

THE COMPARATIVE EFFECT OF SYSTEMATIC
COUNSELING AND INSIGHT-RELATIONSHIP
COUNSELING ON THE TASK-ORIENTED
BEHAVIORS OF SEVENTH GRADERS

Thesis for the Degree of Ph. D.
MICHIGAN STATE UNIVERSITY
WILLIAM SAMUEL BEAVERS
1970



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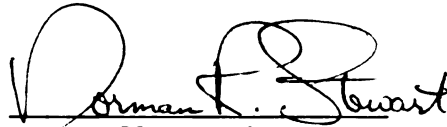
THE COMPARATIVE EFFECT OF SYSTEMATIC COUNSELING
AND INSIGHT-RELATIONSHIP COUNSELING ON
THE TASK-ORIENTED BEHAVIORS
OF SEVENTH GRADERS

presented by

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has been accepted towards fulfillment
of the requirements for

Ph.D. degree in Counseling and Educational
Psychology


Major professor

Date 8/7/70

ABSTRACT

THE COMPARATIVE EFFECT OF SYSTEMATIC COUNSELING AND INSIGHT-RELATIONSHIP COUNSELING ON THE TASK-ORIENTED BEHAVIORS OF SEVENTH GRADERS

By

William Samuel Beavers

This study investigated the comparative effectiveness of three treatments upon the task-oriented behaviors of seventh grade subjects. Experimental conditions included two approaches to counseling. The first approach was Insight-Relationship Counseling as practiced by experienced school counselors. The second was a matched pair of counselors who had participated in a brief in-service training program in Systematic Counseling. The third treatment was a no-contact control condition.

Four junior high school counselors who agreed to participate in the study were blocked on training and experience. One counselor from each block was selected by chance to receive training in Systematic Counseling. The training of the counselors selected was conducted in an in-service setting using teaching-learning units and videotape presentations originally developed for use with the

Michigan State University School Counselor Training Program. The requirement that behavioral objectives be established by these counselors was emphasized throughout the training program.

The approach used by counselors who were not trained in the systematic approach was labeled Insight-Relationship Counseling. This label was based on their responses to hypothetical counseling situations and questionnaire items concerning their counseling goals and procedures.

Subjects for the experiment were randomly selected and assigned to counselors from lists of students identified by teachers as typically exhibiting either low or non-task oriented behaviors. The counselors who did not receive training in Systematic Counseling were informed that the goal and criterion variable for the experiment was an increase in task-oriented behaviors for the subjects involved and that they should continue their accustomed procedures in working with the students assigned to them.

Following the training phase the subjects participated in eight counseling interviews over a 10-week period. The tapes submitted by the counselors were evaluated to determine that the counselors who had received training in Systematic Counseling were, in fact, following this model. Behavioral objectives were established with all subjects assigned to these counselors.

The subjects were video-taped in either their English or Social Studies classes for a total of 90 minutes both prior to and following the counseling phase. Each subject was assigned a Task-Oriented Behavior Rating based on evaluation of the video-tape segments of their classroom behavior. The scale used for the evaluation was a modification of a five-point scale originally developed by Krumboltz and Goodwin (1966). In addition to the Task-Oriented Behavior Rating, each subject was assigned a score on the following variables: (1) the relative rank they assigned themselves on task-oriented behaviors, and (2) the proportion of peers listing them as having improved.

Planned comparison techniques were used to compare the Systematic Counseling group with each of the other two groups. Since the comparisons were not orthogonal, it was necessary to split the overall alpha level of .10 between the two comparisons. The critical values therefore were set to establish significance at the .10 level throughout the study. Preliminary examination of the data led to the decision to drop the pre-counseling Task-Oriented Behavior Rating as a covariate because of the low correlation between this variable and post-counseling measures. Random assignment of subjects was assumed to have equally distributed pre-treatment differences among the groups.

No significant differences were found between the Systematic Counseling and the Insight-Relationship

Counseling treatment on any of the measures. A significant difference was found on the Task-Oriented Behavior Rating variable between the Systematic Counseling group and the no-contact control group. However, no differences between these two groups was found on the other variables.

The finding of a significant difference between the Systematic Counseling and no-contact control group on frequency of task-oriented behaviors led to the conclusion that Systematic Counseling is an effective approach for helping students improve their task-oriented behaviors.

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A THESIS

Submitted to
Michigan State University
in partial fulfillment of the requirements
for the degree of

DOCTOR OF PHILOSOPHY

Department of Counseling, Personnel Services
and Educational Psychology

1970

G-65657

1-27-71

ACKNOWLEDGMENTS

The writer wishes to express his sincere appreciation to Dr. Norman Stewart who, as Chairman of the Doctoral Committee, gave his help, encouragement, support, and friendship throughout my entire doctoral program. Gratitude is also expressed to the following members of my doctoral committee: Dr. William C. Hinds who provided the original idea and impetus for this project, Dr. Andrew C. Porter who gave invaluable assistance during the design and statistical analysis phase of this experiment, and finally to Dr. John Gullahorn who gave his time and support throughout my doctoral program.

Special thanks are given to Mr. Arnold Embree, Director of Guidance and Pupil Personnel Services of the Pontiac, Michigan Public Schools and to Mr. George Yansen, Principal, Madison Junior High School, Pontiac, Michigan for their cooperation and support which made this project possible.

Sincere thanks are due to Miss Iris Huysentruyt, Mr. Robert Rochow, Mr. Michael Delehanty, and Mr. Bruce Neely, counselors at Madison Junior High School, who gave their time and cooperation throughout this project and

without whose help, this study could not have been conducted. I also wish to thank Miss Jane Ferguson, Mrs. Nancy Van Hull, and Mr. Michael Forest of the Madison Junior High School Faculty who generously permitted the video-taping of their classrooms and were often called upon to alter plans to facilitate this project.

I would also like to thank Elizabeth Bridge, Mary Murphy, Suliman Rihani, and Ken Erickson, all master's degree candidates in the Michigan State University School Counselor Training Program, for their help in acting as judges for the reliability study.

My sincere thanks also go to Lois Fiedler, Tom Miller, Ken LeFleur, and Wayne Rowe for evaluating the performance of the counselors and for all the helpful services they provided throughout the study.

Grateful acknowledgment is also made of the excellent services of Mr. John Malacos and Mr. Alan Traines for their commendable work during the video-taping and judging phases of this study.

Finally, to my wife Dorothy, who gave unending love, encouragement, and understanding, I give my warmest thanks. To our parents, for their constant support and encouragement, we both express our deepest gratitude.

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CHAPTER I

THE PROBLEM, RATIONALE AND REVIEW OF LITERATURE

Problem

This study was conducted to evaluate the relative effects of Systematic Counseling as practiced by Counselors receiving abbreviated training in this approach, and an Insight-Relationship approach to counseling on the frequency of task-oriented behaviors displayed by a group of seventh grade students.

Rationale for the Study

An emergent conceptualization of the school counselor's role defines him as a practitioner applying his knowledge of behavioral sciences to the problems brought to his attention by the pupils for whom he has professional responsibility. Counselors are specifically being urged to accept responsibility for, and apply these scientific principles to, bringing about specific changes in client behavior (Krumboltz, 1965a, 1967b). Change in client behavior advocated within this framework does not involve such amorphous descriptions as "improved self-concept," "increased self-acceptance," or "improved peer relations."

Rather the counselor and client mutually specify some overt behavior that the client will engage in as a result of counseling.

Pupils in our schools seek counselor help in effecting solutions to a variety of problems. Typically, these problems fall into two broad categories: (1) the need for help in decision-making, and (2) assistance in modifying maladaptive behaviors. The latter category includes client behaviors in such problem areas as poor study habits, disruptive classroom behaviors, and unsatisfactory peer relationships. The client who comes to the counselor seeking help for either of the above type problems can be viewed as expressing a desire to change his behavior by the mere act of seeking help. In dealing with any client problem the counselor will be called upon to determine, with the cooperation of the client, what specific change in behavior is required to alleviate the client's problem.

The counselor who follows a behavioral science orientation in working to effect change in the behavior of his clients will use those tools, methods, and techniques that have been empirically demonstrated to be viable means of bringing about behavior change. Thoresen (1969b) has described counseling as, " . . . a variety of procedures systematically undertaken to promote specific change in the behavior of clients." Upon determining the specific behavior change desired, the counselor would make his

selection of methods and techniques on the basis of their applicability to the present client problem and their demonstrated effectiveness in changing behavior. Demands on counselor time would dictate that, with due regard to ethical considerations, the most efficient methods in terms of time, cost, and energy expended be selected. The matter of efficiency was alluded to by Krumboltz (1965b) when he discussed the need for counselors to direct inquiry toward determining the types of behavior change that would be brought about by varying combinations of techniques, procedures and counselor types with different clients presenting a variety of problems.

A Systems Approach to Counseling

The systems approach provides a framework for decision-making relative to selection of methods and tools for effecting behavior change. While different definitions of systems abound in the literature, the following common theme appears in nearly all the definitions. A system can be considered as a collection of components and methods that interact to bring about a predetermined goal. In the case of counseling the goal involves a change in client behavior or response.

Niel (1969) has written that the systems approach is useful in education because it makes possible the attainment of rather complicated objectives efficiently and effectively in terms of people, time, money, and other

resources. Applying this approach to the counseling process will enable the counselor to determine appropriate combinations of methods and techniques which will most efficiently attain the goals selected for counseling with any particular client.

Systematic Counseling (Stewart, Winborn & Hinds, 1970) as developed at Michigan State University, provides a model for counselors to use in answering the question, "What techniques and tools will most efficiently assist this client in attaining his specific goals?" The systematic approach to counseling is based in several areas of the behavioral sciences. Learning theory provides the theoretical basis of the model in that counseling is viewed as a learning process. Systems analysis provides the conceptual basis in terms of functional analysis and decision-making processes, while educational technology provides for the development of objectives, media, and materials to facilitate the attainment of objectives (Winborn, Hinds & Stewart, in press).

The learning theory basis of this counseling approach provides a sound theoretical foundation for the counselor who seeks to bring about a client behavior change. Such established procedures as modeling, verbal reinforcement, and operant conditioning have been demonstrated by numerous research studies to be effective means for facilitating behavior change.

The feature of Systematic Counseling that, as much as any other feature, serves to distinguish it from other approaches is the requirement that the counselor and client proceed with a specific objective in mind. This objective would describe, in performance terms, the behavior the client was to engage in as a result of counseling.

Systematic Counseling (Stewart, Winborn & Hinds, 1970) can be viewed as a model for changing client behavior that requires the counselor to:

1. Formulate specific counseling objectives, clearly stating what the learner will do in demonstrating knowledge and skills required for task performance.
2. Consider alternatives from which to select experiences and resources needed to achieve the stated counseling objectives.
3. Use learning principles (social reinforcement, discrimination training, extinction, etc.) in the development of learning exercises.
4. Sequence objectives of the system to provide motivation in helping the client accomplish the objectives.
5. Identify the functions (practice of performance of knowledge, presentation of knowledge, etc.) required for specific behavioral objectives.
6. Implement the process of system and collect information from the findings of performance testing.
7. Evaluate the system (learning process) in terms of the number of objectives actually attained by the client and communicate or feed back the student's progress for further learning.

Need for the Study

Although approximately 50 students have completed a master's degree level counseling practicum utilizing the

Systematic Counseling model, there has been no research evaluating the effectiveness of this approach in comparison with other theoretical approaches in either a laboratory situation or a field setting. This investigation, with its limitations, will provide initial quantitative information as to the effectiveness of the systematic model of counseling in effecting behavior change of a type that is often desired by practicing counselors for their clients.

Information derived from this study will be primarily useful to the following groups:

1. School counselors will be provided with information regarding the effectiveness of the techniques included as independent variables in bringing about change in pupil classroom behavior.
2. Counselor educators seeking to provide trainees with a viable theoretical basis for counseling practice will be provided with data regarding the efficacy of this model.
3. Directors of guidance services desiring to improve the effectiveness of counseling services will be provided with information for deciding on possible in-service training programs for their counselors.

Statement of Purpose

This study investigated the comparative effectiveness of three treatments upon the task-oriented behaviors of seventh grade subjects. Experimental conditions included two approaches to counseling. The first approach was Insight-Relationship Counseling as practiced by experienced school counselors. The second was a matched pair of counselors who had participated in a brief in-service training program in Systematic Counseling. Comparisons were made between the Systematic Counseling condition and a no-contact control condition and between the Insight-Relationship treatment and the Systematic Counseling treatment.

Assumptions Upon Which the Study is Based

An underlying assumption of this study is that an appropriate area of professional activity for school counselors involves assisting clients to change their behavior. This contrasts with the role definition that would restrict counselor activity to providing occupational and educational information and assisting clients in decision-making (Moore, 1961).

The selection of task-oriented behaviors as the dependent variable of this study is based on the assumption that client improvement in classroom performance will be reflected in an increased frequency of task-oriented behaviors.

Scope and Limitations of the Study

In order to conduct this study, it was necessary that a school setting be located where the following conditions would be fulfilled: (1) at least four counselors on the staff with sufficient time to devote to the project and willing to participate, (2) a sufficient number of teachers willing to permit video-taping of classroom sessions, (3) administrative permission for carrying out the project could be obtained.

Madison Junior High School in Pontiac, Michigan was found to meet all of the above conditions. This school has long had the reputation of providing maximum support to the counseling service and of having an administration and staff who were willing to try out educational innovations. Video-taping had been used in some classrooms on previous occasions. This factor also led to the selection of this school as the site for the investigation since the use of video-tape procedures for gathering data was necessary.

Because of demands on the time of the participating counselors, it was necessary to limit the number of subjects participating in the experiment to three subjects for each counselor. The subjects of this study were seventh graders enrolled in three Language Arts and one Social Studies class. Seventh graders were selected because it was believed that less likelihood existed of pupils in this grade either having received intensive counseling within the past

year or leaving school prior to completion of the study. The population was further restricted because of the requirement that subjects be enrolled in those classes taught by teachers willing to permit video-taping of classroom sessions.

While the counselors receiving training in Systematic Counseling were provided with materials covering all phases of Systematic Counseling, the crucial nature of establishing behavioral objectives received the greatest emphasis and this is seen as the principal factor distinguishing Systematic Counseling from Insight-Relationship Counseling in this study. Therefore, the investigation will be limited to conclusions regarding the effectiveness of this crucial factor in the Systematic Counseling model. This limitation exists for two principal reasons: (1) those parts of the Systematic Counseling training program designed to develop beginning counselor skills relative to structuring counseling and examining client concerns are of doubtful value in working with experienced, practicing counselors such as those participating in this study. (2) Time limitations did not permit a thorough instruction in the use of some of the learning procedures that are appropriate for the type of behavior problem under investigation. While instruction in the use of these techniques was offered, it was not as thorough as that offered to master's degree level trainees receiving instruction in this model.

Task-oriented behavior was selected as the dependent variable of this study because it was desired to evaluate the effectiveness of this model in terms of change in an overt and measurable behavior, consistent with the basic principles of Systematic Counseling. Other outcomes of counseling that could possibly result from this treatment such as increased amount of home study time, or decreased number of disciplinary referrals were not considered.

Definition of Terms

The following terms, relevant to this investigation, are defined as to their use in connection therewith.

Systematic Counseling.--The approach to counseling requiring establishment of a behavioral objective for the client, selection by the counselor of appropriate methods and procedures to enable the client to attain the objective, and evaluation of goal-attainment prior to termination.

Insight-Relationship Counseling.--This is defined, for purposes of this study, as the approach followed by the counselors who were not trained in Systematic Counseling. Prior to the study all four counselors described their approach to counseling. All were similar and Insight-Relationship seems to best describe their approach. The identifiable difference is that: (1) no behavioral objectives are established with the client, and (2) no established sequence of procedures is employed by the

counselors across cases. The counselors following this approach emphasized helping the client understand the relationship between classroom behavior and academic performance. They pointed out the possible consequences of failure to improve academic performance and encouraged clients to improve.

Behavioral Objective.--A description, in performance terms, of the behavior the client will engage in as a result of counseling. The specific behavior, the conditions under which it is to occur, and the minimum performance criteria are specified in the objective.

Task-Oriented Behaviors.--Observable behaviors indicating varying degrees of pupil involvement in appropriate classroom activities as follows: High Task-Orientation, Task-Orientation Non Task-Orientation, and Low Task-Orientation.

Review of the Literature

Literature was examined in four major areas related to this study. The literature discussing the counselor as an applied behavioral scientist is reported in the first section, this deals primarily with the counselor as a specialist in changing behavior, using concepts and principles from the broader field of psychology. Literature showing the applicability of the "systems approach" to counseling is presented in the second section, along with a

discussion of the use of behavioral objectives as an integral part of the "systems approach" and in instructional procedures. Studies showing the effectiveness of counseling in bringing about change are reported in the final section. Also included are studies demonstrating the use of behavior modification procedures of the type that could be applied by counselors in modifying classroom behaviors.

The Counselor as a Behavioral Scientist

Examination of literature related to the counselor as a behavioral scientist reveals two principal lines of thought. One common theme describes overt human behavior as the principal concern of the school counselor. A number of authors agree that counseling procedures should be directed toward the changing or modification of client behavior. The other common theme deals with the application of procedures from the broader field of psychology to effecting the needed behavior changes. A number of authors more specifically recommend that counselors look primarily to laboratory studies of behavior as the source of techniques and procedures for bringing about client behavior changes.

Among the earliest advocates of an approach to counseling emphasizing observable behavior as the principal variable with which the practitioner would be concerned are Michael and Myerson (1962). Defining the critical question

for counseling as being how behavior is learned and how it may be unlearned or altered, these authors described a behavioral approach to counseling as, " . . . a highly technical system based on laboratory investigations of the phenomena of conditioning for describing behavior and specifying the conditions under which it is acquired, maintained, or eliminated." Michael and Myerson pointed out that the desirability of certain behaviors in relation to the various problems faced by counselors is fairly clear. What behaviors must be created or maintained and what deficient behaviors must be altered by the manipulation of environmental consequences should, according to these authors, be the principal concern of counselors. In a paper prepared for presentation to a 1964 workshop for administrators of pupil personnel services, Michael (1964) again stressed observable behavior as the basic dependent variable underlying studies of human behavior. Following this stipulation, he urges that counseling specialists turn to behavior laboratories for useful methods and concepts.

Defining client problems in terms of desirable behavior changes was also advocated by Krumboltz (1965a) in one of the earliest articles in which he recommended a behavioral approach to counseling. Of particular interest to the present study were his points that counselors are responsible for selecting the means for effecting behavior change desired by clients and further that, "Counseling

exists of whatever ethical activities a counselor undertakes in an effort to help the client engage in those types of behavior which will lead to a resolution of the client's problems." Krumboltz (1966a) has also pointed out the difficulty of defining such abstract goals as self-fulfillment and self-understanding; instead he advocated behavioral goals should be stated in unambiguous terms for each client. Krumboltz saw the following as being among the possible benefits of stating counseling goals in such unambiguous terms: (1) the very process of stating counseling goals in this fashion might have therapeutic effects, (2) counseling would become more integrated with the mainstream of psychological theory and research as counselors generate testable hypotheses from theory and research in learning, and (3) the search for new and more effective techniques would be facilitated. The requirement for counselor education programs to provide adequate preparation for counselors to assist clients in changing their behavior was pointed out by Krumboltz (1967a) in an article directed at counselor educators. He again defined counselors as behavior changers who need the type of training that will enable them to carry out this task.

Lair (1968) argued that the variable for counselor attention should be overt student behavior in academic areas. Advocating recognition of a primary counselor responsibility for educational counseling, Lair said that

counselors should attempt to alter unsatisfactory behavior in the direction of increasing congruence between capacity and achievement, with success of counseling being evaluated in terms of this increased congruence. The principal variable of the present study, task-oriented behaviors, would be an example of behaviors counselors might work with following Lair's recommendations.

Efficiency in bringing about client learning and behavior change was described as a highly important goal of counseling by Geis (1969) and Vriend (1969). Economy of time and effort in helping the client to change as a valid criteria for evaluation was recognized by Geis, as he pointed out that making counseling an applied science involves counselor attempts at specifying the following: (1) which conditions in (2) which circumstances will lead to (3) which outcomes for (4) which clients.

The importance of goals and objectives for counseling was set forth by Thoresen (1969b) as providing a method for continual monitoring and altering of procedures selected by the counselor. Stating that, " . . . counseling follows from the problems of clients, procedures and techniques are determined by the problems of clients," Thoresen pointed out that any procedure can be considered for counselor use if it is evaluated on the basis of experience and observation and viewed according to its effectiveness in changing client behavior.

Determination of the most effective procedures on the basis of findings in the psychological laboratory has been advocated by some of the previously mentioned authors. The foundations of school counseling in psychology was recognized in a statement published by the American Psychological Association in 1962, relative to the preparation in psychology received by school counselors. This statement emphasized the primary concern of school counseling with understanding, analysis, and modification of individual behavior. Based on this recognition, the 1962 statement recommended that, among other areas of psychology included in counselor education programs, there should be instruction in the area of behavior modification. The recognition of the psychological foundations of school counseling was taken a step further by Brammer (1968) when he defined school counselors as psychologists, as the term refers to specialists in assessment and modification of behavior. Brammer took this position on the basis of the trend toward a two-year master's degree program in counselor education with a basic core in behavioral sciences, thus recognizing the concern of counseling with individuals wishing to modify their behavior.

The literature relative to a conceptualization of the school counselor as an applied behavioral scientist was reviewed in order to show that an appropriate area of concern for school counselors is the overt behavior of

clients. It was further intended to provide a rationale for the selection of methods from psychological research findings in changing client behavior. Subsequently, it will be shown that the use of the systems approach by counselors will assist them in selecting the most efficient techniques for bringing about the desired behavior change.

Applicability of the Systems Approach

If counselors adopt the role of applied behavioral scientists, they will seek a framework within which to select and apply the tools and procedures for effecting change in client behavior. The purpose of the following section of this review is to present a rationale for using the systems approach as a framework for counselor decisions in selecting the most appropriate methods for working with clients.

Definition of the Systems Approach

Definitions of "systems" are many and varied as indicated by Hartley (1969). However, most definitions have the common characteristic of defining the system as a set of methods and components that interact to bring about a common goal. Thoresen (1969c) pointed to the following characteristics as being common to most definitions of the systems approach: (1) objectives explicitly and specifically stated, (2) interrelations of parts and components,

(3) mechanisms for information flow throughout, and (4) combinations of men and machines. Hartley (1969) offered the following definition that incorporates parts of the definition offered by Thoresen, "Systems consist of two or more parts and their relations which together form a single identifiable entity."

Directly related to the problems of instruction is Smith's (1966) description of an instructional system as "an integrated set of media, equipment, methods and personnel performing efficiently the functions required to accomplish one or more training objectives." Closely related to the above definitions of systems, is that offered by Neil (1969) in an article written as part of a symposium on the use of a systems approach in education. Neil defined a system, " . . . as any group of interrelated things, material or abstract." Another very pertinent point was brought out in this article as Neil described the crucial stage in designing and utilizing a system as involving answers to the question, "What is the system supposed to achieve?, i.e., What are its objectives or goals and what criteria are we going to use to judge whether the objectives are being achieved?" Systems establish a requirement for objectives rather than creating objectives themselves, according to Bratten (1969) in an article written as part of the same symposium. Describing precisely defined and measurable objectives as "the sine qua non of the systems

approach," he further defined as a critical activity in systems development the finding and construction of instruments that will precisely define objectives in measurable terms. The requirement for specifically stated goals or objectives was also made by Gagne (1962) who pointed out that the design of a system must begin with a statement of its purpose with man and machine components planned from the beginning with reference to the system's goals.

Applicability to Counseling

Two definitions of the systems approach are especially applicable to the counseling process, when it is viewed as a learning process designed to change client behavior. Kidd (1962) expressing the view that a system is best understood in terms of its goals and purposes, offered the following rationale for the use of a systems approach.

Systems exist to facilitate man's control over his environment, or expressed in another way, to aid him in achieving an adjustive relationship with his environment. The instrumental aspect of the system in combination with its goals or purposes constitute a process whose primary characteristic is the elimination of a discrepancy between a predetermined state of affairs and an existing state of affairs when such a discrepancy exists.

The desired client behavior would be considered as "the predetermined state of affairs" while the present client behavior in the problem area would parallel the "existing state of affairs," as the above definition would be applied to counseling. The description offered by Loughary (1968) also speaks to the task of applying a systems framework to

the counseling process when he pointed out that, "A systems approach would require stating program objectives in specific performance or behavioral terms (or coming as close as one can) and then designing learning procedures for the various objectives."

A systematic approach to counseling has been described by Stewart, Winborn, and Hinds (1970). The approach used in the Michigan State University School Counselor Training Program defines eight specific sub-systems of the counseling process. Paralleling other definitions of systems, the authors described this approach to counseling as follows:

Systematic Counseling provides the counselor with a way of efficiently managing his resources of time, energy skills and materials as he assists the client toward a goal mutually established by the client and counselor as appropriate to the solution of the client's problem.

Behavioral Objectives

It can readily be seen from the preceding discussion that crucial to almost any definition of a systems approach is the establishment of a specific objective that the system will be utilized to attain. Following the determination of goals or objectives, the components and procedures are selected that will lead to the accomplishment of the objective.

The theoretical aspects of expressing specific objectives for instructional endeavors was described by Burns (1967). Two points are especially applicable to this

discussion wherein he pointed out that: (1) learning is change in behavior, and (2) behavioral changes resulting from learning are observable and measurable. Objectives, according to Burns, are composed of the following: (1) the type of behavior, i.e., knowledge, understanding, or skills, (2) the name of the behavior, and (3) a behavioral description.

In one of the earliest discussions of behavioral objectives for the instructional process, Mager (1962) presented the following as characteristics of well written instructional objectives:

1. An identification of the terminal behavior by name.
2. A description of the conditions under which the behavior is to occur.
3. A specification of the criteria of minimum acceptable performance.

Gagne (1970) defined objectives as, "a verbal statement that communicates reliably to any individual the set of circumstances that identifies a class of human performances." According to Gagne, specific objectives have the following possible advantages for facilitating learning.

1. They may establish a "set" that learner uses for organizing experiences and enables him to reject extraneous and irrelevant stimuli.
2. Another possibility is that clearly stated objectives enable the learner to match his own

responses with a response class he remembers, thereby knowing when he is correct; this would be a reinforcement function.

3. Clearly defined objectives clarify the type of learning required and the conditions for it.

The requirement that objectives be stated in terms of the actual behavior to be exhibited by the learner is emphasized by Montague and Butts (1968). Defining a behavioral objective as " . . . a goal for, or a desired outcome of, learning which is expressed in terms of observable behavior (or performance) of the learner." they point out that adequacy and appropriateness of teaching procedures will be more readily determined if such specific outcomes are designated. De Cecco (1968) also described their utility in teacher planning as the most important function of objectives, as well as this quality, DeCecco argued that the practice of explicitly stating instructional goals serves to simplify assessment procedures. These points were also made by Ammons (1962) who emphasized that behavioral objectives are derived from the broader purposes of education. The functional aspects of objectives were also delineated by Trow (1967) who described objectives as "tools for instructional purposes."

The advantages of explicitly stated objectives for instructional purposes, outlined by the above authors, would also accrue to counseling, inasmuch as the change desired

by the client could be stated in the specific terms recommended by Mager (1962). Montague and Butts (1968), DeCecco (1968), Ammons (1962), and Trow (1967) have all shown the usefulness of behavioral objectives to teachers as they plan their instructional procedures. Similarly, counselors using behavioral objectives in their practice would derive comparable benefits as they plan appropriate goal-directed learning experiences for clients. The effectiveness of counseling procedures in bringing about the desired behavior change could also be more easily evaluated. The effectiveness of counseling would be evaluated in terms of whether or not the client attained the objective and the amount of counselor time and effort required to effect the change. The evaluation of counseling success and the procedures used by the counselor were discussed by Thoresen (1969b) who said that goals and objectives provide a basis for the continual monitoring and alteration of procedures used by the counselor.

The requirement that the counselor and client establish and proceed with a specific objective in mind was identified by Stewart, Winborn, and Hinds (1970) as one of the distinguishing features of the Systematic Counseling model. They pointed to the following advantages of establishing behavioral objectives, "This precision in stating goals for counseling has the twofold purpose of facilitating the planning of procedures for counseling and aiding in the

evaluation of counseling." This position has received the support of a number of authors. Vance (1967) urged that client problems be stated in terms of the specific behavior change that the client would like to make. Krumboltz (1966a, 1966b) has also argued that a specific delineation of counseling goals would expedite the selection and evaluation of counseling procedures. Taking the position that specification of goals is vitally important to the development and implementation of programs for modifying behavior, Bandura (1969) said, "If objectives are poorly defined, an agent of behavioral change has no rational basis for selecting the appropriate treatment procedures or for evaluating the effectiveness of his efforts." Following Mager's (1962) definition of objectives as at least describing the appropriate behavior and the conditions under which it is expected to occur, Bandura argued that this precise specification of objectives enables the counselor or therapist to make decisions about the experiences that will produce the desired outcomes.

While counselors will proceed with an ultimate goal or objective in mind, one of the previously indicated requirements of the Systematic Counseling model is that objectives be sequenced to provide motivation for the client in attaining objectives. Vance (1967) pointed out that counselors must set intermediate objectives that clients must learn in order to attempt more complex behaviors. The

differentiation between ultimate goals or objectives and intermediate objectives was also made by Bandura (1969). Bandura viewed the establishment of intermediate objectives, based on skills already possessed by the client, as a necessity if the client is to avoid experiencing unnecessary failure.

The preceding section of this review had the purpose of presenting a rationale for the use of a systems approach by counselors in selecting the methods and procedures they would use in effecting behavioral change in clients. The importance of establishing behavioral objectives in connection with such an approach was also established. An attempt was made to show how the benefits of using a systems approach in instructional endeavors would also be true for counseling.

Review of Related Research

The systematic model of counseling practice alleviates many of the criticisms that have heretofore been directed at counseling research. Kiesler (1966) has suggested that one of the problems confronting researchers in the counseling or psychotherapy field has been confusion regarding what actually occurs during the course of treatment. Patterson (1966) has pointed out that, "a major defect in most studies of counseling and psychotherapy has been a lack of control or specification of the independent variable or

treatment, that is the nature of counseling or psychotherapy." The specificity of the systematic approach, with the operational definitions of the functions carried on, overcomes the criticisms of Kiesler and Patterson regarding the failure of researchers to accurately define the independent variable of counseling.

Another criticism leveled at counseling research concerns the use of global criteria such as improved self-concept, self-knowledge, and insight, all of which are difficult to define operationally. Krumboltz (1967b) has argued against the use of such criteria as grade point average, self-ratings of job satisfaction and employer ratings as being insensitive to accurate measurement, difficult to alter in counseling, and dependent upon a multitude of outside variables not controllable in the counseling situation. As an alternative to the use of global criteria, Krumboltz advocated the use of specific behaviors that are more sensitive to measurement and observation than are the criteria previously mentioned. The specification of specific behaviors, crucial to the Systematic Counseling approach, serves to answer many of the above criticisms.

The search for viable means of changing specific client behaviors required in the systems framework will serve to nullify the distinction between process and outcome research. Investigators will be concerned with identifying the counseling practices (process) that lead to a

specific client change (outcome). Thoresen (1969a) discussed a systems framework as merging process with outcome studies by its very nature. This merger was also alluded to in the previously cited discussion of counseling research by Krumboltz (1967b). Pointing out that research in counseling must originate with client problems and the behavior that will alleviate the problem, he said that counseling research needs to consider alternate ways of helping clients to attain their goals. In this regard, Krumboltz (1967b) suggested the following question as a test for relevance of counseling research, "What will counselors do differently if the results of this research come out one way rather than another?" Research conducted within a systems framework must endeavor to answer such questions.

While no previous research has been conducted directly related to Systematic Counseling (Stewart, Winborn & Hinds, 1970), two previously described aspects of this counseling approach have been studied and provide the basis for this section of the review. It has been pointed out that Systematic Counseling requires, among other things, that the counselor: (1) formulate specific counseling objectives, clearly stating what the learner will do in demonstrating skills and knowledge required for task performance, and (2) use learning principles (social reinforcement, discrimination training, extinction, etc.) in the development of learning exercises. The purpose of this

section is to present studies that show the effectiveness of reinforcement procedures in changing behavior.

The use of reinforcement principles in counseling practice did not originate with formulation of the Systematic Counseling model. Counselor adoption of these principles has been recommended by a number of authors. Among the earliest advocates were Michael and Myerson (1962). More recently, Krumboltz (1965b) has advocated counselor use of reinforcement procedures in effecting behavior change.

Both of the above mentioned authors (Michael & Myerson, 1962; Krumboltz, 1965b) have urged counselor use of reinforcement procedures derived from laboratory investigations of learning. However, if these procedures are to be adopted by counselors, their viability as techniques for modifying client behavior must be demonstrated in field studies. Several studies have been conducted in field settings that demonstrate the effectiveness of reinforcement techniques in the modification of classroom behaviors. Hinds (1968) found that reinforcement applied in group counseling resulted in an increase in adaptive behaviors and a decrease in the interfering behaviors manifested by a group of third, fourth, and fifth grade subjects. A case study by Kennedy and Thompson (1967) also provides supportive evidence for the use of reinforcement procedures in dealing with attending behaviors. Their subject, a first

grade pupil, showed a 22 per cent increase in attending behaviors following the introduction of reinforcement procedures as well as a marked increase in number of assignments completed. These same authors reported another case study where successive approximation procedures and reinforcement were successfully applied in increasing the social interaction engaged in by a fifth grade pupil while working on group projects in an art class.

If reinforcement procedures are to be maximally effective they must be applied in a systematic and consistent fashion. The results obtained by Krumboltz and Goodwin (1966) provide a case in point. The experimental subjects in their study, whose teachers were trained in the use of reinforcement techniques, showed a slight but not significantly greater increase in task-oriented behaviors following treatment than did a control group. The inconsistency of teachers in applying reinforcement techniques was blamed by the authors for the failure of the experimental group to show a significantly greater gain.

Reinforcement for desired behavior change may come from other sources in the client's environment as well as being provided by the counselor. The importance of counselors being alert to these sources was emphasized in a case study reported by Patterson (1965). Attending behaviors of a hyperactive nine year old second grader were increased through the use of reinforcement procedures. Patterson,

however, reported that he did not control for other sources of reinforcement and cautioned against the assumption that experimental variables alone were responsible for the observed change.

The recommendation made by Krumboltz (1966a, 1966b) that goals for counseling be specified individually for each client is embodied in the requirement that counselors following a Systematic Counseling model (Stewart, Winborn & Hinds, 1970) proceed with a specific objective in mind. This approach receives some degree of support in the results of the study conducted by Nolen, Kunzelman and Harring (1967). After defining appropriate academic behaviors individually for each of eight subjects in a learning disabilities classroom, they applied the "Premack Principle" (Premack, 1965) toward increasing the desired responses. All eight of these students showed a significant increase in the frequency of the specified academic response.

Ultimately, counseling can only be considered successful if the client skills learned can be transferred to outside situations. Few studies have clearly demonstrated counseling success as measured by this principle. These have been done primarily by Krumboltz and his associates. An early study (Krumboltz & Thoresen, 1964) reported that both model-reinforcement and counselor verbal reinforcement were found to have significant effects on the amount of client information-seeking behaviors carried on outside the

interview. These findings are corroborated by the results obtained by Meyer, Strowig, and Hosford (1970) when a similar study was carried on with rural high school youth. They found that model-reinforcement counseling in groups and reinforcement in dyadic interviews were equally effective in terms of the amount of outside information-seeking behavior engaged in by subjects assigned to these treatments. An interesting finding in connection with the above studies is the significant correlation between counselor reinforcement of information-seeking responses in the interview and information-seeking carried on outside and subsequent to the interview (Thoresen & Krumboltz, 1967). The findings reported by Hinds (1968) are applicable to this issue, inasmuch as the desired changes in adaptive behavior occurred within the classroom as well as the group counseling setting. Similarly, O'Leary and Becker (1967) found that the use of a token reinforcement system in modifying the behavior of the eight most disruptive children in a third grade classroom resulted in a marked drop in deviant behaviors which generalized to other school situations.

Counselors participating in the Systematic Counseling treatment of this study were encouraged to use verbal reinforcement in attempting to increase the frequency of task-oriented behaviors that the subjects exhibited in a classroom setting. The previously cited studies by Krumboltz and Thoresen (1964, 1967) lend support to this procedure.

While studies reported above generally show reinforcement procedures applied both by counselors and other significant persons to be successful when the desired outcome is some overt behavior, such as the task-oriented behaviors that constitute the dependent variable of this study, the results are less encouraging when such criteria as grade point average are used. Krumboltz (1967b) has criticized the use of grade point average as a criterion on the grounds that it is subject to a large number of influences not controllable in the counseling situation. These influences could well explain the results obtained by Beach (1967). Seventh and eighth grade students participated in either model-reinforcement or instructional group counseling over a seven week period. No differences were found between treatments at the end of the year, although both groups showed significant improvement when compared to a group receiving no counseling. Instructional group subjects alone maintained their improvement through the following year. Improvement in self-concept and attitudes toward school were observed among eighth graders assigned to instructional counseling, but no significant improvements were found in subjects assigned to model-reinforcement counseling. As pointed out before, the criterion used in this study do not represent overt client responses and are subject to a variety of influences that are not under counselor control.

Behavioral Objectives

A principal feature of Systematic Counseling, and the one emphasized in this study, is the requirement that specific behavioral objectives be established. To date no research has been reported relative to the use of behavioral objectives in counseling. The one study reported in the area of school subject matter was conducted by Baker (1969). She evaluated the effects of behavioral and non-behavioral objectives on student achievement in social studies. One of three lists of objectives, two behavioral and one non-behavioral, was randomly distributed to participating teachers who were instructed to teach the objectives in social studies classes. No significant differences due to treatment were found. Baker blamed this fact on the lack of understanding of objectives by the teachers involved. This lack was reflected in their inability to provide appropriate learning experiences and to identify test items that measured the objectives.

Baker's results caused this investigator to take a precautionary measure. While the teachers in the above study were provided with objectives to be taught to their classes, the counselors in this study were provided with instruction regarding behavioral objectives that was designed to enable them to establish appropriate objectives for individual clients. Counselors in the current study were also required, as part of their training, to identify

appropriate test items measuring the attainment of given objectives.

Summary

Counselors are increasingly being urged to adopt a behavioral science orientation to their work. Such a position would require that counselors focus on changing specific client behaviors and that empirically validated learning principles be used to effect this change. This view of the counselors role has been taken by a number of authors (Krumboltz, 1965a, 1967b; Thoresen, 1969; Michael & Myerson, 1962).

The systems approach provides a useful framework for counselors in selecting methods that are appropriate for use with any particular client. Systems are generally defined as collections of components that together form an identifiable entity established for the purpose of attaining a specified goal (Hartley, 1969; Thoresen, 1969b; Niel, 1969). The advantages of clearly defined objectives, as required in the systems approach, have been pointed out both for counseling and instructional purposes by a number of authors (Mager, 1962; DeCecco, 1968; Gagne, 1970; Bandura, 1969; Vance, 1967). Objectives are viewed as facilitating teacher planning of appropriate experiences and making evaluation of learning more meaningful. These same advantages accrue to counseling.

Systematic Counseling (Winborn, Hinds & Stewart, in press) incorporates the requirement that counseling objectives be established in behavioral terms. This approach also specifies the use of learning principles toward helping clients attain the established objectives.

Reinforcement procedures have been verified as effective means of changing client behaviors. The experimental studies of Hinds (1968), Kennedy and Thompson (1967), Krumboltz and Thoresen (1964, 1967), and Nolen, Kunzelman, and Harring (1967) have demonstrated that a variety of reinforcement procedures have effectively modified client behavior in classroom settings. Only one study (Baker, 1969) was reported that dealt directly with behavioral objectives. Lack of teacher understanding was suggested as a possible reason for the failure to obtain significant results.

The present investigation is designed to provide an initial evaluation of the effectiveness of the Systematic Counseling approach. The principal distinguishing aspect of Systematic Counseling in this study is the establishment of behavioral objectives by the counselors who were trained for this study.

CHAPTER II

EXPERIMENTAL DESIGN AND PROCEDURES

Overview

The major purpose of this investigation was to evaluate the comparative effectiveness of Systematic Counseling, as practiced by two counselors who had received short-term, in-service training in this approach, in increasing the frequency of task-oriented behaviors exhibited by a group of seventh graders with the following treatments.

1. An Insight-Relationship Counseling approach as practiced by two counselors who had no exposure to Systematic Counseling.
2. A no-contact control group of students receiving no counseling.

The principal variable differentiating Systematic Counseling from the Insight-Relationship approach in this investigation was the establishment of objectives, stated in terms of client behaviors, by the counselors trained in Systematic Counseling. The counselors not receiving this training were informed that the overall goal and criterion variable of this experiment was an increase in task-oriented

behaviors for the students involved and that their usual procedures should be followed in working with the subjects assigned to them.

Hypotheses

If Systematic Counseling is a more effective means of changing behavior than the Insight-Relationship approach, subjects receiving counseling from counselors trained in this model should show a greater amount of behavior change as a result of counseling. Hypotheses I through IV were formulated to test this proposition.

- I. The subjects receiving counseling provided by counselors trained in Systematic Counseling will show a significantly greater increase in frequency of occurrence of task-oriented behaviors following treatment than will those subjects receiving counseling from counselors following an Insight-Relationship approach.
- II. The subjects receiving counseling provided by counselors trained in Systematic Counseling will assign significantly higher ranks to themselves on a questionnaire designed to test the subjects' perception of their relative standing in task-oriented behaviors than will subjects receiving counseling from counselors following an Insight-Relationship approach.
- III. The subjects receiving counseling provided by counselors trained in Systematic Counseling will be reported by their peers as having increased their task-oriented behaviors significantly more often than will subjects receiving counseling from counselors following an Insight-Relationship approach.
- IV. The subjects receiving counseling provided by counselors trained in Systematic Counseling will be reported by teachers as having increased their task-oriented behaviors significantly more often than will subjects receiving counseling from counselors following an Insight-Relationship approach.

Hypotheses V through VIII were formulated to test the proposition that Systematic Counseling will show an effect in increasing the frequency of task-oriented behaviors of subjects greater than the increase shown by a group of subjects who received no counseling.

- V. The subjects receiving counseling provided by counselors trained in Systematic Counseling will show a significantly greater increase in frequency of occurrence of task-oriented behaviors following treatment than will control group subjects receiving no counseling.
- VI. The subjects receiving counseling provided by counselors trained in Systematic Counseling will assign significantly higher ranks to themselves on a questionnaire designed to test the subjects' perceptions of their relative standing on task-oriented behaviors than will control group subjects receiving no counseling.
- VII. The subjects receiving counseling provided by counselors trained in Systematic Counseling will be reported by their peers as having increased their task-oriented behaviors significantly more often than will control group subjects receiving no counseling.
- VIII. The subjects receiving counseling provided by counselors trained in Systematic Counseling will be reported by teachers as having increased their task-oriented behaviors significantly more often than will control group subjects receiving no counseling.

Counselors

The four counselors participating in this study were stratified on the basis of training and experience and assigned to treatment by chance designation. Before being assigned to treatment, each of the four counselors completed a questionnaire (Appendix A) which, in addition to

information of a biographic nature, asked them to describe the theoretical orientation emphasized both in their training and current practice. Their responses indicated that approaches described as "eclectic" and "Rogerian" predominated both in training and current practice. In response to the questionnaire item asking for a description of goals pursued in the interview, none of the counselors listed effecting specific behavior change as a goal. Rather, they emphasized the general goal of helping students to understand the problem.

Two of the counselors reported training at the master's degree level plus 30 hours, one reported six years experience as a counselor and the other eight years. The other two counselors reported training at the master's degree level and two and three years of experience.

All four counselors responded to four verbally presented hypothetical counseling situations. Their responses were audio-taped and examined for evidence of any marked differences in counseling approach followed by any of the counselors. The responses were especially examined for indications of counselor practice that involved establishment of specific client behavior goals or counselor use of reinforcement procedures. The situations presented are included as Appendix B.

For purposes of this study, the approach followed by the counselors who did not receive training in Systematic

Counseling will be referred to as an "Insight-Relationship" approach. This label was adopted by the investigator as being most descriptive of the orientation of all four counselors, prior to the training phase. The following illustrative statements regarding counseling interview goals are taken from the above mentioned questionnaires and the responses to the verbally presented situations.

Counselor A:

Goals: "Establish rapport with the student."
"Determine what kind of self-concept the student has."

Counselor B:

Goals: "Help the student accept his strengths and weaknesses."
"Try to find out how client feels about it (college) . . . does he understand how present records will affect chances for success in college?"

Counselor C:

Goals: "Make the student aware of himself."
"Get student to gain more self-understanding to see why others pick on him."

Counselor D:

Goals: "Establish rapport (with the student)."
"Make student look at himself and his behavior in a realistic manner."

Examination of these responses indicates that the counselors were similar in the approach employed prior to the beginning of training. This data also permits the inference that the practice of setting behavioral goals was the result of training provided for this experiment and not former training or previous experience.

It was essential to this investigation that the counselors who were not selected for training in Systematic Counseling not adopt the procedures involved in this approach. The importance of these procedures not being communicated was stressed to all counselors. As a further precaution, the counselors following the Insight-Relationship approach were promised an opportunity to receive this training following the experiment.

Sample Selection

The subjects for this study were selected from students enrolled in three seventh grade Social Studies classes at Madison Junior High School in Pontiac, Michigan. This school has approximately 1200 students enrolled in grades seven, eight, and nine. Most of the students are from homes of blue-collar and white-collar workers. The majority of the students at Madison are white with about 15 per cent Black students and some Mexican-American. Pontiac is an industrial city of about 75,000 population located 25 miles northwest of Detroit. The School District of Pontiac has a total enrollment of 25,000.

These classes were taught by three teachers who had previously agreed to permit video-taping of their classroom sessions. Prior to the beginning of the experiment these teachers were informed that they would be asked to refer 10 students who made poor use of independent study time. Two weeks prior to the beginning of the experiment, the

participating teachers submitted a list of 33 students who they described as typically displaying either low task-oriented behaviors or non task-oriented behaviors (Appendix C).

All four counselors screened the lists submitted to eliminate those students who were currently receiving help from the counselors, visiting teacher, or school psychologist. Students were also eliminated who had been seen by a counselor for five or more hours within a 10 week period of the preceding year. Twenty-nine students remained for possible inclusion in the sample following this screening.

A table of random numbers was used to assign 18 of these 29 students to each of the four counselors and control group. Three students were assigned to each of the four participating counselors and six to the control group. In the case of counselor "A" it was necessary to include the alternate in the final sample because one of the subjects assigned to this counselor left school prior to the beginning of the experiment.

The assignment of subjects to counselors and their distribution among the four classrooms are shown in Figures 1 and 2 respectively.

Training of Counselors

The counselors selected for training in Systematic Counseling will hereinafter be labeled counselors "A" and "B." Those counselors not selected for this training are

Treatments					
T ₁		T ₂		T ₃	
Counselors					
A	B	C	D	"E"	"F"
Subjects					
1	4	7	10	13	16
2	5	8	11	14	17
3	6	9	12	15	18
T ₁	Systematic Counseling		Because no counselors were used in treatment 3, designations of "E" and "F" have been given for comparative purposes.		
T ₂	Traditional Counseling				
T ₃	No-contact Control Group				

FIGURE 1

Assignment of Subjects to Counselors and Treatments

Classroom	Subjects Assigned to Classroom
1	1, 4, 5, 10, 16
2	2, 6, 13
3	7, 11, 14, 17
4	3, 8, 9, 12, 15, 18

FIGURE 2

Distribution of Subjects Among Classrooms

labeled "C" and "D." The training program for counselors "A" and "B" was carried out in an in-service setting using the following training procedures.

Since it was crucial to this study that the counselors receiving training in Systematic Counseling be thoroughly familiar with behavioral objectives, they were given

instructions to read the book on preparation of instructional objectives by Mager,¹ respond to the exercises included in the text and to complete a 25 item self-test covering the material.

The second phase of the training program was designed to acquaint these counselors with the Systematic Counseling process as taught at Michigan State University. The counselors were provided with a copy of the Systematic Counseling flowchart and a teaching-learning unit to acquaint them with flowchart symbols. The basic concepts of Systematic Counseling were presented in another unit. As with all subsequent teaching-learning units, the counselors were instructed to read the informational reference in the unit and to complete any written or self-test exercises the unit contained. These units were supplemented by on-the-scene instruction provided by the investigator wherein the concepts presented in the units were further explained and clarified.

The various subsystems of Systematic Counseling were explained through the use of teaching-learning units originally developed by the investigator and others for use with the counseling process portion of the Michigan State University School Counselor Training Program. The units covered the following subsystems and functions of the

¹Robert F. Mager, Preparing instructional objectives, Palo Alto: Fearon, 1962.

Systematic Counseling flowchart: (1) Establish Structure, (2) Discuss Client Concerns, (3) Construct Model of Client Behavior, (4) Establish Goals for Counseling, (5) Establish Behavioral Objectives, and (6) a unit on Evaluation of Counseling and Termination of Contact. Inasmuch as the units as originally developed concerned problem-solving type situations, a supplementary unit on baseline and objectives was developed dealing more directly with behaviors involving overt responses such as completing assignments, daydreaming, and social interactions.

The teaching-learning units were supplemented with the following video-tape presentations: (1) a presentation by Dr. William C. Hinds of Michigan State University showing a counseling session, following the Systematic Counseling flowchart, with a female client, (2) an overview tape, narrated by Dr. Norman R. Stewart of Michigan State University, demonstrating the Systematic Counseling process up through and including the establishment of behavioral objectives, and (3) a video-tape demonstration of function 5.0, "Decide Goals for Counseling."

Since the counselors were urged to use reinforcement procedures in attempting to increase task-oriented behaviors, the final phase of the training program was devoted to providing information regarding reinforcement techniques that were readily available to them. A teaching-learning unit entitled "Performing Required Tasks" was used in this phase.

This unit was originally developed for use with a master's degree level counseling practicum and contained a section on reinforcement techniques. In addition the counselors read reprints of articles by Krumboltz¹ and Thoresen² that dealt with counselor use of reinforcement techniques. These materials were supplemented by a video-tape of Dr. William C. Hinds counseling elementary students that demonstrated use of reinforcement and behavior modification techniques. In addition, Dr. Hinds spoke to the group concerning some reinforcement techniques that the counselors could use.

In addition to the above activities, the investigator met with the counselors for six weekly meetings during the training period. These sessions were approximately two hours in length and were devoted to further explanations of the written materials, model role-playing by the investigator, and role-playing by the counselors involved.

At the completion of training each counselor submitted tapes of three counseling interviews that he had conducted with students. The performances of these counselors were evaluated by three doctoral candidates with

¹J. D. Krumboltz, Promoting adaptive behavior: New answers to familiar questions. In J. D. Krumboltz (Ed.), Revolution in counseling: Implications of behavioral science, Boston: Houghton-Mifflin Co., 1966.

²Carl E. Thoresen, Behavioral counseling: An introduction, The School Counselor, 1966, 14, 13-21.

experience in Systematic Counseling and were judged to be adequate regarding: (1) the establishment of a behavioral objective, and (2) adherence to the Systematic Counseling flowchart without marked deviation. The judges were advised that the counselors had only recently completed a training program in Systematic Counseling and that these interviews represented an early attempt at following the model.

Counseling Phase

The four counselors participating in the study met with the subjects assigned to them in eight counseling sessions over a 10 week period. The annual spring vacation occurred during the third week after the beginning of the counseling phase and during another period higher priority obligations precluded conducting interviews with the subjects. Each interview lasted from 10 to 35 minutes with an average length of about 22 minutes. The interviews were audio-taped and summarized by the investigator on the form contained in Appendix E.

The tapes submitted by the counselors trained in Systematic Counseling were evaluated to determine if:

- (1) these counselors established behavioral objectives with the subjects, and
- (2) the extent to which specific functions of the Systematic Counseling model were carried out.

The tapes of interviews conducted by the counselors not trained in Systematic Counseling were also summarized regarding significant content and were evaluated to determine that

these counselors were not, in fact, engaging in practices that would be typical only of the systematic model.

Each of the counselors trained in Systematic Counseling established one or more behavioral objectives with the students assigned to him. The specific objectives established for each subject are presented in Appendix F. All functions of the Systematic Counseling flowchart, with the exception of the termination and evaluation functions, were performed with all clients. Practice in the "Perform Required Tasks" subsystem consisted of verbal reinforcement by the counselors and discussion of reinforcements received from teachers.

The counselors who followed the traditional counseling procedures did not establish specific objectives with the subjects assigned to this treatment. The interview activities of these counselors consisted primarily of providing encouragement to the clients and pointing out possible consequences if the client failed to improve academically. Both traditional counselors attempted to communicate the idea to their clients that a relationship existed between their classroom behavior and academic performance.

Data Collection

Video-tapes of each subject's classroom behaviors were made both prior to and after the counseling phase of the experiment. Taping was conducted during the time

assigned by the teachers for independent study. The teachers were asked to seat all subjects, both experimental and control, within camera range throughout the data collection phase of the experiment. The teachers changed the seating arrangement two to three days prior to the beginning of taping. Reasons were given for the change that were designed to prevent students from associating the change with the video-taping. The actual taping for collection of data followed a period of taping for acclimation purposes.

Each student in the sample was filmed for a total of 90 minutes over a three week period prior to beginning the counseling phase. The taping was done on two days a week for 30 minutes each day. Absenteeism by various subjects necessitated extending the video-taping over a three week period.

Immediately following the counseling phase of the study, the subjects were again video-taped in the classrooms for a total of 90 minutes. The video-taping at this phase was carried out on three days a week for a two week period.

The equipment used consisted of a Sony Model CVC 2100A camera with a wide angle lens, an Ampex Model VR5000 recorder, and an Electro-Voice Sound Spot high impedance microphone.

Criterion Measures

Frequency of Task-Oriented Behaviors

Task-oriented behaviors have been defined by Krumboltz and Goodwin (1966). The following five-point scale represents a modification of their instrument.

1. High Task-Orientation:
The pupil writes, figures, and enters into activities determined by the teacher. This category includes information-seeking, seeking assistance, reading, and other appropriate behaviors.
2. Task-Orientation:
The pupil is preparing for work, getting out books, paper and pencil. He prepares and arranges materials.
3. Neutral Behavior:
This category is used when there are too few cues to permit labeling, a decision cannot be made. If the pupil is temporarily out of his chair and off-camera, this category should be used.
4. Non Task-Orientation:
Sitting quietly, looking into space, playing with objects, rocking back and forth in chair, staring at other pupils.
5. Low Task-Orientation:
Pupil's behavior is incompatible with finishing work and is disturbing to other children. Include horseplay, noise-making, talking to seatmates and other behavior that clearly deviates from normal classroom behavior.

Tabulation of Behaviors

The tabulation of each subject's task-oriented behaviors was conducted according to the following procedure, adapted from Bijou (1968). Both pre- and post-

treatment video-tapes of each subject's classroom behaviors were rated by judges, all of whom were master's degree candidates in counseling. Each subject was rated by only one judge for any segment. Each segment was 30 minutes in length, thus a total of six segments were viewed and rated for each subject.

Judges were instructed to classify the predominate behavior of the subject as it occurred during each five-second interval. The sheet used for tabulation of the subject's behavior and the instructions provided to the judges are shown in Appendices G and H. A brief practice session was provided that included watching a video-tape of a student who displayed a variety of behaviors, falling into the different categories. The appropriate categories were indicated by a staff member, thus providing further information regarding the identification and classification of behaviors.

The video-tape segments were shown to judges in a random order and the subjects were identified by numbers assigned at random. This procedure precluded the judges being aware of whether they were rating a pre- or post-treatment tape or to which treatment the subject they were viewing was assigned.

Both a pre- and post-treatment rating on task-oriented behaviors was calculated for each subject according to the following schedule.

Number of intervals scored as:

Category 1 x 4 = _____

Category 2 x 3 = _____

Category 4 x 2 = _____

Category 5 x 1 = _____

Total Score = _____

Total number of intervals = 1080

minus number of intervals
scored as Category 3 _____

Total scored intervals = _____

Task-Oriented Behavior Rating = $\frac{\text{Total Score}}{\text{Total scored intervals}}$

The Task-Oriented Behavior (TOB) Rating was used as the basic dependent variable for testing Hypotheses I and IV.

Reliability Study

A reliability estimate of the criterion instrument was obtained by the following procedure. Four judges, all advanced master's degree candidates in counseling, rated 30 minute video-tape segments of four subjects made during the pre-counseling phase. The segments and subjects were randomly selected scoring procedures and instructions to judges were those previously described. The reliability estimate of .95 was calculated using the method recommended by Ebel (1967).

TABLE 1.--Reliability Estimate for Task-Oriented Behavior Scale.

Source	D.F.	Sum of Squares	Mean Square
Subjects	3	2.8982	.9660
Raters	3	.0409	.0136
Subjects x Raters	<u>9</u>	<u>.0892</u>	.0099
Total	15	3.0283	

Questionnaires

Data relative to Hypotheses II, III, IV, VI, VII, and VIII were obtained through the following questionnaires.

Questionnaire number one was given to all experiment and control subjects. The subjects were provided with a list of 10 names including all experimental and control subjects in the classroom being video-taped plus the names of students selected at random to complete the list. The subjects were asked to rank the students on the list, including themselves, according to who made the best use of independent study time. Each subject was assigned a score from one (low) to 10 (high) according to the rank they assigned themselves (Appendix J).

Questionnaire number two was given to all students in the classroom being video-taped with the exception of the experimental and control subjects. The students were asked to list no more than five students whom they believed

had increased their use of independent study time over the preceding six weeks. Each subject was assigned a rating based on the proportion of classmates listing him on the questionnaire (Appendix K).

Questionnaire number three was completed by teachers for each of two academic classes in which the student was enrolled other than the one in which video-taping was done. This tested for transfer of Task-Oriented Behavior from classroom in which behavior was video-taped to the classroom in which it was observed and reported on the questionnaires by teachers. Each teacher was asked to list five students from his class who had increased their use of independent study time over the preceding six weeks. Each student was assigned a score based on the number of teachers listing him (Appendix L).

The questionnaires were distributed at the end of the post-treatment video-taping phase. In the case of classroom number one, the questionnaires were not collected prior to the end of the school year and it was therefore necessary to mail the appropriate questionnaires to all students in the class with a letter of explanation. The mailing of letters was supplemented with telephone calls to all subjects who could be contacted (23 of 31). One experimental and one control subject were sent telegrams after the investigator tried unsuccessfully to contact them by telephone. Completed self-ranking questionnaires were received

from four of the five experimental control group subjects enrolled in this class. Twenty-one of the 26 other students in the class returned questionnaire number two.

Experimental Procedures

The various aspects of the experiment were completed according to the following schedule during the period, September 23, 1969 through June 24, 1970.

1. Identify school and secure counselor and teacher agreement to participate--September 23-25.
2. Selection of counselors to receive training in Systematic Counseling--October 2.
3. Video-taping of classrooms for acclimation purposes--November 12 through December 10.
4. Training of counselors in Systematic Counseling --December 2, 1969 through February 3, 1970.
5. Selection of sample and assignment to treatment --January 5-9.
6. Pre-treatment video-taping--January 13-29.
7. Counseling of subjects in experimental groups--February 25-May 14.
8. Post-treatment video-taping--May 18-28.
9. Rating of video-tapes--June 1-12.
10. Follow-up of non-returned questionnaires--June 12-24.

Experimental Design

This investigation used the "post-test only control group" design suggested by Campbell and Stanley (1963). Random assignment of subjects to counselors permitted evaluation of changes in task-oriented behaviors occurring as a result of treatment procedures without the use of a pre-measure.

A three-way hierarchical nesting design with three levels of treatment and two counselors nested in each treatment was used for the analysis.

While three subjects were originally assigned to each counselor, subject number three (assigned to the Systematic Counseling treatment) left school after the beginning of the counseling phase and was not included. A total of 17 subjects were thus included in the experiment.

Statistical Procedures

The data were keypunched and verified at the Michigan State University Computer Center. The statistical analyses were calculated on the Control Data 3600 computer using a multivariate analysis of variance program developed by Finn (1967).

Planned comparison techniques were used to test all hypotheses examined in this study. A multivariate analysis of variance and three univariate analyses were computed comparing the groups in question on the three dependent variables.

The specific hypotheses of this investigation were stated. A description of the procedures relative to selection and training of counselors was also provided. The methods used to select the sample, the counseling phase and collection, tabulation, and data analysis procedures were also described.

The results of the analysis are reported in the next chapter.

CHAPTER III

RESULTS OF THE DATA ANALYSIS

Introduction

The eight hypotheses of interest in this study were stated in directional form and tested by planned comparison techniques. An overall alpha level of .10 was adopted for this experiment. The selection of this alpha level, rather than the more traditional .05 or .01 levels, was based on two considerations: (1) the large differences that would be required for significance with the small number of observations in this experiment, and (2) the present study is the first to be carried out regarding the effectiveness of Systematic Counseling. The pilot study nature of this investigation, with the attendant desire to detect differences for future research, makes the increased risk of a Type I error more acceptable than would normally be the case.

The planned comparisons used in this study were not orthogonal. It was therefore necessary to split the overall alpha level of .10 between the two comparisons to be made. Critical values were set to establish significance at the .10 level throughout the study. The values established were equal to those required for significance at the .05 level.

Although the hypotheses were stated directionally, analysis of variance is a non-directional test. Therefore, after each of the hypotheses was tested in the null form of no difference between the groups on the variable in question directionality was determined by examination of the means if differences were found.

A pre-treatment Task-Oriented Behavior Rating was obtained for use as a covariate in evaluating changes in Task-Oriented Behavior occurring as a result of treatment. However, a low correlation between this measure and the dependent variables indicated that no precision would be gained by using covariance. Therefore, analysis of variance rather than covariance was used. This procedure also prevented a loss in degrees of freedom.

Since it was desired to make inferences regarding the effectiveness of counselors who had received training in Systematic Counseling, the mean scores for the subjects assigned to each counselor on the three dependent variables were calculated. These mean scores were used as the units of observation in conducting the analysis.

Hypotheses IV and VIII were concerned with the number of teachers reporting the subjects as having increased their task-oriented behaviors. Only four of the 17 subjects were listed by any teachers and of these four, only one was listed by more than one teacher. Of the subjects assigned to the Systematic Counseling treatment,

three were mentioned, one of whom was listed by two teachers. None of the subjects assigned to Insight-Relationship counselors were listed and only one of the no-contact control group subjects appeared on any of the lists. The fact that so few subjects were listed by the teachers made it impossible to conduct a meaningful statistical test of these two hypotheses. Accordingly the data regarding the number of teachers listing subjects who had improved was not included in the analysis.

Two groups of hypotheses were tested in this study. The first group of hypotheses concerned the differences between the subjects assigned to the Systematic Counseling treatment and those assigned to counselors following an Insight-Relationship approach. The second group of hypotheses concerned the differences between subjects assigned to counselors who had received training in Systematic Counseling and subjects assigned to a control group receiving no counseling. The results of the tests for the first group of hypotheses are reported in the following section.

Tests for Hypotheses I-III

Hypotheses I-III were formulated to test the proposition that Systematic Counseling is a more effective method for increasing the task-oriented behaviors of clients than is Insight-Relationship Counseling. The cell means by treatment for each of the dependent variables of post-

treatment Task-Oriented Behavior (TOB) Rating, Self-Ranking, and Peer-Ratings are shown in Table 2. The differences between the means of the Systematic Counseling group and the Insight-Relationship group are displayed in Table 3.

TABLE 2.--Cell Means for TOB Ratings, Self-Ranking, and Peer-Ratings

Variable	Systematic Counseling	Treatment	Control Group
		Insight-Relationship Counseling	
TOB Rating	3.5123	3.4069	3.2248
Self-Ranking	6.3333	5.6666	4.4999
Peer-Rating	0.2283	0.2928	0.3941

TABLE 3.--Differences Between Systematic Counseling Group Mean and Insight-Relationship Group Mean

Variable	Difference
	Systematic Counseling--Insight-Relationship Counseling
TOB Rating	0.1054
Self-Ranking	0.6667
Peer-Rating	-0.0645

Both a multivariate and three univariate analyses of variance were computed comparing the means of the Systematic Counseling treatment and the Insight-Relationship Counseling treatment on each of the three dependent

variables. The hypotheses, analyses, and decisions were as follows.

Hypothesis I

The subjects receiving counseling provided by counselors trained in Systematic Counseling will show a significantly greater increase in frequency of task-oriented behaviors following treatment than will those subjects receiving counseling from counselors following an Insight-Relationship approach.

As shown in Table 4, the univariate analysis comparing the Task-Oriented Behavior (TOB) Rating was not statistically significant ($p < .6420$). No difference could be claimed, between the Systematic and Insight-Relationship Counseling Groups and the hypothesis was rejected.

TABLE 4.--Multivariate and Univariate Tests for Differences Between Systematic Counseling and Insight-Relationship Counseling Groups

Multivariate				
D.F. = 3 and 1		F-Ratio = .1072		
p < .9448				
Univariate				
Variable	Between Mean Squares	Univariate F	p less than	Significance
TOB Rating	0.0020	0.2654	.6420	Not Signif.
Self-Ranking	0.0833	0.1098	.7623	Not Signif.
Peer-Rating	0.0005	0.1481	.7260	Not Signif.
D.F. for Hypothesis = 1		D.F. for Error = 3		

Hypothesis II

The subjects receiving counseling provided by counselors trained in Systematic Counseling will assign significantly higher ranks to themselves on a questionnaire designed to test the subject's perception of their relative standing in task-oriented behaviors than will subjects receiving counseling from counselors following an Insight-Relationship approach.

The analysis for this hypothesis was conducted using Self-Ranking as the variable. The univariate analysis of variance comparing the means of the two groups on this variable was not statistically significant ($p < .7623$) as shown in Table 4. No difference could be claimed between the two groups and the hypothesis was rejected.

Hypothesis III

The subjects receiving counseling provided by counselors trained in Systematic Counseling will be reported by their peers as having increased their task-oriented behaviors significantly more often than will subjects receiving counseling from counselors following an Insight-Relationship approach.

The Peer-Rating variable was used in the test of Hypothesis III. As shown in Table 4 the univariate analysis of variance comparing the means of the Systematic Counseling group and the Insight-Relationship Counseling Group on this variable was not statistically significant ($p < .7260$). No significant differences existed and the hypothesis was rejected.

Tests for Hypotheses V-VII

Hypotheses V-VII were formulated to test the proposition that Systematic Counseling will have an effect in increasing the task-oriented behaviors of clients when compared to a group receiving no counseling. The differences between the means of the Systematic Counseling group and the no-contact control group on the dependent variables are displayed in Table 5.

TABLE 5.--Differences Between Systematic Counseling Group Mean and Control Group Mean

Variable	Difference
	Systematic Counseling--Control Group
TOB Rating	0.2875
Self-Ranking	1.8334
Peer-Rating	-0.1658

Both a multivariate analysis of variance and three univariate analyses of variance were computed comparing the mean of the Systematic Counseling treatment with the control group mean on each of the three dependent variables. The results of the analysis for testing Hypotheses V through VII are presented in Table 6.

Hypothesis V

The subjects receiving counseling provided by counselors trained in Systematic Counseling will show a significantly greater increase in frequency

TABLE 6.--Multivariate and Univariate Tests for Differences Between Systematic Counseling and No-Contact Control Groups

Multivariate				
D.F. = 3 and 1		F-Ratio = 4.9450		
p < .3166				
Univariate				
Variable	Between Mean Squares	Univariate F	p less than	Significance
TOB Rating	0.0827	11.1948	.0442	Significant
Self-Ranking	3.3611	4.4268	.1261	Not Signif.
Peer-Rating	0.0275	8.9954	.0578	Not Signif.
D.F. for Hypothesis 1		D.F. for Error = 3		

of occurrence of task-oriented behaviors following treatment than will control group subjects receiving no counseling.

Hypothesis V was not rejected. The decision not to reject this hypothesis was based on the finding of a significant difference ($p < .0442$) between the means of the Systematic Counseling treatment group and the no-contact control group on the Task-Oriented Behavior Rating as shown in Table 6. The difference, as shown in Table 5, was in the direction hypothesized and was statistically significant.

Hypothesis VI

The subjects receiving counseling provided by counselors trained in Systematic Counseling will assign significantly higher ranks to themselves on a questionnaire designed to test the subjects' perceptions of their relative standing on task-

oriented behaviors than will control group subjects receiving no counseling.

The univariate analysis of the difference between the means of the two groups on the Self-Ranking dependent variable as shown in Table 6 did not reach statistical significance ($p < .1261$). The finding of no significant differences between these two groups resulted in rejection of Hypothesis VI.

Hypothesis VII

The subjects receiving counseling from counselors trained in Systematic Counseling will be reported by their peers as having increased their task-oriented behaviors significantly more often than will control group subjects receiving no counseling.

Hypothesis VII was tested using the Peer-Rating dependent variable as shown in Table 6. The univariate test of the difference between the Systematic Counseling group mean and the control group mean was not statistically significant ($p < .0578$). Hypothesis VII was rejected.

Only one of the three hypotheses comparing the Systematic Counseling treatment with a no-contact control group was accepted. Hypothesis V dealt with the difference between the two groups on the Task-Oriented Behavior (TOB) Rating. Failure to reject this hypothesis supports the conclusion that Systematic Counseling has an effect on the frequency of occurrence of task-oriented behaviors as measured by the Task-Oriented Behavior Scale.

Summary of the Tests of Hypotheses

Eight hypotheses were originally formulated for this study. These were divided into two groups of four, with the first group concerning the differences between the Systematic Counseling and the Insight-Relationship Counseling treatments. The second group of four hypotheses dealt with the differences found between the Systematic Counseling treatment and a no-contact control group.

Two of the hypotheses originally formulated were not tested. These concerned the number of teachers that listed subjects as having increased their frequency of occurrence of task-oriented behaviors. The low number of teachers listing either experimental or control subjects made a statistical test of these hypotheses impossible.

These hypotheses are stated below:

- IV. The subjects receiving counseling provided by counselors trained in Systematic Counseling will be reported by their peers as having increased their task-oriented behaviors significantly more often than will subjects receiving counseling from counselors following an Insight-Relationship approach.
- VIII. The subjects receiving counseling from counselors trained in Systematic Counseling will be reported by teachers as having increased their task-oriented behaviors significantly more often than will control group subjects receiving no counseling.

The results of the tests for Hypotheses I-III indicate that the effect of Systematic Counseling in increasing the frequency of task-oriented behaviors exhibited by subjects assigned to counselors following this model was not

significantly greater than the effect of an Insight-Relationship approach. None of these hypotheses were accepted.

The results of the tests for Hypothesis V indicate that Systematic Counseling had an effect in increasing the task-oriented behaviors of clients assigned to this treatment when compared with a no-contact control group. Subjects assigned to the Systematic Counseling treatment did not, however, assign significantly higher ranks to themselves on task-oriented behaviors than the control group subjects. Peers did not report the Systematic Counseling group subjects as having increased their task-oriented behaviors significantly more often than they reported control group subjects.

Of the six hypotheses tested for this study, only one was accepted. Two hypotheses that had originally been formulated were not tested because the results obtained did not lend themselves to statistical analysis. The .10 level was used in determining the significance of the tests for any hypothesis.

The results of this experiment are discussed in Chapter IV.

CHAPTER IV

SUMMARY AND CONCLUSIONS

Summary

This study was designed to provide initial information regarding the relative effectiveness of the Systematic Counseling approach practiced by counselors who had participated in an in-service training program in this model (Stewart, Winborn & Hinds, 1970) with an Insight-Relationship approach in increasing the frequency of task-oriented behaviors exhibited by clients.

Among the activities required in Systematic Counseling are the following: (1) that the counselor and client proceed with a specific objective in mind, and (2) that the counselor use scientifically validated learning principles in helping clients attain the established objectives. This approach, based in systems analysis, provides a useful framework for counselor use in selecting appropriate procedures and techniques for effecting behavior change.

This study was carried out in Madison Junior High School, Pontiac, Michigan. Four counselors participated in the study. All followed a similar orientation in practice prior to the training phase. The approach which all had

previously used was labeled Insight-Relationship Counseling based on the responses provided by the counselors to questionnaire items and to hypothetical counseling situations. The counselors were clocked on training and experience and one from each block was selected to receive training in Systematic Counseling by chance designation. The counselors not selected were instructed to continue their customary approach with the experimental subjects assigned to them.

The counselors assigned to the Systematic Counseling treatment participated in an in-service training program conducted by the investigator. Teaching-learning units originally used with the counseling process portion of the Michigan State University School Counselor Training Program. These units were supplemented with video-tape presentations and on the scene instruction provided by the investigator and Dr. William C. Hinds of the Michigan State University faculty.

The sample was selected from students enrolled in three seventh grade Language Arts and one Social Studies class. The teachers of these classes listed eight to 10 students in each class who they described as typically engaging in low task-oriented behaviors or non task-oriented behaviors. After an initial screening to eliminate students who were receiving counseling help currently or who had engaged in intensive counseling within the previous year,

18 of these students were randomly assigned among the counselors and a no-contact control group.

Subjects assigned to both counseling treatments participated in eight interviews over a 10 week period. Both groups of counselors were informed that the purpose of their counseling should be to improve the task-oriented behaviors of their clients. The principle variable differentiating the two counseling approaches in this study was the establishment of behavioral objectives by the counselors trained in Systematic Counseling. This aspect of the systematic approach was also emphasized during the in-service training program.

Video-tapes of the subjects' classroom behaviors were made both prior to the counseling phase and immediately thereafter. A total of 90 minutes of video-tapes were made during both periods. The taping was done during periods assigned for independent study.

A Task-Oriented Behavior Rating was assigned to each subject based on the evaluation of the video-tape segments of his classroom behaviors. The Task-Oriented Behavior Rating scale was adapted from an instrument described by Krumboltz and Goodwin (1966). Five categories reflecting different degrees of task-orientation are presented. Subjects were rated at five-second intervals according to which of these categories described their behavior during the interval.

Questionnaires were used to collect data regarding the following: (1) the relative rank each subject assigned himself on task-oriented behaviors, (2) the proportion of classmates identifying the subject as having improved in task-oriented behaviors, and (3) the number of teachers describing subjects as having improved. Each subject was assigned a score based on responses to each of the above questionnaires.

Original plans called for using the pre-counseling Task-Oriented Behavior Rating as a covariate in evaluating changes occurring as a result of counseling. However, the finding of a low correlation between this measure and other dependent variables resulted in the decision to drop the covariate and use analysis of variance rather than covariance. The random assignment of subjects to counselors justified the assumption that initial differences were randomly distributed among the treatments.

Eight hypotheses were originally formulated for this study. Two hypotheses concerning the number of teachers listing subjects as having improved were not tested because of inadequate data. All hypotheses were stated in directional form.

A three-way hierarchical nesting design was used for the statistical analysis. The basic unit of observation was the mean score on each dependent variable for the subjects assigned to each counselor. An overall alpha level

of .10 was used in this experiment. Selection of this level was based on the small number of observations and the pilot study nature of the experiment.

Planned comparison techniques were used to test the six hypotheses that were examined. Since the comparisons were not orthogonal, it was necessary to split the overall alpha level of .10 between the two comparisons. Critical values were set to establish significance at the .10 level throughout the study.

The statistical analysis was carried out using a multi-variate analysis and a univariate analysis. The analysis was computed on the Control Data Corporation 3600 computer using a program developed by Finn (1967).

Of the six hypotheses tested in this study, one was accepted. This hypothesis predicted that subjects assigned to the Systematic Counseling treatment would show a greater increase in task-oriented behaviors than would subjects assigned to a no-contact control group.

Conclusions and Implications

In this section conclusions regarding the effectiveness of Systematic Counseling as compared with the no-contact control condition and Insight-Relationship Counseling will be presented and discussed. The implications of the findings of this study for counseling practice and future research will also be presented.

Systematic Counseling vs Control Group

The most important conclusion that can be drawn from the findings of this study is that Systematic Counseling, as practiced by counselors receiving a brief training course in this approach, is an effective means for helping clients increase their task-oriented behaviors. This conclusion is based on the finding of a significant difference between the means of the Systematic Counseling group and the no-contact control group on the Task-Oriented Behavior Rating. This conclusion is strengthened by the fact that the Task-Oriented Behavior Rating is based on actual observation of behavior as it occurs in a classroom. The high reliability of the Task-Oriented Behavior Scale has also been demonstrated. These factors enable one to say with confidence that the counselors trained in using the Systematic Counseling model were able to successfully apply the basic principles of this approach in effecting an observable and beneficial behavior change.

The above conclusion is modified to a degree by the results of questionnaires used to determine subject's self-ranking and peer ratings. No significant differences were found between the groups on these variables. Although the discrepancy cannot be denied, several factors may account for the failure of questionnaire results to support the findings on the Task-Oriented Behavior Rating.

While teachers who administered these questionnaires were informed as to their purpose and told to instruct the students accordingly, there is no certainty that the students actually comprehended what they were being asked to describe. The failure of the students within one classroom to complete their assigned questionnaires until one week following the end of the school year raises the most serious question regarding the information provided by these instruments. Since a week elapsed between the last meeting of this class and receipt of the questionnaires by the students, the accuracy of their perceptions as reflected in these questionnaires, must be doubted.

While the questionnaire results do not support the previously stated conclusion, it is felt that the conclusion that Systematic Counseling is an effective means for increasing task-oriented behaviors is justified since it is based on observations of actual classroom behaviors.

Amid these mixed results it should be carefully noted that significant results were found using the seemingly more reliable measure of Task-Oriented Behavior Rating. The other instruments used are of unknown reliability and, to some degree, of doubtful accuracy.

Systematic Counseling vs Insight-Relationship Counseling

One stated purpose of this experiment was to provide information about the relative effectiveness of the

Systematic Counseling approach and what is called an Insight-Relationship approach. The findings presented in Chapter III support the conclusion that a Systematic Counseling approach, based on the establishment of behavioral objectives, is equally as effective as an Insight-Relationship approach in dealing with maladaptive classroom behaviors.

It should be noted that the counselors who received training in Systematic Counseling were using this approach with the first client or clients following training in this model. In contrast, those following the Insight-Relationship approach had had several years experience in the approach they used. This fact will be discussed further in the following section.

Examination of the means of the two groups on the Task-Oriented Behavior Rating reveals a slight difference favoring the counselors who received training in Systematic Counseling. The difference was not statistically significant, however. While one cannot with certainty identify the reasons for the failure of the Systematic Counseling group to show an increase significantly greater than that of the Insight-Relationship group as predicted by the hypotheses, several possible explanations may be offered and are discussed in the following paragraphs.

Examination of the objectives established by the counselors assigned to the Systematic Counseling treatment

does not reveal a consistent sequence of objectives leading to an established goal. The objectives established might more accurately be described as tasks. Had the counselors clearly specified a possible goal to be attained prior to termination and directed a sequence of tasks toward that goal, the differences between the groups might have been greater.

The above criticism has a direct relationship to the training program used in this study. While the counselors trained for this study showed an enthusiastic response to the concepts and principles of Systematic Counseling when the training program began, there was a noticeable drop in interest as the experiment progressed. It must therefore be questioned whether the program used was the most efficient and effective in terms of motivation and opportunities for learning. Fiedler (1970) reported that a one-day workshop on information-seeking for school counselors had an effect on the amount and variety of information-seeking behaviors engaged in by clients subsequently seen by the participating counselors. Her approach involved a larger number of participants and training personnel than did the present study. It is quite possible that a shorter training program with more participants would enhance the motivation of the trainees. Following a workshop format would also have advantages in terms of the more efficient use of media and training personnel. Increasing the number of personnel

involved in training would provide more opportunities to engage in supervised role playing and observe a variety of effective models, while increasing the number of trainees would provide greater opportunity for peer reinforcement for quality performance. All of the above could be important factors in terms of motivation and learning of new skills.

Implications for Counselor Practice

As previously indicated, the most important finding of this study is that counselors who received a brief training course in Systematic Counseling successfully applied the basic principles of this model in assisting clients to make beneficial behavior changes. One fact that should be remembered in evaluating the importance of this finding is that the clients with whom the counselors successfully applied this model were the first with whom the counselors worked following training. Insight-Relationship counselors did no better using procedures they had employed with countless clients throughout their years of experience. The initial success enjoyed by the counselors who received this brief training program indicates that continued practice and experience will further increase their effectiveness as users of this model. This evidence strongly suggests that Systematic Counseling represents a viable method for effecting client behavior change and that this

conclusion will be strengthened by continued refinement and investigation of the model.

It is perhaps in the field of in-service training, however, that the results of this study will have the most far-reaching implications. The present investigation is among the first to report the effect of an in-service training program upon the subsequent behavior of clients. The training program used in this study is based on teaching-learning units using well defined and integrated media and experiences. The program used is one that can be "packaged" and presented to a large number of practicing counselors in a variety of settings. The counselors in this study learned the principles of the Systematic Counseling approach with a total instruction time of about twelve contact hours. As previously indicated, a shorter training period might be even more effective. These points have implications for directors of counseling service and counselor educators both of which are concerned with helping counselors improve their effective through in-service training.

The need for alternative approaches to school counseling practice is made evident by the apparent failure of some commonly used approaches to produce beneficial results. Laxer, Quarter, Isnor, and Kennedy (1967), Mayer, Kranzler, and Mathes (1967), Quarter and Laxer (1970), and Winkler and others (1965) have all reported studies wherein

the client-centered approach, used by many school counselors, has failed to improve grade points, sociometric standing, or classroom behaviors of clients receiving this type of counseling.

The failure of teacher reinforcement alone to significantly improve task-oriented behaviors, as reported by Krumboltz and Goodwin (1966), when contrasted with the findings of this study suggest that counselors, with their greater amount of preparation in behavioral sciences, offer a greater potential for effecting behavior change than classroom teachers. In-service training efforts aimed at enhancing the school's potential for effecting behavior change might be more efficient and economic if directed at counselors rather than teachers. Although other investigations, most notably those of Krumboltz and his associates at Stanford University, have demonstrated certain counseling techniques to be effective means for changing client behaviors, the present investigation shows that counselors who adopt this unique approach to counseling can have an effect on the behavior of their clients. The studies by Krumboltz and Thoresen and their associates have typically used practicum students as counselors and have not involved training practicing counselors in the use of a new approach. The outcome criteria of this study, task-oriented behaviors, is an area of concern to many school personnel who are trying to help students obtain the maximum benefit of their

educational opportunities. The fact that this counseling approach is shown to be effective in increasing these behaviors is of importance to all counselors seeking to develop skills and techniques that will ultimately benefit their clientele.

Implications for Research

One purpose of this study was to provide groundwork for future examinations of the Systematic Counseling model. While the differences were not significant, the cell means of the Systematic Counseling treatment were higher than the Insight-Relationship treatment in this particular study on two of the three measures used. This suggests that future research efforts might determine whether significant differences exist between them. Suggestions for future research, based on the limitations previously discussed, are presented in the following section.

One research endeavor would be to evaluate the effectiveness of different training models. The use of formal graduate level courses in this approach should be evaluated as models for providing practicing counselors with skills required by the Systematic Counseling model. This suggestion is based on the earlier discussion of the shortcomings of the training program used in this investigation.

Directly related to the above recommendation is one concerning the adequacy of objectives established by the

counselors. The problems encountered in this study might be avoided if future investigators act as consultants during the counseling phase to help counselors in establishing appropriate sequences of objectives.

While establishment of objectives is crucial to the Systematic Counseling model, the effects of establishing behavioral objectives could be evaluated separately from other practices and procedures required by this model. A study of this problem could be conducted that would involve assigning subjects to participating counselors who would establish behavioral objectives with some clients but not with others. Other counseling practices such as establishing structure, use of verbal reinforcement, and determination of baseline behaviors would be constant with all subjects.

Any future investigation of this model would provide for a greater number of participating counselors than was the case in this investigation. Modifying the training program to accommodate a larger number of counselors would also answer some of the recommendations offered regarding training procedures.

One area which requires investigation is the application of this model in group settings. With some behavior problems such as task-oriented behaviors that are common to many students, counselors might make more effective use of their time in group settings. Two other

possible areas for research derive from this suggestion. One possible effort would be to determine the differential effectiveness of the Systematic Counseling model with clients of different backgrounds and ability levels. It is quite possible that this approach is more effective with some clients than others and may be less effective than some commonly used approaches with certain clients.

Although the problem of efficiency, in terms of counselor time, has been alluded to several times in this study, a determination of the relative efficiency of the Systematic Counseling approach was beyond the scope of the present investigation. Research could be conducted that would determine the relative amount of time required by counselors following the Systematic Counseling approach to effect a given amount of behavior change when compared with other approaches such as Insight-Relationship.

The effectiveness of Systematic Counseling must be evaluated in a variety of settings. While evidence is provided concerning its effectiveness with junior high school students, investigations of its effectiveness with populations ranging from elementary grades to college students should be conducted. Studies should also be conducted using a variety of criterion measures. Among the possibilities are increased social interactions, improved study habits, and information-seeking. The effectiveness of this model in facilitating client decision-making can also be evaluated.

While it is obviously beyond the scope of this section to exhaust the list of possibilities for future research, the above list is presented as a result of lessons learned from the current study.

In Retrospect

This study was conducted to provide an initial evaluation of a promising approach to counseling practice. The Systematic Counseling approach is based on the premise that counselor efforts should be devoted to changing the way clients behave. If school counseling is to survive as a profession, the practitioners in this area must demonstrate their effectiveness through observable changes that occur in the behaviors of their clientele. School counselors must accept the challenge of providing students with the skills necessary to cope with a complex society, both in and out of school. It is hoped that this study provides some preliminary evidence that suggests alternative ways in which this challenge can be met.

This study was not purported to be the final word on the effectiveness of this approach. Rather, the intent of the investigator was to gather initial data that would pave the way for continuing research into all aspects of this model in a variety of institutional settings.

The effectiveness of Systematic Counseling was compared with an approach described as Insight-Relationship Counseling. No final conclusions can be drawn regarding the

effectiveness of this approach based on this study alone. Judgement must be suspended until this approach is compared with a variety of counseling orientations using different criteria representing the range of problems confronting counselors in their practice.

This investigation has met the goal of providing initial data in an important area of counseling practice. It remains for future research endeavors to provide information on which the effectiveness of this promising approach must ultimately be judged.

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APPENDICES

APPENDIX A

COUNSELOR QUESTIONNAIRES

COUNSELOR QUESTIONNAIRE

1. Name _____
2. Age _____
3. Number of years experience as a counselor _____
4. Number of years in present position _____
5. Training:
 B.A. _____ B.A. plus 15 hrs _____ B.A. plus 30 hrs _____
 M.A. _____ M.A. plus 15 hrs _____ M.A. plus 30 hrs _____
6. Have you completed a counseling practicum? yes no
7. If yes, how many terms?__ Year in Which Completed_____
8. Describe your practicum in terms of the approximate number of contact yours with clients, number of hours supervised, and number of hours in meeting with supervisor.
9. Describe the theoretical approach to counseling stressed during training.
10. Describe the theoretical approach (if any) which you now rely upon.
11. List your present goals in the counseling interview.
 1. _____
 2. _____
 3. _____
 4. _____
 5. _____
 6. _____

12. Have you completed any graduate courses in psychology or education in which learning theory was emphasized?
____ yes ____ no. If yes, cite courses and dates.

13. Number of hours per week that you are now assigned to counseling. _____

APPENDIX B

HYPOTHETICAL COUNSELING SITUATIONS

HYPOTHETICAL COUNSELING SITUATIONS

Instructions:

Read the following introduction and situations aloud to the subject. Provide a copy for them to follow as you read aloud. Present only one situation at a time and allow the subject to respond before presenting the next situation. Allow the subject about two minutes for his response to each situation.

Introduction:

You are going to be presented with a number of situations typical of those faced by school counselors. Please respond by telling how you would approach the problem as a school counselor, if you were faced with each of these situations. Indicate the following in your response: (a) some possible goals you might help the client to develop, and (b) procedures you would use in attaining these goals. You will have about two minutes for your response.

1. You have occasion to meet with a student who is not doing well in school. Often the student is called lazy by other students and teachers, and the student agrees with this.
2. A tenth grade girl confides to you that she is three months pregnant.
3. You learn of a student who is being "picked on" by other students.
4. A ninth grade boy asks for help in deciding whether or not to follow a college preparatory program in high school.

APPENDIX C

REFERRAL SHEET

REFERRAL SHEET

Instructions

Please list in the spaces provided, the names of ten pupils in each of the classrooms being sampled that you would describe as typically engaging in either low task-oriented or non task-oriented behaviors according to the accompanying descriptions. If there are not, to the best of your knowledge, ten students in the classes in question whose behavior would typically fit these two categories, please complete your list by including pupils who you believe could profit from a program aimed at increasing the amount of time the pupil engages in task-oriented behavior.

Description of the Categories

High Task-Orientation

The pupil writes, figures, and engages in teacher determined activities. This category includes reading, seeking assistance, and/or information and other appropriate activities.

Task-Orientation

The pupil prepares for work by getting out and/or arranging materials.

Neutral Behavior

Too few cues to permit a decision.

Non Task-Orientation

The pupil sits quietly, looks into space, plays with objects, stares at other pupils, and rocks back and forth in chair.

Low Task-Orientation

The pupil engages in horseplay, noise making, talks to other pupils or other behavior that clearly deviates from normal classroom behavior.

Names	Describe the Category in Which the Pupils Behavior Normally Falls
1. _____	_____
2. _____	_____
3. _____	_____
4. _____	_____
5. _____	_____
6. _____	_____
7. _____	_____
8. _____	_____
9. _____	_____
10. _____	_____

APPENDIX D

LETTER TO PARENTS OF EXPERIMENTAL SUBJECTS

January 23, 1970

Dear _____:

_____ has been selected to participate in a study being conducted by Michigan State University. The purpose of this study is to improve the learning capabilities of the children involved.

Members of the counseling staff at Madison Junior High School will be working with your child in individual counseling sessions. Studies have shown counseling to be effective in improving students' learning behavior in the classroom.

Dr. William Hinds and I, the persons conducting this study, will be most happy to answer any questions you might have concerning it. If you do have any questions, please contact the counseling office at Madison Junior High School. The telephone number is 334-2519. If you should wish to discuss the results of this study following its completion, either Dr. Hinds or I will be happy to do so.

Sincerely,

William S. Beavers
Graduate Assistant

WSB/jf

APPENDIX E

INTERVIEW SUMMARY FORM

INTERVIEW SUMMARY FORM

Counselor _____ Client _____

Interview # _____ Date _____ Time _____ Mins.

Significant Content:

Objective Established: (Systematic Counselors Only)

Functions Performed:

Verbal Evidence:

APPENDIX F

OBJECTIVES ESTABLISHED BY COUNSELORS IN
SYSTEMATIC COUNSELING TREATMENT

OBJECTIVES ESTABLISHED BY COUNSELORS IN
SYSTEMATIC COUNSELING TREATMENT

Counselor A:

Client 1

For one week client will fill in chart indicating what the teacher has discussed in Social Studies class. The client must report at least four topics discussed.

Client will write down three important points that might appear on a test in Social Studies class. She will do this for each class session for the period between now and the next test.

Will take sheet to social studies teacher that requests information about client's current standing in class. Client is to return this sheet to the counselor within one week.

Client is to report to the counselor that she has said "Good morning Mr. Forrest" to her social studies teacher on two consecutive mornings.
(Client had reported difficulty in getting along with this teacher.)

Client 3

Client will give progress sheet to each of her teachers and will report to the counselor with the sheet prior to the end of the week.

Write down each assignment in every class for next two weeks. List three important points covered in each class.

Client will complete every assignment during English class for next two weeks. English teacher is to fill out slip indicating that assignment was completed.

Counselor B:

Client 4

Client is to record number of homework assignments given during following week and give this information to counselor at next interview.

Client is to complete every homework assignment in English and Social Studies classes between now and next interview. She must report that all assignments were completed.

Client 5

The client will hand in every assignment in English class for next five days.

Client will attempt to solve every math problem in the assignment made on the day of the interview. He will show the assignment to the counselor before school the next day.

The client will report to the counselor that he has made an appointment with the math teacher to receive help on problems that are difficult for him.

Client 6

Client is to report number of times he is corrected by teachers during the day. He is to give this information to the counselor.

Client is to report to the counselor that he reported to class with the following materials: book, paper, and pen.

Client is to improve academic performance by one letter grade for the next week and citizenship by one point. The teachers report till indicate to the counselor that he has achieved this objective.

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

1 min.

2 min.

2½ min.

	Categories				
	1	2	3	4	5
31					
32					
33					
34					
35					
36					
37					
38					
39					
40					
41					
42					
43					
44					
45					
46					
47					
48					
49					
50					
51					
52					
53					
54					
55					
56					
57					
58					
59					
60					

3 min.

4 min.

5 min.

Totals

- Writes, figures, engages in teacher determined activities, seeks assistance and/or information, reads and other appropriate activities.
- Prepares for work by getting out materials and/or arranging materials.
- Too few cues to permit a decision.
- Sits quietly, looks into space, plays with objects, stares at other pupils, rocks back and forth in chair.
- Horseplay, noise making, talking to other pupils, behavior that clearly deviates from normal behavior in the classroom.

APPENDIX G

RATING FORM TASK-ORIENTED BEHAVIORS

APPENDIX H

INSTRUCTIONS TO JUDGES

INSTRUCTIONS TO JUDGES

During these sessions, you will be watching videotape segments of a student's behavior in a normal classroom situation. A staff member will inform you as to which student you are to observe.

Your task will be to determine which of five categories of behavior the subject is engaging in during any five second interval. These categories are described below.

Category

1. High Task-Orientation

The pupil writes, figures and enters into activities determined by the teacher. This category includes information-seeking, seeking assistance, reading, and other task-related behaviors.

2. Task-Orientation

The pupil is preparing for work, getting out books, paper, and pencil. He prepares and arranges materials.

3. Neutral Behavior

This category is used when there are too few cues to permit a labeling of the behavior, a decision cannot be made. If the pupil is temporarily out of his chair and off-camera, this category should be used.

4. Non Task-Orientation

This includes sitting quietly, looking into space, playing with objects, rocking back and forth in chair, and staring at other pupils.

5. Low Task-Orientation

Pupil's behavior is incompatible with finishing work and is disturbing to other children. This includes

horseplay, noise making, talking to seatmates, and other behavior that clearly deviates from normal classroom behavior.

Procedure to be Followed

The video-tape will be started and you will hear an audio signal telling you to begin. At the end of five seconds, you will hear a distinct knock, upon hearing this knock, on the accompanying rating sheet, mark the category that best describes the predominate behavior of the subject during that five second interval. Continue this procedure for five minutes. Each sheet has enough intervals for a five minute period. At the end of five minutes the tape will be stopped and you will start a new sheet.

Before Proceeding with the Judging, Please do the Following:

1. Read the above categories and be sure you are thoroughly familiar with them. If you have any questions, please ask a staff member.
2. Watch the five minute training tape and score it in accordance with the above described procedures. The tape will be stopped at one minute intervals to provide feedback on your ratings. Again, if you have questions, please ask a staff member.

APPENDIX I

TASK-ORIENTED BEHAVIOR RATING
TABULATION SHEET

TASK-ORIENTED BEHAVIOR RATING TABULATION SHEET

Subject # _____

Treatment _____

Pre-Treatment:

Category:	Number of Intervals	X	Interval Score	=	Total for Category
1	_____	X	4	=	_____
2	_____	X	3	=	_____
3	_____	X	1	=	_____
4	_____	X	2	=	_____
5	_____	X	1	=	_____

Total _____

Less category #3 _____

Usable Intervals _____

Mean Interval Score = $\frac{\text{Total for Category}}{\text{Usable Intervals}}$ = _____

Post-Treatment:

Category:	Number of Intervals	X	Interval Score	=	Total for Category
1	_____	X	4	=	_____
2	_____	X	3	=	_____
3	_____	X	1	=	_____
4	_____	X	2	=	_____
5	_____	X	1	=	_____

Total _____

Less category #3 _____

Usable Intervals _____

Mean Interval Score = $\frac{\text{Total for Category}}{\text{Usable Intervals}}$ = _____

Difference Score: Post-Treatment MIS _____
 less Pre-Treatment MIS _____

APPENDIX J

QUESTIONNAIRE 1 COMPLETED
BY SUBJECTS

QUESTIONNAIRE 1 COMPLETED BY SUBJECTS

Name _____

Independent Study Questionnaire #1

We would like to know which of your classmates on this list, including yourself, makes the best use of independent study time in _____ class. In other words, who spends the most time concentrating on their work, reads the most pages or completes the assignment most quickly.

In the space provided, rank the following students from the one who makes the best use of independent study time (number 1) to the one who makes the poorest use (number 10).

(List of ten students including all experimental and control students in classroom)

1. _____
2. _____
3. _____
4. _____
5. _____
6. _____
7. _____
8. _____
9. _____
10. _____

APPENDIX K

QUESTIONNAIRE 2 COMPLETED BY PEERS

QUESTIONNAIRE 2 COMPLETED BY PEERS

Independent Study Questionnaire #2

We have been trying to help some of your fellow students make better use of their independent study time. Would you help us to find out how well we have done our job by listing the names of no more than five of your classmates who you believe have begun to make better use of independent study time over the past six weeks. For each one you list, suggest ways in which they are making better use of their time.

Names	Ways in Which They Have Improved
1. _____	1. _____ _____ _____ _____
2. _____	2. _____ _____ _____ _____
3. _____	3. _____ _____ _____ _____
4. _____	4. _____ _____ _____ _____
5. _____	5. _____ _____ _____ _____

APPENDIX L

QUESTIONNAIRE 3 COMPLETED BY TEACHERS

QUESTIONNAIRE 3 COMPLETED BY TEACHERS

Some of the students in your _____ period class have been receiving help in recent weeks aimed at improving their use of independent study time. We have been trying to increase the amount of time they spend in task-oriented behaviors.

Please list below any of your students who you believe have improved in their use of independent study time over the past six weeks. For each one you list, briefly describe what you have observed him or her doing that indicates improvement. List no more than five.

Names:

1. _____

2. _____

3. _____

4. _____

5. _____

