclusions are drawn from the quantitative and qualitative information pertaining to the selective perceptions of three hundred and seventy-nine professional educators regarding guidance services in their own school systems. Recommendations are advanced for the future development of guidance services in Ohio schools.
CHAPTER II

REVIEW OF RELATED LITERATURE

There have been numerous studies in the area of perception. Only a relatively few studies deal with how various people perceive guidance and counseling. The review of the literature that follows includes a general survey of perception, a discussion of how perception is distinguished from action, detailed descriptions of studies of perceptions of guidance and counseling in schools, and a reporting of studies made of the parents' role in guidance and counseling in the schools.

**Perception Defined**

This research study was designed to determine selective perceptions of professional educators regarding various aspects of guidance services in their schools. Good has defined perception in these terms: "(1) in its most limited sense, awareness of external objects, conditions, relationships, etc., as a result of sensory stimulation; (2) more broadly, awareness of whatever sort, however brought about."\(^1\) Gage believed that perception is important to education both as means and as end. He stated that learning to perceive is prerequisite to all kinds of learning. He envisions a "continua"

at one extreme, where an elementary percept—a point of light—is determined primarily by characteristics of the stimulus and the physiological functioning of the perceiver, where the process may be called sensation. Toward the other extreme—where the percepts are words, problems, violations of football rules, ambiguous pictures—the process may be termed apperception, cognition, or imagination.² Gage indicated that perceptions have a "set and expectancy effect." In this situation the sets or attitudes of individuals influence what will be perceived and how readily. Such sets, Gage concluded, are induced by needs, past experience, values, or even verbal instructions.³

Combs and Snygg⁴ stated that: "People do not behave according to the facts as others see them. They behave according to the facts as they see them. What governs behavior from the point of view of the individual himself are his unique perceptions of himself and the world in which he lives, the meaning things have for him."⁵ The foregoing authors⁶ explain that these personal meanings which govern behavior are called "perceptions" by the psychologist. They amplify

³Ibid., p. 942.
⁵Ibid., p. 17.
⁶Ibid., p. 18.
this definition of "perceptions" by stating: "However capricious, irrelevant, and irrational his behavior may appear to an outsider, from his point of view at that instant, his behavior is purposeful, relevant, and pertinent to the situation as he understands it. How it appears to others has no bearing upon the causes of his behavior. The important thing is how it seems to the person himself."7 Combs and Smyge8 refer to this frame of reference as the "perceptual," "personal," or "phenomenological" frame of reference.

Heider9 stated that perceiving is experienced as a direct contact with the environment. It is a means whereby objective facts enter the life space. He also observed that "A fact can also enter a life space by way of language transmissions, as when we read something or when somebody tells us something."10

The Hanover Institute as described by Kelley11 has some interesting and important demonstrations constructed in its laboratories that are physical and factual. They furnish laboratory proofs of a number of visual facts that many people have felt were true, but which until fairly recently were held only as opinions. The first of these

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7Ibid., p. 18.
8Ibid., p. 16.
10Ibid., p. 16.
demonstrations served to show that we do not get our perceptions from the things around us, but that the perceptions come from us. Since they do not come from the immediate environment (the present), and obviously cannot come from the future, they must come from the past. If this is true, they then must be based on experience. Since the perception is the usable reality, and since no two organisms can make the same use of clues or bring the same experimental background to bear, no two of us can see alike. We do some interesting things with the perceptions which come to us. We select the coincidences in nature which we choose to register. Given the same scene, or nearly so, no two people pay attention to the same factors in it. In any ordinary scene, we have past experience with practically everything in it, but we do not elect to pay attention to everything. Our selection, therefore must be based on something in addition to experience. Kelley concluded that it apparently is a combination of past experience and what we call "purpose," for the "human being is a purposive creature." The drives necessary to survival, food, sex, etc., are fairly simple. Kelley believed that they seem to be only part of the purpose of the total organism, which has value at the core of it.\(^2\)

Krech and Crutchfield introduced their readers to perception by stating:

Each man lives in his own world. His world is what he experiences—what he perceives, feels, thinks about, and imagines. And what he perceives, feels, thinks about, and imagines depends upon the physical and social

\(^{12}\text{i}b_{id.}, \text{pp. 46-47.}\)
environments in which he lives and upon his own biological nature, particularly the way his brain and nervous system work. His world is his own, and different from the worlds of others, because his brain and nervous system and his physical and social environments are not exactly like anyone else's.13

Solley and Murphy defined perception as (a) a process by which stimulation is structured and (b) the result of a stimulation structuring process.14 They believe that there can be little doubt that what we perceive is determined jointly by (a) hereditary factors which govern the limits and capacities of the perceptual process, (b) the cumulative effect of learning operations, and (c) the potentiation of one set of factors by the other.15 They further believe that the statement that all perception is learned is just as false as the statement that all perception is unlearned. They agree that the truth lies somewhere between these extreme assertions. They see the major problem as being one of understanding the interaction of the two factors, "nativistic characteristics" and the "earmarks of prior experience."16

For the purpose of this study, perception of school administrators, teachers, and counselors concerning various aspects of their school's guidance program will be viewed in terms of facts as each


15 Ibid., pp. 318-319.

16 Ibid., p. 319.
perceived them. Whatever governed each behavior from their individual point of view were their own unique perceptions in their school setting. Regardless how irrational each individual educator's reactions may appear to an outsider, from his point of view at the instant he registered his reaction to each of the 148 items on the Questionnaire used in this study, his behavior was "purposeful, relevant, and pertinent" to the school situation as he understood it. The important thing is that each professional educator did react individually to the Questionnaire. How it appeared to others had no bearing upon the causes of his behavior.

**Perception Distinguished from Action**

Kelley stated that "We act on our perceptions."\(^{17}\) What we do depends upon our past experience and purpose brought to the situation. Kelley amplified upon this statement by saying that our actions are always at variance with our surroundings to a degree, and when this becomes too great, failure is the result. If our estimates are too bad and the environment too destructive, frustration results. Whenever this occurs, we may become aggressive and try force, or we may withdraw from the situation. If there is not too much feeling involved in the frustration, we may make a new estimate and try

again. He concluded that the only way we could know if our perception was faulty was by action.

Heider believed that in the action outcome there must be effective forces of the person and environment. He cites the following example to refer to factors that are significant in the action outcome:

We say, "He is trying to row the boat across the lake," He has the ability to row the boat across the lake," He can row the boat across the lake," "He wants to row the boat across the lake," "It is difficult to row the boat across the lake," "Today there is a good opportunity for him to row the boat across the lake," "It is sheer luck that he succeeded in rowing the boat across the lake."

These varying descriptive statements have reference to personal factors on the one hand and to environmental factors on the other.

From the foregoing discussion we have seen that perceptions are directives for action and that reality is only achieved through action. This would indicate that in order to have support for guidance, then favorable perceptions are necessary for action in extending guidance services.

Instruments Employed to Determine Perceptions

Since a full-scale survey is not something that can be utilized easily, cheaply, or frequently, necessary stages and procedures have

\textsuperscript{18}Ibid., pp. 37-38.

\textsuperscript{19}Ibid., p. 40.

\textsuperscript{20}Heider, \textit{op. cit.}, p. 82.

\textsuperscript{21}Ibid., p. 82.
been simplified and adapted to fit specific situations and local limitations. Withey stated that special treatments of research deal with such aspects as interviewing, sampling, asking questions, coding, and community self-surveys. Relating survey research specifically to schools, Withey wrote:

Schools' executives operate within a setting of several publics. There are students, teachers, parents, taxpayers, the general public, and several sectors of this public with varying influence, interest, and involvement in school affairs. With the steady growth of population and the increased centralization of schools, these publics have become so large and yet so crucial to school functions that only a survey-type operation can keep one apprised of conditions. Schools are increasingly inbedded in the community as a whole, and their services are more and more committed to a larger fraction of the total community.

It will be noted in Chapter III that a decision was reached to use the Questionnaire in the present study to secure the perceptions of school administrators, teachers, and counselors concerning various aspects of guidance services in their schools. This conclusion was made after having studied the types of instruments used by other investigators in securing perceptions of individuals. A review of studies employing various types of instruments to secure perceptions of guidance services follow.

Berdie compared the accuracy of self ratings of a counseled group and a group of students who did not receive counseling.

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23 Ibid., p. 1447.
Form\textsuperscript{25} believed that the construction and use of a Counseling Attitude Scale had several advantages over the follow-up questionnaire of satisfaction with counseling services. Form reported that the Counseling Attitude Scale was used in March 1951 at Michigan State College and made some startling discoveries. Even though counseling services were initiated in 1946, 40 per cent of the students had never used the Counseling Center on campus; 30 per cent of the five hundred and forty-four students responding had sought help but once or twice; 18 per cent visited the Center between three to five times; and 14 per cent used its services more than five times.\textsuperscript{26}

Blank\textsuperscript{27} listed twelve propositions in an instrument called "Toward Counseling Readiness," which he believed useful in both school and rehabilitation counseling.

Barahal and Brammer\textsuperscript{28} raised the question: "Why not ask the student directly what he thinks of his high school counseling?"


They realized that this had been done in many follow-up questionnaire studies; but the use of a permissive, confidential interview to evaluate student reactions to counseling had been neglected.

Forgy and Black\(^\text{29}\) used a free response questionnaire and check-list which the clients completed. They followed up after three years eighty-nine clients to determine measure of satisfaction with counseling in "client-centered" and "counselor-centered" groups.

Fick\(^\text{30}\) referred to the Mooney Problem Check List and the SRA Youth Inventory as two problem check lists which offered promise in securing students' perceptions of their difficulties.

Rothney and Mooren\(^\text{31}\) cautioned against biased data resulting from incomplete samples of populations in follow-up studies. Travers\(^\text{32}\) reported his belief that there is no essential difference between the procedure for evaluating guidance and the procedure for evaluating the outcome of any other learning situation provided by the school.


Super and his colleagues of Teachers' College used school records, twelve hours of testing, and four hours of electronically recorded interviews as their source of data for developing indices of vocational maturity in the ninth grade.

Using the Sarbin Adjective Checklist, Shaw, Edson and Bell measured the self-concept of twenty male and twenty-one female achievers, and nineteen male and twenty-seven female underachievers.

Utter recommended that a Counseling Situation-Rating Scale be designed for the purpose of assisting the counselor with his record keeping of counseling notes. Hoppock taught a course in Occupations to fifty mature graduate students at a New York University. At ten of the fifteen class sessions the students answered the question: "From today's class session, how many have learned something that was worth the time spent in class?" The result was an 82 per cent.

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"efficiency ratio," Farwell and Vekich\textsuperscript{37} used the Ohio Annual Principal's Report to determine the status of school counselors in Ohio secondary schools.

Steinke and Kaczkowski\textsuperscript{38} used a questionnaire in their attempt to discover some of the factors influencing the occupational choice of ninth grade girls. Harmon and Arnold\textsuperscript{39} mailed two hundred questionnaires to a sample of school counselors who are members of the American School Counselors Association in their attempt to determine effectiveness of training programs for high school counselors. Carlson and Rothney\textsuperscript{40} attempted, by statistical analysis, to determine the effectiveness of questionnaires, one of the methods of evaluation most commonly used in counseling.

Regarding the Questionnaire, Withey stated:

The questionnaire can be administered to large groups at a single sitting or it can be sent to individuals for self-administration and return. A problem that always arises with transmitted questionnaires is non-response. Any sample is impoverished to the extent that any of its members do not respond. Even a face-to-face interview poses the same problem, since

\footnotesize


a few individuals refuse to be interviewed, or are sick or otherwise unavailable. With the questionnaire, however, the problem is intensified since no interviewer is on the spot to motivate the respondent at the moment when he may be vacillating between carrying out the respondent role or refusing to do so. In practice, a 60 per cent response to a mail questionnaire is a fairly good accomplishment, but it is insufficient to eliminate bias. Those who answer questionnaires differ from those who do not. Similarly, those who cannot or will not be interviewed are different from those who acquiesce.

The choice between questionnaire and interview involves such other considerations as the relative accuracy of the communication process under the two conditions, the degree of spontaneity or frankness of response that is desired, and the cost of gathering and analyzing the data.

In attempting to discover the selective perceptions of guidance services by professional educators, the writer elected to use a questionnaire developed specifically for this study. In dealing with a considerable N that represented county, exempted village, and city schools in all sections of Ohio, the writer thought the questionnaire offered definite advantages over an observation or interview technique in three areas:

1. Economy of time
2. Efficiency in tabulating the data
3. Statistical treatment of the data

In addition, consideration of evaluative techniques reviewed in this chapter suggested that the questionnaire technique would be a more efficient method of sampling a representative portion of

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41Withey, op. cit., p. 1448.
professional educators in the State. The procedure for developing the questionnaire will be described in detail in Chapter III.

Contributions of Guidance to School Programs

This section of the chapter will be divided into two parts. The first will review literature revealing perceptions of professional educators concerning what guidance should contribute to a school's on-going guidance program. The second part will review research study reports listing what guidance does contribute to a school's on-going guidance program.

Perceptions of School Administrators

Superintendent Hanson of Rock Island, Illinois, schools believed that guidance is something like the atom. Everybody talks about it, but not too many people understand how it works. He stated "... despite a growing popularity, 'guidance' still remains a vague, even controversial, word in the minds of many parents, as well as some educators. Some people feel it might be usurping parental authority. Others believe it may coddle and spoil our children.  

In order to have universal education, and still try to educate everybody up to the limit of his abilities, however, it is necessary to have, "... something to take up the slack, something that will enable the youngster to find himself emotionally and scholastically in the tumult of modern society. For us the answer appears to be not just

any kind of guidance but a program in which the teacher plays a 
greater and greater role, supported, of course, by professional 
counselors and the best teaching techniques available."\textsuperscript{43}

It is important for parents to realize that a guidance program 
does cost money. "For one thing, guidance isn't effective with 
large classes. We find that teachers who have more than twenty-five 
students in a class are unable to learn enough about each youngster 
to deal effectively with him. Therefore, classes must often be re-
duced and more teachers hired."\textsuperscript{44}

It is also important for parents to realize that it is impossible 
to measure with strict accuracy just what guidance has accomplished. 
Since guidance is a twentieth-century development, Hanson believed 
that: "... we have intimations of success to make us feel we are 
on the right track. In fact, my own humble opinion is that much of 
the exploratory groundwork is now behind us. From here on I believe 
the road to effective guidance will be a lot easier to follow than 
that, as a result, the whole country will reap the benefits of the 
journey."\textsuperscript{45}

\textsuperscript{43}Ibid., p. 86. 
\textsuperscript{44}Ibid., p. 86. 
\textsuperscript{45}Ibid., p. 86.
Superintendent of Chicago Schools, Benjamin C. Willis, in an address commemorating the expansion of the city's Bureau of Counseling Services, made the following remarks:

The entire focus of the guidance program operating within a school setting should be toward improving the instructional program for each student. Through the information and understanding the guidance worker, the principal organizes the school in a manner consistent with the talents of the staff and the needs of the children. The guidance worker translates this educational experience for children into optimum growth, utilizing the resources of the classroom teacher, community informational sources and cooperating with homes for securing optimum motivation.

All of this says that the guidance worker contributes the needed information to help the administrative and teaching staffs plan an effective program of education for all of the children. This is truly a significant responsibility.46

Peters believed that the school administrator should be aware of the major factors in developing guidance programs. He believed that they could make an evaluation of their own perceptions of their school program by answering the following questions:

1. What is the level of your guidance program— is it on paper or is it actively functioning?

2. How much of your school budget is specifically allocated to guidance work? (5 per cent is not too much.)

3. What are your counseling facilities—are there private counseling rooms?

4. How much time do counselors have for guidance in relation to their other duties?

5. How well trained are your staff members in counseling — do they meet certification requirements?

6. Do the patrons of your school know about your guidance program?

7. Where does the chief school administrator stand on guidance — in action, not in words?[^47]

Keppers[^48] made a survey of guidance specialists to obtain their opinions on two fundamental questions regarding the organization of guidance services: (1) What are the most important guidance services and activities to be included in an emerging program of services? (2) Who should give service and leadership in providing them? In expressing their opinion the respondents were instructed to think in terms of a program for a "brand new" junior-senior high school with over five hundred pupils, the staff to include a principal, coordinator of guidance services, counselor, and teachers. According to the respondents, all of the professional educators should participate in the guidance program on a cooperative basis. Majority opinion indicated that the principal is of greatest help to the guidance program by giving administrative support. Specifically, he should:

1. Encourage guidance personnel to improve themselves professionally.


2. Determine staff readiness for a guidance program as part of the selection process and while personnel are on the job.

3. Use the findings of research, conducted by guidance personnel, for school improvement.49

Perceptions About Teachers

It must be remembered that teachers have many students and time-demanding duties and do not have the time to counsel each student. In addition, teachers are usually prepared for one major field and do not have an overview of the whole educational picture. Many teachers lack adequate information of the student's family and social condition. Details revealed by a student would very likely change the relationship between the teacher and student and would tend to cause an uncomfortable situation in the classroom. Rothney stated his viewpoint on this matter: "Apart from the common objection that teachers are not well enough prepared to counsel, there is the further objection that a youth may be literally torn apart by his many teachers who are well-intentioned but who collectively confound his confusion."50

Strang51 has made important contributions to the development and

49Ibid., p. 274.


understanding of the role of the classroom teacher in guidance. In regard to guidance openings in subject fields she stated that each subject has special guidance value. Gaining skill in sports may facilitate social adjustment. Much of the content of home economics can be used to improve health and personal appearance. In the study of literature, young people may gain insight into why they behave as they do and how other people may be feeling when they act in certain ways. In the social studies they can learn how the present grew out of the past and can gain at least a little sense of direction in moving toward what seems to be an uncertain and ominous future. By studying the human relations in history, they may understand the influence of certain personalities on world events. Health education should provide a more healthful place for young and old. Music, fine arts, and all the practical arts and crafts have special therapeutic value in providing creative outlets for the psychological energy and pent-up feelings of adolescents. The knowledge and skill gained in every subject may be applied to individual needs.\(^5^2\)

Perceptions of Counselors' Roles

Quinn\(^5^3\) made a study to discover information related to the role of the school counselor as indicated by administrators and classroom

\(^5^2\text{Ibid.}, \text{pp. 135-161.}\)

\(^5^3\text{Howard Allan Quinn, "The Role of the School Counselor as Indicated by School Administrators and Classroom Teachers" (Unpublished Master's thesis, The Ohio State University, 1955), 111 pages.}\)
teachers. He reached six conclusions. They are as follows:

1. One of the roles most expected of the school counselor is to assist the pupils with their vocational, educational, personal, and social adjustment problems.

2. The school counselor is expected to keep up-to-date with the current research in the field of guidance.

3. The counselor is expected to assume the leadership, or assist in the planning and conducting of the school-wide guidance program.

4. The focus of the school counselor's role is to assist and aid school pupils, not graduates or drop-outs.

5. The school counselor is not expected to provide individual help with study problems.

6. The school counselor is expected to obtain individual student information by using such tools as tests, cumulative records, and case studies.54

Knapp55 cited the advantages of counselors having scheduling assignments. He believed that scheduling "may well open the door both to a better understanding of the curriculum and to increased contacts with the students, teachers, and parents whom he serves."56

Other advantages of a guidance-based scheduling program were, increasing the possibility of students entering courses which were more in accordance with their true interests, abilities, and occupational goals, while at the same time enabling the counselor to use his informational and counseling service to better advantage.57

54Ibid., pp. 98-99.


56Ibid., p. 177.

57Ibid., p. 177.
McQuary\textsuperscript{58} issued a warning that a cooperative and planned attack is needed to counteract the misconception that to adjust is to conform.

It will be noted that the foregoing reported studies describing perceptions of educators were based on what might be done instead of what has been done. The emphasis of this particular study, however, was to determine the perceptions of professional educators on what guidance has done. The second part of this section will review findings of research studies that reveal what is actually happening in guidance.

Students' Perceptions of Guidance Services

Evraiff\textsuperscript{59} reported on the findings of a survey study made by the Wayne State University graduate seminar class in Guidance and Counseling during the 1959 spring semester. The seminar class made a survey of the perceptions of the role of the school counselor by the administrators, teachers, students, and parents in order to compare these findings with what they had learned the role should be in their graduate courses at the university. The participants regarded the most important functions of the school counselor to be counseling with the students concerning school problems, personal problems, planning their future careers, programming, orientation and conferences


with parents. The seminar class was somewhat startled by the poor showing made by testing, identification of and assisting the gifted children, providing occupational information, and maintaining contacts with referral agencies. The class considered it impossible for a school counselor to do a good job of counseling in the areas the participants felt important without the aid of a good testing program that would provide information concerning the ability, strength, weaknesses, interests and aptitudes of each student. It is also difficult to be realistic in discussing future career plans with a student without the necessary occupational information. They concluded that there is a need for counselors to inform people with whom they work as to what is involved in being a counselor. It is also necessary for counselors to attempt to discover ways of being more helpful in their working relationships with students, parents, teachers, and administrators.

Rothney\(^\text{60}\) described a Wisconsin Counseling Study begun in 1948 and completed in 1957. An experimental group was given counseling during their last three years in high school and members of a control group were not counseled. Follow-up studies were conducted six months after graduation in 1951, repeated in 1953 and in 1956. In each case all living subjects were located. The most important difference between the two groups was in the greater percentage of

the counseled subjects who entered and remained to complete post-high school training in college or other institutions. Other differences favoring the counseled group were: more satisfied with the counseling they had received, more consistent in following vocational choices made in high school, greater progress in post-high school employment and indicated greater job-satisfaction.

In a statement made before the Congress of the United States of America by the former United States Commissioner of Education, Dr. Lawrence G. Derthick stated:

As you realize, a good guidance counselor can help the boy or girl assess his own talents, aptitudes, and interests. The counselor can help pupils and their families to become informed about possibilities for advanced education, and to plan wisely for professional or vocational careers. We know from research that pupils that have been counseled make more honor grades, have fewer curricular changes, and attend college in larger numbers than those who have not.61

Form62 reported on a doctoral study measuring students' attitudes toward counseling services at Michigan State College. His major premise was that "...attitudes towards counseling services can be isolated and measured."63 He constructed a scale of attitudes towards counseling, on which the respondent selected one of five varying degrees of agreement for each item to be judged. The investigator's


62 Form, op. cit., pp. 84-87.

63 Ibid., p. 84.
main interest in Form's study is the degree of confidence that Form reported in his efforts to measure attitudes towards counseling, as reflected in the following statement: "The results of this study indicate clearly that attitudes toward counselors and counseling can be accurately measured."^{64}

In 1952, Jenson^65 made a guidance program appraisal, with special attention given to the counseling service, in the Phoenix Union High Schools. He inaugurated this as an in-service, research project involving a representative district-wide planning steering committee made up of school administrators and school counselors. Two specific areas were investigated: Students' Feelings About Help Received from Counselors, and To Whom Do Students Wish to Take Their Problems. Eighty-one per cent of the students felt that they had received the most counseling help in understanding themselves better in terms of their abilities, interests, ambitions, and personality. Sixty per cent of the students felt that they had received help in making progress toward realistically chosen goals. Reaction tendencies to three other areas were about two-thirds positive, fifteen per cent uncertain, and approximately seventeen or eighteen per cent felt counseling was of no help or worse than none at all. Counselors were given chief preference for assisting with problems in the areas of school activities and work, and making progress toward selected

^{64}Ibid., p. 86.

goals in school and work. Students gave the nod to counselors and parents over all other sources of help in the areas of learning of their real abilities, interests, ambitions, and personality, and in their desire to learn how to get along better with friends and others at school, at home, or in the community.

Barahal and Brammer\textsuperscript{66} cited a need for expanded guidance services on the high school level. They based their opinions upon the responses of a "representative sample" of one hundred Stanford freshmen who were asked these questions:

Did you have any counseling or guidance in high school?
What did you think of it?
Was it excellent, good, fair, poor, definitely harmful?\textsuperscript{67}

Almost half of the students could not rate their high school guidance programs since they felt there was no program to rate. The remaining half who had some counseling were divided equally between those who thought their high school guidance was poor or harmful, and those who thought it was fair to excellent. This study revealed that the Stanford freshmen were not happy with their high school counseling. According to the author\textsuperscript{68} they wanted more expert interpretation of the tests given, more occupational information, and the opportunity to discuss their plans in a permissive interview with a trained counselor. Talks with sympathetic teachers were appreciated; but they did not satisfy the students' needs for technical test data,


\textsuperscript{67}Ibid., p. 328.

\textsuperscript{68}Ibid., pp. 330-331.
occupational information, and assistance with personal problems. Students were annoyed to have batteries of tests administered throughout their high school careers, and then the results filed in their permanent records without interpretation to them. The students felt that these test results could have assisted them greatly in their educational-vocational planning.

Harrod designed a study to determine what the pupils in secondary schools with counseling programs believed was their most beneficial guidance service, and in what areas they should have received greater assistance. Three hundred and sixty pupils from eleven high schools comprised the pupil group for this study. The pupils represented grades seven through twelve with an attempt made to equalize the representation from each class. It was the opinion of a majority of the pupils that the guidance program assists individuals to understand better themselves, to take steps to utilize their assets, and to recognize their limitations. The statement was made frequently that the counselor did not have enough time allotted for counseling and that many pupils either did not see the counselor at all or were able to claim only a small amount of the counselor's time. Many pupils felt that the counseling program was not publicized enough at the school, in the community, and among the parents. This deficiency was believed to result in a lack of understanding of the guidance program by the teachers, pupils and community. Some

69George W. Harrod, "Pupil Attitudes Toward the Counseling Programs in Eleven Arkansas Public Schools," The School Counselor, Vol. 7, No. 2 (December 1959), pp. 31-34.
suggestions for improving this condition were: The institution of guidance activities in the homeroom, school assembly, activity clubs, student government, local newspapers, and radio stations. The pupils recommended some specific improvements in the guidance program as indicated in the points listed below:

1. More and larger classes in occupational information and in some instances requiring credit in the course to meet graduation requirements.

2. That students in the seventh grade should have more contact with the counselor in order to plan their high school program.

3. Provide detailed explanation of all standardized tests.

4. More information about available jobs should be provided.

5. More time should be provided for the counselor to counsel with the seniors. Many seniors said that they felt confused after such short conferences.

6. All teachers should be better informed about the services available through the guidance program. Many pupils expressed the opinion that some teachers impeded the work of the counselor because of a lack of understanding.

7. More office space provided for the counselor to include precautions for privacy during interviews.

8. The counselor should be available all periods of the day. Many pupils stated that when the counselor had other duties it was practically impossible for some pupils to find time for an interview. When the counselor had free time, the pupil was in class.70

In New York State,71 4,455 seniors in twenty-nine schools in 1948 completed a Questionnaire prepared by the Division of Research

70Ibid., pp. 33-34.

of the New York State Education Department, devised to evaluate the effectiveness of guidance services. The students were asked the following question in one of the items on the Questionnaire: If you were able what changes would you make in guidance to make it more helpful to students? The responses to this question by eight hundred and forty-one seniors in the seven schools selected as having the highest ranking guidance programs were compared with the responses of the eleven hundred and fifty-three seniors in the seven schools having the lowest ranking guidance programs. Results indicated that 57.2 per cent of the seniors in the lowest quarter schools made suggestions for improving the guidance program, as compared with 45.9 per cent in the highest quarter schools. The report of the research study indicated that this difference was considerably greater than could be accounted for by chance, and indicated that pupils were aware of the relative meagerness of their guidance programs. The report also indicated that the total number of suggestions per pupil for improvement was greater in the lowest quarter schools. The need for more counselors, more counseling time and more conferences were the most frequently mentioned inadequacy in both highest and lowest quarter schools. The need for more friendly and understanding counselors received next highest mention in lowest quarter schools. Very few pupils in the highest quarter schools made this suggestion. The report stated that this suggested that a cardinal element in the excellence of a guidance program is the personality of the counselor—that the job calls for the friendly and approachable person. That guidance should begin earlier was the next most frequent suggestion,
and this was made almost as frequently by pupils in both groups of schools. The need for freer scheduling received next highest mention. Pupils wanted greater choice of courses and easier program changes. They resented having courses or subjects forced upon them. Every student should be counseled regularly, said the seniors in schools where the program was of the lowest rank. In the better programs this was apparently not a problem. There should be a conference for planning the course of study upon entry to the school or earlier, and regular annual conferences thereafter for revising this plan, said the senior in the lowest quarter schools. Apparently the better guidance program followed this plan, because only two suggestions to this effect originated in the highest quarter schools. There should be more help given in choosing an occupation. This suggestion was common to highest and lowest quarter schools. There should be more tests to explore interests and abilities, and early counseling on vocational interests. Seniors in the highest quarter schools suggested this even more frequently than did those in the lowest quarter schools. The report concluded that in the social-emotional areas, pupils who had the most serious needs found it difficult to recognize those needs and almost impossible to express them, however evident they might be to trained observers. As a result of this, the needs of pupils for help with social-emotional problems were probably greater than indicated in the study, and guidance programs also probably less adequate in this area than indicated.
Perceptions on Teacher Findings

A recent study was completed by the Home Economics Section of the Division of Vocational Education, State of Ohio Department of Education, to determine the scholastic achievement and mental ability of students in home economics selected at random from all over Ohio. They discovered that there is little difference in the mental abilities of vocational student in home economics classes and other students throughout the total school system. They concluded that teachers should learn the mental abilities of the students within their classes and that where sufficient numbers warrant should make provisions for giving students special attention.

Perceptions of the Counselors' Roles

Williams describes a study conducted by the Guidance Department of the El Monte Union High School District to determine students' understanding of the "duties of a high school counselor." This school district contains three high schools, employs thirteen counselors three of which are part-time, and has a student-counselor ratio of approximately 1 counselor to 500 students. The instrument used was an Open-end Statement addressed to the student, entitled, "We Need Your Help!" The instrument was designed to determine each student's understanding of "what the duties of your high school counselors are."


Over one-half of the combined responses requested aid in "Helping with problems." It may be assumed that these problems ranged from personal and social to educational, vocational, etc. "Choosing subjects best suited for student" and "Planning student's program" represented approximately one-third of the total response.

Grant investigated the degree to which high school seniors perceived counselors as being able to give help in educational, vocational, and personal areas. For each of nine problem situations each student named three persons, in order of preference, from whom he would most prefer to get help. Sixty-two per cent of the respondents named the counselor as first choice for helping with vocational problems, while only four per cent named the counselor as first choice for personal-emotional problems. Non-school people were named by seventy-five per cent of the respondents as first choice for helping with personal-emotional problems. The categories named most frequently were friend, parent, and doctor, in that order.

In a later research description, Grant hypothesized that the perceptions held by students, as described above, were "a reflection of a common point of view or attitude about the role of the counselor held by administrators, teachers, and by counselors themselves." He tested the hypotheses by obtaining the perceptions of teachers,

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administrators and counselors through a questionnaire similar to the one used by students in a previous study. He found that all three categories of school personnel perceived the counselor as being of significant help to pupils with vocational and educational problems. None of the categories of respondents, however, assigned counselors an important role in helping with personal-emotional problems. In the area of personal-emotional problems the counselor was named first choice as follows: 33 per cent by teachers, 27 per cent by administrators, and 56 per cent by counselors themselves. With nearly half of the counselors themselves perceiving others as being more helpful with personal-emotional problems, Grant concluded that students' perceptions of the role of counselors might well be a reflection of perceptions held by school personnel, that counselors should be more thoroughly trained in the handling of personal-emotional problems, and that school personnel should be made aware of counseling services (as opposed to other, miscellaneous services) of school counselors.

Heilfron76 explored the attitudes of students toward the role of the high school counselor. She used a questionnaire composed of fourteen brief descriptions of different "types of students" and five degrees of counseling which she administered to one hundred and seven high school juniors. The specific question investigated was

this: "What types of students or kinds of problems do high school students feel require counseling and to what degree?" Two major findings emerged from the study. The first was that high school students feel that students who perform well academically and socially need much less counseling than students who are intellectually inferior, socially immature, or unrealistic in their aspirations. The second was that only students who display obvious character disorders should be referred to agencies outside the school for professional help. To the extent that these two perceptions were reinforced by similar attitudes on the part of counselors due possibly to what Robinson refers to as the "continuing historical emphasis on rehabilitating the derelict...," well-performing students will undoubtedly be reluctant to avail themselves of counseling services. Heilfron concluded that much more education of students is needed regarding the function of therapy and counseling, and the services of the psychiatrist, the clinical psychologist, and the counselor in order to rid them of the notion that therapists are "head shrinkers" who deal only with extreme forms of mental and emotional abnormality.

Strang, after working with guidance groups, determined that group guidance makes a unique contribution to the total guidance


78 Heilfron, op. cit., p. 136.

program, as well as helping solve the problem of a low student-counselor ratio. Through group interaction, learning takes place. Peers, in group discussions, develop verbal facility, sometimes discover what they think, help one another by sharing their best ways of coping with common difficult situations, reassure one another by presenting similar problems, and experience satisfaction in being of service to others.

Bergstein and Grant studied parents' perceptions of the role of the school counselor with 200 pairs of parents. Fifty pairs of parents were selected from each of the sixth, eighth, and twelfth grades. They were matched on their children's general school performance, intelligence quotients, and socio-economic standing. None of the parents had or had had older children in the secondary school. Two kinds of parent responses were recorded: (1) free response made in reply to question of who could be of varying degrees of help to a child involved in specific situations, and (2) man-to-man comparisons consisting of placements of the school counselor on a frame of reference established by the free responses. Specific problem situations used in this study were educational, vocational, and personal-emotional-social. The variability of ratings made by parents, in their perceptions of the role of school counselors, did not follow a distinguishable pattern among the four grade levels.

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Parents perceived school counselors to be more helpful than best family friends and more helpful than school principals. It was also found that parents at all four grade levels perceived school counselors to be more helpful with educational and vocational problems than with personal-emotional-social problems.

Hill and Nitzschke\(^8\) reported efforts to elicit parent reactions to certain phases of the Gallipolis' and Jackson's schools' guidance efforts. As to the amount of help the school has provided their child, the reactions were very similar in both communities. About two-thirds of the parents checked "several times." About a fourth checked "seldom" and about ten per cent checked "never."

Slater\(^8\) described the effect of the parental occupations on their children's value system of education and vocations. He pointed out that the father's occupation is an important determiner of the neighborhood in which the family lives and of children's experiences.

Summary

In the 82 references to studies and related literature reviewed in this chapter, emphasis has been given to defining perception, differentiating between perception and action, describing instruments

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\(^8\) George E. Hill and Dale F. Nitzschke, "Students and Parents Evaluate the School's Guidance Program" (Center for Educational Service, College of Education, Ohio University, Athens, Ohio, Pupil Services Series No. 2, 1960), 23 pages.

to determine perceptions, and relating the contributions of guidance as seen by administrators, teachers, counselors, students, and parents. The value and results of counseling were given. Cooperation and communication were stressed at all levels. In order to understand the work of the counselor in guidance services, administrators, teachers, and parents need to know at least three things: (1) They must know something about the growth and development of high school age children and become familiar with some of the common problems these youngsters face. (2) They must understand their own roles. It is important for them to know that children change as they grow, and that adjustment should be made from time to time in dealing with them. Dealing with a teenager is different in many ways than dealing with a pre-school or elementary school child. (3) They must know what our schools stand for, what the schools are trying to accomplish, and the various methods of approach to meeting the needs of the students. With this understanding of the child, of himself, and of the school, the administrator, teacher, and parent can comprehend the purpose and nature of the guidance services program in the school. They are then in a position to do a better job of working with the counselor for the benefit of all children.
CHAPTER III
PROCEDURES, DESIGN, AND METHODOLOGY

This chapter includes a description of the procedures used in developing and categorizing a 148 item questionnaire used in this research study. Hypotheses for the study are listed. A description of fifty schools included in the study and their method of selection is described. The statistical method of analysis of the data is also stated. The chapter concludes with a summary of the procedures, design, and methodology.

Procedure Used In This Study

The procedures used in obtaining data for this investigation were as follows:

1. The literature was reviewed to ascertain what professional authors considered important in an on-going program of guidance services for secondary schools. These ideas were collected in order that they might be utilized in the development of a questionnaire to be used in this study.

2. The investigator conferred with professional members of the Staff of the Division of Guidance and Testing, State of Ohio Department of Education, as well as guidance teaching staff members of The Ohio State University, in order to secure additional items for use.
in the development of a questionnaire that would serve as a base for this study.

3. A questionnaire was developed, compared with other questionnaires, and submitted as a pilot instrument to Graduate Students participating in the 1960 Guidance Summer NDEA Institute at The Ohio State University for their suggestions for additions and removal of overlapping items. Their authority for expertness revolved around the idea that they had had previous teaching and other occupational work experiences, and had been employed and functioned as school counselors prior to their selection to attend the Guidance Summer NDEA Institute.

4. One hundred forty-eight items relating to guidance services were acceptable to the jury of Graduate Students attending the 1960 NDEA Institute. The author categorized these items into the following five areas:

   a. What is the contribution of guidance services to their on-going school program? (Questions 1-78)

   b. What is the contribution of guidance to the self-actualization of students? (Questions 79-110)

   c. What is the contribution of guidance services in maintaining and disseminating occupational information with evidence of concomitant positive results? (Questions 111-123)
d. What is the contribution of guidance services in greater numbers of students being realistic in their desire to seek higher education? (Questions 124-129)

e. What is the contribution of guidance services to the awareness of, support for, and expectancies of guidance services by parents? (Questions 130-148)

5. Ten Ohio counselor educators rated the validity of the items in the questionnaire. For each of the five hypothesis, items unanimously rated "above average" or "superior" in a program of guidance services were separated from the items relating to each hypothesis where there was a lack of agreement among the counselor educators as to the emphasis that should be given in a school's guidance program.

6. Twenty-five schools, all participating in counseling reimbursement under Title V-A of the National Defense Education Act and who had organized programs for at least three years, were selected in the same proportion of county (local), exempted village, and city school districts in all of the school systems in the State of Ohio.

7. Twenty-five schools, with no recognized program as determined by NDEA requirements for reimbursement, were matched with the twenty-five participating schools on the basis of school enrollment, size of faculty, type and size of community, and type of school district.
8. In each of the fifty schools an 148 item question¬
naire was personally presented to the principal, an
English teacher in grades 9 or 10 and grades 11 or 12,
both a man and woman physical education teacher that
also taught health, a home economics teacher, and
either an agriculture or industrial arts teacher, in
addition to the school counselor. Throughout the study,
these principals, counselors, and teachers will be re-
ferred to as professional educators.
9. An analysis was made of the responses of the pro-
fessional educators who were staff members of the
twenty-five school experimental group participating
in Title V-A of the National Defense Education Act
and compared with the professional educators who were
staff members of the twenty-five school control group
having no recognized program as determined by NDEA re-
quirements for reimbursement.

Hypotheses for the Study

This study investigated the extent to which the following null
hypotheses related to the contribution of guidance services to the
school's instructional program, and the contribution of guidance
services in assisting parents in the selected schools.
1. Between the two study groups, there are no differences between the selective perceptions of administrators, counselors, and teachers as to the extent to which guidance services contributes to their on-going school program. (Questions 1-78)\(^1\)
2. Between the two study groups, there are no differences between the selective perceptions of administrators, counselors, and teachers that guidance services do contribute to the self-actualization of students. (Questions 79-110)\(^2\)
3. Between the two study groups there are no differences between the selective perceptions of administrators, counselors, and teachers in recognition that occupational information is maintained and disseminated with evidence of concomitant positive results. (Questions 111-123)\(^3\)
4. Between the two study groups there are no differences between the selective perceptions of administrators, counselors, and teachers that the guidance program has contributed to greater numbers

\(^1\)Chapter IV, pp. 74-79.
\(^2\)Ibid., p. 79-81.
\(^3\)Ibid., p. 81-82.
of students being realistic in their desire to seek higher education. (Questions 124-129)⁴

5. Between the two study groups there are no differences between the selective perceptions of administrators, counselors, and teachers as to the awareness of, support for, and expectancies of guidance services by parents.
(Questions 130-148)⁵

The Population

The data in this investigation were obtained from professional educators in twenty-five schools participating in Title V-A of the National Defense Education Act labeled Group A, NDEA, and from professional educators in twenty-five schools not participating in Title V-A of the National Defense Education Act labeled Group B, NDEA. The two groups of schools were matched on the basis of type of school organization, organization of the school, size of faculty, and size of school enrollment. The three types of school organization in Ohio are city, exempted village, and local (County). Organization of the school refers to the class organization for the respective schools, i.e., grades 10-12, grades 9-12, grades 8-12, and grades 7-12. TABLE 1 lists the two groups of schools.

⁴Ibid., p. 82-83.
⁵Ibid., p. 83-84.
## TABLE 1

Listing of Twenty-Five Schools in Group A, NDEA, and Twenty-Five Schools in Group B, Non-NDEA

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<thead>
<tr>
<th>Group A, NDEA</th>
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<tr>
<td>City Schools</td>
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The author personally visited each of the foregoing fifty schools representing city, exempted village, and county high schools. Advance appointments were scheduled for each of the schools so as to cause as few school interruptions as possible. Eight professional educators in each of the fifty schools responded on the questionnaire. All questionnaires were completed in the presence of the investigator so the responses were entirely those of the individual educator. A principal, counselor, and six selected classroom teachers in each of the twenty-five schools completed the questionnaire. The six teachers included two teaching English, two physical education, and two practical arts.

**Statistical Treatment of Data**

The statistical method of analysis used in this research project was the analysis of covariance. According to Edwards,\(^7\) the analysis of covariance is applicable to any experiment in which a source of variation, which it may not be possible to equalize between the various experimental groups prior to the experiment proper, can be measured. An adjustment is then made for this source of variation in the analysis of the outcomes of the experiment. An attempt was made in this research project to select twenty-five schools participating in the National Defense Education Act, and match these schools with twenty-five schools not participating in the Act. They were not,

however, completely equalized. In addition, selective responses of professional educators to the Questionnaire used in this study varied according to their understanding and background experiences. It was considered desirable, therefore, to make an adjustment for these variables in the analysis of the outcomes of this research study.

McNemar stated that experimental control is the ideal, but, if this cannot be attained one may resort to statistical allowances and thereby arrive at valid conclusions. In this research study if the number of questionnaires had been the same in the different categories (that is local teachers in NDEA, city principals in NDEA), a straightforward analysis of variance could have been performed. As it was, the essential computations for the analysis of variance were carried out using the multiple regression routine on the IBM-704. This procedure allows one to test for interactions among the categories as well as for the main effects. The complete statistical process appears in the Appendix.

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9 All statistical procedures to determine covariance were done under the direction and supervision of The Ohio State University's Statistical Laboratory, Department of Mathematics.

Summary of Scope of the Study

The investigator made personal visits to twenty-five (25) Ohio secondary schools which had an organized guidance program for the past three years. Each school possessed a student-counselor ratio of less than 500-1, and were participating in the National Defense Education Act program. This is in accordance with Title V-A of the National Defense Education Act which states:

To share in the funds, a State will submit a plan to the Commissioner, setting forth the details of its program for testing, guidance and counseling.\(^{11}\)

The State of Ohio Plan for Guidance, Counseling, and Testing approved by the State Board of Education on February 4, 1959 states:

Participating schools shall maintain a minimum counselor-pupil ratio of one full-time counselor, or equivalent in part-time counselors, for each 500 pupils enrolled....Participating schools shall be encouraged to work toward the goal of one full-time counselor or equivalent for each 400 pupils.\(^{12}\)

Counselors included in the 500-1 ratio must meet Standard VI-B of the 1957 Ohio High School Standards which stipulates that:

Persons assigned guidance responsibilities shall be qualified through interest, training, adaptability and personal adjustment. Evidence of qualification shall include the following:

1. Persons devoting half-time or more to guidance duties shall possess the School Counselor Certificate as evidence of professional qualification, with the following exception:

Persons who have been assigned guidance duties on a


\(^{12}\)"State Plan for Guidance, Counseling, and Testing under Section 501-504(a), inclusive, Title V of P. L. 85-864" (Columbus, Ohio), 1959.
more-than-half-time basis for a period of five years or more and who have demonstrated the ability to give satisfactory service may continue to serve in this capacity without the School Counselor Certificate. Evidence of such service shall include assignments as shown on the annual Principal's Report for the years in question and evidences in the local school of the existence of an outgoing guidance program.

2. Beginning with the school year 1960-61, persons devoting less than half-time to the guidance program shall have, as a minimum, six semester hours credit in professional guidance courses. Such credits shall be obtained from courses regularly included in the counselor training sequence of recognized counselor-training institutions, including a basic or introductory course and other courses such as techniques of guidance, counseling theory and practice, guidance testing, educational-occupational information, and organization and administration of guidance services. Credit for organized guidance workshops will be accepted to the extent of four semester hours.¹³

Thirteen of the twenty-five schools were county (local) systems, three were exempted village, and nine were city school systems. This ratio is in the same proportion as the total percentage of these same type schools in the 1095¹⁴ school districts of Ohio. Twenty-five schools were matched on the basis of school enrollment, size of faculty, type and size of community, but had no recognized guidance program as determined by NDEA requirements for reimbursement. In each of the fifty schools an 148 item questionnaire was personally presented

¹³State of Ohio, State Board of Education, "Ohio High School Standards (Minimum) 1957," (Columbus, Ohio), pp. 36-37.

¹⁴Educational Directory, State of Ohio Department of Education (Columbus Ohio, School Year 1960-61), p. 27.
to the school principal, an English teacher in grades 9 or 10 and
grades 11 or 12, both a man and woman physical education teacher
that also taught health, a home economics teacher, and either an
agriculture or industrial arts teacher, and the school counselor.
Thus it was attempted to secure selective perceptions of eight pro-
fessional educators in each of fifty schools in the State of Ohio.
Results were secured from three hundred and seventy-nine professional
educators, twenty-one short of the planned four hundred. The reason
for this deficiency was that in the smaller county and in some ex-
empted village schools, a teacher had overlapping teaching assignments
in the teaching areas covered in this investigation, or no staff
member had been assigned guidance duties.

A description of the treatment of the data is included in the
chapter that follows.
CHAPTER IV
TREATMENT AND INTERPRETATION OF THE DATA

This investigation was conducted to test five hypotheses. In this chapter an explanation of statistical terms will be given, the statistical procedures will be explained, each hypothesis will be restated, an analysis of the data will be made in describing the procedures used in testing each hypothesis, and an interpretation of the results will be made.

Explanation of Statistical Terms

For the purpose of this study the following explanations of statistical terms apply.

**Multiple regression analysis.** In a multiple regression analysis the regression equation is a linear equation used to estimate the mean value of a dependent variable from given values of the independent variable. The regression coefficient \( b \) is a constant in the regression equation. It indicates the slope of the regression line in a correlation.

**Interaction.** The condition resulting when the effect of one factor or condition is dependent on the presence or absence of another factor or condition. This may be within groups or between groups.

**Dependent variable.** The responses to the items in the questionnaire given by the professional educators. The dependent variable is
influenced by the characteristics of the separate independent variables. This is a constant.

**Independent variable.** Principals, counselors, and teachers in city, exempted village, and local schools constitute the independent variables.

**One-tailed test.** The questionnaire developed for this study provided for the probability of responses only in a positive direction, or one-tail of a normal distribution.

**Analysis of variance.** The total sums of squares of each one identifiable with a given source of variation. The "F" test was used.

**Analysis of covariance.** The extension of the method used in the analysis of variance to segregate from comparable groups of data the covariance in two or more measured variables.

**Covariance.** The mean of the products of paired deviations of two variables.

**Statistically merged.** Any numbers of like origin merged for convenience and/or for purposes of statistical evaluation in this study.

**Adjusted means.** A method used to adjust for disproportionality within the classification.

**Significant level.** The statistical point beyond which the null hypothesis is rejected. A point is marked significant when the gap between two samples signifies a degree of difference which is acceptable to the problem. In this study the significant level is .10,
i.e., differences could not have happened by chance in ninety trials out of a hundred.

**Statistical Procedures Employed**

A multiple regression analysis was performed to provide for the action and interaction of variables. Variables were introduced into the multiple regression analysis and their actions and interactions were taken into consideration in arriving at mean differences. These variables were: Size and type of school, type and number of professional educators, sex of respondents, type of school program (NDEA vs. Non-NDEA), and unequal numbers responding to individual items in the questionnaire. Means were adjusted because of these differences that existed in the variables. Using a one-tailed test, results at the ten per cent level were considered significant, i.e., differences as great as these could not have happened by chance in ninety trials out of a hundred. Interactions within and between groups and the resulting adjusted means that are reported in this Chapter are significant at the ten per cent level. Those means that were not significant are given in the Appendix.¹ All of the statistical computations were made by using an IBM-704.

¹ Appendix, pp. 168-177.
The Questionnaire

One hundred forty-eight items were included in the Questionnaire. These items were separated according to five null hypotheses. For each null hypothesis were two Groups or a total of ten Groups for the total Questionnaire. One Group in each null hypothesis consisted of items upon which ten Ohio counselor educators agreed should be receiving "above average" or "superior" treatment in a school's guidance program. A second Group of items for each null hypothesis were those upon which there was a lack of agreement among counselor educators as to the amount of emphasis that should be given.

This Questionnaire, as presented to educators in fifty Ohio high schools, is reproduced on the following pages.
FORM II
RESEARCH PROJECT: GUIDANCE IN OHIO
(The Ohio State University)

School ____________________________ Address ____________________________
Street ______________________________
City __________________________ Zone _______________________________

Please check to indicate position and type of school organization:

I am a: Principal ___ from a/an: local (county) school ___
Teacher ___ exempted village school ___
_____ English (grade 9 or 10) city school ___
_____ English (grade 11 or 12) ___
_____ Men's Phys. Ed. (Health) ___
_____ Women's Phys. Ed. (Health) ___
_____ Voc. Agriculture ___
_____ Home Economics ___
_____ T & I ___
Full-time Counselor ___
Teacher-counselor (teaching more than half-time) ___
Counselor-teacher (teaching less than half-time) ___

Male ___
Female ___

As you view what you understand to be Guidance Services, please read the following items and then use your best judgment in reacting to each of them by CIRCLING the appropriate symbol in the following scale that now applies to your school system:

0 to mean (None)
1 below average (very little)
2 average (quite a bit)
3 above average (a great deal)
4 superior (very much)
? do not know (don't know)
N not a guidance function (doesn't apply to guidance)

I. Guidance services are contributing to the development of our students through:

A. Overall school assistance:

0. EXAMPLE: informing them of current vocational trends............. 0 1 2 3 4 ? N

1. Better course selection............. 0 1 2 3 4 ? N
2. Better use of educational information .......................................................... 0 1 2 3 4 ? N

3. A functional use of the guidance and counseling services available............. 0 1 2 3 4 ? N

4. Information about the health services, clinics, etc., of the school and of the community 0 1 2 3 4 ? N

5. Information about the subjects and activities which contribute to sound health................. 0 1 2 3 4 ? N

6. Greater interest in problems of health and personal hygiene............... 0 1 2 3 4 ? N

7. Encouragement of appropriate conduct and dress in the classroom and in school activities............. 0 1 2 3 4 ? N

8. Improved relationships with other students.................................................. 0 1 2 3 4 ? N

9. Encouragement in planning a well-balanced program of physical activities.................. 0 1 2 3 4 ? N

10. Prevention, identification and correction of maladjustments in their relationships with other persons....................... 0 1 2 3 4 ? N

11. An orientation to produce a feeling of security in "knowing their way around" the physical plant........ 0 1 2 3 4 ? N

12. Utilization of time to discuss, via group procedures, problems that are common to all.................. 0 1 2 3 4 ? N

13. Discovery and correction of physical defects—sight, hearing, speech, deformity.................. 0 1 2 3 4 ? N

14. Propagation of the belief that each student does have some ability and to make an attempt to help him discover his potentialities................. 0 1 2 3 4 ? N
15. Discovery and correction of cases of malnutrition.
0 1 2 3 4 ? N

16. Emphasis of the importance of physical attractiveness.
0 1 2 3 4 ? N

17. Importance of interests in sports and games.
0 1 2 3 4 ? N

18. Discovery and correction of all possible causes for lack of interest in reading.
0 1 2 3 4 ? N

19. Eradication of extreme sensitivity and shyness.
0 1 2 3 4 ? N

20. Awareness of the dangers of carelessness.
0 1 2 3 4 ? N

0 1 2 3 4 ? N

22. Development of social-mindedness.
0 1 2 3 4 ? N

23. Encouragement of greater independence.
0 1 2 3 4 ? N

24. Encouragement of participation in school activities.
0 1 2 3 4 ? N

25. Recognition that all subjects have value.
0 1 2 3 4 ? N

26. Discovery of the causes of teacher or school dislikes.
0 1 2 3 4 ? N

27. Creation of the feeling that someone is interested in them.
0 1 2 3 4 ? N

28. Discovery and correction of causes of truancy.
0 1 2 3 4 ? N

29. Awareness of the danger of smoking and drinking.
0 1 2 3 4 ? N

0 1 2 3 4 ? N

31. Tolerance for beliefs and opinion of others.
0 1 2 3 4 ? N
32. Opportunity to discuss the meaning of love. ................................. 0 1 2 3 4 ? N
33. Idea that all have citizenship duties............................................. 0 1 2 3 4 ? N
34. Encouragement of progressive self-direction, not prescription.......... 0 1 2 3 4 ? N
35. Specific individual examples of improved student adjustment.............. 0 1 2 3 4 ? N
36. Improvement in school behavior.................................................. 0 1 2 3 4 ? N
37. Improved morale of students and staff........................................ 0 1 2 3 4 ? N
38. Personal-social information as part of the guidance program.............. 0 1 2 3 4 ? N
39. Reduction in number of failures................................................ 0 1 2 3 4 ? N
40. Decrease in the drop-out rate................................................... 0 1 2 3 4 ? N
41. More students prepared for graduation........................................ 0 1 2 3 4 ? N
42. Establishment of classes for slow learners................................... 0 1 2 3 4 ? N
43. Establishment of classes for the superior students (upper 15%)........... 0 1 2 3 4 ? N
44. Better general student atmosphere resulting from orientation............ 0 1 2 3 4 ? N
45. Use of guidance information for curriculum.................................... 0 1 2 3 4 ? N
46. Better climate for learning....................................................... 0 1 2 3 4 ? N
47. Testing results released and explained to teachers.......................... 0 1 2 3 4 ? N
48. Cooperation between teachers and counselors for the welfare of the students.................................................. 0 1 2 3 4 ? N
49. Improved public relations......................................................... 0 1 2 3 4 ? N
<p>| | | | | | |</p>
<table>
<thead>
<tr>
<th></th>
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</tr>
</thead>
<tbody>
<tr>
<td>50.</td>
<td>Improved teacher understanding due to in-service training</td>
<td>0</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>51.</td>
<td>Closer working relationships with community agencies</td>
<td>0</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>52.</td>
<td>Increased awareness of individual differences</td>
<td>0</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>53.</td>
<td>Better understanding of pupils by faculty</td>
<td>0</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>54.</td>
<td>Careful use of group procedures as time-saving devices</td>
<td>0</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>55.</td>
<td>Carefully kept records of every student</td>
<td>0</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>56.</td>
<td>Emphasis of counseling as the heart of the guidance program</td>
<td>0</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>57.</td>
<td>Adequate use of community resources for guidance purposes</td>
<td>0</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>58.</td>
<td>Cooperation of local social and civic groups</td>
<td>0</td>
<td>1</td>
<td>2</td>
<td>3</td>
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<tr>
<td>59.</td>
<td>Utilization of regular school courses for guidance purposes</td>
<td>0</td>
<td>1</td>
<td>2</td>
<td>3</td>
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<tr>
<td>60.</td>
<td>Release of guidance activities through the school paper</td>
<td>0</td>
<td>1</td>
<td>2</td>
<td>3</td>
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<tr>
<td>61.</td>
<td>Increased use of films and other audio-visual aids to learning</td>
<td>0</td>
<td>1</td>
<td>2</td>
<td>3</td>
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<tr>
<td>62.</td>
<td>Utilization of extra-curricular activities for their guidance value</td>
<td>0</td>
<td>1</td>
<td>2</td>
<td>3</td>
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<tr>
<td>63.</td>
<td>Regular periods scheduled for interviews</td>
<td>0</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>64.</td>
<td>Written records of all interviews</td>
<td>0</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>65.</td>
<td>Intensive systematic studies of all problem cases</td>
<td>0</td>
<td>1</td>
<td>2</td>
<td>3</td>
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<tr>
<td>66.</td>
<td>Faculty agreement upon principles by which the guidance program operates</td>
<td>0</td>
<td>1</td>
<td>2</td>
<td>3</td>
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<tr>
<td>67.</td>
<td>Well defined objectives of guidance program</td>
<td>0</td>
<td>1</td>
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<tr>
<td>68.</td>
<td>Participation of entire staff in the guidance program</td>
<td>0 2 3 4 ? N</td>
<td></td>
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</tr>
<tr>
<td>69.</td>
<td>Coordination of guidance services with the total school program</td>
<td>0 1 2 3 4 ? N</td>
<td></td>
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</tr>
<tr>
<td>70.</td>
<td>Provision of guidance services for all pupils</td>
<td>0 1 2 3 4 ? N</td>
<td></td>
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<tr>
<td>71.</td>
<td>Encouragement of private rooms for individual counseling</td>
<td>0 1 2 3 4 ? N</td>
<td></td>
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<tr>
<td>72.</td>
<td>Case studies of pupils with special problems</td>
<td>0 1 2 3 4 ? N</td>
<td></td>
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<tr>
<td>73.</td>
<td>Research into the causes of student failure</td>
<td>0 1 2 3 4 ? N</td>
<td></td>
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<tr>
<td>74.</td>
<td>Encouragement to students with reading problems</td>
<td>0 1 2 3 4 ? N</td>
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<tr>
<td>75.</td>
<td>Realization on the part of the staff of the function of education as the development of the entire individual</td>
<td>0 1 2 3 4 ? N</td>
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<tr>
<td>76.</td>
<td>Aid to school staff in analysis and organization of their work so as to make it more effective</td>
<td>0 1 2 3 4 ? N</td>
<td></td>
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<td></td>
</tr>
<tr>
<td>77.</td>
<td>Aid in the organization of the curriculum program, and in coordinating all activities of the school and focusing them upon pupil development</td>
<td>0 1 2 3 4 ? N</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>78.</td>
<td>Provision of direct personal assistance to pupils</td>
<td>0 1 2 3 4 ? N</td>
<td></td>
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</tr>
<tr>
<td>79.</td>
<td>More striving to achieve higher scholastic recognition</td>
<td>0 1 2 3 4 ? N</td>
<td></td>
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</tr>
<tr>
<td>80.</td>
<td>Better study methods</td>
<td>0 1 2 3 4 ? N</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>81.</td>
<td>Greater number performing close to potential</td>
<td>0 1 2 3 4 ? N</td>
<td></td>
<td></td>
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</tr>
<tr>
<td>82.</td>
<td>Increased self-referrals by students</td>
<td>0 1 2 3 4 ? N</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
83. Better use of personal-social information .................................................. 0 1 2 3 4 ? N
84. Improved attendance and punctuality .................................................. 0 1 2 3 4 ? N
85. Improved use of leisure-time activities .................................................. 0 1 2 3 4 ? N
86. Emphasis of their strengths in the area of personal relationships so that their lacks or weaknesses do not prove serious handicaps .................................................. 0 1 2 3 4 ? N
87. Increased interest in test results:
   a. Mental ability .......................................................... 0 1 2 3 4 ? N
   b. Achievement .......................................................... 0 1 2 3 4 ? N
   c. Personality inventories .............................................. 0 1 2 3 4 ? N
   d. Vocational preferences ............................................. 0 1 2 3 4 ? N
   e. Special aptitude ....................................................... 0 1 2 3 4 ? N
88. Better classroom behavior .......................................................... 0 1 2 3 4 ? N
89. Realization that everyone cannot excel in every field .................................................. 0 1 2 3 4 ? N
90. Development of self confidence .................................................. 0 1 2 3 4 ? N
91. Recognition of the importance of getting along with people .................................................. 0 1 2 3 4 ? N
92. Development of sportsmanship .................................................. 0 1 2 3 4 ? N
93. Awareness of the benefits of budgeting time .................................................. 0 1 2 3 4 ? N
94. More effective study habits .................................................. 0 1 2 3 4 ? N
95. Art of self application .................................................. 0 1 2 3 4 ? N
96. Willingness to put forth effort .................................................. 0 1 2 3 4 ? N
97. Improvement of study conditions in school or at home .................................................. 0 1 2 3 4 ? N
98. Good classroom preparation .................................................. 0 1 2 3 4 ? N
99. Balance of athletics or other school activities with subject matter .................................................. 0 1 2 3 4 ? N
100. Decrease in problems of cheating, lying, stealing

101. Value of time, money, and the wise use of each

102. Good physical and mental habits

103. Sense of belonging, of being accepted by a group or groups

104. Knowledge of self

105. Sense of life values

106. Satisfactory and socially acceptable adjustment in living and working with others

107. Satisfactory and socially acceptable adjustment to the opposite sex

108. Ethical and spiritual meanings of life

109. Responsibility and assumption of the obligations of a citizen and worker in the community

110. Realization that race, color, and sex have little or no relation to aptitudes and abilities

111. Earlier and better planning for future by students

112. Better use of vocational information

113. Decrease in problems of employment and vocational adjustment

114. Provision for follow-up of individuals:
   a. Who enter occupations after graduation
   b. Who do not finish high school
   c. Who enter colleges, business schools, and trade schools
115. Increased awareness of the importance of selecting an occupation in harmony with the strongest interests and most outstanding abilities of the pupils. 0 1 2 3 4 ? N

116. Assistance in the choice of occupations that are suitable to the best interests of the child. 0 1 2 3 4 ? N

117. Awareness of vocational conditions and opportunities. 0 1 2 3 4 ? N

118. Information about the training required for successful entry into their chosen occupations. 0 1 2 3 4 ? N

119. Information about the factors which should be considered in making an occupational choice. 0 1 2 3 4 ? N

120. Knowledge of major vocational trends. 0 1 2 3 4 ? N

121. Selection of school courses and extracurricular activities that are in harmony with their vocational goals. 0 1 2 3 4 ? N

122. Increased interest in part-time summer employment. 0 1 2 3 4 ? N

123. Greater knowledge of scholarships and loans available to secure the preparation necessary for the vocation chosen. 0 1 2 3 4 ? N

124. Increased number seeking advanced education. 0 1 2 3 4 ? N

125. More realistic choice of college. 0 1 2 3 4 ? N

126. More college scholarships. 0 1 2 3 4 ? N

127. Awareness of college and university requirements. 0 1 2 3 4 ? N

128. Knowledge of finances needed to further their education. 0 1 2 3 4 ? N
II. Guidance Services are contributing to the development of our students through:

B. Assistance to parents:

130. Interpretation of children's test scores........................................... 0 1 2 3 4 ? N

131. Arrangement of conferences with the counselor........................................ 0 1 2 3 4 ? N

132. Better understanding of the ability and interests of their child..................... 0 1 2 3 4 ? N

133. Increased respect for the school......................................................... 0 1 2 3 4 ? N

134. Improvement of study habits of their children......................................... 0 1 2 3 4 ? N

135. Recognition of different interest patterns of the various members of the family........................................... 0 1 2 3 4 ? N

136. Realization that each individual has individual rights................................ 0 1 2 3 4 ? N

137. Appreciation of brother-sister relationships........................................... 0 1 2 3 4 ? N

138. Consideration for others in the use of the family car................................ 0 1 2 3 4 ? N

139. Recognition that all people have problems............................................ 0 1 2 3 4 ? N

140. Recognition that the problems of children differ at different ages.............. 0 1 2 3 4 ? N

141. Recognition that respect is basic to fairness......................................... 0 1 2 3 4 ? N

142. Realization of the dangers of dominance.................................................. 0 1 2 3 4 ? N

143. Realization of the importance of home fellowship.................................... 0 1 2 3 4 ? N
144. Maintenance of a balance of home duties—neither too few nor too many ........................................ 0 1 2 3 4 ? N

145. Knowledge of the causes of jealousy or friction among children ................... 0 1 2 3 4 ? N

146. Awareness of the importance of wholesome home conditions—physical, social, moral ........................................ 0 1 2 3 4 ? N

147. Realization that cooperation with the school is important ................... 0 1 2 3 4 ? N

148. Realization that there are dangers in choosing a definite occupation for their children ................... 0 1 2 3 4 ? N

**First Null Hypothesis**

Between the two study groups there are no differences between the selective perceptions of administrators, counselors, and teachers as to the extent to which guidance services contributes to their on-going school program.

The data used in testing this null hypothesis were the responses made by school administrators, counselors, and teachers to the first seventy-eight items of a 148 item Questionnaire. These professional educators were employed in fifty Ohio secondary schools. Twenty-five of the fifty schools were participating in Title V-A of the National Defense Education Act, and twenty-five comparable schools were not participating in the Act. Thirteen of the twenty-five schools were local, three were exempted village, and nine were city. When the twenty-five participating and non-participating schools were merged into a unit, twenty-six were local, six were exempted village, and eighteen were city. This ratio is in the same proportion as the total percentages of these types of Ohio schools. In each school a principal,
counselor, and six teachers indicated their selective perceptions as to the extent that guidance services were contributing to their ongoing school program. Two of the six teachers taught English, two physical education, and two practical arts.

The seventy-eight items related to the foregoing hypothesis were divided into Group I and Group II. Group I consisted of twenty-five individual items rated by ten Ohio counselor educators as receiving "above average" or "superior" attention in any ideal program of guidance services. The Questionnaire introduction to these items read: "Guidance services are contributing to the development of our students through:" These items are indicated in TABLE 2.
TABLE 2

Group I

Items Rated by Counselor Educators "Above Average" or "Superior" in the Contribution of Guidance to an On-Going School Program

<p>| | |</p>
<table>
<thead>
<tr>
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<tbody>
<tr>
<td>1.</td>
<td>Better course selection</td>
</tr>
<tr>
<td>2.</td>
<td>Better use of educational information</td>
</tr>
<tr>
<td>3.</td>
<td>A functional use of the guidance and counseling services available</td>
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<tr>
<td>4.</td>
<td>Prevention, identification and correction of maladjustments in their relationships with other persons</td>
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<tr>
<td>5.</td>
<td>Utilization of time to discuss, via group procedures, problems that are common to all</td>
</tr>
<tr>
<td>6.</td>
<td>Elimination of inferiority complexes</td>
</tr>
<tr>
<td>7.</td>
<td>Creation of the feeling that someone is interested in them</td>
</tr>
<tr>
<td>8.</td>
<td>Encouragement of progressive self-direction, not prescription</td>
</tr>
<tr>
<td>9.</td>
<td>Improvement in school behavior</td>
</tr>
<tr>
<td>10.</td>
<td>Personal-social information as part of the guidance program</td>
</tr>
<tr>
<td>11.</td>
<td>Decrease in the drop-out rate</td>
</tr>
<tr>
<td>12.</td>
<td>Use of guidance information for curriculum</td>
</tr>
<tr>
<td>13.</td>
<td>Testing results released and explained to teachers</td>
</tr>
<tr>
<td>14.</td>
<td>Closer working relationships with community agencies</td>
</tr>
<tr>
<td>15.</td>
<td>Increased awareness of individual differences</td>
</tr>
<tr>
<td>16.</td>
<td>Better understanding of pupils by faculty</td>
</tr>
<tr>
<td>17.</td>
<td>Emphasis of counseling as the heart of the guidance program</td>
</tr>
<tr>
<td>18.</td>
<td>Adequate use of community resources for guidance purposes</td>
</tr>
<tr>
<td>19.</td>
<td>Well defined objectives of guidance program</td>
</tr>
<tr>
<td>20.</td>
<td>Coordination of guidance services with the total school program</td>
</tr>
<tr>
<td>21.</td>
<td>Provision of guidance services for all pupils</td>
</tr>
<tr>
<td>22.</td>
<td>Encouragement of private rooms for individual counseling</td>
</tr>
<tr>
<td>23.</td>
<td>Case studies of pupils with special problems</td>
</tr>
<tr>
<td>24.</td>
<td>Aid in the organization of the curriculum program, and in coordinating all activities of the school and focusing them upon pupil development</td>
</tr>
<tr>
<td>25.</td>
<td>Provision of direct personal assistance to pupils</td>
</tr>
</tbody>
</table>

Group II consisted of the fifty-three items upon which there was a lack of agreement among the ten Ohio counselor educators as to the proper emphasis in an on-going school program. These items are listed in TABLE 3.
<table>
<thead>
<tr>
<th>Items Where Agreement was Lacking Among Counselor Educators as to Their Proper Emphasis in An On-Going School Guidance Program</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Information about the health services, clinics, etc., of the school and of the community</td>
</tr>
<tr>
<td>2. Information about the subjects and activities which contribute to sound health</td>
</tr>
<tr>
<td>3. Greater interest in problems of health and personal hygiene</td>
</tr>
<tr>
<td>4. Encouragement of appropriate conduct and dress in the classroom and in school activities</td>
</tr>
<tr>
<td>5. Improved relationships with other students</td>
</tr>
<tr>
<td>6. Encouragement in planning a well-balanced program of physical activities</td>
</tr>
<tr>
<td>7. An orientation to produce a feeling of security in &quot;knowing their way around&quot; the physical plant</td>
</tr>
<tr>
<td>8. Discovery and correction of physical defects—sight, hearing, speech, deformity</td>
</tr>
<tr>
<td>9. Propagation of the belief that each student does have some ability and to make an attempt to help him discover his potentialities</td>
</tr>
<tr>
<td>10. Discovery and correction of cases of malnutrition</td>
</tr>
<tr>
<td>11. Emphasis of the importance of physical attractiveness</td>
</tr>
<tr>
<td>12. Importance of interests in sports and games</td>
</tr>
<tr>
<td>13. Discovery and correction of all possible causes for lack of interest in reading</td>
</tr>
<tr>
<td>14. Eradication of extreme sensitivity and shyness</td>
</tr>
<tr>
<td>15. Awareness of the dangers of carelessness</td>
</tr>
<tr>
<td>16. Development of social-mindedness</td>
</tr>
<tr>
<td>17. Encouragement of greater independence</td>
</tr>
<tr>
<td>18. Encouragement of participation in school activities</td>
</tr>
<tr>
<td>19. Recognition that all subjects have value</td>
</tr>
<tr>
<td>20. Discovery of the causes of teacher or school dislikes</td>
</tr>
<tr>
<td>21. Discovery and correction of causes of truancy</td>
</tr>
<tr>
<td>22. Awareness of the danger of smoking and drinking</td>
</tr>
<tr>
<td>23. Development of courtesy</td>
</tr>
<tr>
<td>24. Tolerance for beliefs and opinion of others</td>
</tr>
<tr>
<td>25. Opportunity to discuss the meaning of love</td>
</tr>
<tr>
<td>26. Idea that all have citizenship duties</td>
</tr>
<tr>
<td>27. Specific individual examples of improved student adjustment</td>
</tr>
<tr>
<td>28. Improved morale of students and staff</td>
</tr>
<tr>
<td>29. Reduction in number of failures</td>
</tr>
<tr>
<td>30. More students prepared for graduation</td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td>---</td>
</tr>
<tr>
<td>31.</td>
</tr>
<tr>
<td>32.</td>
</tr>
<tr>
<td>33.</td>
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<tr>
<td>34.</td>
</tr>
<tr>
<td>35.</td>
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<td>36.</td>
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<td>37.</td>
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<td>38.</td>
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<tr>
<td>39.</td>
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<td>40.</td>
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<td>41.</td>
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<td>42.</td>
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<td>43.</td>
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<tr>
<td>44.</td>
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<tr>
<td>45.</td>
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<td>46.</td>
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<tr>
<td>47.</td>
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<tr>
<td>48.</td>
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<tr>
<td>49.</td>
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<tr>
<td>50.</td>
</tr>
<tr>
<td>51.</td>
</tr>
<tr>
<td>52.</td>
</tr>
<tr>
<td>53.</td>
</tr>
</tbody>
</table>

The ratings of the ten Ohio counselor educators upon the seventy-eight items composing the first hypothesis can be found in the Appendix.²

Tabulations were made of frequencies of responses of school administrators, counselors, and teachers in both NDEA and Non-NDEA participating schools. Each series of frequencies were examined to see if there was a pattern of increases or decreases in the perceptions

²Appendix, p. 168-169.
among the different professional educators, or between the school types that were participating in NDEA. Responses for the twenty-five items in Group I were separated from the fifty-three items included in Group II.

Group I Scores

TABLE 4 contains the adjusted mean frequencies for the different type schools in Group I. This TABLE contains only those items which were found to be significant at the ten per cent level by taking into consideration an analysis of variance (F) and covariance ("t"). All of the adjusted mean frequencies for Group I and Group II items can be found in the Appendix. Action between the groups and interaction with the city, exempted village and local schools will be shown and discussed for Group I. All interactions are significant at the ten per cent level.

TABLE 4

Group I

Adjusted Mean Frequencies of Professional Educators According To School Type in Both NDEA and Non-NDEA Participating Schools*

<table>
<thead>
<tr>
<th></th>
<th>Local</th>
<th>Exempted</th>
<th>Village</th>
<th>City</th>
<th>Total Personnel Groups</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>N</td>
<td>Mean</td>
<td>N</td>
<td>Mean</td>
<td>N</td>
</tr>
<tr>
<td>N.D.E.A.</td>
<td>97</td>
<td>2.49</td>
<td>23</td>
<td>2.59</td>
<td>72</td>
</tr>
<tr>
<td>Non-N.D.E.A.</td>
<td>93</td>
<td>1.90</td>
<td>22</td>
<td>1.78</td>
<td>72</td>
</tr>
</tbody>
</table>

*Significant at the ten per cent level of confidence.

3Appendix, p. 168-169.
It will be noted that professional educators in the three type schools participating in the National Defense Education Act rated their schools' guidance programs as contributing more to their on-going school program than did professional educators in Non-NDEA participating schools. City schools were rated as doing the best job in both NDEA and Non-NDEA schools. Interactions within the group participating in NDEA revealed that the local schools adjusted mean is the lowest of the group; however, all differences within the group were significant. The local NDEA participating schools rated their programs of guidance services contributions to their on-going school program higher than the city schools not participating in NDEA. Professional educators in exempted village schools participating in NDEA, rated their program significantly higher than participating local schools. In contrast, however, professional educators in local schools not participating in NDEA rated their programs significantly higher than Non-NDEA participating exempted village schools. Interactions between the groups of professional educators revealed that NDEA participating schools were significantly higher than the Non-NDEA participating schools.

Frequency scores of both NDEA and Non-NDEA schools were statistically merged to see if there was a significant difference in the selective perceptions of groupings of school administrators, counselors, and teachers. The information for Group I follows.
TABLE 5

Group I

Adjusted Mean Frequencies of Professional Educators
When NDEA and Non-NDEA Schools Were Statistically Merged*

<table>
<thead>
<tr>
<th>Professional Educators</th>
<th>N</th>
<th>Mean</th>
</tr>
</thead>
<tbody>
<tr>
<td>Principals</td>
<td>50</td>
<td>2.51</td>
</tr>
<tr>
<td>Counselors</td>
<td>47</td>
<td>2.59</td>
</tr>
<tr>
<td>Teachers</td>
<td>282</td>
<td>2.27</td>
</tr>
</tbody>
</table>

*Significant at the ten per cent level of confidence.

From the foregoing TABLE it will be noted that counselors in statistically merged NDEA and Non-NDEA participating schools perceived, significantly higher than other professional educators, that guidance services made a greater contribution to the on-going school program. The adjusted mean of the principals was lower than that of the counselors. Teachers rated the contribution of guidance with a mean difference lower than administrators.

When the adjusted mean frequencies for Group I of the NDEA and Non-NDEA participating schools were merged, interactions revealed that professional educators in cities rated their programs of guidance services' contributions to their on-going school program significantly higher than did educators from local and exempted village schools. This information is shown in TABLE 6.
TABLE 6

Group I

Adjusted Mean Frequencies Where NDEA and Non-NDEA Type Schools Were Statistically Merged*

<table>
<thead>
<tr>
<th>Type School</th>
<th>N</th>
<th>Mean</th>
</tr>
</thead>
<tbody>
<tr>
<td>City</td>
<td>144</td>
<td>2.58</td>
</tr>
<tr>
<td>Local</td>
<td>190</td>
<td>2.20</td>
</tr>
<tr>
<td>Exempted Village</td>
<td>45</td>
<td>2.19</td>
</tr>
</tbody>
</table>

*Significant at the ten per cent level of confidence.

Group II Scores

Group II scores will now be reported. This area consisted of fifty-three items relating to the contribution of guidance services to an on-going school program, but upon which counselor educators were of differing opinions as to the amount of emphasis that should be given. Adjusted mean frequencies of school types is shown in TABLE 7.

TABLE 7

Group II

Adjusted Mean Frequencies of Professional Educators According to Type of School*

<table>
<thead>
<tr>
<th></th>
<th>N.D.E.A.</th>
<th>Non-N.D.E.A.</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>N</td>
<td>Local</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>N.D.E.A.</td>
<td>97</td>
<td>2.28</td>
</tr>
<tr>
<td>Non-N.D.E.A.</td>
<td>93</td>
<td>1.88</td>
</tr>
</tbody>
</table>

*Significant at the ten per cent level of confidence.
Professional educators in both NDEA and Non-NDEA city schools believed the best job of providing guidance services that contributed to their on-going school program was being done in their systems. In city systems participating in NDEA, professional educators rated their programs significantly higher than professional educators in local and exempted village schools. Non-NDEA city schools' professional educators rated their programs higher than the NDEA participating local and exempted village schools. TABLE 7 also indicated that exempted village professional educators in participating NDEA schools rated their programs significantly lower than local schools, in contrast to a difference favoring the Non-NDEA participating exempted village school over Non-NDEA participating local schools.

TABLE 8 shows Group II scores of professional educators in statistically merged NDEA and Non-NDEA schools which revealed a significant difference in the perceptions of professional educators as a group relative to the extent of guidance services contributing to their on-going school program.

<table>
<thead>
<tr>
<th>Professional Educators</th>
<th>N</th>
<th>Mean</th>
</tr>
</thead>
<tbody>
<tr>
<td>Principals</td>
<td>50</td>
<td>2.32</td>
</tr>
<tr>
<td>Counselors</td>
<td>47</td>
<td>2.37</td>
</tr>
<tr>
<td>Teachers</td>
<td>282</td>
<td>2.18</td>
</tr>
</tbody>
</table>

*Significant at the ten per cent level of confidence.
In Group II, the ratings by counselors of the contribution of guidance to an on-going school program were significantly higher than other professional educators. The adjusted mean of 2.37, however, is significantly lower than the 2.59 rating given the items in Group I. Principals rated Group II items significantly lower than counselors. Teachers rated Group II items significantly lower than principals or counselors.

When the adjusted mean frequencies for Group II of the NDEA and Non-NDEA participating schools were statistically merged, it was found that professional educators in cities rated their programs of guidance services that contributed to their on-going school program significantly higher than did those in local and exempted village schools. This information is shown in TABLE 9.

**TABLE 9**

<table>
<thead>
<tr>
<th>Type School</th>
<th>N</th>
<th>Mean</th>
</tr>
</thead>
<tbody>
<tr>
<td>City</td>
<td>144</td>
<td>2.43</td>
</tr>
<tr>
<td>Local</td>
<td>190</td>
<td>2.08</td>
</tr>
<tr>
<td>Exempted Village</td>
<td>45</td>
<td>2.14</td>
</tr>
</tbody>
</table>

*Significant at the ten per cent level of confidence.

To summarize, in the twenty-five items of Group I, i.e., items agreed by ten Ohio counselor educators as being necessary to an
on-going guidance program, there was not support for the hypothesis that there is no difference between schools participating in the National Defense Education Act and those not participating in the Act. Research data showed the selective perceptions of professional educators concerning the contribution of guidance services to their on-going school program in NDEA schools higher than Non-NDEA schools. In Group II, the null hypothesis is accepted. Group II items are those upon which ten Ohio counselor educators lacked complete agreement regarding the extent to which guidance services should contribute to their on-going school program.

Research evidence does not support the hypothesis that there are no differences between the selective perceptions of professional educators regarding the extent to which guidance services contributes to their on-going school program. When the NDEA and Non-NDEA schools were statistically merged, counselors rated the items in Group I and Group II significantly higher than school administrators. Administrators rated the items in Group I and Group II significantly higher than teachers.

When NDEA and Non-NDEA schools were statistically merged, significant differences in school type did not support the first hypothesis in either Group I or Group II. Professional educators in cities perceived the contribution of their guidance programs to be significantly greater than did the professional educators in local and exempted village schools. When NDEA and Non-NDEA schools were merged, professional educators in local schools in Group I perceived their
programs significantly greater in contribution to their on-going school program than did educators in exempted village schools. Very limited support was given for the first hypothesis.

Second Null Hypothesis

Between the two study groups there are no differences between the selective perceptions of administrators, counselors, and teachers that guidance services does contribute to the self-actualization of students.

The thirty-one items related to the foregoing null hypothesis were divided into Group III and Group IV. Group III consisted of seven individual items rated by ten Ohio counselor educators as idealistically receiving "above average" or "superior" attention in their contribution to the self-actualization of students. These items are indicated in TABLE 10.

TABLE 10

Group III

Items Rated by Counselor Educators "Above Average" or "Superior" in Their Contribution to the Self-Actualization of Students

<table>
<thead>
<tr>
<th>Item</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Greater number performing close to potential</td>
</tr>
<tr>
<td>2. Increased self-referrals by students</td>
</tr>
<tr>
<td>3. Better use of personal-social information</td>
</tr>
<tr>
<td>4. Realization that everyone cannot excel in every field</td>
</tr>
<tr>
<td>5. Knowledge of self</td>
</tr>
<tr>
<td>6. Satisfactory and socially acceptable adjustment in living and</td>
</tr>
<tr>
<td>working with others.</td>
</tr>
<tr>
<td>7. Satisfactory and socially acceptable adjustment to the opposite sex</td>
</tr>
</tbody>
</table>
Group IV consisted of the twenty-five items upon which there was a lack of agreement among the ten Ohio counselor educators as to their proper emphasis in their contribution to the self-actualization of students. These items are listed in TABLE 11.

**TABLE 11**

**Group IV**

Items Where Agreement Was Lacking Among Counselor Educators as to Their Contribution to the Self-Actualization of Students

1. More striving to achieve higher scholastic recognition
2. Better study methods
3. Improved attendance and punctuality
4. Improved use of leisure-time activities
5. Emphasis of their strengths in the area of personal relationships so that their lacks or weaknesses do not prove serious handicaps
6. Increased interest in test results
   a. Mental ability
   b. Achievement
   c. Personality inventories
   d. Vocational preferences
   e. Special aptitude
7. Better classroom behavior
8. Development of self confidence
9. Recognition of the importance of getting along with people
10. Development of sportsmanship
11. Awareness of the benefits of budgeting time
12. More effective study habits
13. Art of self application
14. Willingness to put forth effort
15. Improvement of study conditions in school or at home
16. Good classroom preparation
17. Balance of athletics or other school activities with subject matter
18. Decrease in problems of cheating, lying, stealing
19. Value of time, money, and the wise use of each
20. Good physical and mental habits
21. Sense of belonging, of being accepted by a group or groups
22. Sense of life values
23. Ethical and spiritual meanings in life
24. Responsibility and assumption of the obligations of a citizen and worker in the community
25. Realization that race, color, and sex have little or no relation to aptitudes and abilities
The ratings of the ten counselor educators upon the thirty-two items composing the second hypothesis can be found in the Appendix. 4

Tabulations were made of frequencies of responses of school administrators, counselors, and teachers in both NDEA and Non-NDEA participating schools. Each series of frequencies was examined to see if a pattern existed in the perceptions of the different professional educators, or between the three school types participating in NDEA. A total of thirty-two items is contained in the second hypothesis. Seven of these items compose Group III; twenty-five items were included in Group IV.

**Group III Scores**

**TABLE 12** contains the adjusted mean frequencies for the different type schools in Group III. This **TABLE** contains only those items which were found to be significant at the ten per cent level by taking into consideration an analysis of variance (F) and covariance ("t"). The adjusted mean frequencies for all items in Group III can be found in the Appendix. 5 Action between the groups and interaction within the city, exempted village and local schools will be shown and discussed for Group III. All interactions are significant at the ten per cent level.

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4 Appendix, p. 170-171.

5 Appendix, p. 170.
TABLE 12

**Group III**

Adjusted Mean Frequencies of Professional Educators According to School Type*

<table>
<thead>
<tr>
<th></th>
<th>Exempted</th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Local</td>
<td>Village</td>
<td>City</td>
<td></td>
</tr>
<tr>
<td></td>
<td>N  Mean</td>
<td>N  Mean</td>
<td>N  Mean</td>
<td></td>
</tr>
<tr>
<td>N.D.E.A.</td>
<td>97 2.33</td>
<td>23 2.32</td>
<td>72 2.35</td>
<td></td>
</tr>
<tr>
<td>Non-N.D.E.A.</td>
<td>93 1.83</td>
<td>22 2.00</td>
<td>72 2.28</td>
<td></td>
</tr>
</tbody>
</table>

*Significant at the ten per cent level of confidence.

TABLE 12 shows that professional educators in both NDEA and Non-NDEA city schools believed that the best job of providing guidance services for the self-actualization of students was being done in their systems. The mean differences in the perceptions of professional educators in city, exempted village, and local school systems that were participating in NDEA, appeared to be small; however, they are significant. TABLE 12 also indicated that professional educators in Non-NDEA participating exempted village schools rated their programs higher than local schools not participating in NDEA.

Frequency scores of both NDEA and Non-NDEA schools were statistically merged to see if a significant difference existed in the selective perceptions of groupings of school administrators, counselors, and teachers. The information for Group III follows in TABLE 13.
TABLE 13

Group III

Adjusted Mean Frequencies of Professional Educators
When NDEA and Non-NDEA Schools Were Statistically Merged*

<table>
<thead>
<tr>
<th>Professional Educators</th>
<th>N</th>
<th>Mean</th>
</tr>
</thead>
<tbody>
<tr>
<td>Principals</td>
<td>50</td>
<td>2.38</td>
</tr>
<tr>
<td>Counselors</td>
<td>47</td>
<td>2.44</td>
</tr>
<tr>
<td>Teachers</td>
<td>282</td>
<td>2.11</td>
</tr>
</tbody>
</table>

*Significant at the ten per cent level of confidence.

From the foregoing TABLE it will be noted that counselors in statistically merged NDEA and Non-NDEA participating schools perceived, to a greater extent than other professional educators, that guidance services made a greater contribution to the self-actualization of students. The adjusted mean of the principals was lower than that of the counselors. Teachers rated the contribution of guidance least best of the professional educator groups with a significant mean difference lower than administrators.

When the adjusted mean frequencies for Group III of the NDEA and Non-NDEA participating schools were statistically merged, it was found that professional educators in city schools rated their programs of guidance services significantly higher than did those from local and exempted village schools. This information is shown in TABLE 14.
TABLE 14

Group III

Adjusted Mean Frequencies When NDEA and Non-NDEA Type Schools Were Statistically Merged*

<table>
<thead>
<tr>
<th>Type School</th>
<th>N</th>
<th>Mean</th>
</tr>
</thead>
<tbody>
<tr>
<td>City</td>
<td>144</td>
<td>2.32</td>
</tr>
<tr>
<td>Local</td>
<td>190</td>
<td>2.08</td>
</tr>
<tr>
<td>Exempted Village</td>
<td>45</td>
<td>2.16</td>
</tr>
</tbody>
</table>

*Significant at the ten per cent level of confidence.

Group IV Scores

Group IV scores will now be reported. This area consisted of twenty-five items relating to the contribution of guidance services to the self-actualization of students, but upon which counselor educators were of differing opinions as to the amount of emphasis that should be given. All of the adjusted mean frequencies for Group IV can be found in the Appendix; adjusted mean frequencies of school types is shown in TABLE 15. Interactions between the adjusted means NDEA and Non-NDEA for city, exempted village, and local schools will be shown and discussed for Group IV. All interactions are significant at the ten percent level.

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6Appendix, p.171.
TABLE 15

Group IV

Adjusted Mean Frequencies of Professional Educators According to School Type*

<table>
<thead>
<tr>
<th></th>
<th>Local</th>
<th>Village</th>
<th>City</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>N</td>
<td>Mean</td>
<td>N</td>
</tr>
<tr>
<td>N.D.E.A.</td>
<td>97</td>
<td>2.31</td>
<td>23</td>
</tr>
<tr>
<td>Non-N.D.E.A.</td>
<td>93</td>
<td>2.00</td>
<td>22</td>
</tr>
</tbody>
</table>

*Significant at the ten per cent level of confidence.

Professional educators in both NDEA and Non-NDEA city schools believed that the best job of providing guidance services that contributed to the self-actualization of students was being done in their systems. Professional educators from NDEA participating local and exempted village schools were in apparent agreement as to the contribution of guidance services to the self-actualization of students. Professional educators in each of three type schools participating in NDEA rated their programs of guidance services significantly higher than Non-NDEA participating schools. Professional educators in Non-NDEA participating exempted village schools rated their programs of guidance services significantly higher than Non-NDEA participating local schools.

TABLE 16 shows Group IV scores of professional educators in statistically merged NDEA and Non-NDEA schools which revealed a significant difference in the perceptions of professional educators as a
group relative to the extent of guidance services contributing to the self-actualization of students.

TABLE 16

Group IV

Adjusted Mean Frequencies of Professional Educators In Statistically Merged NDEA and Non-NDEA Schools*

<table>
<thead>
<tr>
<th>Professional Educators</th>
<th>N</th>
<th>Mean</th>
</tr>
</thead>
<tbody>
<tr>
<td>Principals</td>
<td>50</td>
<td>2.43</td>
</tr>
<tr>
<td>Counselors</td>
<td>47</td>
<td>2.49</td>
</tr>
<tr>
<td>Teachers</td>
<td>282</td>
<td>2.20</td>
</tr>
</tbody>
</table>

*Significant at the ten per cent level of confidence.

In Group IV, counselors rated higher than other professional educators their perceptions of the contribution of guidance to the self-actualization of students. The counselors' adjusted mean of 2.49, however, is significantly different than the 2.44 rating given the items in Group III. Both principals and teachers, also, rated Group IV items significantly different from Group III, although teachers' ratings were the lowest among the professional educators in both groups.

When the adjusted mean frequencies for Group IV of the NDEA and Non-NDEA participating schools were statistically merged, it was found that professional educators in cities rated their programs of guidance services that contributed to the self-actualization of students significantly higher than local and exempted village schools. This information is shown in TABLE 17.
TABLE 17

Group IV

Adjusted Mean Frequencies When NDEA and Non-NDEA Type Schools Were Statistically Merged*

<table>
<thead>
<tr>
<th>Type School</th>
<th>N</th>
<th>Mean</th>
</tr>
</thead>
<tbody>
<tr>
<td>City</td>
<td>144</td>
<td>2.44</td>
</tr>
<tr>
<td>Local</td>
<td>190</td>
<td>2.16</td>
</tr>
<tr>
<td>Exempted Village</td>
<td>45</td>
<td>2.20</td>
</tr>
</tbody>
</table>

*Significant at the ten per cent level of confidence.

In summation, in both Group III, i.e., items agreed by ten Ohio counselor educators as being necessary to the self-actualization of students and Group IV, i.e., items upon which ten Ohio counselor educators were lacking in agreement, the null hypothesis is accepted. There are no differences between schools participating in Title V-A of the National Defense Education Act and those not participating in the Act. Research data did not show NDEA schools significantly higher than Non-NDEA schools.

Research evidence, however, does not support the hypothesis that there are no differences between the selective perceptions of professional educators regarding the extent to which guidance services contributed to the self-actualization of students. When NDEA and Non-NDEA scores were statistically merged counselors rated the items in Group III and in Group IV significantly higher than school administrators. Counselors and administrators in the same schools perceived the items in Group III and in Group IV significantly higher than teachers.
Differences among school types are not supported by the hypothesis. When NDEA and Non-NDEA scores were statistically merged, professional educators in city schools for both Group III and Group IV items perceived their guidance programs to be significantly greater in contributing to the self-actualization of students than did professional educators in either exempted village or local schools. Professional educators in exempted village schools perceived both Group III and Group IV items higher than did professional educators in local schools. This gives overall limited support for the hypothesis.

Third Null Hypothesis

Between the two study groups there are no differences between the selective perceptions of administrators, counselors, and teachers in recognition that occupational information is maintained and disseminated with evidence of concomitant positive results.

The thirteen items related to the foregoing null hypothesis were divided into Group V and Group VI. Group V consisted of eight individual items rated by ten Ohio counselor educators as receiving "above average" or "superior" attention in their contribution to the maintenance and dissemination of occupational information with concomitant positive results. These items are indicated in TABLE 18.
TABLE 18

Group V

Items Rated by Counselor Educators "Above Average" or "Superior" in Their Contribution to the Maintenance and Dissemination of Occupational Information With Concomitant Positive Results

1. Earlier and better planning for future by students
2. Better use of vocational information
3. Provision for follow-up of individuals
   a. Who enter occupations after graduation
   b. Who do not finish high school
   c. Who enter colleges, business schools, and trade schools
4. Increased awareness of the importance of selecting an occupation in harmony with the strongest interests and most outstanding abilities of the pupils
5. Awareness of vocational conditions and opportunities
6. Information about the factors which should be considered in making an occupational choice
7. Knowledge of major vocational trends
8. Greater knowledge of scholarships and loans available to secure the preparation necessary for the vocation chosen

Group VI consisted of five items upon which there was a lack of agreement among the ten Ohio counselor educators as to their proper emphasis in contributing to the maintenance and dissemination of occupational information with concomitant positive results. These items are listed in TABLE 19.
TABLE 19

Group VI

Items Where Agreement Was Lacking Among Counselor Educators As to Their Contribution to the Maintenance and Dissemination Of Occupational Information With Concomitant Positive Results

1. Decrease in problems of employment and vocational adjustment
2. Assistance in the choice of occupations that are suitable to the best interests of the child
3. Information about the training required for successful entry into their chosen occupations
4. Selection of school courses and extra-class activities that are in harmony with their vocational goals
5. Increased interest in part-time summer employment

The ratings of the ten counselor educators upon the thirteen items composing the third hypothesis can be found in the Appendix.7

As in the first and second hypothesis tabulations were made of frequencies from responses of school administrators, counselors, and teachers in both NDEA and Non-NDEA participating schools. Each series of frequencies was examined to see if there was a pattern in the perceptions among the different professional educators, or between the school types that were participating in NDEA. Responses for the eight items in Group V were separated from the five items included in Group VI.

Group V Scores

TABLE 20 contains the adjusted mean frequencies for the professional educators in both NDEA and Non-NDEA participating schools.

7Appendix, p. 172-173.
in Group V. This TABLE contains only those items which were found to be significant at the ten per cent level by taking into consideration an analysis of variance (F) and covariance ("t"). All of the adjusted mean frequencies for Group V and Group VI can be found in the Appendix. Action between the NDEA and Non-NDEA participating groups and interaction within the city, exempted village and local schools will be shown and discussed for Group V. All interactions are significant at the ten per cent level.

TABLE 20

Group V

Adjusted Mean Frequencies of Professional Educators According to School Type in Both NDEA and Non-NDEA Participating Schools*

<table>
<thead>
<tr>
<th></th>
<th>Total</th>
<th>Exempted Personnel</th>
<th>City</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>N</td>
<td>Mean</td>
<td>N</td>
<td>Mean</td>
</tr>
<tr>
<td>N.D.E.A.</td>
<td>97</td>
<td>2.46</td>
<td>23</td>
<td>2.84</td>
</tr>
<tr>
<td></td>
<td>72</td>
<td>2.85</td>
<td>192</td>
<td>2.65</td>
</tr>
<tr>
<td>Non-N.D.E.A.</td>
<td>93</td>
<td>2.03</td>
<td>22</td>
<td>1.92</td>
</tr>
<tr>
<td></td>
<td>72</td>
<td>2.58</td>
<td>187</td>
<td>2.23</td>
</tr>
</tbody>
</table>

*Significant at the ten per cent level of confidence.

It will be noted that professional educators in the three type schools participating in the National Defense Education Act rated their schools higher in their recognition that occupational information is maintained and disseminated with concomitant positive results than Non-NDEA participating schools. City schools were rated as doing

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8Appendix, p. 172-173.
the best job in both NDEA and Non-NDEA schools. The adjusted mean ratings for exempted village NDEA schools approximated that of the city, while the local NDEA school had the lowest adjusted mean frequency. In the Non-NDEA participating schools, the perceptions of professional educators in the local schools exceeded those of the educators in the exempted village schools. Educators in participating NDEA exempted village schools rated their programs significantly higher than educators in Non-NDEA participating city schools. This was also true in Group I and in Group III.

Frequency scores of both NDEA and Non-NDEA schools were statistically merged to see if there was a significant difference in the selective perceptions of groupings of school administrators, counselors, and teachers. The information for Group V follows.

TABLE 21

Group V

<table>
<thead>
<tr>
<th>Professional Educators</th>
<th>N</th>
<th>Mean</th>
</tr>
</thead>
<tbody>
<tr>
<td>Principals</td>
<td>50</td>
<td>2.37</td>
</tr>
<tr>
<td>Counselors</td>
<td>47</td>
<td>2.61</td>
</tr>
<tr>
<td>Teachers</td>
<td>282</td>
<td>2.43</td>
</tr>
</tbody>
</table>

*Significant at the ten per cent level of confidence.

From TABLE 21 it will be noted that counselors in statistically merged NDEA and Non-NDEA participating schools perceived, to a greater extent than other professional educators, that occupational information
was maintained and disseminated with concomitant positive results.

For the first time in this reporting, however, teachers have a higher adjusted mean frequency than the school administrators. Teachers rated the contribution of guidance significantly higher than administrators who in turn rated the program significantly lower than counselors.

When the adjusted mean frequencies for Group V of the NDEA and Non-NDEA participating schools were statistically merged, it was found that professional educators in cities rated their programs of guidance services contributing to the maintenance and dissemination of occupational information with concomitant positive results higher than professional educators in local and exempted village schools. This information is shown in TABLE 22.

**TABLE 22**

**Group V**

Adjusted Mean Frequencies When NDEA and Non-NDEA Type Schools Were Statistically Merged*

<table>
<thead>
<tr>
<th>Type School</th>
<th>N</th>
<th>Mean</th>
</tr>
</thead>
<tbody>
<tr>
<td>City</td>
<td>144</td>
<td>2.72</td>
</tr>
<tr>
<td>Local</td>
<td>190</td>
<td>2.25</td>
</tr>
<tr>
<td>Exempted Village</td>
<td>45</td>
<td>2.39</td>
</tr>
</tbody>
</table>

*Significant at the ten per cent level of confidence.
Group VI Scores

Group VI scores will now be reported. This area consisted of five items related to the contribution of guidance services in the maintenance and dissemination of occupational information with concomitant positive results. In these five items counselor educators were of differing opinions as to the amount of emphasis that should be given. The adjusted mean frequencies for Group VI can be found in the Appendix. \(^9\) Adjusted mean frequencies of professional educators in NDEA and Non-NDEA participating schools is shown in TABLE 23.

TABLE 23

<table>
<thead>
<tr>
<th>School Type</th>
<th>N</th>
<th>Mean</th>
<th>N</th>
<th>Mean</th>
<th>N</th>
<th>Mean</th>
<th>N</th>
<th>Mean</th>
</tr>
</thead>
<tbody>
<tr>
<td>Local</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>N.D.E.A.</td>
<td>97</td>
<td>2.49</td>
<td>23</td>
<td>2.83</td>
<td>72</td>
<td>2.79</td>
<td>192</td>
<td>2.64</td>
</tr>
<tr>
<td>Non-N.D.E.A.</td>
<td>93</td>
<td>2.14</td>
<td>22</td>
<td>2.06</td>
<td>72</td>
<td>2.56</td>
<td>187</td>
<td>2.29</td>
</tr>
</tbody>
</table>

*Significant at the ten per cent level of confidence.

It will be noted that professional educators in the three type schools participating in the National Defense Education Act rated their programs higher in their recognition that occupational information was maintained and disseminated with concomitant positive results than schools not participating in the Act. For the first time

\(^9\)Appendix, p. 173.
professional educators in exempted village schools participating in NDEA rated their schools higher than did the educators in city schools. City school educators not participating in NDEA, however, rated their schools significantly higher than local and exempted village schools. Educators in exempted village schools participating in NDEA had the highest significant adjusted mean frequency, but in the non-participating NDEA exempted village schools, educators rated them the lowest of the three types of schools; however, these results are still significant at ten per cent level.

Frequency scores of both NDEA and Non-NDEA participating schools were statistically merged to see if there was a significant difference in the selective perceptions of groupings of school administrators, counselors, and teachers. The information for Group VI follows.

**TABLE 24**

**Group VI**

**Adjusted Mean Frequencies of Professional Educators When NDEA and Non-NDEA Schools Were Statistically Merged**

<table>
<thead>
<tr>
<th>Professional Educators</th>
<th>N</th>
<th>Mean</th>
</tr>
</thead>
<tbody>
<tr>
<td>Principals</td>
<td>50</td>
<td>2.47</td>
</tr>
<tr>
<td>Counselors</td>
<td>47</td>
<td>2.66</td>
</tr>
<tr>
<td>Teachers</td>
<td>282</td>
<td>2.43</td>
</tr>
</tbody>
</table>

*Significant at the ten per cent level of confidence.

From **TABLE 24** it will be noted that counselors in statistically merged NDEA and Non-NDEA participating schools perceived, to a
greater extent than other professional educators, that occupational information was maintained and disseminated with concomitant positive results. Counselors had the highest adjusted mean rating, followed by administrators and teachers.

When the adjusted mean frequencies for Group VI of the NDEA and Non-NDEA participating schools were statistically merged, it was found that professional educators in cities rated their programs of disseminating occupational information significantly higher than local and exempted village schools. Educators in exempted village schools rated their programs significantly greater than local schools. This information is shown in TABLE 25.

<table>
<thead>
<tr>
<th>Type School</th>
<th>N</th>
<th>Mean</th>
</tr>
</thead>
<tbody>
<tr>
<td>City</td>
<td>144</td>
<td>2.67</td>
</tr>
<tr>
<td>Local</td>
<td>190</td>
<td>2.32</td>
</tr>
<tr>
<td>Exempted Village</td>
<td>45</td>
<td>2.45</td>
</tr>
</tbody>
</table>

*Significant at the ten per cent level of confidence.

To summarize, in both Group V, i.e., items agreed by ten Ohio counselor educators as being necessary for occupational information to be maintained and disseminated with concomitant positive results, and Group VI, i.e., items upon which ten Ohio counselor educators were
lacking in agreement, support was lacking for the hypothesis that there is no difference between schools participating in the National Defense Education Act and those schools that are not participating in the Act. Research data showed in both Group V and Group VI that NDEA participating city schools were rated higher by professional educators than Non-NDEA participating schools. Educators in NDEA participating exempted village schools rated their programs of guidance services contributing to the maintenance and dissemination of occupational information with concomitant positive results higher than educators in Non-NDEA participating exempted village schools.

Research evidence does not support the hypothesis that there are no differences between the selective perceptions of professional educators regarding the extent that occupational information is maintained and disseminated with concomitant positive results. When NDEA and Non-NDEA scores were merged, counselors in both NDEA and Non-NDEA schools rated items in Group V and Group VI significantly higher than administrators and teachers.

Differences in school type is not supported by the hypothesis. When NDEA and Non-NDEA scores were merged, professional educators in city schools rated their programs significantly higher than either exempted village or local schools in both Group V and Group VI. Professional educators in exempted village schools rated their programs significantly higher than did educators in local schools in both Group V and Group VI.
The data provided do not lend to an acceptance of the third hypothesis that there are no differences between the judgements of administrators, counselors and teachers in their recognition that occupational information is maintained and disseminated with evidence of concomitant positive results.

Fourth Null Hypothesis

Between the two study groups there are no differences between the selective perceptions of administrators, counselors, and teachers that the guidance program has contributed to greater numbers of students being realistic in their desire to seek higher education.

Six of the 148 items on the Questionnaire applied to the fourth null hypothesis. Group VII consisted of two individual items rated by ten Ohio counselor educators as receiving "above average" or "superior" attention in their contribution to greater numbers of students being realistic in their desire to seek higher education. These two items are indicated in TABLE 26.

| TABLE 26 |
| Group VII |

Items Rated by Counselor Educators "Above Average" or "Superior" in Their Contribution to Greater Numbers of Students Being Realistic in Their Desire to Seek Higher Education

1. More realistic choice of college
2. Knowledge of finances needed to further their education

Group VIII consisted of the four items upon which there was a lack of agreement among the ten Ohio counselor educators as to the
proper emphasis in their contribution to greater numbers of students being realistic in their desire to seek higher education. These items are listed in TABLE 27.

TABLE 27

Group VIII

Items Where Agreement Was Lacking Among Counselor Educators as to Their Contribution to Greater Numbers of Students Being Realistic in Their Desire to Seek Higher Education

1. Increased number seeking advanced education
2. More college scholarships
3. Awareness of college and university requirements
4. Specific examples among students of more realistic vocational planning

The ratings of the ten counselor educators upon the six items composing the fourth hypothesis can be found in the Appendix.10

Frequency tabulations were made of school administrators', counselors', and teachers' responses from both NDEA and Non-NDEA participating schools. Each series of frequencies was examined to see if a pattern existed in the perceptions of the different professional educators, or between the three school types participating in NDEA. A total of six items is contained in the fourth hypothesis. Two of these items compose Group VII; four items were included in Group VIII.

10 Appendix, p. 174-175.
Group VII Scores

TABLE 28 contains the adjusted mean frequencies for the different type schools in Group VII. This TABLE contains only those items which were found to be significant at the ten per cent level by taking into consideration an analysis of variance (F) and covariance ("t"). The adjusted mean frequencies for both items in Group VII can be found in the Appendix. Action between the groups and interaction within the city, exempted village, and local schools will be shown and discussed for Group VII. All interactions are significant at the ten per cent level.

TABLE 28

Group VII

Adjusted Mean Frequencies of Professional Educators According to School Type*

<table>
<thead>
<tr>
<th></th>
<th>Exempted</th>
<th>Local</th>
<th>Village</th>
<th>City</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>N</td>
<td>Mean</td>
<td>N</td>
<td>Mean</td>
</tr>
<tr>
<td>N.D.E.A.</td>
<td>97</td>
<td>2.72</td>
<td>23</td>
<td>2.72</td>
</tr>
<tr>
<td>Non-N.D.E.A.</td>
<td>93</td>
<td>2.31</td>
<td>22</td>
<td>2.11</td>
</tr>
</tbody>
</table>

*Significant at the ten per cent level of confidence.

TABLE 28 shows that professional educators in both NDEA and Non-NDEA city schools believed that the best job of assisting students in being realistic in their desire to seek higher education was provided in their systems. The mean differences in the perceptions of

11Appendix, p. 174.
professional educators in exempted village and local school systems were the same, but lower than the adjusted mean frequency for cities. Interaction between participating and non-participating schools in TABLE 28 indicated that the perceptions of professional educators in Non-NDEA participating city schools were significantly higher than the perceptions of professional educators in local and exempted village schools that were participating in NDEA. The mean difference for exempted village schools was lower than that for local schools. All differences were significant.

Frequency scores of both NDEA and Non-NDEA schools were statistically merged to see if a significant difference existed in the selective perceptions of groupings of school administrators, counselors, and teachers. The information for Group VII follows in TABLE 29.

<p>| TABLE 29 |
|------------------|--------|-----|
| Group VII        |        |
| Adjusted Mean Frequencies of Professional Educators When NDEA and Non-NDEA Schools Were Statistically Merged* |</p>
<table>
<thead>
<tr>
<th>Professional Educators</th>
<th>N</th>
<th>Mean</th>
</tr>
</thead>
<tbody>
<tr>
<td>Principals</td>
<td>50</td>
<td>2.87</td>
</tr>
<tr>
<td>Counselors</td>
<td>47</td>
<td>3.07</td>
</tr>
<tr>
<td>Teachers</td>
<td>282</td>
<td>2.54</td>
</tr>
</tbody>
</table>

*Significant at the ten per cent level of confidence.
From the foregoing TABLE it will be noted that counselors in statistically merged NDEA and Non-NDEA participating schools perceived, to a greater extent than other professional educators, that guidance services contributed to greater numbers of students being realistic in their desire to seek higher education. The adjusted mean of the principals was significantly lower than that of the counselors. Teachers rated the contribution of guidance least effective of the professional educator groups with an adjusted mean difference significantly lower than administrators.

When the adjusted mean frequencies for Group VII of the NDEA and Non-NDEA participating schools were merged, it was found that professional educators in city schools rated their programs of guidance services significantly higher than did those from local and exempted village schools. Adjusted mean frequencies were significantly higher for local schools than for exempted village schools. This information is shown in TABLE 30.

### TABLE 30

**Group VII**

<table>
<thead>
<tr>
<th>Type School</th>
<th>N</th>
<th>Mean</th>
</tr>
</thead>
<tbody>
<tr>
<td>City</td>
<td>144</td>
<td>2.89</td>
</tr>
<tr>
<td>Local</td>
<td>190</td>
<td>2.52</td>
</tr>
<tr>
<td>Exempted Village</td>
<td>45</td>
<td>2.42</td>
</tr>
</tbody>
</table>

*Significant at the ten per cent level of confidence.*
Group VIII Scores

Group VIII scores will now be reported. This area consisted of four items relating to the contribution of guidance services to greater numbers of students being realistic in their desire to seek higher education, but upon which ten counselor educators were of differing opinions as to the amount of emphasis that should be given. All of the adjusted mean frequencies for Group VIII can be found in the Appendix. Adjusted mean frequencies of school types is shown in Table 31. Interactions within and between the adjusted means of city, exempted village, and local schools will be shown and discussed for Group VIII. All interactions are significant at the ten per cent level.

TABLE 31

Group VIII

Adjusted Mean Frequencies of Professional Educators According to School Type*

<table>
<thead>
<tr>
<th></th>
<th>Exempted</th>
<th></th>
<th>Local</th>
<th></th>
<th>Village</th>
<th>N</th>
<th>Mean</th>
<th></th>
<th>Village</th>
<th>N</th>
<th>Mean</th>
<th></th>
<th>City</th>
<th>N</th>
<th>Mean</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>N.D.E.A.</td>
<td>97</td>
<td>2.67</td>
<td>23</td>
<td>2.98</td>
<td>72</td>
<td>2.98</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Non-N.D.E.A.</td>
<td>93</td>
<td>2.27</td>
<td>22</td>
<td>2.22</td>
<td>72</td>
<td>2.86</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

*Significant at the ten per cent level of confidence.

Professional educators in NDEA and Non-NDEA city schools believed that the best job of providing guidance services was being done

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12 Appendix, p. 175.
in their systems. Professional educators in NDEA participating city and exempted village schools were in apparent agreement as to the contribution of guidance services to a greater number of students being realistic in their desire to seek higher education. Educators in local NDEA participating schools rated their programs of guidance services significantly lower than the professional educators from city and exempted village schools. Professional educators in each of the three types of schools participating in NDEA rated their programs of guidance services significantly higher than Non-NDEA participating schools. Professional educators in Non-NDEA participating local schools rated their programs of guidance services significantly higher than Non-NDEA participating exempted village schools.

TABLE 32 shows Group VIII scores of professional educators in statistically merged NDEA and Non-NDEA schools revealing significant differences among the perceptions of the professional educators concerning the extent to which guidance services contribute to greater numbers of students being realistic in their desire to seek higher education.

<table>
<thead>
<tr>
<th>Professional Educators</th>
<th>N</th>
<th>Mean</th>
</tr>
</thead>
<tbody>
<tr>
<td>Principals</td>
<td>50</td>
<td>2.76</td>
</tr>
<tr>
<td>Counselors</td>
<td>47</td>
<td>2.87</td>
</tr>
<tr>
<td>Teachers</td>
<td>282</td>
<td>2.60</td>
</tr>
</tbody>
</table>

*Significant at the ten per cent level of confidence.
In Group VIII, counselors rated their perceptions of the contribution of guidance to greater numbers of students being realistic in their desire to seek higher education significantly higher than other professional educators. The counselors' adjusted mean of 2.87, however, is significantly different from the 3.07 rating given the items in Group VII. Principals and teachers, also, rated Group VIII items significantly different from Group VII, although teachers' ratings were the lowest among the professional educators in both groups.

When the adjusted mean frequencies for Group VIII of the NDEA and Non-NDEA participating schools were statistically merged, these data showed that professional educators in city schools rated their programs of guidance services significantly higher than did those from local and exempted village schools. In Non-NDEA participating schools under the same conditions, exempted village professional educators rated their program of guidance services significantly higher than educators in local schools. This information is shown in TABLE 33.

<table>
<thead>
<tr>
<th>Type School</th>
<th>N</th>
<th>Mean</th>
</tr>
</thead>
<tbody>
<tr>
<td>City</td>
<td>144</td>
<td>2.92</td>
</tr>
<tr>
<td>Local</td>
<td>190</td>
<td>2.47</td>
</tr>
<tr>
<td>Exempted Village</td>
<td>45</td>
<td>2.61</td>
</tr>
</tbody>
</table>

*Significant at the ten per cent level of confidence.
In summation, in both Group VII, i.e., items upon which ten Ohio counselor educators agreed were necessary to greater number of students being realistic in their desire to seek higher education, and Group VIII, i.e., items where agreement by ten Ohio counselor educators was lacking, the null hypothesis is accepted. There are no differences between schools participating in Title V-A of the National Defense Education Act and those not participating in the Act. Research data did not show NDEA schools significantly higher than Non-NDEA schools.

Research evidence does not support the hypothesis that there are no differences between the selective perceptions of professional educators regarding the extent to which guidance services contributed to greater number of students being realistic in their desire to seek higher education. When NDEA and Non-NDEA scores were statistically merged, counselors rated the items in Group VII and in Group VIII significantly higher than school administrators. Counselors and administrators in the same schools perceived the items in Group VII and in Group VIII significantly higher than teachers.

When scores of NDEA and Non-NDEA schools were statistically merged, differences among school types did not support the fourth hypothesis. Professional educators in cities in NDEA and Non-NDEA statistically merged schools for the items of Group VII and Group VIII perceived the contribution of their guidance programs to be significantly higher than did professional educators in either exempted village or local schools. Professional educators in local schools
perceived Group VII items significantly higher than educators in exempted village schools. For Group VIII items the reverse was true. Limited support was given the fourth hypothesis.

Fifth Null Hypothesis

Between the two study groups there are no differences between the selective perceptions of administrators, counselors, and teachers as to the awareness of, support for, and expectancies of guidance services by parents.

Nineteen of the 148 items on the research questionnaire applied to the fifth null hypothesis. Group IX consisted of two individual items rated by ten Ohio counselor educators as idealistically receiving "above average" or "superior" attention in their contribution to the awareness of, support for, and expectancies of guidance services by parents. These two items are indicated in TABLE 34.

TABLE 34

<table>
<thead>
<tr>
<th>Group IX</th>
</tr>
</thead>
<tbody>
<tr>
<td>Items Rated by Counselor Educators &quot;Above Average&quot; or &quot;Superior&quot; in Their Contribution to the Awareness of, Support for, and Expectancies of Guidance Services by Parents</td>
</tr>
<tr>
<td>1. Better understanding of the ability and interests of their child</td>
</tr>
<tr>
<td>2. Realization that there are dangers in choosing a definite occupation for their children</td>
</tr>
</tbody>
</table>

Group X consisted of the seventeen items upon which there was a lack of agreement among the ten Ohio counselor educators as to the proper emphasis in their contribution to the awareness of, support for,
and expectancies of guidance services by parents. These items are listed in TABLE 35.

**TABLE 35**

**Group X**

Items Where Agreement Was Lacking Among Counselor Educators as to Their Contribution to the Awareness of, Support for, and Expectancies of Guidance Services by Parents

1. Interpretation of children's test scores
2. Arrangement of conferences with the counselor
3. Increased respect for the school
4. Improvement of study habits of their children
5. Recognition of different interest patterns of the various members of the family
6. Realization that each individual has individual rights
7. Appreciation of brother-sister relationships
8. Consideration for others in the use of the family car
9. Recognition that all people have problems
10. Recognition that the problems of children differ at different ages
11. Recognition that respect is basic to fairness
12. Realization of the dangers of dominance
13. Realization of the importance of home fellowship
14. Maintenance of a balance of home duties - neither too few nor too many
15. Knowledge of the causes of jealousy or friction among children
16. Awareness of the importance of wholesome home conditions - physical, social, moral
17. Realization that cooperation with the school is important

The ratings of the ten counselor educators of the nineteen items composing the fifth hypothesis can be found in the Appendix. The tabulations were made of frequencies of responses of school administrators, counselors, and teachers in NDEA and Non-NDEA participating schools. Each series of frequencies was examined to determine
the effect of interaction upon the differences of perceptions of the professional educators in the three school types participating in NDEA. A total of nineteen items is contained in the fifth hypothesis. Two of these items compose Group IX; seventeen items were included in Group X.

**Group IX Scores**

TABLE 36 contains the adjusted mean frequencies for professional educators in both NDEA and Non-NDEA participating schools in Group IX. This TABLE contains only those items which were found to be significant at the ten per cent level by taking into consideration an analysis of variance (F) and covariance ("t"). All of the adjusted mean frequencies for Group IX and Group X can be found in the Appendix. Action between the groups and interactions within the city, exempted village and local schools will be shown and discussed for Group IX. All interactions are significant at the ten per cent level.

**TABLE 36**

**Group IX**

Adjusted Mean Frequencies of Professional Educators According to School Type in Both NDEA and Non-NDEA Participating Schools*

<table>
<thead>
<tr>
<th></th>
<th>Local</th>
<th>Exempted Village</th>
<th>City</th>
<th>Total Personnel Groups</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>N</td>
<td>Mean</td>
<td>N</td>
<td>Mean</td>
</tr>
<tr>
<td>N.D.E.A.</td>
<td>97</td>
<td>2.41</td>
<td>23</td>
<td>2.63</td>
</tr>
<tr>
<td>Non-N.D.E.A.</td>
<td>93</td>
<td>1.73</td>
<td>22</td>
<td>1.89</td>
</tr>
</tbody>
</table>

*Significant at the ten per cent level of confidence.

14 Appendix, p. 176-177.
It will be noted that professional educators in the three types of schools participating in the National Defense Education Act rated their schools significantly greater in their awareness of, support for, and expectancies of guidance services by parents, than Non-NDEA participating schools. City schools were rated by professional educators as doing the best job in both NDEA and Non-NDEA schools. The adjusted mean frequencies for exempted village schools participating in NDEA were rated by professional educators with a significantly higher adjusted mean frequency than the ratings of professional educators in local NDEA participating schools. In the Non-NDEA participating schools, the perceptions of professional educators in the exempted village schools exceeded those of the educators in the local schools. Both NDEA participating and non-participating local schools were rated by their professional educators with significantly lower adjusted mean frequencies than did counterparts in the exempted village schools.

Frequency scores of both NDEA and Non-NDEA schools were statistically merged to see if they were significantly different in the selective perceptions of groupings of school administrators, counselors, and teachers. The information for Group IX follows in TABLE 37.
TABLE 37

Group IX

Adjusted Mean Frequencies of Professional Educators
When NDEA and Non-NDEA Schools Were Statistically Merged*

<table>
<thead>
<tr>
<th>Professional Educators</th>
<th>N</th>
<th>Mean</th>
</tr>
</thead>
<tbody>
<tr>
<td>Principals</td>
<td>50</td>
<td>2.48</td>
</tr>
<tr>
<td>Counselors</td>
<td>47</td>
<td>2.72</td>
</tr>
<tr>
<td>Teachers</td>
<td>282</td>
<td>2.20</td>
</tr>
</tbody>
</table>

*Significant at the ten per cent level of confidence.

From the foregoing TABLE it will be noted that counselors in statistically merged NDEA and Non-NDEA participating schools perceived, to a greater extent than other professional educators, that guidance services contributed to the awareness of, support for, and expectancies of guidance services by parents. The adjusted mean of the principals was lower than that of the counselors. Teachers rated the contribution of guidance the lowest of the professional educator groups with an adjusted mean difference lower than administrators.

When the adjusted mean frequencies for Group IX of the NDEA and Non-NDEA participating schools were statistically merged, it was found that professional educators in city schools rated their programs of guidance services significantly higher than did those from local and exempted village schools. Adjusted mean frequencies were significantly higher for exempted village schools than for local schools. This information is shown in TABLE 38.
**TABLE 38**

**Group IX**

Adjusted Mean Frequencies When NDEA and Non-NDEA Type Schools Were Statistically Merged*

<table>
<thead>
<tr>
<th>Type School</th>
<th>N</th>
<th>Mean</th>
</tr>
</thead>
<tbody>
<tr>
<td>City</td>
<td>144</td>
<td>2.62</td>
</tr>
<tr>
<td>Local</td>
<td>190</td>
<td>2.07</td>
</tr>
<tr>
<td>Exempted Village</td>
<td>45</td>
<td>2.27</td>
</tr>
</tbody>
</table>

*Significant at the ten per cent level of confidence.

**Group X Scores**

Group X scores will now be reported. This area consisted of seventeen items relating to the contribution of guidance services to the awareness of, support for, and expectancies of guidance services by parents, but upon which ten Ohio counselor educators differed in their opinions on the amount of emphasis that should be given. All of the adjusted mean frequencies for Group X can be found in the Appendix.15 Adjusted mean frequencies for professional educators in both NDEA and Non-NDEA participating schools in Group X will be shown in **TABLE 39**. Interactions of the adjusted means of city, exempted village, and local schools will be shown and discussed for Group X. All interactions are significant at the ten per cent level.

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15 Appendix, p. 177.
TABLE 39

Group X

Adjusted Mean Frequencies of Professional Educators According to School Type in Both NDEA and Non-NDEA Participating Schools*

<table>
<thead>
<tr>
<th></th>
<th>Local</th>
<th>Exempted Village</th>
<th>City</th>
<th>Total Personnel Groups</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>N</td>
<td>N</td>
<td>N</td>
<td>N</td>
</tr>
<tr>
<td></td>
<td>Mean</td>
<td>Mean</td>
<td>Mean</td>
<td>Mean</td>
</tr>
<tr>
<td>N.D.E.A.</td>
<td>97</td>
<td>2.27</td>
<td>23</td>
<td>2.44</td>
</tr>
<tr>
<td>Non-N.D.E.A.</td>
<td>93</td>
<td>1.75</td>
<td>22</td>
<td>1.95</td>
</tr>
</tbody>
</table>

*Significant at the ten per cent level of confidence.

Once again the professional educators in the three types of schools participating in the National Defense Education Act rated their schools higher than Non-NDEA participating schools. City schools were rated by professional educators as doing a significantly better job in their awareness of, support for, and expectancies of guidance services by parents in both NDEA and Non-NDEA schools. The adjusted mean frequencies for exempted village schools participating in NDEA were rated by professional educators with a significantly higher adjusted mean frequency than the ratings of professional educators in local NDEA participating schools. Also, in the Non-NDEA participating schools, there was a higher significant difference in the perceptions of professional educators in exempted village schools when compared with Non-NDEA participating schools. Both NDEA participating and non-participating local schools were rated by their professional educators with significantly lower adjusted mean frequencies than were the exempted village schools.
Frequency scores of both NDEA and Non-NDEA schools were statistically merged to see if they were significantly different in the selective perceptions of groupings of school administrators, counselors, and teachers. Group X, consisting of sixteen items upon which ten counselor educators were lacking in agreement as to their proper guidance emphasis in their contribution to the awareness of, support for, and expectancies of guidance services by parents, was the only one of ten groups of items in which no significant differences were shown.

When the adjusted mean frequencies for Group X of the NDEA and Non-NDEA participating schools were statistically merged, it was found that professional educators in city schools rated their programs of guidance services significantly higher than did those from local and exempted village schools. Adjusted mean frequencies were significantly higher for exempted village schools than for local schools. This information is shown in TABLE 40.

**TABLE 40**

<table>
<thead>
<tr>
<th>Group X</th>
<th>Adjusted Mean Frequencies When NDEA and Non-NDEA Type Schools Were Statistically Merged*</th>
</tr>
</thead>
<tbody>
<tr>
<td>Type School</td>
<td>N</td>
</tr>
<tr>
<td>City</td>
<td>144</td>
</tr>
<tr>
<td>Local</td>
<td>190</td>
</tr>
<tr>
<td>Exempted Village</td>
<td>45</td>
</tr>
</tbody>
</table>

*Significant at the ten per cent level of confidence.
In summation, in both Group IX, i.e., items upon which ten Ohio counselor educators agreed were necessary to the awareness of, support for, and expectancies of guidance services by parents, and Group X, i.e., items where complete agreement was lacking among ten Ohio counselor educators, support was not significant for the hypothesis that there is no difference between schools participating in Title V-A of the National Defense Education Act and those not participating in the Act. These data showed NDEA schools significantly higher than Non-NDEA schools.

In Group IX research evidence did not support the hypothesis that there are no differences among the selective perceptions of professional educators regarding the extent to which guidance services contributed to the awareness of, support for, and expectancies of guidance services by parents. Counselors in both NDEA and Non-NDEA schools rated the items in Group IX significantly higher than school administrators. Counselors and administrators in the same schools perceived the items in Group IX significantly higher than teachers. The interaction of the adjusted means for Group X did support the hypothesis that there are no significant differences among the selective perceptions of professional educators regarding the extent to which guidance services contributed to the awareness of, support for, and expectancies of guidance services by parents. The null hypothesis is accepted for Group X which referred to items lacking in agreement of counselor educators concerning the extent to which guidance services contributed to the awareness of, support for, and expectancies of guidance services by parents.
Differences among school types were not supported by the hypothesis. Professional educators in cities in both NDEA and Non-NDEA statistically merged schools for the items of Group IX and Group X perceived their guidance programs to be significantly higher than did professional educators in either exempted village or local schools. In both NDEA and Non-NDEA participating schools, professional educators in exempted village schools perceived the items of Groups IX and X significantly higher than educators in local schools. It can thus be concluded that there is but limited support for the hypothesis that between the two study groups there are no differences between the judgments of administrators, counselors, and teachers as to the awareness of, support for, and expectancies of guidance services by parents.

Summary

In this chapter an explanation of statistical terms was given, the statistical method of treatment of the data was presented, each null hypothesis was described, and the findings were reported.

It was found that the adjusted mean scores of the selective perceptions of professional educators in city, exempted village, and local schools in all ten Groups were significantly higher for schools participating in Title V-A, National Defense Education Act, than were their professional counterparts in schools not participating in NDEA.

When the rating of the selective perceptions of professional educators in NDEA and Non-NDEA participating schools were statistically
merged, nine of the Groups showed significant differences at the ten per cent level. The selective perceptions of counselors in all nine Groups were significantly higher than administrators or teachers. Selective perceptions of school administrators were significantly higher than teachers in eight of the nine Groups. Only in Group V, items rated by counselor educators "above average" or "superior" in their contribution in maintenance and dissemination of occupational information with concomitant positive results, were the perceptions of teachers significantly higher than school administrators.

When the ratings of the selective perceptions of professional educators in NDEA and Non-NDEA participating schools were statistically merged, it was found that professional educators in city schools rated their guidance programs significantly higher in all ten groups. Professional educators in exempted village schools rated their programs significantly higher than local school educators in eight of the ten Groups.

The next chapter contains the summary of the study, the conclusion, and implications for further research.
CHAPTER V

SUMMARY AND CONCLUSIONS

The purpose of this study was to analyze the selective perceptions of principals, counselors, and teachers regarding various aspects of guidance services in selected Ohio high schools. The five specific areas of inquiry dealt with the selective perceptions of the foregoing professional educators regarding (1) the extent to which guidance services contributes to their overall school instructional program, (2) their belief that guidance services do contribute to the self-actualization of students, (3) their recognition that occupational information is maintained and disseminated with evidence of concomitant positive results, (4) their belief that the guidance program has contributed to greater numbers of students being realistic in their desire to seek higher education, and (5) the awareness of, support for, and expectancies of guidance services by parents.

Summary

Evidence of the selective perceptions of professional educators was gathered by using a structured questionnaire especially developed for this purpose. The items composing the questionnaire were determined on the bases of (1) investigating the literature to determine what authors considered important in an on-going school guidance
program, (2) seeking expert judgment from professional counselor educators and professional staff members of the Division of Guidance and Testing of the State of Ohio Department of Education, (3) submitting the questions to a Jury composed of Graduate Students enrolled in a 1960 NDEA Summer Guidance Institute at The Ohio State University, and (4) value judgments of ten Ohio counselor educators were considered. The items were then categorized into the following five areas for further investigation: (1) contribution of guidance services to an on-going school program, (2) contribution of guidance services to the self-actualization of students, (3) contribution of guidance services to the maintenance and dissemination of occupational information with evidence of concomitant positive results, (4) contribution of guidance services to greater numbers of students being realistic in their desire to seek higher education, and (5) contribution of guidance services to the awareness of, support for, and expectancies of guidance services by parents.

Through an interview schedule, the questionnaire was administered by the writer to principals, counselors, and teachers in fifty Ohio high schools. Twenty-five of the fifty schools were NDEA participating, and twenty-five matched schools were Non-NDEA participating. The bases for matching were type of school, organization of the schools, size of faculty, and size of school enrollment. The ratio of selection was in the same proportion as the total percentages of these types of Ohio schools. It was the intention of the investigator that eight professional educators in each of the fifty schools would complete the
questionnaire developed for this research study; three hundred seventy-nine professional educators were involved. Some of the schools did not employ a counselor or one of the teachers selected for this study. All questionnaires were completed in the presence of the investigator so the responses were entirely those of the individual educator. A principal, counselor, and six selected classroom teachers in each of the twenty-five schools were chosen to complete the questionnaire. The six teachers included two teaching English, two physical education, and two practical arts.

The null hypotheses underlying this investigation were as follows:

1. Between the two study groups there are no differences between the selective perceptions of administrators, counselors, and teachers as to the extent to which guidance services contributes to their on-going school program.

2. Between the two study groups there are no differences between the selective perceptions of administrators, counselors, and teachers that guidance services do contribute to the self-actualization of students.

3. Between the two study groups there are no differences between the selective perceptions of administrators, counselors, and teachers in recognition that occupational information is maintained and disseminated with evidence of concomitant positive results.

4. Between the two study groups there are no differences between the selective perceptions of administrators, counselors, and teachers that the guidance program has contributed to greater numbers of students being realistic in their desire to seek higher education.

5. Between the two study groups there are no differences between the selective perceptions of administrators, counselors, and teachers as to the awareness of, support for, and expectancies of guidance services by parents.
The Instrument

A questionnaire was developed and submitted as a pilot instrument to graduate students participating in the 1960 Guidance Summer N.D.E.A. Institute at The Ohio State University for their suggestions for additions and removal of overlapping items. The author categorized the items into the following areas:

1. What is the contribution of guidance services to their on-going school program? (Questions 1-78)

2. What is the contribution of guidance to the self-actualization of students? (Questions 79-110)

3. What is the contribution of guidance services in maintaining and disseminating occupational information with evidence of concomitant positive results? (Questions 111-123)

4. What is the contribution of guidance services in greater numbers of students being realistic in their desire to seek higher education? (Questions 124-129)

5. What is the contribution of guidance services to the awareness of, support for, and expectancies of guidance services by parents? (Questions 130-148)

Each of the above areas were divided into two groups of items for statistical treatment. One group of items were those upon which ten Ohio counselor educators agreed should receive "above average" or "superior" attention in a school's program of guidance services. A second group of items were those where there was a lack of agreement among counselor educators as to their proper emphasis.

The Statistics

In order to determine if there were significant differences between the selective perceptions of administrators, counselors, and teachers in NDEA and Non-NDEA participating schools, a multiple
regression analysis was performed to provide for the action and interaction of variables. Variables were introduced into the multiple regression analysis and their actions and interactions were taken into consideration in arriving at mean differences. These variables were the (1) size and type of school, (2) type and number of professional educators, (3) sex of respondents, (4) type of school program (NDEA vs. Non-NDEA), and (5) unequal numbers responding to individual items in the questionnaire. Means were adjusted because of differences that existed in the variables. Using a one-tailed test, results at the ten per cent level were considered significant. All of the statistical computations were made by using an IBM-704.

The Findings

The findings of this study were the selective perceptions of administrators, counselors, and teachers concerning various aspects of guidance services in fifty selected Ohio high schools. Twenty-five of the schools were participating in Title V-A of the National Defense Education Act, and twenty-five schools were not participating in the Act. The findings resulted from investigation of five hypotheses. Each item relating to the null hypothesis was placed into either of two Groups, or a total of ten Groups for the five null hypotheses. One of the Groups consisted of the items in the hypothesis that were rated by ten Ohio counselor educators as receiving "above average" or "superior" emphasis in a school's guidance program; the second Group in each hypothesis consisted of items which lacked agreement
among the ten Ohio counselor educators as to their proper emphasis
in an on-going school guidance program. The ten counselor educators
in Ohio rated forty-four of the items in the 148 item questionnaire
as receiving "above average" or "superior" emphasis in an on-going
program of guidance services. These forty-four items were:

1. Better course selection
2. Better use of educational information
3. A functional use of the guidance and counseling
   services available
4. Prevention, identification and correction of
   maladjustments in their relationships with other
   persons
5. Utilization of time to discuss, via group pro­
   cedures, problems that are common to all
6. Elimination of inferiority complexes
7. Creation of the feeling that someone is interested
   in them
8. Encouragement of progressive self-direction,
   not prescription
9. Improvement in school behavior
10. Personal-social information as part of the guid­
    ance program
11. Decrease in the drop-out rate
12. Use of guidance information for curriculum
13. Testing results released and explained to teachers
14. Closer working relationships with community agencies
15. Increased awareness of individual differences
16. Better understanding of pupils by faculty
17. Emphasis of counseling as the heart of the guid­
    ance program
18. Adequate use of community resources for guidance
    purposes
19. Well defined objectives of guidance program
20. Coordination of guidance services with the total
    school program
21. Provision of guidance services for all pupils
22. Encouragement of private rooms for individual
    counseling
23. Case studies of pupils with special problems
24. Aid in the organization of the curriculum program,
    and in coordinating all activities of the school and
    focusing them upon pupil development.
25. Provision of direct personal assistance to pupils
26. Greater number performing close to potential
27. Increased self-referrals by students
28. Better use of personal-social information
29. Realization that everyone cannot excel in every field
30. Knowledge of self
31. Satisfactory and socially acceptable adjustment in living and working with others
32. Satisfactory and socially acceptable adjustment to the opposite sex
33. Earlier and better planning for future by students
34. Better use of vocational information
35. Provision for follow-up of individuals:
   a. Who enter occupations after graduation
   b. Who do not finish high school
   c. Who enter colleges, business schools, and trade schools
36. Increased awareness of the importance of selecting an occupation in harmony with the strongest interests and most outstanding abilities of the pupils
37. Awareness of vocational conditions and opportunities
38. Information about the factors which should be considered in making an occupational choice.
39. Knowledge of major vocational trends
40. Greater knowledge of scholarships and loans available to secure the preparation necessary for the vocation chosen
41. More realistic choice of college
42. Knowledge of finances needed to further their education
43. Better parent understanding of the ability and interests of their child
44. Realization that there are dangers in parents choosing a definite occupation for their children

The following twenty-eight items, however, were rated by nine of the ten Ohio counselor educators as receiving "above average" or "superior" emphasis in a school's guidance program; a tenth Ohio educator rated each item as receiving an "average" amount of emphasis in his perception of the operation of an on-going program of guidance services.
1. Improved relationships with other students
2. Propagation of the belief that each student
does have some ability and to make an attempt
to help him discover his potentialities
3. Encouragement of greater independence
4. Discovery of the causes of teacher or school
dislikes
5. Specific individual examples of improved student
adjustment
6. Reduction in number of failures
7. Better general student atmosphere resulting from
orientation
8. Cooperation between teachers and counselors for
the welfare of the students
9. Carefully kept records of every student
10. Utilization of regular school courses for guid-
ance purposes
11. Regular periods scheduled for interviews
12. Faculty agreement upon principles by which the
guidance program operates
13. Participation of entire staff in the guidance
program
14. Research into the causes of student failure
15. Better study methods
16. Emphasis of their strengths in the area of personal
relationships so that their lacks of weaknesses do
not prove serious handicaps
17. Development of self confidence
18. More effective study habits
19. Sense of belonging, of being accepted by a group or
groups
20. Sense of life values
21. Realization that race, color, and sex have little or
no relation to aptitudes and abilities
22. Decrease in problems of employment and vocational
adjustment
23. Assistance in the choice of occupations that are
suitable to the best interests of the child
24. Information about the training required for success-
ful entry into their chosen occupations
25. Selection of school courses and extra-class activ-
ities that are in harmony with their vocational
goals
26. Awareness of college and university requirements
27. Interpretation of children's test scores to parents
28. Arrangements of parents' conferences with the coun-
selor
Professional educators in city, exempted village, and local schools participating in Title V-A of the National Defense Education Act, perceived in all ten Groups investigated that significantly greater contributions were being made in their overall programs of guidance services than did their professional counterparts employed in city, exempted village, and local schools not participating in Title V-A of the National Defense Education Act. The data show, therefore, that professional educators employed in NDEA participating schools perceive that those schools are making greater contributions to their programs of guidance services than do professional educators employed in Non-NDEA participating schools.

When the ratings of the selective perceptions of professional educators in NDEA and Non-NDEA participating schools were statistically merged, only the ratings of Group X were not significant. This Group consisted of items in which there was a lack of agreement among counselor educators as to the contribution of guidance to parents' awareness of, support for, and expectancies of guidance services. In the nine significant Groups, the selective perceptions of counselors were significantly higher than those of administrators or teachers. Selective perceptions of school administrators were significantly higher than those of teachers in eight of the nine Groups. Only in Group V, items rated by counselor educators "above average" or "superior" in their contribution in maintenance and dissemination of occupational information with concomitant positive
results, were the perceptions of teachers significantly higher than those of school administrators.

When the ratings of the selective perceptions of professional educators in NDEA and Non-NDEA participating schools were statistically merged, the data showed that professional educators in city schools rated their programs significantly higher in all ten Groups. Once again the data showed, therefore, that professional educators in city schools perceive that they are providing significantly better programs of guidance services than do the professional educators in exempted village or local schools. Professional educators in exempted village schools rated their programs of guidance services significantly higher than local school educators in eight of the ten Groups.

Conclusions

The conclusions resulting from this study followed from an investigation of an analysis of the selective perceptions of professional educators regarding various aspects of guidance services in fifty selected Ohio high schools. Caution should be employed in drawing general conclusions about other communities in other states from the results of this study.

1. Principals, counselors, and teachers employed in city schools that are participating in Title V-A of the National Defense Education Act perceive that guidance services are making greater contributions to their overall school programs than do their
counterparts perceive is being accomplished in city schools not participating in NDEA.

2. Principals, counselors, and teachers employed in city schools that are participating in Title V-A of the National Defense Education Act perceive that guidance services are making greater contributions to their overall school programs than do their counterparts perceive is being accomplished in NDEA participating exempted village or local schools.

3. Principals, counselors, and teachers employed in both NDEA and Non-NDEA city schools perceive that the programs of guidance services in the city schools are making greater contributions to their overall school programs than do their counterparts perceive is being accomplished in either exempted village or local schools.

4. Principals, counselors, and teachers employed in exempted village schools that are participating in Title V-A of the National Defense Education Act perceive that guidance services are making greater contributions to their overall school programs than do their counterparts perceive is being accomplished in exempted village schools not participating in NDEA.

5. Principals, counselors, and teachers employed in both NDEA and Non-NDEA participating exempted village schools perceive that guidance services are contributing more to their overall school programs than do their counterparts perceive is being accomplished in local schools.
6. Principals, counselors and teachers employed in local schools that are participating in Title V-A of the National Defense Education Act perceive that guidance services are making greater contributions to their overall school programs than do their counterparts perceive is being accomplished in local schools not participating in NDEA.

7. Principals, counselors, and teachers employed in local schools perceive that the contributions of their guidance programs are the least effective of any in the three types of schools.

8. Counselors as a group perceive the contributions of guidance services to their overall school programs statistically significantly higher than other professional educators.

9. Administrators as a group perceive the contributions of guidance services to their overall school programs statistically significantly higher than teachers.

10. Teachers as a group perceive the contributions of guidance services to their overall school programs statistically significantly lower than either administrators or counselors.

Discussion

In determining how administrators, counselors, and teachers in NDEA and Non-NDEA participating schools perceived the contribution of various aspects of guidance services in selected and randomly matched Ohio high schools, the writer drew conclusions that will be summarized in several general statements.
This study showed that perceptions of principals, counselors, and teachers in city, exempted village, and local schools participating in Title V-A of the National Defense Education Act revealed greater guidance contributions than that of their counterparts that were not participating in NDEA. This may be because these schools are employing greater numbers of trained, certificated personnel, and have a counselor-pupil ratio no greater than 1-500. Certificated counselors are in a position to assist students with their educational, vocational, and personal-social problems. This help for students, in turn, assists the school administrator in instructional program development to meet student needs. Teachers, too, can be assisted in understanding their students' abilities and needs, and can adjust their instructional procedures accordingly to meet these needs. This study showed that groups of schools receiving financial assistance for guidance programs were perceived by the staff to be gaining more from the guidance programs than other schools not participating in such assistance under the Act.

Professional educators employed in city schools perceive that guidance services are making greater contributions to their school's overall school program than is perceived by either exempted village or local schools' staff. It was found that many city schools did have counselors employed but were not seeking financial assistance. In some cases this was due to a philosophy opposed to accepting Federal assistance; in other schools in which counselors had been employed for a number of years, the guidance programs had not been expanded
sufficiently to meet the counselor-pupil ratio required by reimbursement standards. Due to the fact that counselors were employed in a greater number of city schools not seeking financial assistance than was true of either Non-NDEA exempted village or Non-NDEA local schools, it would seem obvious that the influence of the counselor should be recognized.

The study also revealed that professional educators perceived that the least effective job of guidance services is being provided in local schools. A State of Ohio schools' inspector recently observed in a public statement, that in every single instance of local schools' charter revokement as a result of a 1960-61 school inspection, minimum standards for providing guidance services were not being met. Many of the local schools in Ohio are small, with minimum operating budgets, few elective subjects available, small and overloaded teaching staffs, and with teachers minimally trained in guidance. Only limited time is provided for guidance services. Schools that are only meeting minimum Ohio standards for guidance, do not qualify for Federal assistance. This study shows that professional educators perceive that the programs in guidance in local schools are the least effective being provided in the State.

Professional educators perceive that the guidance services provided by exempted village schools in general contribute more than the program of guidance services being provided by local schools, but are not contributing as much as the program of guidance services provided by city schools. Justification for this appears in the fact
that, in general, exempted village schools are larger than local schools, offer a broader instructional program, and in many instances have employed a school counselor for a longer period of time and for more hours during a school day.

That counselors in general rated the contributions of programs of guidance services the highest of professional educators can be justified because they are more directly self-involved, are aware of the immediate benefits, and can note the progress in improving and extending the schools' programs of guidance services. Often their offices are in close proximity to that of the school administrator, and in many cases the only pupil record files are located in the office of the school administrator. It is usual, also, for a counselor to seek the administrator's views concerning new approaches being considered for extending guidance services in the school. This would account in part for the fact that administrators rate their programs of guidance services more effective than do teachers. The chief responsibility of the teacher is classroom instruction. Many teachers are not seeking additional responsibilities and wish to confine their school activities to their subject-matter area. As a result, many teachers are not so aware of the extent that guidance services are functioning in their schools and/or could be of assistance to them in understanding their students. The fact that teachers do rate programs of guidance services the lowest of the professional educators points to the need for counselors to communicate more effectively with teachers concerning the purposes and accomplishments of the guidance programs in their schools.
Implication for Further Research

1. The results of this study are based on the selective perceptions of administrators, counselors, and teachers regarding various aspects of guidance services in selected Ohio high schools. Comparable investigations nationwide with NDEA and Non-NDEA participating schools would serve to complete the picture of which the present study would be a part.

2. In this study a questionnaire was developed to determine the selective perceptions of administrators, counselors and teachers concerning various aspects of guidance services in selected Ohio high schools. It is suggested that this type of questionnaire be considered as a base for other investigations where selective perceptions are involved.

3. The present investigation dealt with 148 selected items in determining the selective perceptions of professional educators. A periodic survey of this group would demonstrate the stability or changes in perceptions of professional educators employed in both NDEA and Non-NDEA participating schools.

4. Is there a relationship between the perceptions of professional educators concerning the perceptions of parents and the perceptions of the parents relative to the guidance programs? Obtaining the perceptions of parents who have children attending the NDEA and Non-NDEA schools investigated in this study would enable such a comparison to be made. Also, should future studies of the selective perceptions concerning various aspects of guidance programs be made,
the children of these parents might be involved concurrently to seek
an answer to this question.

5. It would be valuable to learn how counselor educators and
supervisors across the nation perceive guidance services operating
within a school system. In this study selective perceptions of
ten Ohio counselor educators were included. A study of the per­
ceptions of counselor educators in other colleges and universities
across the nation should give more direction to high school coun­
selors, State Departments of Education, and the U. S. Office of
Education in evaluating the quality and extent of present guidance
practices, as well as providing future direction for NDEA in the
improvement and extension of guidance services.

6. Finally, research is needed to determine actual accomplish­
ments of changed behavior in pupils as the result of the guidance
function. These data should then be compared with what is perceived
as being accomplished by the guidance function.
APPENDIX
**MR2 - MULTIPLE REGRESSION**

**USE**

This program performs the multiple regression analysis under the hypothesis

\[ y = b_0 + b_1 x_1 + b_2 x_2 + \cdots + b_I x_I \]

The \( x_i \) are the observable independent variables, the \( y \) is the observable dependent variable, and the \( b_i \) are the constants to be estimated. The \( b_i \) are called regression coefficients.

Several sets of \( y \)'s may be used with the same set of \( x \)'s. The problem will be solved simultaneously and separate sets of solutions for the \( b_i \) will be obtained. In particular, if

\[ I = \text{number of independent variables}, \]
\[ J = \text{number of dependent variables}, \]
\[ K = I + J, \]

then \( I + J = K \leq 31 \), and \( I \geq 2 \).

The number of observations which can be accommodated, \( N \), is in the range \( 1 \leq N \leq 9999 \), subject to the restriction \( N > I + 1 \).

If several separate problems are to be solved, they may be stacked consecutively. All results will contain specific identification and may be printed or punched.
Normal output includes the following items.

1. For the observable independent and dependent variables:
   a) sums
   b) sums of squares
   c) sums of crossproducts
   d) means
   e) standard deviations
   f) unbiased covariances
   g) correlations
   h) squares of correlations

2. Associated with every set of $b_i$'s:
   a) the estimate of $b_i$
   b) standard deviation of $b_i$
   c) variance of $b_i$
   d) the "t" ratio for significance of $b_i$

3. Associated with every set of dependent variables:
   a) standard deviation of residual
   b) multiple correlation coefficient, $R$
   c) $R^2$
   d) the $F$ ratio for the significance of $R$
MACHINE PROCEDURE

A. This routine is included on the OSU system tape in binary. It is called from the tape with a special call card. The card deck required consists of the following.

1. System call card.
2. System post-mortem key card if desired.
3. Multiple regression call card.
4. Setup card.
5. Data cards and control cards as desired.
6. An END control card.
7. One blank card.

B. Tapes 1, 2, 3 are required. Tape 1 is the system tape.

Tape 2 is called the sum tape and is used to retain subtotals if required, while tape 3 is called the input tape. All data is read from cards and written on the input tape from which it is read and processed.

STORAGE REQUIREMENTS (Continued)

| 0000-0251       | OSU SYSTEM |
| 0252-2157       | PROGRAM    |
| 2160-4576       | DATA       |
| 4577-5006       | DATA AND PROGRAM |
| 5007-7764       | PROGRAM    |
| 7765-7777       | NOT USED   |

Four logical drums and three tapes are required.
A. Setup Card.

The number of independent, the number of dependent variables and the number of decimal positions in each variable are specified on the setup card. The setup card also contains a key as to whether results are to be printed or punched. The format for the setup card follows.

Col. 1 : 1

Col. 2 : Blank

Cols. 3-6 : XXXX Number of Observations

Col. 7 : Blank

Cols. 8-12 : Identification (Used as Output Identification)

Col. 13 : Blank

Cols. 14-15 : XX No. of Independent Variables (IMAX)

Col. 16 : Blank

Cols. 17-18 : XX No. of Dependent Variables (JMAX)

Col. 19 : Blank

Col. 20 : \[
0 \quad \text{Print Results}
\] \[
1 \quad \text{Punch Results}
\]

Col. 21 : Blank

Cols. 22-72: \(D_1 D_2 \cdots D_k \cdots\)

\(D_k\) is the number of decimal places in the \(k^{th}\) variable.

The first blank after Col. 22 indicates the end of the card.

Each \(D\) must be less than or equal to six.
MR2 - Continued

B. Data Cards.

Col. 1 : 

Col. 2 : Card Number (Must be increasing)

Cols. 3-6 : Observation Number (Must be increasing)

Col. 7 : Blank

Cols. 8-11: Identification (Not checked by program)

Cols. 13-72: \( \pm X \cdots X \div X \cdots X \div X \cdots \) Variables,
\[ S_1 \quad S_2 \quad S_3 \]

1) \( 1 \leq S_k \leq 6 \)

2) Signs must be punched.

3) The first blank after column 13 indicates the end of the card.

4) Numbers may not be split at the end of a card.

5) Independent variables are punched first; dependent variables last. More than one card may be required to record all variables of a single observation.

C. Control Cards.

The course of the computation is determined by control cards inserted at appropriate points in the input deck.

Format:

Col. 1 : 2

Col. 2 : Blank

Cols. 3-6: T (T is an octal transfer address)
The possible values of Target:

1. 6032 START
2. 6555 COMPUTE
3. 0030 END
4. 5701 WRITE SUMS ON SUM TAPE
5. 5735 ACCUMULATE FROM SUM TAPE
6. 5730 CLOSE SUM TAPE
7. 6331 READ INPUT TAPE
8. 2065 REWIND INPUT TAPE
9. 4067 WRITE END-OF-FILE ON INPUT TAPE
10. 5674 CLEAR

The use of the control cards is described below.

1. START.

A START control card should be inserted between regression problems but need not precede the first problem of a batch. This card causes all sums and counts to be set to zero, the sum and input tapes to be rewound, and the printer form to be ejected. There is printed a reminder that a sum and an input tape are required after which the computer halts. Depress start to proceed. Control is then transferred to read a setup card which must follow the start control card in the input deck.
2. **COMPUTE.**

This control results in a transfer to the section of the program which calculates and prints the information described as output. Control is then returned to READ where a new setup card, data card, or control card is read. Tapes are not rewound and sums and counts are not reset.

3. **END.**

This control card will cause the program to search for a blank card and execute a card load button sequence once a blank has been found.

4. **WRITE SUMS ON SUM TAPE**

This control card will cause all sums and counts to be written on the sum tape (2) as a multi-record file. The sum tape is not rewound either before or after it is written. Sums and counts are not reset and control is sent to READ where a new setup, control, or data card is read.

5. **ACCUMULATE FROM SUM TAPE.**

This control card will result in the sum tape being rewound and then read. As the sub-totals are read from the tape they are accumulated to form grand totals. Sums and counts in the core are not reset either before or after the tape is read. Control is returned to READ where a new control card, data card, or setup card is read.
6. CLOSE SUM TAPE.

This control card causes a one word record to be written on the sum tape. This record is recognized by the tape accumulation routine as the end of the sum tape. Thus, a CLOSE SUM TAPE control card should follow the last WRITE SUMS ON SUM TAPE control card and precede the ACCUMULATE FROM SUM TAPE control card. Sums and counts are not reset and control is returned to READ where a new control card or data card is read.

7. READ INPUT TAPE.

All data is written on the input tape as it is read from cards. It is then processed from the input tape. A READ INPUT TAPE control card will send control to the tape reading and accumulation routine where data is read and processed one observation at a time until an end-of-file is encountered on the input tape. Control is then returned to READ where a new control card must be read.

8. REWIND INPUT TAPE.

The program will automatically rewind the input tape each time a START control card is read and each time the program is read from the library tape, but at no other time. Hence, REWIND INPUT TAPE control cards must be inserted at appropriate places in the input deck.
9. WRITE END-OF-FILE ON INPUT TAPE.

The tape reading and accumulation routine will process observation after observation from the input tape until an end-of-file is encountered, at which time control will be sent to READ where a control card will be read. Hence, an END-OF-FILE control card should be inserted in the data deck at those points at which accumulation should be interrupted to compute or to write on the sum tape.

10. CLEAR.

This control card will cause all counts and sums to be reset. The sum tape is not rewound and the printer form is not ejected. Control is returned to READ where a new control card or data card is read.
A. Output One.

Output one consists of one card (printed line) for each variable $x_i$ or $y_i$. It contains the subscript $i$, the sum, the mean, the sum of squares, and the standard deviation of $x_i$ or $y_i$. The card format is as follows:

Col. 1 : 1

Col. 2 : Blank

Cols. 3-6 : N Observation Count

Col. 7 : Blank

Cols. 8-12: Identification (Taken from 3U card)

Col. 13 : Blank

Cols. 14-15: i

Col. 16 : Blank

Cols. 17-28: $\pm XXXX \ XXXXX$, Sum of $x_i$

Col. 29 : Blank

Cols. 30-40: $\pm XXXXXX.XXX$ Mean of $x_i$

Col. 41 : Blank

Cols. 42-58: XXXX XXXXXX XXXXXX. Sum of Squares of $x_i$

Col. 59 : Blank

Cols. 60-69: XXXXXX, XXX Standard Deviation of $x_i$

Cols. 70-72: Blanks
B. Output Two.

Output two consists of one card (printed line) for each subscript pair $i, j$, $i \leq j$, $i < I$. It contains the subscript $i, j$, the sums of products, the variance, the correlation, and correlation squared for the two variables $x_i$ and $x_j$ or $y_j$. The format is as follows.

<table>
<thead>
<tr>
<th>Col.</th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>2</td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>Blank</td>
<td></td>
</tr>
<tr>
<td>3-6</td>
<td>N</td>
<td>Observation Count</td>
</tr>
<tr>
<td>7</td>
<td>Blank</td>
<td></td>
</tr>
<tr>
<td>8-12</td>
<td>Identification</td>
<td>(Taken from SU card)</td>
</tr>
<tr>
<td>13</td>
<td>Blank</td>
<td></td>
</tr>
<tr>
<td>14-15</td>
<td>$i$</td>
<td></td>
</tr>
<tr>
<td>16</td>
<td>Blank</td>
<td></td>
</tr>
<tr>
<td>17-18</td>
<td>$j$</td>
<td></td>
</tr>
<tr>
<td>19</td>
<td>Blank</td>
<td></td>
</tr>
<tr>
<td>20-37</td>
<td>$+XXXX XXXXXX XXXXXXN$</td>
<td>Sum of $x$</td>
</tr>
<tr>
<td>38-54</td>
<td>$+XXXXXXX XXXXXX, XXX$</td>
<td>Covariance $x_j$</td>
</tr>
<tr>
<td>55</td>
<td>Blank</td>
<td></td>
</tr>
<tr>
<td>56-63</td>
<td>$+X, XXXXX$</td>
<td>Correlation $x_j$</td>
</tr>
<tr>
<td>64</td>
<td>Blank</td>
<td></td>
</tr>
<tr>
<td>65-72</td>
<td>$X, XXXXX$</td>
<td>Correlation Squared $x_j$</td>
</tr>
</tbody>
</table>
C. Output Three.

Output three consists of one card (printed line) for each subject pair \(i, j\), \(0 \leq i \leq I\), \(1 \leq j \leq J\). It contains the subscripts \(i, j\), the regression coefficient \(b_{ij}\), as well as the variance, deviation, and "t" ratio associated with \(b_{ij}\). The format is as follows.

Col. 1 : \(3\)

Col. 2 : Blank

Cols. 3-6 : \(N\)  
Observation Count

Col. 7 : Blank

Cols. 8-12: Identification (Taken as \(i\))

Col. 13 : Blank

Cols. 14-15: \(i\)

Col. 16 : Blank

Cols. 17-18: \(j\)

Cols. 19-20: Blanks

Cols. 21-31: \(\pm X, XXXXE+XX\) \(b_{ij}\)

Cols. 32-33: Blanks

Cols. 34-44: \(\pm X, XXXXE+XX\) \(\sigma_{b_{ij}}^2\)

Cols. 45-46: Blanks

Cols. 47-57: \(\pm X, XXXXE+XX\) \(\sigma_{b_{ij}}\)

Cols. 58-59: Blanks

Cols. 60-70: \(\pm X, XXXXE+XX\) \(t_{b_{ij}}\)

Cols. 71-72: Blanks
D. Output Four.

The fourth output consists of one card (printed line) for each subscript \( j \), \( 1 \leq j \leq J \). It contains the subscript \( j \), the standard deviation of residuals \( \sigma_{y_j - y_j^*} \), the multiple correlation coefficient \( R_j \), the square of the multiple correlation coefficient \( R_j^2 \), and the \( F \) ratio for the significance of \( R \). The card format follows.

<table>
<thead>
<tr>
<th>Col.</th>
<th>1</th>
<th>2</th>
<th>3-6</th>
<th>7</th>
<th>8-12</th>
<th>13-16</th>
<th>17-18</th>
<th>19-20</th>
<th>21-31</th>
<th>32-33</th>
<th>34-44</th>
<th>45-46</th>
<th>47-57</th>
<th>58-59</th>
<th>60-70</th>
<th>71-72</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>4</td>
<td>Blank</td>
<td>N</td>
<td>Blank</td>
<td>Identification</td>
<td>Blanks</td>
<td>( j )</td>
<td>Blanks</td>
<td>( \sigma_{y_j} - y_j^* )</td>
<td>Blanks</td>
<td>( R_j )</td>
<td>Blanks</td>
<td>( R_j^2 )</td>
<td>Blanks</td>
<td>( F_j )</td>
<td>Blanks</td>
</tr>
</tbody>
</table>
At the completion of the computation the inverse correlation
matrix is inverted and its inverse is compared with the original
matrix. The absolute value of the largest difference is
punched (printed) as the last output of the program.

FORMULAS

\[
\bar{x}_i = \frac{1}{N} \sum_{a} x_{ia}
\]

Means

\[
S_i^2 = N \sum_{a} x_{ia}^2 - \bar{x}_i^2
\]

N Times Sum of Squared Deviations

\[
\sigma_i = \sqrt{\frac{S_i^2}{N(N-1)}}
\]

Unbiased Standard Deviation

\[
S_{ij} = N \sum_{a} x_{ia} x_{ja} - \bar{x}_i \bar{x}_j
\]

N Times Sum of Cross Deviation

\[
\sigma_{ij} = \frac{S_{ij}}{N(N-1)}
\]

Unbiased Variance

\[
r_{ij} = \frac{S_{ij}}{S_i S_j}
\]

Where \( r_{ij} \) is Element of Inverse Correlation Matrix

\[
\beta_i = \sum_{y} r_{iy} r_{iy} , \ i \neq 0
\]

\[
\beta_0 = \frac{N\bar{y}}{S_y}
\]

\[
b_i = \frac{S_y}{S_i} \beta_i , \ i \neq 0
\]

Regression Coefficient
MR2 - Continued

\[ b_0 = y - \sum b_i x_i \]

\[ R^2 = \sum \beta_i r_{iy} \]

\[ \Omega_a = S_y^2 (1 - R^2) \]

\[ \sigma_{b_i}^2 = \frac{r_{ii} S_y^2 (1 - R^2)}{S_i (N-1-1)} , \quad i \neq 0 \]

\[ \sigma_{b_0}^2 = \frac{1}{N^2} + \sum \frac{r_{ij} x_i x_j}{S_i S_j} \]

\[ \sigma_{b_i} = \sqrt{\sigma_{b_i}^2} , \quad i = 0, 1, \ldots, 1 \]

\[ t_{b_i} = \frac{b_i}{\sigma_{b_i}} , \quad i = 0, 1, \ldots, 1 \]

\[ \sigma_{y-y*}^2 = \frac{\Omega_a}{N(N-1-1)} \]

\[ \sigma_{y-y*} = \sqrt{\sigma_{y-y*}^2} \]

\[ F(I, N-1-1) = \frac{R^2(N-1-1)}{I(1-R^2)} \]
GROUP I

ITEMS RATED BY COUNSELOR EDUCATORS "ABOVE AVERAGE" OR "SUPERIOR" IN THE CONTRIBUTION OF GUIDANCE TO AN ON-GOING SCHOOL PROGRAM

Adjusted Mean Frequencies of Professional Educators According to School Type in NDEA Participating Schools

<table>
<thead>
<tr>
<th>Personnel Groups and School Type</th>
<th>Local</th>
<th>Exempted</th>
<th>City</th>
<th>Total Personnel Groups &amp; School Type</th>
</tr>
</thead>
<tbody>
<tr>
<td>N Mean</td>
<td>N Mean</td>
<td>N Mean</td>
<td>N Mean</td>
<td>N Mean</td>
</tr>
<tr>
<td>Principal</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>13</td>
<td>2.77</td>
<td>3 2.99</td>
<td>9</td>
<td>2.99</td>
</tr>
<tr>
<td>Teacher</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>71</td>
<td>2.38</td>
<td>17 2.46</td>
<td>54</td>
<td>2.68</td>
</tr>
<tr>
<td>Counselor</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>13</td>
<td>2.78</td>
<td>3 2.93</td>
<td>9</td>
<td>2.76</td>
</tr>
<tr>
<td>School Type</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>97</td>
<td>2.49*</td>
<td>23 2.59*</td>
<td>72</td>
<td>2.73*</td>
</tr>
</tbody>
</table>

*Significant at the ten per cent level of confidence.

Adjusted Mean Frequencies of Professional Educators According to School Type in Non-NDEA Participating Schools

<table>
<thead>
<tr>
<th>Personnel Groups and School Type</th>
<th>Local</th>
<th>Exempted</th>
<th>City</th>
<th>Total Personnel Groups &amp; School Type</th>
</tr>
</thead>
<tbody>
<tr>
<td>N Mean</td>
<td>N Mean</td>
<td>N Mean</td>
<td>N Mean</td>
<td>N Mean</td>
</tr>
<tr>
<td>Principal</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>13</td>
<td>1.98</td>
<td>3 1.81</td>
<td>9</td>
<td>2.52</td>
</tr>
<tr>
<td>Teacher</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>69</td>
<td>1.82</td>
<td>17 1.78</td>
<td>54</td>
<td>2.39</td>
</tr>
<tr>
<td>Counselor</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>11</td>
<td>2.27</td>
<td>2 1.74</td>
<td>9</td>
<td>2.59</td>
</tr>
<tr>
<td>School Type</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>93</td>
<td>1.90*</td>
<td>22 1.78*</td>
<td>72</td>
<td>2.43*</td>
</tr>
</tbody>
</table>

*Significant at the ten per cent level of confidence.

Adjusted Mean Frequencies of Professional Educators When NDEA and Non-NDEA Schools Were Statistically Merged

<table>
<thead>
<tr>
<th>Personnel Groups and School Type</th>
<th>Local</th>
<th>Exempted</th>
<th>City</th>
<th>Total Personnel Groups &amp; School Type</th>
</tr>
</thead>
<tbody>
<tr>
<td>N Mean</td>
<td>N Mean</td>
<td>N Mean</td>
<td>N Mean</td>
<td>N Mean</td>
</tr>
<tr>
<td>Principal</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>26</td>
<td>2.38</td>
<td>6 2.40</td>
<td>18</td>
<td>2.75</td>
</tr>
<tr>
<td>Teacher</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>140</td>
<td>2.11</td>
<td>34 2.12</td>
<td>108</td>
<td>2.54</td>
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<tr>
<td>Counselor</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>24</td>
<td>2.55</td>
<td>5 2.45</td>
<td>18</td>
<td>2.68</td>
</tr>
<tr>
<td>School Type</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>190</td>
<td>2.20*</td>
<td>45 2.19*</td>
<td>144</td>
<td>2.58*</td>
</tr>
</tbody>
</table>

*Significant at the ten per cent level of confidence.
GROUP II

ITEMS WHERE THERE WAS A LACK OF AGREEMENT AMONG COUNSELOR EDUCATORS AS TO THEIR PROPER EMPHASIS IN AN ON-GOING SCHOOL GUIDANCE PROGRAM

Adjusted Mean Frequencies of Professional Educators According to School Type in NDEA Participating Schools

<table>
<thead>
<tr>
<th>Personnel Groups and School Type</th>
<th>Local</th>
<th>Exempted</th>
<th>City</th>
<th>Total Personnel Groups &amp; School Type</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>N</td>
<td>Mean</td>
<td>N</td>
<td>Mean</td>
</tr>
<tr>
<td>Principal</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Principal</td>
<td>13</td>
<td>2.48</td>
<td>3</td>
<td>2.56</td>
</tr>
<tr>
<td>Teacher</td>
<td>71</td>
<td>2.21</td>
<td>17</td>
<td>2.15</td>
</tr>
<tr>
<td>Counselor</td>
<td>13</td>
<td>2.48</td>
<td>3</td>
<td>2.48</td>
</tr>
<tr>
<td>School Type</td>
<td>97</td>
<td>2.28*</td>
<td>23</td>
<td>2.24*</td>
</tr>
</tbody>
</table>

*Significant at the ten per cent level of confidence.

Adjusted Mean Frequencies of Professional Educators According to School Type in Non-NDEA Participating Schools

<table>
<thead>
<tr>
<th>Personnel Groups and School Type</th>
<th>Local</th>
<th>Exempted</th>
<th>City</th>
<th>Total Personnel Groups &amp; School Type</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>N</td>
<td>Mean</td>
<td>N</td>
<td>Mean</td>
</tr>
<tr>
<td>Principal</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Principal</td>
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*Significant at the ten per cent level of confidence.

Adjusted Mean Frequencies of Professional Educators When NDEA and Non-NDEA Schools Were Statistically Merged

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*Significant at the ten per cent level of confidence.
GROUP III

ITEMS RATED BY COUNSELOR EDUCATORS "ABOVE AVERAGE" OR "SUPERIOR" IN THEIR CONTRIBUTION TO THE SELF-ACTUALIZATION OF STUDENTS

Adjusted Mean Frequencies of Professional Educators According to School Type in NDEA Participating Schools

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*Significant at the ten per cent level of confidence.

Adjusted Mean Frequencies of Professional Educators According to School Type in Non-NDEA Participating Schools

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*Significant at the ten per cent level of confidence.

Adjusted Mean Frequencies of Professional Educators When NDEA and Non-NDEA Schools Were Statistically Merged

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*Significant at the ten per cent level of confidence.
GROUP IV

ITEMS WHERE THERE WAS A LACK OF AGREEMENT AMONG COUNSELOR EDUCATORS AS TO THEIR CONTRIBUTION TO THE SELF-ACTUALIZATION OF STUDENTS

Adjusted Mean Frequencies of Professional Educators According to School Type in NDEA Participating Schools

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Adjusted Mean Frequencies of Professional Educators According to School Type in Non-NDEA Participating Schools

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*Significant at the ten per cent level of confidence.

Adjusted Mean Frequencies of Professional Educators When NDEA and Non-NDEA Schools Were Statistically Merged

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*Significant at the ten per cent level of confidence.
GROUP V

ITEMS RATED BY COUNSELOR EDUCATORS "ABOVE AVERAGE" OR "SUPERIOR"
IN THEIR CONTRIBUTION TO THE MAINTENANCE AND DISSEMINATION OF
OCCUPATIONAL INFORMATION WITH CONCOMITANT POSITIVE RESULTS

Adjusted Mean Frequencies of Professional Educators
According to School Type in NDEA Participating Schools

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*Significant at the ten per cent level of confidence.

Adjusted Mean Frequencies of Professional Educators According to School Type in Non-NDEA Participating Schools

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*Significant at the ten per cent level of confidence.

Adjusted Mean Frequencies of Professional Educators When NDEA and Non-NDEA Schools Were Statistically Merged

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*Significant at the ten per cent level of confidence.
GROUP VI

ITEMS WHERE THERE WAS A LACK OF AGREEMENT AMONG COUNSELOR EDUCATORS AS TO THEIR CONTRIBUTION TO THE MAINTENANCE AND DISSEMINATION OF OCCUPATIONAL INFORMATION WITH CONCOMITANT POSITIVE RESULTS

Adjusted Mean Frequencies of Professional Educators According to School Type in NDEA Participating Schools

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*Significant at the ten per cent level of confidence.

Adjusted Mean Frequencies of Professional Educators According to School Type in Non-NDEA Participating Schools

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*Significant at the ten per cent level of confidence.

Adjusted Mean Frequencies of Professional Educators When NDEA and Non-NDEA Schools Were Statistically Merged

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*Significant at the ten per cent level of confidence.
GROUP VII

ITEMS RATED BY COUNSELOR EDUCATORS "ABOVE AVERAGE" OR "SUPERIOR" IN THEIR CONTRIBUTION TO GREATER NUMBERS OF STUDENTS BEING REALISTIC IN THEIR DESIRE TO SEEK HIGHER EDUCATION

Adjusted Mean Frequencies of Professional Educators According to School Type in NDEA Participating Schools

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Adjusted Mean Frequencies of Professional Educators According to School Type in Non-NDEA Participating Schools

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Adjusted Mean Frequencies of Professional Educators When NDEA and Non-NDEA Schools Were Statistically Merged

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GROUP VIII

ITEMS WHERE THERE WAS A LACK OF AGREEMENT AMONG COUNSELOR EDUCATORS AS TO THEIR CONTRIBUTION TO GREATER NUMBERS OF STUDENTS BEING REALISTIC IN THEIR DESIRE TO SEEK HIGHER EDUCATION

Adjusted Mean Frequencies of Professional Educators According to School Type in NDEA Participating Schools

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Adjusted Mean Frequencies of Professional Educators According to School Type in Non-NDEA Participating Schools

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<td>2.15</td>
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<tr>
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<td>2.20</td>
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<tr>
<td>Counselor</td>
<td>11</td>
<td>2.82</td>
<td>2</td>
</tr>
<tr>
<td>School Type</td>
<td>93</td>
<td>2.27*</td>
<td>22</td>
</tr>
</tbody>
</table>

*Significant at the ten per cent level of confidence.

Adjusted Mean Frequencies of Professional Educators When NDEA and Non-NDEA Schools Were Statistically Merged

<table>
<thead>
<tr>
<th>Personnel Groups and School Type</th>
<th>Local</th>
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<th>Total Personnel Groups &amp; School Type</th>
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*Significant at the ten per cent level of confidence.
GROUP IX

ITEMS RATED BY COUNSELOR EDUCATORS "ABOVE AVERAGE" OR "SUPERIOR"
IN THEIR CONTRIBUTION TO THE AWARENESS OF, SUPPORT FOR, AND
EXPECTANCIES OF GUIDANCE SERVICES BY PARENTS

Adjusted Mean Frequencies of Professional Educators
According to School Type in NDEA Participating Schools

<table>
<thead>
<tr>
<th>Personnel Groups and School Type</th>
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<th>City</th>
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<th>Mean</th>
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<tr>
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<td>71</td>
<td>2.24</td>
<td>17</td>
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<td>142</td>
<td>2.45</td>
<td></td>
<td></td>
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<tr>
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<td>25</td>
<td>3.00</td>
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*Significant at the ten per cent level of confidence.

Adjusted Mean Frequencies of Professional Educators According to School Type in Non-NDEA Participating Schools

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<th>Village</th>
<th>City</th>
<th>N</th>
<th>Mean</th>
<th>N</th>
<th>Mean</th>
<th>N</th>
<th>Mean</th>
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<td>Teacher</td>
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<td>1.59</td>
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<td>1.88</td>
<td>54</td>
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<td>140</td>
<td>1.96</td>
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<tr>
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<td>2.41</td>
<td>2</td>
<td>1.75</td>
<td>9</td>
<td>2.56</td>
<td>22</td>
<td>2.41</td>
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<td>187</td>
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*Significant at the ten per cent level of confidence.

Adjusted Mean Frequencies of Professional Educators When NDEA and Non-NDEA Schools Were Statistically Merged

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<th>City</th>
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<th>Mean</th>
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*Significant at the ten per cent level of confidence.
GROUP X

ITEMS WHERE THERE WAS A LACK OF AGREEMENT AMONG COUNSELOR EDUCATORS AS TO THEIR CONTRIBUTION TO THE AWARENESS OF, SUPPORT FOR, AND EXPECTANCIES OF GUIDANCE SERVICES BY PARENTS

Adjusted Mean Frequencies of Professional Educators According to School Type in NDEA Participating Schools

<table>
<thead>
<tr>
<th>Personnel Groups and School Type</th>
<th>Total Personnel Groups and School Type</th>
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<td>School Type</td>
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</tr>
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</table>

*Significant at the ten per cent level of confidence.

Adjusted Mean Frequencies of Professional Educators According to School Type in Non-NDEA Participating Schools

<table>
<thead>
<tr>
<th>Personnel Groups and School Type</th>
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</tbody>
</table>

*Significant at the ten per cent level of confidence.

Adjusted Mean Frequencies of Professional Educators When NDEA and Non-NDEA Schools Were Statistically Merged

<table>
<thead>
<tr>
<th>Personnel Groups and School Type</th>
<th>Total Personnel Groups and School Type</th>
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</thead>
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<tr>
<td></td>
<td>Local</td>
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<tr>
<td>N</td>
<td>Mean</td>
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<tr>
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<tr>
<td>Principal</td>
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<td>24</td>
</tr>
<tr>
<td>School Type</td>
<td>190</td>
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</table>

*Significant at the ten per cent level of confidence.
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AUTOBIOGRAPHY

I, Charles Edward Weaver, was born on September 29, 1916, at Leipsic (Putnam County), Ohio. I received my elementary education in a one-room school and my secondary education in Crawfis High School. A two-year teacher training certificate, the degree of Bachelor of Science in Education, and the degree of Master of Arts were all earned at Wittenberg University. I taught for two years in a dual role in both the elementary and high school at the Botkins Public Schools before joining the Lima Shawnee High School staff as business education instructor. In 1942 I entered the United States Army as a private and was released in 1946 as a captain. I was recalled into the United States Army in 1950 for a one-year period during the Korean conflict. Following both World War II and the Korean conflict, I served as Director of Guidance for the Shawnee Schools. In the fall of 1956 I was promoted to Assistant Administrator in the Shawnee Schools. Other work experience includes stock tracer at the Frigidaire Division of General Motors in Dayton, Ohio, and an Industrial Relations assignment with Standard Oil Company of Ohio, Lima Plant.

In January 1957 I was employed by The Ohio State University as Instructor and by the State Department of Education as Assistant Supervisor of Guidance, a position I presently hold. During the 1960-61 school year I served as President of the Central Ohio Guidance Association. Currently I am serving as Vice President of the Washington Local (Dublin) Board of Education.