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The Differential Effects of the Gestalt Two-Chair Experiment and Cognitive Problem-Solving on Career Decision-Making

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THE DIFFERENTIAL EFFECTS OF THE GESTALT TWO-CHAIR EXPERIMENT
AND COGNITIVE PROBLEM-SOLVING
ON CAREER DECISION-MAKING

by

Katherine M. Clarke

A Dissertation Submitted to the Faculty of the Graduate School
of Loyola University of Chicago in Partial Fulfillment
of the Requirements for the Degree of
Doctor of Philosophy

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This effort is dedicated with love to the memory of Rev. Charles A. Curran of Loyola University of Chicago.

VITA

The author, Katherine Moira Clarke, is the daughter of Richard Alexander and Nancy Moira (Graves) Clarke. She was born October 29, 1953 in Vancouver, British Columbia, Canada.

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CHAPTER I

INTRODUCTION

Background of the Study

The needs of people engaged in normal growth and development might be considered a special domain of the counseling and guidance profession (Wrenn, 1962). Recent conceptions of the counselor's role as psychological educator (Ivey and Alschuler, 1973; Ivey and Weinstein, 1970; and Mosher and Sprinthall, 1971) or consultant (Dinkmeyer, 1975; Lewis, 1978) reflect the trend away from a medical model of counseling as "therapy" for "sick" people (Szasz, 1969). The emerging notion of counseling as a normal, life-enhancing process (Sanford, 1958) has freed many people to seek the services of the profession.

The current trend in counseling has also highlighted that the needs of this "healthy" clientele are often quite different from those of the traditional, patient population (Wrenn, 1973). Many issues now presented in counseling are quite circumscribed, require short-term intervention, and do not call for the extensive, personality restructuring once thought necessary (Malan, 1976). We have also come to realize that many problems and conflicts which people experience are part of a normal developmental path (Sheehey, 1976; Levinson, 1976). This has provided a more positive conception of such crisis points. Rather than simply remediating distress, counseling interventions now seek to maximize the contribution of crises to overall personal growth

(Butcher and Koss, 1978). Current counseling approaches, then may be designed to respond to fairly circumscribed issues often related to normal growth and development.

Distinctions are often made among these counseling approaches on the basis of their theoretical orientation (Corey, 1978). One major distinction might be made between "affective" and "behavioral" theories of counseling. The primary focus of affective theories is the client's subjective emotional experience (Rogers, 1957; Perls, Hefnerline and Goodman, 1952). Some attention is also given to the values (i.e., "introjects", "shoulds") which may be the source of emotional distress and to the physical manifestations of various inner feelings.

Behavioral theorists, on the other hand, have long claimed the client's overt behavioral activity as the only valid target of counseling interventions (Skinner, 1953; Craighead, Kazdin and Mahoney, 1976). There has been, however, growing attention to covert "thought" behavior (Ellis, 1962; Mahoney, 1974; Meichenbaum, 1974) giving rise to a "cognitive-behavioral" or, simply, "cognitive" school of counseling. Cognitive theorists are particularly interested in what clients say to themselves (e.g., "I am no good," "I must be liked"), how they evaluate what they say, and how they apply these thoughts to solve problems (Goldfried and Goldfried, 1975). A brief description of the two counseling methods which will be used in this study illustrates the fundamental differences between "affective" and "cognitive" counseling approaches.

Problem-solving (D'Zurilla and Goldfried, 1971) is a cognitive counseling method used to help people resolve conflicts. It consists of,

...a behavioral process, whether overt or cognitive in nature, which (a) makes available a variety of potentially effective response alternatives for dealing with the problematic situation and (b) increases the probability of selecting the most effective response from among these various alternatives (D'Zurilla and Goldfried, 1971, p. 108).

The basic premise of Problem-solving is that when we recognize a problematic situation, by virtue of the fact that we are upset about "something", the essential task is to refocus attention from the emotional state to the situation creating the upset (Goldfried and Goldfried, 1975).

The Gestalt two-chair experiment (Perls, Hefferline and Goodman, 1952) is an affective counseling method shown to be particularly effective in resolving conflicts (Greenberg, 1979; Greenberg and Clarke, 1979; Greenberg and Higgins, 1980). It consists of creating a dialogue between the two sides of a conflict, often asking the client literally to change chairs as he/she speaks. The basic premise of the two-chair experiment is that when a person is upset about "something" the essential task is to focus attention on all aspects of the affective state and bring them into awareness (Passons, 1975). Awareness, in and of itself, will then result in conflict resolution (Perls, 1975).

It is evident then that Problem-solving and the Gestalt two-chair experiment are almost polar opposites on an affective-cognitive dimension. They are similar, however, in that both methods are used to help people resolve conflicts.

Purpose of the Study

The purpose of this study was to compare an affective (Gestalt two-chair experiment) and a cognitive (Problem-solving) counseling method used to help people resolve conflicts. A specifically defined conflict was examined: an intrapersonal conflict related to a career decision.

The controversy between affective and cognitive approaches to counseling has generated extensive discussion in the field (Garfield and Bergin, 1979). Few studies, however, have experimentally compared specific procedures from each approach, applied to a specific counseling issue such as career decision-making (Bergin and Suinn, 1975). It is this sort of differential research which holds the most promise for practical application (Goldman, 1978).

Definition of Terms

The following terms will be defined to provide a basis for further description of the study: career decision-making, intrapersonal conflict, Problem-solving and Gestalt two-chair experiment.

Career Decision-Making

In the current literature (Herr and Cramer, 1979), the term "career" is used to connote an extremely broad conception of a person's vocational behavior throughout the lifespan. "Career as lifestyle" has been suggested as a model to reflect the integration of all aspects of a person's activities: work, family life, community life and time alone (McIlroy, 1979). Career decision-making, then, goes beyond initial vocational exploration and choice. It encompasses all the changes and

modifications of that vocation demanded by the developmental stages of a person's life (Dudley and Tiedeman, 1977). Decisions of this sort will be the focus of the present study.

Intrapersonal Conflict

Often when people must make critical life decisions they suffer a great deal of inner conflict. This inner conflict may be experienced as a split inside the self (Polster and Polster, 1973). It is common to hear someone say, for example, "Part of me wants to go ahead but part of me is holding back," or "I don't really want to but I think I should" (Bandler and Grinder, 1976). This expresses the person's inner feeling of a dichotomy and the struggle between the two parts of the self.

This type of inner conflict can be a major impediment to effective decision-making (Tiedeman and Miller-Tiedeman, 1975). A person may have all the objective information necessary to make a decision and yet still be stuck or "hung-up" because of an inner conflict. It was this conflict point in a decision-making process which was of interest in the present study.

Problem-Solving

Problem-solving is one cognitive counseling method designed to help people resolve conflictual situations or "problems" (D'Zurilla and Goldfried, 1971). While Problem-solving springs from a broad theoretical domain (Scandura, 1977; Gagné, 1959), our primary concern here will be Problem-solving as a specific counseling intervention (Goldfried and Davison, 1975).

In proposing Problem-solving as a counseling approach, D'Zurilla and Goldfried (1971) describe five steps: general orientation, problem

definition and formulation, generation of alternatives, decision-making, and verification. These five steps can be taught to people who may then go away and apply them to their problems (Platt, Scura and Hannon, 1973; Kifer, et al., 1974). They can also be used, as in the present study, as a format for the counseling session. The counselor in this case acts as a sort of guide or consultant (Mahoney and Arnkoff, 1978) in the Problem-solving process.

In the first stage of Problem-solving, "general orientation," the counselor explains the rationale of the approach and tries to help the client understand that conflicts and problematic situations are a normal part of everyone's life. The counselor emphasizes that when these situations occur the client should refrain from acting impulsively. In essence, the counselor strives to establish a problem-solving "set" before the actual work on the problem begins (Goldfried and Goldfried, 1975).

The second step of the Problem-solving approach is "problem definition and formulation." Here the counselor helps the client to define the problem specifically and to include all related details. Not only external events, but also thoughts and feelings (internal events) are used to fully describe the problematic situation. The counselor also helps the client to filter out irrelevant information and to focus on that which will contribute to solving the problem (Goldfried and Goldfried, 1975).

The third step in Problem-solving is the "generation of alternatives." The counselor assists the client in outlining general plans, or "strategies," and specifics for putting the general plans into action,

namely, "tactics." The client is urged to "brainstorm" for alternatives and to suspend evaluation during this phase (Goldfried and Goldfried, 1975).

The next step in Problem-solving is "decision-making" or "choice." The counselor helps the client to estimate which alternatives are worth pursuing. It is suggested that the client consider the personal, social, short- and long-term consequences of the various alternatives. After considering the consequences, the client selects the option which promises to yield the best results. After the choice is made, tactics are designed to carry it out (Goldfried and Goldfried, 1975).

The final step in the Problem-solving process is "verification." Since the counseling session goes on only at the cognitive level, it is necessary for the client to go back into "real life" to see if the chosen solution to the problem produces the desired consequences. If the solution is unsatisfactory then the Problem-solving process is resumed and another solution tried out (Goldfried and Goldfried, 1975). This five step process of Problem-solving will be one of the counseling methods evaluated in the proposed study.

Gestalt Two-Chair Experiment

The Gestalt two-chair experiment is a technique used by many Gestalt therapists when a client is experiencing a conflict (Greenberg, 1975). The procedure was originally used by Fritz Perls, the founder of Gestalt therapy (Perls, 1975). Others have discussed it in describing their practice of Gestalt therapy (Passons, 1975; Latner, 1973; Polster and Polster, 1973). When a person expresses a conflict, the counselor suggests that the two sides of the conflict be located in separate

chairs. A dialogue is then begun between the parts of the conflict. The client is asked to sit in each chair, become aware of his/her experience and speak to the "other chair." The person then moves to the other chair to respond. Throughout the dialogue, the counselor intervenes to bring more of the client's functioning into awareness.

Greenberg (1979) has described the five principles which guide the counselor's interventions during the Two-chair experiment. These are:

1. Maintenance of a contact boundary: Maintaining clear separation and contact between the two parts of the conflict;
2. Responsibility: Directing the person to use his or her abilities to respond in accordance with the true nature of his or her experience;
3. Attending: Directing the person's attention to particular aspects of experience by increasing the level of arousal;
4. Heightening: Highlighting aspects of experience by increasing the level of arousal; and
5. Expressing: Making actual and specific that which is intellectual or abstract. Particularizing experience by moving from theory to practice.

These principles are not used in a particular sequence but follow the client's naturally unfolding experience. This Gestalt technique will be the other counseling method evaluated in the present study. Appendix A provides an example of the Two-chair experiment used to work on a career conflict.

Population of the Study

The population of the study was adults who sought short-term counseling because they were experiencing conflict regarding a career

decision. They were drawn from an urban, west-coast Canadian city (population approximately 1.5 million). They ranged in age from 16 years to 73 years and represented a variety of educational and socio-economic strata.

Limitations of the Study

The following are potential limitations of the study:

1. The sample consisted of persons who sought counseling for conflictual career decisions. They may be different from people who do not seek counseling for such conflicts. The generalizability of the results will be limited to persons who have sought counseling for the same purposes;
2. The sample is drawn from the population at large. It may or may not have implications for a psychiatric population;
3. The sample is drawn from a Canadian urban area. The results may or may not be applicable in other demographic regions;
4. The Two-chair experiment is one technique drawn from the Gestalt approach to counseling. While it is based on Gestalt concepts, it is removed for experimental purposes from the full context of Gestalt therapy. The results, therefore, have limited generalizability to Gestalt therapy as a whole;
5. Problem-solving is one technique drawn from the cognitive approach to counseling. It is based on the precepts of Cognitive counseling, but it is removed for experimental

purposes from the full context of Cognitive counseling. The results, therefore, have limited generalizability to Cognitive counseling as a whole.

Hypotheses

The following hypotheses were tested in the study:

- H₁: Problem-solving, Two-chair and Control groups will not differ significantly on a post-treatment measure of undecidedness ("Scale of Vocational Indecision" [Osipow and Carney, 1975]).¹
- H₂: Problem-solving, Two-chair and Control groups will not differ significantly on a post-treatment measure of decision-making stage ("Assessment of Career Decision-Making" [Harren, 1978]).

¹Hypotheses will be evaluated using a non-directional test of statistical significance at the $\alpha = .05$ level.

CHAPTER II

REVIEW OF RELATED LITERATURE

A review of the literature pertinent to this study touches three areas: career decision-making, Problem-solving approaches to counseling and Gestalt approaches to counseling.

Career Decision-Making

Since the first half of this century, career decision-making has been recognized as an important aspect of counseling. Frank Parsons (1909, p. 5), father of the vocational guidance movement, described it, recommending that the worker make the following assessments prior to choosing a vocation:

- (1) a clear understanding of yourself, your aptitudes, abilities, interests, ambitions, resources, limitations, and their causes;
- (2) a knowledge of the requirements and conditions of success, advantages and disadvantages, compensation, opportunities and prospects in different lines of work;
- (3) true reasoning on the relations of these two groups of facts.

For Parsons, career decision-making was essentially a matter of finding a compatible match between client traits and job traits.

The second half of this century has spawned many, more elaborate, models of career decision-making. Some of these have been translated

into intervention programs but few have been subjected to experimental investigation. This review will describe the major models of career decision-making.

Jepsen and Dilley (1974) point out that decision-making theory has been applied to human situations as both a prescriptive model to be emulated and a description of actual decision-making behavior. Horan (1979), on the other hand, distinguishes decision-making models according to their theoretical base. He describes psychodynamic, rational and behavioral conceptions of decision-making. Herr and Cramer (1979) suggest that most career decision-making (CDM) models are based on Keynesian economic theory, in that one chooses a career or an occupational goal that will maximize the gain and minimize the loss. They discriminate among CDM models on the basis of how they go about maximizing gain and minimizing loss. None of these categorization schemes evaluate all dimensions of CDM models, but they do serve as a useful organizational structure.

The Tiedeman-O'Hara CDM model is a descriptive model with a rational theoretical base. They describe it as a "paradigm of differentiation and integration in attempting rational solutions to the problems of one's vocational situation" (Tiedeman and O'Hara, 1963, p. 37). The problem-solving process is initiated by the experiencing of a vocational problem and by the recognition that a decision must be made (Tiedeman, 1964, 1965; Tiedeman and Field, 1961).

Tiedeman and O'Hara divide the process into two periods, called Anticipation and Implementation-Adjustment, that distinguish between behavior prior to and following instrumental action on the decision.

The anticipation period is subdivided into four stages, representing discrete changes in the condition of the decision. The decision-maker may reverse himself/herself in the order of stages, but advancement predominates over time. Since decisions inter-connect, a person may be at an advanced stage on one particular decision, yet at an earlier stage with regard to another decision.

The first stage of the model, called Exploration, accounts for trial and error efforts to differentiate among alternate goals. The next stage, Crystallization, describes attempts to clarify the order and pattern of goals and their fields. Assessment of personal values and their basis is a primary activity. Goals are compared on the basis of competing demands, costs and returns, advantages and disadvantages, and take on the qualities of definiteness, clarity, complexity and rationality. Thought about the problem becomes more stable, durable and reliable.

The next stage, Choice, involves commitment to one goal which, in turn, orients the person to act. The final, Clarification stage, is brought on by doubt experienced during the waiting period between choice and action. It involves attempts to perfect the image of self in the later situation (Tiedeman and Miller-Tiedeman, 1975).

Another descriptive model, based on complex information-processing mechanisms, was outlined by Hilton (1962). It is influenced by human problem-solving (Newell, Shaw and Simon, 1958; Simon, 1955, 1958) and by "cognitive dissonance" (Festinger, 1957) theory. The key elements in the model are premises, plans (Miller, Galanter and Pibram, 1960), and cognitive dissonance. Premises are beliefs and expectations about self

and the world. Plans are not explicitly defined, but denote an image of sequential actions associated with an occupational role. Cognitive dissonance accounts for a method of testing out plans against current premises.

Hilton's decision-making process begins with an input from the environment that alters the decision-maker's plans. The decision-maker "tests" to see if the input has raised dissonance above the satisfactory threshold. If dissonance has been raised above threshold, the decision-maker examines his/her premises, and if there is no imbalance, continues acting on the present plan for action. If the premises can be revised, this is done and they are then submitted (with the plans) for a dissonance test and the cycle is complete. If, on the other hand, premises cannot be revised, the person searches stored knowledge or surroundings for another behavioral plan. New plans are tested and if dissonance is below threshold, it becomes the controlling plan for future action.

Another descriptive, cognitive-based model was described by Vroom (1964). This model uses algebraic equations to define principal concepts: the concept of Valence, the concept of Expectancy, and the concept of Force. Vroom drew upon psychological theories where similar concepts had been employed, e.g., Lewin (1951), Rotter (1955), Peak (1955), Davidson, Suppes and Siegel (1957), Atkinson (1957), and Tolman (1959).

Valence refers to the decision-maker's preferences among outcomes or, more specifically, to the affective orientations toward particular outcomes. It is the anticipated satisfaction from an outcome, rather than the actual satisfaction. Expectancy refers to the degree to which

a decision-maker believes outcomes are probable. It is defined as "the momentary belief concerning the likelihood that a particular act will be followed by a particular outcome (Vroom, 1967, p. 17). Behavior, or the decision commitment, is controlled by the direction and magnitude of forces to perform particular and competing acts. Force is the hypothetical cognitive factor that controls behavior--it is the product of Valence and Expectancy.

Another descriptive CDM model is presented by Hsu (1970). In his model, based largely on Vroom's, Hsu assumes that the decision-maker can be represented as a "system" where information in the form of occupational values, occupational information, and evaluative information about the self serves as the environmental "input" and occupational choice is the "output."

Fletcher's CDM model (1966) is based on conceptual learning ideas. He assumes that decision processes are not wholly rational and that commitment is as much a function of timing as it is of the data available to the decision-maker. Motivation in this CDM is, initially, to satisfy basic human needs but later may derive from curiosity or conceptual conflict.

Fletcher hypothesized that the formulations for career decisions are concepts about the future. These concepts are based on experiences associated with one or more basic human needs (e.g., Maslow's hierarchy). A career concept system is the composite of several concepts, such as self-concept, interests, attitudes, and values--all derived from experiences that the decision-maker associates with a given career alternative. Each career concept has an affect charge defined as the

particular feeling or emotional tone associated with, or actually a part of, the concept. Affect charges for a complex career concept system may be the summed result of several affect charges related to several experiences both positive and negative. The career chosen is that one for which the career concept's affect charge is the highest at the time of decision.

Katz (1963) sketched a "general model for career decision-making" and later added detail in his "model of guidance for decision-making" (1966). The prescriptive model emphasizes a structure to be used in the practical art of helping people. Indeed, Katz (1969c) suggested that career development theory contributes the content and outcome for guidance theory. In this sense, it prescribes preferred CDM behavior. The major difference from other models is that the entry point into the CDM process is the identification and definition of values (rather than the listing of alternatives).

Values are regarded as the satisfying goals or desired states that are sought but not in terms of motivating drive or specific instrumental action (Katz, 1963, 1969a). The decision-maker develops his own list of dominant values and scales them according to their relative "magnitude of value." For each value a "threshold level" that meets his personal requirements is identified. For each option (or alternative) the decision-maker estimates the "strength of return" it offers in respect to each value's threshold level. This refers to probabilities inherent in the option itself (e.g., the proportion of people earning the desired "threshold level" income in an occupational option). The sum of

products of "strength of return" and "magnitude of values" provides a "value return" for each option.

Objective probabilities regarding success or entry for each option are multiplied by the value return to obtain an "expected value." The strategy is to select that option for which the expected value is greatest.

Assuming that one important purpose of counseling is to help people make "good" decisions, Gelatt (1962) suggested that a decision be evaluated by the process it follows rather than the outcome alone. He described a "proposed decision-making framework" derived from Bross' (1953) design for statistical decisions and Cronbach and Gleser's (1957) description of decision sequences. The model assumes a decision-maker who requires information as "fuel" and who produces a recommended course of action which may be terminal (i.e., final) or investigatory (i.e., calling for more information) depending upon how it relates to his purposes. Information is organized into three systems: (1) predictive system, information about alternative actions, possible outcomes, and probabilities linking actions to outcomes; (2) value system, relative preferences among outcomes; and (3) decision criterion, or rules for evaluation.

A "good" decision includes adequate and relevant information in each system (Clarke, Gelatt and Levine, 1965; Gelatt, 1962). Clarke, et al. argued that, since the content of prediction and value systems is more readily observable and far less complex than the decision criterion, improving information services would increase the likelihood of good decisions. Gelatt and Clarke (1967) emphasize the importance of

subjective probabilities, the place of objective data in modifying subjective estimates, and the indeterminable, but significant effect of subjective probability estimates on preferences. In effect, the Gelatt model prescribes characteristics of adequate informational inputs and suggests an organization to be imposed on it. No specific rules are offered for proceeding from information to commitment.

A model of career decision-making derived from the tenets of economic decision-making was developed by Kaldor and Zytowski (1969) to specify classes of determinants and to describe their interrelationships in producing a final choice.

The career choice process is assumed to approximate maximizing behavior and, as such, can be described in terms of inputs and outputs. The inputs include personal resources, e.g., intellectual and physical characteristics. When applied to a given occupational alternative (in imagination), certain outputs, or consequences, follow as a function of the inputs and the alternative. Likewise, the inputs are priced in terms of what the decision-maker foregoes in using them in a particular occupational alternative. The chosen alternative is the one offering the greatest net value--the highest value when input costs are balanced against output gains.

Prescriptive models dealing specifically with college choice decisions have been offered by Hills (1964) and Hammond (1965). Thoresen and Mehrens (1967) describe variables relevant to vocational decisions and suggest research questions about the influence of information on decisions.

Problem-solving Approaches to Counseling

In the emerging domain of cognitive-behavioral counseling, Problem-solving is considered one of the most promising intervention strategies (Mahoney and Arnkoff, 1978). Although the phenomenon of problem-solving has long been of interest to experimental (e.g., Thorndike, 1898, 1911; Maier and Burke, 1967) and cognitive (e.g., Dewey, 1933; Campbell, 1960; Gagne, 1964) psychologists, its relevance to clinical concerns has been only recently explored (Horan, 1979). D'Zurilla and Goldfried (1971) were the first to suggest the exploration of problem-solving strategies from a behavioral viewpoint. They believe that much of what we view clinically as abnormal behavior or 'emotional disturbance' may be viewed as ineffective behavior and its consequences. The individual is unable to resolve certain situational problems in life and inadequate attempts to do so have undesirable effects, such as anxiety, depression, and the creation of additional problems. This conceptualization has stimulated considerable research on the application of problem-solving to counseling (Hepner, 1978).

Before examining the literature on the experimental evaluation of Problem-solving as an overall counseling approach, it is interesting to see how various models of counseling may serve particular parts of the Problem-solving approach.

The first stage of Problem-solving involves a general orientation or mental set of the client. D'Zurilla and Goldfried (1971) suggest that an optimal set is one that stimulates the emission of three distinct classes of behavior: verbal acknowledgement that problems are

a normal part of life and behaving as though it is possible to cope effectively with them, identifying troublesome situations and labeling them as such, and not acting on impulse or avoiding problematic situations.

Heppner (1978) has suggested that the theoretical postulations of Bandura (1969) on modeling and the applied research on the effects of modeling (Bandura, 1971; Kazdin, 1973; Meichenbaum, 1971) indicates that a short videotape portraying a client in the process of learning the desired behaviors could enhance the development of functional behaviors within problem-solving. The effects of verbal conditioning have been demonstrated in a number of studies (Krumboltz & Schroeder, 1965; Krumboltz & Thoresen, 1964; Ryan & Krumboltz, 1964) and it may be possible to strengthen behaviors associated with the facilitative set by verbally reinforcing the client for not avoiding, but accepting and approaching a problem task.

Rogerian or experiential styles of counseling might also contribute to instituting the optimal set since they attempt to help clients understand and learn to accept their emotions as human experiences, not events to be repressed (Perls, Hefferline & Goodman, 1965; Rogers, 1961). Ellis's rational-emotive approach (Ellis, 1961), with its goal of behaving as though it is possible to cope effectively with one's problems is also consistent with initiating the optimal problem-solving approach. Finally, the self-recording techniques used in self-management investigations may help clients to become aware of their internal reactions to problematic stimuli (Thorsen & Mahoney, 1974).

The second stage of Problem-solving consists of defining the problem. It appears that "good" problem solvers "understand" the essence of the problem (Bloom & Broder, 1951). Bourne, Ekstrand, and Dominowski (1971) concluded that the more information a person has about the problem, the easier it is to solve the problem (e.g. Davis, 1966; Davis, Train & Manske, 1968; Duncan, 1963). Several investigations have shown that the first step of successful problem-solvers is to gather all the information and facts (De Groot, 1965; Maier & Solem, 1962; Simon & Barenfeld, 1969). Bloom & Broder (1950) have shown further that successful problem solvers tend to translate vague or unfamiliar terms into simpler, more concrete terms.

Given that defining a problem requires these various skills, counselors may draw on techniques from other disciplines to promote information gathering and clarification. From the industrial world, for example, comes a productive thinking program developed by Crutchfield, Covington and Davies (1966), which helps people learn to identify the boundary conditions of the problem and arrange the facts in an orderly form. A structured data-gathering procedure is also outlined for counselors by the detailed interviewing procedures of Sullivan (1954) and Banaka (1971).

Other counseling approaches have various ways of defining the problem. Freud (1920) analyzed the individual's past and unconscious processes to determine needs and conflicts, bringing them into the client's awareness. Gestalt therapists help clients to become more

aware of their ongoing processes, thus bringing more data into awareness. Transactional analysis strives to define the problem by facilitating awareness of structural and transactional analyses (Berne, 1961). All these approaches seek to make explicit the stimuli, events, and relationships among events that are associated with the problem situation.

The third stage of Problem-solving, generating alternatives, may also be facilitated by strategies drawn from the industrial field. Osborn's (1963) brainstorming technique is widely used as a means of generating alternatives. Others, such as attribute listing (Crawford, 1964) and idea checklists (Polya, 1957) follow similar procedures.

An examination of various counseling approaches suggests that reorganizing the client's perceptions of the environment is aimed at generating alternative solutions to a problem situation. The Gestalt approach, for example, seeks to increase the phenomenological data persons have about themselves and thus increase possible alternatives. Client-centered therapists, through unconditional acceptance of their clients, hope to facilitate an open, non-critical generation of possible alternatives.

The decision-making stage of the Problem-solving process has received extensive attention in many fields. From a counseling perspective, the goal of the decision-making stage is to help clients engage in a series of behaviors that will increase the probability of their being satisfied with the decision (Krumboltz, 1966). Dilley (1971), Cronbach and Gleser (1957) and others have proposed various methods of determining relative value of alternatives.

Finally, the fifth stage of verification and evaluation may be served by self-monitoring procedures (Ferster, Nurnberger, & Levit, 1961; Fox, 1962; Goldiamond, 1965). Kanfer (1970) has stressed that training in self-observation enhances self-management skills.

The five steps of Problem-solving, then, may be served by techniques drawn from various counseling approaches. Some, with their focus on the client's inner world, are thought to be appropriate in the orientation, definition and data gathering stages of the process and others, with their focus on behavioral implementation, are useful in the decision-making and verification stages.

A number of experimental studies have been conducted to evaluate the effects of Problem-solving as a counseling approach. Spivack and his colleagues have extended the Problem-solving approach to counseling to their work with pre-schoolers, emotionally disturbed children, adolescents, and institutionalized psychiatric clients (Shure, Spivack and Jaeger, 1971; Shure and Spivack, 1972; Platt and Spivack, 1972a, 1972b, 1973, 1974; Platt, Scura and Hannon, 1973; Spivack and Shure, 1974; Siegel and Spivack, 1976; Platt and Shure, 1976). They found significant differences in problem-solving skills between "normal" and "deviant" populations. They also reported preliminary success for several projects in which "deviant" subjects were given systematic training in personal problem-solving.

A number of promising studies have supplemented the research of Spivack and others. Instruction in and practice of problem-solving skills were beneficial in decreasing conflict situations with pre-delinquent youths (Kifer, Lewis, Green and Phillips, 1974). MacPherson,

Candee and Hohman (1974) evaluated an experiment where aides were instructed to manage the lunchroom behavior of children aged six to thirteen. The children were evenly divided into three lunch periods with differing treatments. The first was behavior modification, for example, positive reinforcement, praise, and attention contingent upon behavior. In the second condition behavior modification plus a punishment essay were used. If children disobeyed they were given an essay [sic] to write ("Write 'I will not chew gum' 50 times"). In the third condition children were exposed to behavior modification plus a meditation essay. If they disobeyed they were told to copy an essay the experimenters had devised on "What did I do wrong." This third cognitive condition was significantly more effective in reducing interruptions of the aides, quarreling, and out of seat behavior.

Coche and Flick (1975) examined small group therapy over eight sessions with hospitalized psychiatric clients. There were three treatment conditions: the teaching of problem-solving skills, a placebo control, and a wait-list control. All three groups were administered the Means End Problem-Solving Procedure as a pre- and post-test measure. The treatment group had the highest post-score on the Means End Problem-Solving Procedure. Not only did the treatment group increase its score on the Means End Problem-Solving Procedure, but both that group and the placebo control had significantly shorter stays in the hospital than did the wait-list control group.

Stone, Hinds and Schmidt (1975) were successful in teaching information seeking skills to third, fourth, and fifth graders in two elementary schools. The 144 children were randomly assigned to either a

treatment or control group. In three sessions the treatment group was taught three tasks: information seeking, generation of alternatives, and the setting of personal goals. Both groups were pre- and post-tested on their responses to video-taped situations. The results show that the treatment group had higher frequencies in all three categories.

Mendonca and Siess (1976) discovered that a combination of both anxiety-management and problem-solving skills had a greater effect than either anxiety-management or problem-solving alone in treating anxious vocational indecision. Thirty-two university undergraduates (18-25 years old) were randomly assigned to one of five conditions for seven sessions. The three treatment groups were: anxiety-management, problem-solving, and a combination of both. The two control groups were discussion placebo and no treatment. The anxiety-management group was treated with desensitization. The problem-solving group was taught defining problems and goals, generating alternatives, exploring the consequences of the alternatives, and selecting a plan. The discussion control examined how career biases effect employment decisions. The results were that the anxiety management group and the combination group demonstrated greater pre-post differences on a paper and pencil test of vocational exploratory behaviors. There was no difference between groups on a pre-post anxiety measure, with the exception of the wait list control group where anxiety level remained unchanged. All three treatment groups self-reported equivalent satisfaction with their problem-solving skills.

Dixon, Hepner, Pearce and Ronning (1979) assessed the effects of intensive problem-solving training on outcomes related to counseling.

Treatments consisted of didactic presentations, group discussions, and directed practice in five 1 1/2 hour sessions that were designed for systematic training in five stages of problem-solving. Dependent variables were generation of alternatives, decision-making skills, and subject's perceptions of their problem-solving skills. Results indicated that training did influence the quality of response, but training did not increase the number of subject's alternatives. Subjects participating in the problem-solving training also described themselves as using fewer impulsive behaviors in counseling.

Jacobson (1977) treated ten married couples under a wait-list versus treatment design. All couples reported marital dissatisfaction. The treatment group was seen for eight sessions. During treatment they were taught to interact positively, problem-solve, and to develop written contingency contracts. Nine weeks following treatment, the treatment group behaved more positively toward each other and were more satisfied with their respective spouses.

Blechman (1974) has devised a family problem-solving game. Blechman, Olson, Schornagel, Halsdorf and Turner (1976) examined the effectiveness of this Family Contract Game. The game is a board game for family members and is designed to resolve specific intra-family problems by reducing conflict and identifying mutually acceptable problem solutions. The game prompts and contingently reinforces a chain of family interaction beginning with the selection of a problem to be solved. The game is to end with an agreement signed by all players. This is all done with the assistance of a therapist. Using the N=1 reversal design the researchers demonstrated that the frequency of

arguments, insults, and interruptions had decreased with the demands of the game, but were increased when the game was not in effect. Later, Blechman, Olson and Hellman (1976) were able to replicate these results with eight subjects, using the same N=1 reversal design.

Clinical practitioners have also included problem-solving training in their treatment packages (Weiss, Hops and Patterson, 1973; Haley, 1976). For example, an effective strategy for the treatment of obesity has been developed using the mnemonic SCIENCE (Mahoney and Mahoney, 1976a, 1976b; Mahoney, 1977b):

- S Specify general problems
- C Collect information
- I Identify causes or patterns
- E Examine options
- N Narrow options and experiment
- C Compare data
- E Extend, revise, or replace

In the various stages of problem-solving, the client develops additional skills like self-monitoring, means-ends thinking, evaluation of probable consequences, and rehearsal of options.

A review of the counseling literature then reveals that only a handful of studies have empirically investigated problem-solving within the counseling process (Hepner, 1978). Despite the move toward teaching generalizable problem-solving skills (Krumboltz and Thoresen, 1976) and specific training models (Mahoney, 1977b), there is a lack of empirical support for the utility of problem-solving in counseling. A first step in investigating the utility of problem-solving is to compare it to another procedure already shown effective in helping people solve problems.

Gestalt Approaches to Counseling

The literature on Gestalt approaches to counseling is decidedly lacking in empirical validation of its efficacy. Glass (1976), in his meta-analysis of eight controlled research studies involving Gestalt Therapy, found an effect size of only one-quarter standard deviation. This means that a person at the mean of the control group would be expected to be at the 58th percentile of the control group after treatment. This result is based on a relatively small sample of diversely defined Gestalt Therapies with a variety of outcome measures.

Only recently have Gestalt therapists begun to define and articulate the components of this therapy which has long been considered more of an art, inaccessible and somewhat mysterious, than a skill that could be defined and learned. This articulation and definition of Gestalt therapy techniques is certainly a first step in the research process, responding to the question: How does it work? To date, however, the answers have been provided in vaguely defined terms, substantiated subjectively with clinical illustrations (Fagan and Shepherd, 1971; D'Andrea, 1973; Polster and Polster, 1973).

Polster and Polster (1973) have presented a comprehensive exposition of key therapist interventions, describing their theoretical intention and giving clinical illustrations. Levitsky and Perls (1970) describe the interventions of Gestalt Therapy as "games" and list eleven common games which may be used to increase a client's awareness. Many of these games are similar to the principles of the two-chair experiment described by Greenberg (1975).

Fagan (1975) has illustrated the "empty chair" intervention by extensive, annotated protocols of therapy sessions conducted by therapists with varying degrees of expertise. She comments on each therapist intervention, pointing out its intent and describing how it did or did not achieve its purpose. There were, however, no objective measures to verify the hypothesized effects of the interventions.

A similar analysis was performed by Fleischer (1973) who examined the verbal behavior of a well-known Gestalt therapist and her patient. He submitted transcripts of the therapy sessions to raters who categorized the verbal behavior in 28 classes. He then related this objective description of therapy process to subjective client and therapist reports on the process. In this way, critical points of interaction between patient and therapist were identified and described. His results, while intricately obtained, add little new information to the simpler descriptions of Gestalt Therapy derived from inter-ocular impact procedures.

Many other Gestalt therapists have followed the trend toward descriptive analysis of their techniques (Perls, 1951, 1969; Latner, 1973; Stephenson, 1975; Thorne, 1975). The most important shortcoming, however, of the Gestalt Therapy literature is its lack of objective measurement, and the absence of evaluation of the therapy's effects. In an attempt to provide some empirical support for the efficacy of Gestalt therapy a number of studies have been conducted on one technique used by Gestalt therapists, namely, the Two-chair experiment.

The Two-chair experiment is operationally defined by Greenberg (1979) and has been shown to be effective in helping clients resolve

conflicts. In three single-cases of clients in counseling, the Two-chair experiment produced significantly greater depth of experiencing, more focused voice, and more conflict resolution than did empathic reflection (Greenberg, 1976).

Bohart (1977) found that Gestalt Two-chair role-playing was more effective in reducing anger, hostile attitudes, and behavioral aggression than were intellectual analysis or emotional discharge techniques.

Clarke (1977; Greenberg and Clarke, 1979) compared the effects of the Gestalt Two-chair experiment and high levels of empathy on client depth of experiencing, change in awareness and goal attainment. In an analogue study using four counselors and 16 subjects as their own controls, each treatment was applied to each subject to facilitate resolution of personally meaningful conflicts. Results showed that depth of experiencing and awareness were significantly higher for the subjects following the Gestalt intervention.

Higgins (1979; Greenberg and Higgins, 1980) replicated this study, comparing the Two-chair experiment to focusing (Gendlin, 1969) and again found the Two-chair experiment to be more effective than the alternative treatment.

Dompierre (in press) extended Clarke's study to clients experiencing intrapsychic conflicts in therapy. Using 10 counselors and 16 subjects as their own controls, the Gestalt Two-chair experiment and empathic reflection were applied at different times during a series of counseling sessions. Results showed that depth of experiencing, shifts of awareness, conflict resolution and behavior change were significantly greater following the Gestalt intervention.

All of these studies have compared the Gestalt technique to other affectively-based counseling approaches. The only study, which closely parallels the present one, to compare an affective and a cognitive approach was conducted by Rubinton (1980). She compared the differential effectiveness of teaching a "rational" decision-making intervention versus an "intuitive" intervention to persons with rational, intuitive or dependent decision-making styles. The dependent variables were certainty of vocational choice and changes in vocational maturity. The "rational" approach used was "Guided Design," developed by Wales and Stager (1978). Students were led through an entire rational career decision-making process following the Miller and Tiedeman (1972) cubistic model of decision-making. The affective intervention used was several exercises from the career decision-making instructional method, "Decisions and Outcomes," (Gelatt et al., 1973). It utilized a variety of affective and experiential activities to teach students decision-making skills.

Rubinton (1980) found that decision-making style contributed to vocational maturity and certainty of vocational choice and that both interventions resulted in increases on both dependent measures. Rational decision makers did best with the rational intervention and intuitive decision makers did best with the intuitive interventions. Dependent decision makers demonstrated decreases on both dependent measures in all groups.

A critical difference between Rubinton's study and the present study is that she compared instructional methods rather than counseling approaches. Also, her dependent variables of vocational maturity and

certainty of vocational choice are more generalizable to college students than the general population of decision-makers.

While the Rubinton study is important to the question of cognitive versus affective treatments, there have still been no studies comparing such diverse interventions as the Gestalt Two-chair experiment and Cognitive Problem-solving. Further, studies comparing affective treatments to Gestalt therapy have relied heavily on process variables to show differential effects. No attempt has been made to evaluate differential outcome, in a context of general practical concern in counseling such as career decision-making. The present study attempted to address these issues.

CHAPTER III

METHODOLOGY

This chapter will describe the subjects and counselors who participated in the study. The instruments used to measure the dependent variables will then be presented with a discussion of the composition, validity and reliability of the tests. Other forms used in the study will be described. The procedure of data collection will also be detailed and the design and statistical analyses will be delineated.

Subjects

The subjects in this study were 48 adults who voluntarily sought counseling to help them resolve a conflict related to their careers. There were eleven men and thirty-seven women, ranging in age from 16 to 73 years (\bar{X} = 36 years). The sample was fairly well-educated; of 48 participants, 44 had graduated from high school, 32 had some university education, 9 had attended graduate or professional school, and 12 had vocational/technical school training. Various occupations were represented in the sample; 11 of the 48 were professionals, 14 were employed in skilled trades and the rest were housewives, students or retired persons.



Counselors

Four counselors trained in the Gestalt Two-chair experiment and four counselors trained in Cognitive Problem-solving each saw four clients. Two of the Gestalt counselors and two of the Problem-solving counselors were Ph.D.'s and registered psychologists. The other counselors were advanced graduate students in counseling or clinical psychology.

Instruments

Two instruments were used in this study to assess the effects of the treatments. The subjects' degree of undecidedness, before and after treatment, was measured by an adapted form of Osipow and Carney's (1975) "Scale of Vocational Indecision." Changes in the subjects' decision-making stage were measured by Harren's (1978) "Assessment of Career Decision-Making," Part III, administered before and after treatment.

Scale of Vocational Indecision

The "Scale of Vocational Indecision" (Osipow and Carney, 1975) provides an overall index of undecidedness. The scale consists of eighteen items to be rated on a four point scale from (1) "not at all like me" to (4) "exactly like me." A high score reflects indecision, a low score reflects decidedness.

Since a number of items on the Vocational Indecision scale are particular to college students, some minor revision of wording was necessary to make it appropriate for this study (For example, the item, "I know what I'd like to major in, but I don't know what careers it can

lead to that would satisfy me," has been changed to, "I know what I'd like to do now but I don't know what it can lead to that would satisfy me"). The essential meaning of each item was maintained. Appendix D presents the revised form of the Scale of Vocational Indecision.

In order to verify that these changes had not adversely affected the validity and reliability of the scale, the adapted form was administered to 145 graduate students. If the students were not currently experiencing a career conflict, which is unusual among graduate students, they were instructed to recall their last time of indecision and answer as they had felt at that time.

The results of this test administration were analyzed using LERTAP, a computer program at the University of British Columbia Computing Center, based on Hoyt's model of internal consistency (Stanley and Hopkins, 1972). The resulting $r = .85$ indicates that the revised items are consistent with the other items in the test and that the adapted test is reliable. Since, then, the instrument is essentially the same, research on the reliability and validity of the original test is relevant to the present study.

Osipow, et al. (1976) evaluated the validity and reliability of the Vocational Indecision scale using seven groups of Ohio State University students ($N = 837$). These groups represented a wide range of career decidedness and because several of them were involved in various career decision-making programs, post-testing of the scale was permitted. The overall test-retest Pearson correlation for two groups of nontreated subjects was high (.902, .819), as was the item by item test-retest correlation which ranged from .343 to .820. The scale

revealed significant differences between students requesting help in vocational decision-making and those not requesting such help. It also reflected the pre- and post-treatment effects of an intervention designed to reduce vocational indecision.

Assessment of Career Decision-Making Stage

The Decision-Making Task: Occupation scale of the ACDM (Harren, 1975) was designed to measure progress through the decision-making process. It is based on Tiedeman and O'Hara's (1963) model of decision-making. The model postulates four anticipatory stages of a decision: exploration, crystallization, choice, and clarification. The Decision-Making Task: Occupation scale provides a single weighted score that represents progress through these four stages of the decision-making process.

The ACDM is an extension of an earlier instrument, the Vocational Decision Making Checklist (VDC), developed by Harren (1966). This instrument was constructed in order to empirically test part of Tiedeman and O'Hara's vocational decision making paradigm (1963).

The ACDM, or its predecessor, the Vocational Decision-Making Checklist, has been used in a number of studies to evaluate the effectiveness of various career counseling interventions (Wachowiak, 1972; Smith and Evans, 1973; Berman, Gelso, Greenfeig and Hirsch, 1977; Cochran, Hoffman, Strand and Warren, 1977; Evans and Rector, 1978). Test-retest reliability for the DMT-O scale was reported at .85 (Harren, Kass, Tinsley and Moreland, 1976).

The first published study using the instrument in its current form was reported by Wachowiak (1972, 1973). He compared model-reinforcement

counseling with traditional counseling and no counseling, using the Major scale pre- and post-counseling. The post-counseling scores for the model-reinforcement and the traditional groups were significantly higher than the control group. While the model-reinforcement group did not differ significantly from the traditional group, the model-reinforcement subjects obtained a somewhat higher average score. These results were replicated by Schneider (1971). Harren also correlated the change scores of the two counseled groups with the Gough Adjective Checklist. Improvement on the Major scale was significantly correlated with Dominance, Aggression, Heterosexuality, and Self-Confidence, and negatively correlated with Abasement.

Similar results were found in a study by Smith and Evans (1973) who compared experimental group counseling, individual counseling and no counseling using both the Major and Occupation scales of the instrument, and including both men and women subjects. They found no main or interaction effect for sex of subject or for counselor. They did find, however, that the change scores for the experimental group counseling group were significantly higher than the individual counseling group, and that both counseled groups were significantly higher than the control group.

A study by Gelso and associates (1975) which was recently completed and is being replicated on another sample, also found significant results. In this case, the subjects were adult women returning to college after some years outside of an educational context. The age range was from 20 to 50 with a mean age of 36. Three counseled groups were used, a 12 week counseled group, a 6 week counseled group and a

wait-list control group. The wait-list group was pre- and post-tested over a one month wait period and re-tested again after six weeks of counseling. The significance of this study, in contrast to the others reported, was that a "motivated control group" was used. All three groups significantly improved on the Occupation scale after counseling. The 12 week group also significantly improved on the Major scale, although the two six week groups did not. More importantly, the wait-list control subjects did not improve significantly during the one month wait period, but did improve after six weeks of counseling. Similar, although somewhat more equivocal results, because of design problems, were found by Hoffman (1973).

As part of a large scale, systematic evaluation of the services of a university counseling center, VanAtta (1974) administered the instrument pre- and post-counseling to all clients of the counseling center during one year who requested help with educational-vocational problems. He found that the post-test scores were significantly higher than the pre-test scores. Again, no significant differences were found between men and women. This study is important in that these subjects were bona fide, self-referred clients of a typical counseling center, whereas other studies utilized solicited subjects or enrollees in career planning courses.

Streufert (1975) used the instrument to evaluate the effects of structured and unstructured career exploration courses with subjects differing in conceptual level. Of the four dependent variables used, only the ACDM indicated significant results in the multivariate analysis. Streufert also identified an important independent variable,

conceptual level. Subjects were classified as high or low conceptual level by the median split procedure, and only high conceptual level subjects were found to profit significantly from the career exploration program. This result is important in that other studies (Schneider, 1971; Wachowiak, 1972) failed to demonstrate differential treatment effects with their independent variables.

Only two studies have failed to show significant differences in ACDM scores (Katz, 1975; Dye, 1976). In the Dye study, the instrument was administered only at post-test, and no significant differences were found among groups. Since no pre-test was given, it is not known if the groups were equated as to initial differences prior to treatment. In three of the studies reviewed, this has been the case, so covariance analyses were employed to adjust for initial differences. In the Katz study, the lack of significant improvement may have been due to the short duration and questionable relevance of the treatment. In this study, undergraduates spent one week off-campus, during their spring vacation, with alumni engaged in careers of potential interest to the students.

The results of the studies reported, then, demonstrate considerable construct validity for the ACDM, and suggest that it is suitable for use in this study.

Miscellaneous Forms

Explanation of the Study: A written explanation of the study was given to all subjects. It described the study as about "how people make decisions related to their careers." It also informed the clients of

their rights to confidentiality and to withdraw from the study at any time (see Appendix C).

Consent Form: All subjects were asked to sign a Consent Form which stated that they were freely volunteering to participate in the study, had been informed of the nature of their participation, and had been informed of their right to withdraw from the study (see Appendix C).

Information Sheet: A short form was used to collect information such as name, address, age, sex, occupation, marital status and education (see Appendix C).

Procedure

Subject Selection and Assignment

Subjects were solicited through radio and newspaper advertisements, as well as posters and brochures placed in community centers and libraries (Appendix B presents a sample poster.) The announcements described a free, short program, conducted under the auspices of the university, for people facing a difficult decision related to their career. Radio and television announcements were the most effective advertising and approximately 125 inquiries were received in response to this publicity.

From the approximately 125 calls received, 48 people were selected for use in the study. A preliminary screening occurred at the initial telephone contact. If callers were not experiencing a current conflict related to a career decision they were referred to an alternate community service. If they were currently experiencing such a conflict, they were invited to an "introductory" interview.

At the introductory interview subjects were screened for evidence of severe disturbance. Only persons who were relatively well-functioning and experiencing a career-related conflict were accepted for the study. Appendix C presents a protocol of the screening interview and a checklist of the acceptance criteria. These are based on Malan's (1976) criteria of who is best suited for short-term counseling.

Of 86 persons interviewed, 16 were screened out because they did not meet acceptance criteria or because of scheduling problems. The remaining 70 persons were randomly assigned to one of the three treatment conditions. There were 15 people who did not show up for the first treatment session and 7 subjects dropped out later in the study.² Dropouts were evenly spread across treatment groups.

After the screening interview, volunteers accepted for the study were provided with a written explanation of the study and asked to sign the informed consent form. The "Scale of Vocational Indecision" (SVI) and the "Assessment of Career Decision-Making" (ACDM) were then administered.

Control Group

Persons who were to be in the control group were told at the screening interview that there was currently no space in the program. They were offered the option of returning in 4 weeks to begin the program. If they accepted this alternative they were asked to complete

²All "no-shows" and dropouts were contacted by either the experimenter or the counselor. Reasons for withdrawal from the study ranged from scheduling difficulties (e.g., summer holidays) to more ambiguous issues (e.g., "I just decided it wasn't for me."). In all cases an alternative referral was offered.

the SVI and the ACDM. They were then given another copy of each test and asked to complete them the night before the first session. They were also told that the completed forms were their "admission ticket" to the program.

Four weeks later the control group returned, completed forms in hand, and proceeded with treatment. Counseling sessions for the control groups were conducted by a clinical training team at the University Counseling Center.

Problem-Solving and Two-Chair Groups

Subjects who were to be in the PS or TC groups were randomly assigned to a counselor. Four subjects were assigned to each of the four Gestalt counselors (TC n = 16), and four subjects were assigned to the Problem-Solving counselors (PS n = 16). Thirty-two clients and eight counselors thus participated in the study, with 16 clients forming the wait-list control group.

Group Briefings

Approximately one week after the screening interview, the subjects received a group briefing session which lasted about one hour. The TC group was briefed separately from the PS group. The purpose of these sessions was to explain the rationale of the counseling approach to be used and to encourage the notion that conflicts and problematic situations are a normal part of life.

The PS group briefing was conducted by an advanced doctoral student in Clinical Psychology. The five steps of the Problem-Solving approach were presented and explained. Examples were given to illustrate how to go about each step of the process. Time was then allowed

for questions of clarification. Subjects were told that in their two counseling sessions, the counselor would help them to work on their conflict using the Problem-Solving process.

The TC group briefing was conducted by an advanced doctoral student in Counseling Psychology. The Gestalt two-chair experiment was described and demonstrated. Time was allowed for questions of clarification. Subjects were told that in their two counseling sessions, the counselor would help them to work on their conflict by using the two-chair experiment.

Treatment

One week after the briefing session, subjects met individually with their counselors. They described their conflict and the counselor then instituted the assigned counseling intervention. A week later, the client and counselor met again and the same counseling approach was used.

One week after the counseling sessions the SVI and the ACDM were again administered to all Ss. The experimenter then debriefed all Ss and responded to any questions or concerns.

Check on Treatments

In order to verify that the assigned treatment was in fact conducted, audio-tapes of the counseling sessions were inspected by four raters. The raters, trained in the treatment they were evaluating, were blind to the experimental hypotheses. Two raters listened to the PS tapes and recorded their evaluations on a checklist. Two different raters listened to the TC tapes and recorded their evaluations on a

checklist. In all cases the raters agreed that the assigned treatment was conducted.

This method of confirming treatment procedures was developed by Snodgrass and Healy (1979). Appendix F presents the checklists.

Design and Analysis

The design used in this study was the "Pretest-Posttest Control Group Design" (Campbell and Stanley, 1963). Table 1 illustrates this design.

TABLE 1

THE PRETEST-POSTTEST CONTROL GROUP DESIGN

| | | | |
|---|-------|-------|-------|
| R | O_1 | X_1 | O_2 |
| R | O_3 | X_2 | O_4 |
| R | O_5 | | O_6 |

This design controls for all seven hypotheses which may rival the experimental hypotheses (Campbell and Stanley, 1963).

Before evaluating the experimental hypotheses, it was necessary to find out if the therapists in each group were differentially effective in applying the treatment. Had this been the case, it would have raised the question, "Is the treatment or the therapist causing the effect?"

To investigate this question a one-way analysis of variance with planned orthogonal comparisons was conducted on the post-test scores of the SVI for the TC and PS groups. This analysis considered therapist as a four-level fixed factor. When a significant difference was found for

one group on one test, an analysis of variance and covariance was conducted using the pre- and post-test scores.

To evaluate the experimental hypotheses, the data were submitted to a one-way analysis of variance considering treatment group as a three-level fixed factor ($p < .05$). The pre-test scores on each test were first tested to see if the groups were different before treatment. Post-test scores were then analysed to find out if the groups were significantly different after treatment.

CHAPTER IV

RESULTS

This chapter will present the results of the statistical analyses conducted on the data. To show that the counselors were not differentially effective in applying the treatments, the results of analyses of variance and covariance will be reported. Statistical evaluations of the experimental hypotheses will then be described.

Counselor Effect

To determine whether or not the counselors in each group were differentially effective in applying the treatments, the post-test scores on the SVI were submitted to a one-way, two-tailed analysis of variance, considering "counselor" as a four-level fixed factor with alpha set at $\leq .05$. Planned orthogonal comparisons were included in this analysis to determine the source of any differences. These comparisons were tested ($p \leq .05$) with the t-statistic (Kirk, 1968). The computer program used was from the Statistical Package for the Social Sciences. Tables 2 and 3 present the summary tables for these analyses.

Table 4 presents the contrast coefficient matrix used for both groups. Table 5 presents the summary table for the evaluation of these contrasts in the TC group and Table 6 presents the same results for the PS group.

TABLE 2
ANOVA ON SVI POST-TEST SCORES FOR TC GROUP:
COUNSELOR AS FIXED FACTOR

| Source | D.F. | SS | MS | F |
|----------------|------|--------|-------|------|
| Between groups | 3 | 190.75 | 63.58 | 1.69 |
| Within Groups | 12 | 451.00 | 37.58 | |
| Total | 15 | 641.75 | | |

TABLE 3
ANOVA ON SVI POST-TEST SCORES FOR PS GROUP:
COUNSELOR AS FIXED FACTOR

| Source | D.F. | SS | MS | F |
|----------------|------|--------|-------|------|
| Between Groups | 3 | 275.69 | 91.90 | 2.56 |
| Within Groups | 12 | 430.25 | 35.85 | |
| Total | 15 | 705.94 | | |

TABLE 4
CONTRAST COEFFICIENT MATRIX

| | Co ₁ | Co ₂ | Co ₃ | Co ₄ |
|------------|-----------------|-----------------|-----------------|-----------------|
| Contrast 1 | -1 | 1 | 0 | 0 |
| Contrast 2 | 1 | 0 | -1 | 0 |
| Contrast 3 | -1 | 0 | 0 | 1 |
| Contrast 4 | 0 | -1 | 1 | 0 |
| Contrast 5 | 0 | 1 | 0 | -1 |
| Contrast 6 | 0 | 0 | -1 | 1 |
| Contrast 7 | 1 | -1 | 0 | 0 |
| Contrast 8 | 0 | 0 | 1 | -1 |

TABLE 5

SUMMARY OF T-TESTS ON PLANNED ORTHOGONAL COMPARISONS: TC GROUP

| | Value | S. Error | T-Value | D.F. |
|------------|-------|----------|---------|------|
| Contrast 1 | -9.5 | 4.33 | -2.19* | 12 |
| Contrast 2 | 6.5 | 4.33 | 1.49 | 12 |
| Contrast 3 | -4.5 | 4.33 | -1.03 | 12 |
| Contrast 4 | 3.0 | 4.33 | 0.69 | 12 |
| Contrast 5 | -5.0 | 4.33 | -1.15 | 12 |
| Contrast 6 | 2.0 | 4.33 | 0.46 | 12 |
| Contrast 7 | 9.5 | 4.33 | 1.19* | 12 |
| Contrast 8 | -2.0 | 4.33 | -0.46 | 12 |

*p<.05

TABLE 6

SUMMARY OF T-TESTS ON PLANNED ORTHOGONAL COMPARISONS: PS GROUP

| | Value | S. Error | T-Value | D. F. |
|------------|--------|----------|---------|-------|
| Contrast 1 | 2.75 | 4.23 | 0.64 | 12 |
| Contrast 2 | 8.50 | 4.23 | 2.00 | 12 |
| Contrast 3 | -1.50 | 4.23 | -0.35 | 12 |
| Contrast 4 | -11.25 | 4.23 | -2.65* | 12 |
| Contrast 5 | 4.25 | 4.23 | 1.00 | 12 |
| Contrast 6 | 7.00 | 4.23 | 1.65 | 12 |
| Contrast 7 | -2.75 | 4.23 | -0.64 | 12 |
| Contrast 8 | -7.00 | 4.23 | -1.65 | 12 |

*p<.05

Since one contrast in each of the two groups was significant, the data were submitted to a one-way analysis of covariance where pre-test score on the SVI was the covariate, post-test was the dependent variable and counselor was again a four level fixed factor. The same contrasts were used to determine the source of any differences and the University of California computer program BMDP1V was used for the analysis. Table 7 presents means, standard deviations and standard errors for the TC group, Table 8 presents the summary of ANCOVA and Table 9 presents the T-values for contrasts on the adjusted group means. Tables 10, 11 and 12 present the same data for the PS group.

The results of these analyses indicate that despite random assignment, four clients assigned to a counselor in the TC group and four clients assigned to a counselor in the PS group had scores which were elevated enough on the pre-test to cause spuriously significant differences between counselors on the post-test. When the post-test counselor means were adjusted for the pre-test there were no significant differences between counselors for either group on the post-test scores of the SVI.

Scale of Vocational Indecision

Pre-test scores on the SVI for the TC, PS and Control groups were submitted to a one-way, two-tailed analysis of variance considering treatment as a three-level fixed factor. The program used was from the Statistical Package for the Social Sciences (SPSS V800). This test was to determine whether or not the groups differed significantly on undecidedness before treatment. Table 13 presents the means, standard

TABLE 7

ANCOVA FOR THE TC GROUP:
MEANS AND STANDARD ERRORS

| Group | N | Group Mean | Adj. Grp. Mean | Std. Error |
|-------|---|------------|----------------|------------|
| A | 4 | 34.24 | 32.69 | 2.61 |
| B | 4 | 24.74 | 24.72 | 2.54 |
| C | 4 | 27.75 | 27.72 | 2.54 |
| D | 4 | 29.74 | 31.35 | 2.61 |

TABLE 8

ANCOVA FOR THE TC GROUP:
PRE-TEST AS COVARIATE, POST-TEST AS DEPENDENT VARIABLE

| Source | D.F. | SS | MS | F |
|-----------------------------|------|--------|--------|-------|
| Equality of Adj. Cell Means | 3 | 156.27 | 52.09 | 2.01 |
| Zero Slope | 1 | 166.82 | 166.82 | 6.45* |
| Error | 11 | 284.17 | 25.83 | |
| Equality of Slopes | 3 | 17.70 | 5.90 | 0.17 |
| Error | 8 | 266.46 | 33.30 | |

*p<.05

TABLE 9

T-VALUES FOR CONTRASTS IN ADJUSTED GROUP MEANS: TC GROUP

| Contrast No. | T | P(T) | Group A | Group B | Group C | Group D |
|--------------|-------|------|---------|---------|---------|---------|
| 1 | -2.18 | .05 | -1 | 1 | 0 | 0 |
| 2 | 1.36 | .19 | 1 | 0 | -1 | 0 |
| 3 | -0.35 | .73 | -1 | 0 | 0 | 1 |
| 4 | 0.83 | .42 | 0 | -1 | 1 | 0 |
| 5 | -1.81 | .09 | 0 | 1 | 0 | -1 |
| 6 | 0.99 | .34 | 0 | 0 | -1 | 1 |
| 7 | 2.18 | .05 | 1 | -1 | 0 | 0 |
| 8 | -0.99 | .34 | 0 | 0 | 1 | -1 |

TABLE 10

ANCOVA FOR THE PS GROUP:
MEANS AND STANDARD DEVIATIONS

| Group | N | Group Mean | Adj. Grp. Mean | Std. Error |
|-------|---|------------|----------------|------------|
| A | 4 | 35.25 | 34.62 | 2.63 |
| B | 4 | 38.00 | 36.11 | 2.75 |
| C | 4 | 26.74 | 29.48 | 2.89 |
| D | 4 | 33.74 | 33.54 | 2.61 |

TABLE 11

ANCOVA FOR THE PS GROUP: PRE-TEST AS COVARIATE,
POST-TEST AS DEPENDENT VARIABLE

| Source | D.F. | SS | MS | F |
|-----------------------------|------|--------|--------|------|
| Equality of Adj. Cell Means | 3 | 71.97 | 23.99 | 0.88 |
| Zero Slope | 1 | 130.59 | 130.59 | 4.79 |
| Error | 11 | 299.65 | 27.24 | |
| Equality of Slopes | 3 | 17.58 | 5.86 | 0.16 |
| Error | 8 | 282.06 | 35.25 | |

TABLE 12

T-VALUES FOR CONTRASTS IN ADJUSTED GROUP MEANS: PS GROUP

| Contrast No. | T | P(T) | Group A | Group B | Group C | Group D |
|--------------|-------|------|---------|---------|---------|---------|
| 1 | 0.39 | .69 | -1 | 1 | 0 | 0 |
| 2 | 1.28 | .22 | 1 | 0 | -1 | 0 |
| 3 | -0.29 | .77 | -1 | 0 | 0 | 1 |
| 4 | -1.56 | .14 | 0 | -1 | 1 | 0 |
| 5 | 0.68 | .50 | 0 | 1 | 0 | -1 |
| 6 | 1.03 | .32 | 0 | 0 | -1 | 1 |
| 7 | -0.39 | .69 | 1 | -1 | 0 | 0 |
| 8 | -1.03 | .32 | 0 | 0 | 1 | -1 |

TABLE 13

PRE-TEST SCORES ON SVI:
MEANS, STANDARD DEVIATIONS AND
STANDARD ERRORS

| Group | N | Mean | Std. Dev. | Std. Error |
|-------|----|-------|-----------|------------|
| PS | 16 | 39.13 | 6.13 | 1.53 |
| TC | 16 | 41.44 | 7.54 | 1.88 |
| Cont | 16 | 40.87 | 6.17 | 1.54 |
| Total | 48 | 40.48 | 6.57 | 0.95 |

deviations and standard errors of the SVI pre-test scores and Table 14 summarizes the analysis of variance.

The probability of the differences between groups before treatment being due to chance was 0.59. It is assumed, therefore, that the groups did not differ significantly before treatment ($p > .05$).

Post-test scores on the SVI for all groups were then submitted to a one-way, two-tailed ANOVA, again considering treatment as a three-level fixed factor. Table 15 presents the means, standard deviations and standard errors of the post-test SVI scores and Table 16 displays the results of the ANOVA.

The probability of the differences between groups after treatment being due to chance was 0.0003. It is assumed, therefore, that the groups were significantly different after treatment ($p < .05$). Post hoc comparisons using Tukey's HSD (Kirk, 1968) revealed that the TC group was significantly different from the PS and Control groups ($p < .05$). Inspection of the means indicated that this difference was in the

TABLE 14

ANOVA ON PRE-TEST SCORES OF SVI: TREATMENT AS FIXED FACTOR

| Source | D.F. | SS | MS | F |
|----------------|------|---------|-------|------|
| Between Groups | 2 | 46.56 | 23.28 | 0.52 |
| Within Groups | 45 | 1987.43 | 44.16 | |
| Total | 47 | 2033.99 | | |

TABLE 15

POST-TEST SCORES ON SVI:
MEANS, STANDARD DEVIATIONS AND
STANDARD ERRORS

| Group | N | Mean | Std. Dev. | Std. Error |
|-------|----|-------|-----------|------------|
| PS | 16 | 33.44 | 6.86 | 1.72 |
| TC | 16 | 29.13 | 6.54 | 1.64 |
| Cont | 16 | 39.81 | 7.04 | 1.75 |
| Total | 48 | 34.13 | 8.01 | 1.16 |

TABLE 16

ANOVA ON POST-TEST SCORES OF SVI: TREATMENT AS FIXED FACTOR

| Source | D.F. | SS | MS | F |
|----------------|------|---------|--------|-------|
| Between Groups | 2 | 925.12 | 462.56 | 9.95* |
| Within Groups | 45 | 2090.12 | 46.44 | |
| Total | 47 | 3015.24 | | |

*p<.01

direction of reduced scores on the SVI, reflecting a reduction of undecidedness.

The analyses of variance on the pre- and post-test scores of the SVI was used to test the following hypothesis:

H₁: Problem-solving, Two-chair and Control groups will not differ significantly on a post-treatment measure of undecidedness ["Scale of Vocational Indecision" (Osipow and Carney, 1975)].

In light of the ANOVA results ($P(F) = 0.0003$) the null hypothesis was rejected.

Assessment of Career Decision-Making

Pre-test scores on the DMT-O scale of the ACDM for the TC, PS and Control groups were submitted to a one-way, two-tailed analysis of variance considering treatment as a three-level fixed factor. The computer program was taken from the Statistical Package for the Social Sciences (SPSS.V800). This test was to find out if the groups differed significantly on decision-making stage before treatment. Table 17 presents the means, standard deviations and standard errors of the ACDM pre-test scores and Table 18 presents the results of the ANOVA.

The probability of the differences between groups before treatment being due to chance was 0.12. It is assumed, therefore, that the groups did not differ significantly before treatment ($p < .05$).

Post-test scores on the DMT-O scale of the ACDM for all groups were then submitted to a one-way, two-tailed ANOVA, again considering

TABLE 17

PRE-TEST SCORES OF ACDM:
MEANS, STANDARD DEVIATIONS AND
STANDARD ERRORS

| Group | N | Mean | Std. Dev. | Std. Error |
|-------|----|-------|-----------|------------|
| PS | 16 | 24.31 | 2.39 | 0.60 |
| TC | 16 | 23.31 | 2.02 | 0.50 |
| Cont | 16 | 22.87 | 1.45 | 0.36 |
| Total | 48 | 23.50 | 2.04 | 0.29 |

TABLE 18

ANOVA ON PRE-TEST SCORES OF ACDM: TREATMENT AS FIXED FACTOR

| Source | D.F. | SS | MS | F |
|----------------|------|--------|------|------|
| Between Groups | 2 | 17.37 | 8.68 | 2.18 |
| Within Groups | 45 | 178.62 | 3.96 | |
| Total | 47 | 195.99 | | |

treatment as a three-level fixed factor. Tables 19 and 20 display the results of this test.

The probability of the differences between groups after treatment being due to chance was 0.07. Since this probability exceeds the acceptable alpha level of .05, it cannot be assumed that the groups were significantly different after treatment ($p < .05$). Inspection of the means revealed that the difference, while not significant, was in the direction of increased scores on the ACDM for the PS and TC group but

TABLE 19

POST-TEST SCORES ON THE ACDM:
MEANS, STANDARD DEVIATIONS AND
STANDARD ERRORS

| Group | N | Mean | Std. Dev. | Std. Error |
|-------|----|-------|-----------|------------|
| PS | 16 | 29.94 | 2.21 | 0.55 |
| TC | 16 | 24.63 | 2.83 | 0.71 |
| Cont | 16 | 23.19 | 1.64 | 0.41 |
| Total | 48 | 24.25 | 2.36 | 0.34 |

TABLE 20

ANOVA ON POST-TEST SCORES OF ACDM: TREATMENT AS FIXED FACTOR

| Source | D.F. | SS | MS | F |
|----------------|------|--------|-------|------|
| Between Groups | 2 | 27.85 | 13.93 | 2.69 |
| Within Groups | 45 | 233.12 | 5.18 | |
| Total | 47 | 260.99 | | |

not for the Control group. An increased score reflects progress through the stages of decision-making.

The analyses of variance on the pre- and post-test scores of the DMT-O scale of the ACDM was used to test the following hypothesis:

H₂: Problem-solving, Two-chair and Control groups will not differ significantly on a post-treatment measure of decision-making stage ["Assessment of Career Decision-Making" (Harren, 1978)].

In light of the ANOVA results ($P(F) = 0.07$) the null hypothesis was not rejected.

Summary

Analysis of covariance revealed that the counselors in the Two-chair and Problem-solving groups were not differentially effective in applying the treatments within each group. This indicated that if there was a difference between groups it was not due to differential counselor effectiveness.

Analysis of variance revealed no significant differences between TC, PS and Control groups on the pre-test of the SVI ($p = 0.59$). Significant differences were found on the post-test of the SVI ($p = 0.0003$) and Tukey's method of a posteriori comparisons indicated that the TC group experienced significantly less indecision after treatment than either the PS or Control groups. The null hypothesis was rejected in favor of the alternative.

Analysis of variance revealed no significant differences between TC, PS and Control groups on the pre-test of the ACDM ($p = 0.12$) or on the post-treatment administration of the same test ($p = 0.07$). The null hypothesis was not rejected in favor of the alternative.

CHAPTER V

SUMMARY, DISCUSSION, CONCLUSIONS, IMPLICATIONS AND RECOMMENDATIONS

Summary

Background of the Study

The counseling and guidance profession seeks to serve the needs of "normal" people engaged in normal growth and development. Rightly understood, the difficulties and conflicts which people experience as they grow and change can contribute to overall personal development. To this end, researchers have sought effective interventions for assisting people on a short-term, developmental basis.

Two schools of thought which fundamentally influence these interventions are the "behavioral" and the "affective" theories of counseling. The behaviorists, particularly the cognitive behaviorists, suggest that we stop focusing on how we feel about our problems and start figuring out rational solutions for them. The affective theorists, on the other hand, would have us "get out of our head and come to our senses"; that is, to focus on our feelings and stop being so rational. Both counseling approaches are used to help people resolve conflicts and make decisions, but they have not yet been compared under controlled, experimental conditions.

Purpose of the Study

The purpose of this study was to compare an affective (i.e., Gestalt two-chair experiment) and a cognitive (i.e., Problem-solving)

counseling method used to help people resolve conflicts. A specifically defined conflict was examined: an intrapersonal conflict related to a career decision.

Procedure

Forty-eight persons who were experiencing a conflict related to a career decision were randomly assigned to three groups. One group of sixteen subjects formed a wait-list control group. Another group of sixteen subjects received two sessions of counseling from four counselors using the Problem-solving approach and the third group of sixteen received two sessions of counseling from four different counselors using the Two-chair experiment. All subjects were pre- and post-tested on measures of vocational indecision ("Scale of Vocational Indecision [Osipow and Carney, 1975]) and career decision-making stage ("Assessment of Career Decision-Making" [Harren, 1975]).

All sessions were rated on a checklist to be sure the assigned intervention occurred. A one-way analysis of variance and covariance was then conducted, with counselor as a four-level fixed factor, pre-test SVI score as covariate and post-test SVI score as dependent variable. The purpose of this analysis was to find out if the counselors within each group were differentially effective in applying the treatment.

When it was verified that the assigned treatment had indeed occurred, and with equal effectiveness for all counselors, the pre- and post-test scores on the SVI and the ACDM for all three groups were submitted to analysis of variance. Treatment group was considered as a

three-level fixed factor with pre- and post-test scores as dependent variables. Alpha was set at $\leq .05$.

Results

At pre-testing, there were no significant differences between any of the groups on either the SVI or the ACDM. At post-testing the Two-chair group showed a significant drop in indecision, as compared to the Problem-solving or Control groups ($p \leq .05$).

There were no significant differences between groups at post-testing on the ACDM but the difference did approach significance ($p \leq .07$). Inspection of the means indicated that both the PS and TC groups had higher scores on the measure of career decision-making stage than did the Control group and that the PS group had made the greatest pre-post gain.

Discussion

This discussion will first consider the significant differences found between counseling approaches on a measure of indecision. The absence of significant differences on a measure of decision-making stage will then be discussed.

The results of this study indicate that the Two-chair experiment, an affective counseling approach, reduces indecision more effectively than the cognitive approach or the absence of treatment. The Problem-solving, cognitive approach is superior to no treatment but inferior to the affective approach at reducing indecision.

Previous research (Greenberg and Clarke, 1979; Greenberg and Higgins, 1980) has shown that the Two-chair experiment is more effective

than empathic reflections (Carkhuff, 1967) or focusing (Gendlin, 1968) in producing greater Depth of Experiencing (Klein, 1969) and more shifts in awareness for clients working on resolving a conflict. Level of experiencing and shifts in awareness are constructs thought to be conducive to conflict resolution and decision-making. The present study, however, is important in that it shows a significant effect on a direct measure of indecision rather than on constructs correlated with decision-making.

The results of the present study are also important because they show differential effects between the Two-chair experiment and a cognitive treatment widely used to facilitate conflict resolution and decision-making. What the results seem to indicate is that "problem-solving," a model of counseling based on mathematics, is not so effective for reducing indecision as is the Two-chair experiment, taken from a model of counseling based on the ebb and flow of human functioning.

The premise of the Problem-solving approach is that at a point of "indecision," when a person experiences phenomena such as feelings of conflict, fear, struggle or paralysis, the best way to proceed is to set aside these feelings and to focus only on the "problem" to be solved. The mysterious complexity of human functioning is thus reduced to the clarity of a specific "problem." By ignoring the feelings, then, the problem may be solved and the distressful affective state will be reduced.

The present study, however, directly refutes this premise. It shows that while one may proceed "as if" feelings did not exist, in order to eliminate the source of these feelings, the feelings will not

go away. Subjects in the cognitive treatment group felt more "undecided" after going through the Problem-solving process than did subjects who "dwelt in their misery" in the Two-chair treatment. After the Two-chair clients had fully attended to their feelings of conflict, they reported feeling more decided than clients who directly tried to decide "in spite of" their feelings.

It should be noted, however, that this study shows changes on a self-reported measure of a state called "indecision." It does not show objective evidence of decision implementation or concrete behavioral change emanating from a decision. Perhaps the "Problem-solving" approach may have its place after indecision is reduced by an affective approach. The Problem-solving focus on tactics and strategies might complement the affective approach by providing a way of implementing the decision, once it is made.

The lack of significant differences between groups on the post-test ACDM scores indicates that the treatments did not significantly effect movement through decision-making stages. While not significant, the greatest pre-post change occurred for the PS group. This may indicate that on a more cognitively oriented measure, i.e. the ACDM, the cognitive treatment shows change and that on a more affectively oriented measure, i.e. the SVI, the affective treatment shows change. Had the sample been larger, the difference for the PS group might have been significant and revealed the differential effect of the cognitive treatment.

The lack of significant differences between groups on career decision-making stage may also be an artifact of the instrument used to

measure the variable. The scale, which attempts to measure progress through decision-making, is based on a rather complex, four-substage model of decision-making. As such, the DMT-0 scale is a "summary" of progress through Exploration, Crystallization, Choice and Clarification. While previous research indicates that the instrument is powerful enough to pick up gross differences between treated and untreated groups, perhaps it lacks the fine tuning needed to pick up subtle differences between various types of treatment. These differences are likely to be qualitative rather than quantitative and the ACDM appears to be better at picking up the presence of change than at differentiating the kind of change.

It is also interesting to consider the counselor's clinical observations, in light of the objective results. A comment made repeatedly by the Problem-solving counselors, all avowed cognitive-behaviorists, was that it was often difficult to keep their clients focused on problem-solving steps when strong feelings were involved in the decision. They also received comments from clients such as, "I know all that, but I just can't do it," suggesting an irrational block that was not amenable to a cognitive intervention.

The Two-chair counselors commented that the original decision a person wished to make often unfolded into deeper, related decisions. For example, a woman deciding on a job transfer began to explore her husband's reactions, which led further to her way of relating to pressure. The original decision, on which the measures were taken, may have changed somewhat by the time post-test measures were taken. The instruments may not have been subtle enough to pick up these shifts.

Conclusions

The following conclusions may be drawn from the results of this study:

1. The Two-chair experiment, an affective approach to counseling, leads to a significantly greater reduction in indecision than does Problem-solving, a cognitive approach to counseling.
2. There is no significant difference on the post-treatment stage of decision-making for the groups receiving affective, cognitive or no treatment.

Recommendations

The findings reported in this study seem to call for the following recommendations:

1. Since the Two-chair experiment appears to be effective in reducing indecision for people experiencing conflicts related to their careers, it may prove valuable for more disturbed populations experiencing other types of conflicts. It is recommended that future research investigate the efficacy of the Two-chair experiment in resolving other sorts of conflicts and in working with more disturbed persons.
2. Another study might examine the effects of the Two-chair experiment on other dependent variables related to decision-making. These might include, for example, anxiety, self-concept, or time orientation.

3. Future research should attempt to follow clients for some period of time after treatment to determine the long-term differential effects of various counseling approaches to decision-making. The instruments should include some objective measures of behavioral change.
4. An interesting extension of the present study would be to conduct an experiment comparing the affective approach alone, the cognitive approach alone, and a sequential combination of the affective and cognitive approaches. Such a study should include instruments designed to get at specific differences at particular stages of treatment.
5. In order to find out which treatment is better for what kind of people, future research should include measures of individual differences as blocking variables. The most productive variables would be functional measures of cognitive or decision-making style; measures based on actual performance not on inferred personality traits.

Implications

The results of this study have implications in three areas: clinical practice; counselor education; and theoretical conceptualization.

For the clinician, the study provides important information about the relative efficacy of two major counseling approaches for helping clients with a major class of issues. Counselors who have focused

exclusively on behavioral interventions may now wish to include some affective approaches in their repertoires.

The study has implications for counselor educators, particularly those who are cautious about including "touchy-feely" counseling approaches in their curricula. Since these experimental results validate the effectiveness of at least one technique drawn from the affective domain, counselor educators may wish to expose their students to more of these approaches.

Finally, the study has raised a critical issue about the models underlying our present counseling approaches. The problem-solving model of mathematics may be effective for economic or technical decision-making but it appears to break down when applied to human functioning. We must move, now, beyond the notion of the person as a problem to be solved, and confront the mystery of the person as a living organism to be understood.

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APPENDIX A

TWO-CHAIR EXPERIMENT FOR A CAREER DECISION

APPENDIX A*

- Cl: So the problem boils down to my now being able to make up my mind whether or not I want the job.
- Co: You've been putting off the decision?
- Cl: Yes. I get it all figured out in my mind that I will and then zap! I turn right around and convince myself that I don't want it. It's the same old jazz.
- Co: The song being "first you say you will and then you won't."
- Cl: Yeah.
- Co: Let's try a dialogue. There are two parts to you on this. One says "Take the job"; the other says "Don't take the job." Perhaps if we let the two sides argue openly we may get a fresh perspective on the argument. Want to try it?
- Cl: O.K.
- Co: Which side do you want to be first, pro or con?
- Cl: Pro.
- Co: Then feel yourself as the side who is for taking the job. State your position to the other side, the one which doesn't want to take the job.
- Cl: The job will be great for me. You are wrong about it. It will give me the chance to earn some money. The hours are O.K. I think I'll like the work. Some nice people are working there.
- Co: Now switch over to the other side. What does the con person have to say? Try to relate your point of view.
- Cl: That job is not right for me. It will tie me down. So what if I'm earning money. I won't be doing the traveling I want. Anyhow, they didn't say how long it will last. You know I wouldn't be happy.
- Co: Now continue the dialogue between the two parts.

*From W.R. Passons, Gestalt Approaches in Counseling, (Holt, Rinehart and Winston, 1975), p. 147.

APPENDIX B

PUBLICITY

DECISIONS! DECISIONS! DECISIONS!

Is it time to sit down with yourself ?



**A Free Short Program on
Decision-making**

Department of Counselling Psychology
University of British Columbia

APPENDIX C

MISCELLAENOUS FORMS

SCREENING INTERVIEW

We would like to ask you some questions to see if what we are offering would be suitable for you. If it doesn't seem appropriate, we will suggest some other sources of help.

1. Is there a particular issue you wish to work on in counseling? How urgent or critical is this issue?
2. Have you ever sought counseling before? From whom? For what reason? With what result?
3. What do you expect from the counseling sessions?
4. What are you doing now? (e.g., working, at school, raising family). How do you spend your leisure time?
5. What is your present living arrangement?
6. Are there any other general issues of concern to you at this time?

Comments

- a. It looks like our sessions will be appropriate for you.
or
- b. Perhaps another resources would be more helpful to you.

EVALUATION OF SCREENING INTERVIEW

1. Evidence of severe disturbance? Yes _____ No _____
2. Is there a conflict related to a career decision? Yes _____ No _____
3. Are the client's expectations reasonable? Yes _____ No _____
4. Client has some significant relationships? Yes _____ No _____
5. Recommend client for the study? Yes _____ No _____

If not recommended for study, suggest appropriate referral:

Student Services _____

Women's Resources _____

Health Sciences Outpatient _____

Canada Employment Centre _____

Continuing Education _____

Others (please specify) _____

EXPLANATION OF STUDY

(Given in writing to subjects and read aloud)

We are studying people making decisions about their careers. We want to find out how different counseling methods help them. If you would like to participate, we can offer you three counseling sessions, about once a week for three weeks. They can be held pretty much at your convenience. One session will consist of an introduction and description of the kind of counseling you are to receive. The other two sessions will be with a counselor and you will work on the decision you wish to make. Each session will last about one hour. There is no charge for these sessions but we will ask you to fill out some questionnaires before and after the sessions. These questionnaires will help us to evaluate the counseling you have received.

All of your counseling sessions will be tape recorded. The tape recordings and the questionnaires will be kept strictly confidential. Only your counselor and the chief investigator will know your name. It will be removed from all materials before they are scored by research assistants. Every effort will be made to protect your privacy.

This study is being conducted under the auspices of the university. If you wish to withdraw from the study at any time you are quite free to do so without jeopardizing your opportunity for counseling. If you wish more counseling at the end of the three sessions, we will be glad to refer you for further counseling. If you decide now or at any time during the study that you do not want to go ahead with it, we can refer you to other resources that may be of help.

If you have any questions please ask them now. If any questions come up during the course of the study please feel free to contact me: Katherine Clarke 684-3687.

CONSENT FORM

I hereby give consent to the use of tape recordings of my counseling sessions and my written responses to questionnaires for the purposes of this research. I understand that the study is aimed at discovering which counseling method is most helpful in aiding people making decisions. I understand that these tape recordings and my written responses will be coded to protect my privacy before they are given to research assistants for scoring.

I understand that I may withdraw from this study at any time or request that a tape be erased, without jeopardizing my opportunity for counseling. I am willing to complete a number of questionnaires used to evaluate the effects of my counselor's interventions.

I am participating in this study of my own free will, without coercion of any sort.

Signature _____

Date _____

Witness _____

Date _____

INFORMATION SHEET
(strictly confidential)

NAME: _____ AGE: _____

ADDRESS: _____ SEX: _____

TELEPHONE: home _____ work _____

OCCUPATION: _____ MARITAL STATUS: _____

EDUCATION:

High School graduate: Yes _____ No _____

University: _____ number of years _____ degree _____

Graduate or Professional School: no. of years _____ degree _____

Trade or Vocational school: no. of years _____ certificate _____

College: _____ no. of years _____ diploma _____

APPENDIX D

SCALE OF VOCATIONAL INDECISION

APPENDIX D

SCALE OF VOCATIONAL INDECISION

(Adapted form)

Please indicate on the answer sheet if these statements describe you.

1. I have decided on a long-term goal and feel comfortable with it. I also know how to go about implementing my choice.
2. I have decided on a short-term goal and feel comfortable with it. I also know how to go about implementing my choice.
3. If I had the skills or the opportunity I would _____ but this choice is really not possible for me. I haven't given much thought to other alternatives, however.
4. Several options have equal appeal to me. I'm having a difficult time deciding among them.
5. I know I will have to decide eventually but none of the options I know about appeal to me.
6. I'd like to _____ but I'd be going against the wishes of someone who is important to me if I did so. Because of this, it's difficult for me to make a decision right now. I hope I can find a way to please them and myself.
7. Until now I haven't given much thought to making a choice. I feel lost when I think about it because I haven't had many experiences in making decisions on my own and I don't have enough information to make a decision right now.
8. I feel discouraged because everything about making a choice seems so "ify" and uncertain; I feel discouraged, so much so that I'd like to put off making a decision for the time being.
9. I thought I knew what I wanted, but recently I found out that it wouldn't be possible for me to pursue it. Now I've got to start looking for other alternatives.
10. I want to be absolutely certain in that my choice is the "right" one, but none of the options I know about seem right to me.
11. Having to make a decision bothers me. I'd like to make a decision quickly and get it over with. I wish I could take a test that would tell me what choice I should make.

12. I know what I'd like to do now but I don't know what it would lead to in the future.
13. I can't make a choice right now because I don't know what my abilities are.
14. I don't know what my interests are. A few things "turn me on" but I'm not certain that they are related in any way to possible alternatives.
15. So many things interest me and I know I have the ability to do well regardless of what I choose. It's hard for me to find just one thing that I want.
16. I have made a decision but I'm not sure how to go about implementing my choice.
17. I need more information about what different alternatives are like before I can make a decision.
18. I think I know what I want now but feel I need some additional support for it as a choice for myself.
19. None of the above items describe me. The following would describe me better: (write your response on the answer sheet).

NAME _____

ANSWER SHEET

- | | | | | |
|-----|---|---|-------------------------------------|--|
| 1. | <input type="checkbox"/> Not at all like me | <input type="checkbox"/> Somewhat like me | <input type="checkbox"/> Like me | <input type="checkbox"/> Exactly like me |
| 2. | <input type="checkbox"/> Not at all like me | <input type="checkbox"/> Somewhat like me | <input type="checkbox"/> Like me | <input type="checkbox"/> Exactly like me |
| 3. | <input type="checkbox"/> Not at all like me | <input type="checkbox"/> Somewhat like me | <input type="checkbox"/> Like me | <input type="checkbox"/> Exactly like me |
| 4. | <input type="checkbox"/> Not at all like me | <input type="checkbox"/> Somewhat like me | <input type="checkbox"/> Like me | <input type="checkbox"/> Exactly like me |
| 5. | <input type="checkbox"/> Not at all like me | <input type="checkbox"/> Somewhat like me | <input type="checkbox"/> Like me | <input type="checkbox"/> Exactly like me |
| 6. | <input type="checkbox"/> Not at all like me | <input type="checkbox"/> Somewhat like me | <input type="checkbox"/> Like me | <input type="checkbox"/> Exactly like me |
| 7. | <input type="checkbox"/> Not at all like me | <input type="checkbox"/> Somewhat like me | <input type="checkbox"/> Like me | <input type="checkbox"/> Exactly like me |
| 8. | <input type="checkbox"/> Not at all like me | <input type="checkbox"/> Somewhat like me | <input type="checkbox"/> Like me | <input type="checkbox"/> Exactly like me |
| 9. | <input type="checkbox"/> Not at all like me | <input type="checkbox"/> Somewhat like me | <input type="checkbox"/> Like me | <input type="checkbox"/> Exactly like me |
| 10. | <input type="checkbox"/> Not at all like me | <input type="checkbox"/> Somewhat like me | <input type="checkbox"/> Like me | <input type="checkbox"/> Exactly like me |
| 11. | <input type="checkbox"/> Not at all like me | <input type="checkbox"/> Somewhat like me | <input type="checkbox"/> Like me | <input type="checkbox"/> Exactly like me |

12. Not at all like me Somewhat like me Like me Exactly like me
13. Not at all like me Somewhat like me Like me Exactly like me
14. Not at all like me Somewhat like me Like me Exactly like me
15. Not at all like me Somewhat like me Like me Exactly like me
16. Not at all like me Somewhat like me Like me Exactly like me
17. Not at all like me Somewhat like me Like me Exactly like me
18. Not at all like me Somewhat like me Like me Exactly like me
19. This describes me:

APPENDIX E

ASSESSMENT OF CAREER DECISION-MAKING

APPENDIX E

ASSESSMENT OF CAREER DECISION-MAKING

DECISION-MAKING TASK: OCCUPATION

On your answer sheet, circle "A" if you Agree with the statement or "D" if you Disagree with it. For a statement to be true of you, it doesn't always have to be the case, but more often than not. If you really can't make up your mind, then leave the item blank, but try not to leave more than a few of them blank, or the scores from the questionnaire will not be valid.

1. Almost any choice seems appealing to me.
2. What I used to think I wanted to do doesn't seem practical any more.
3. I think I'll be happy with the choice I have made.
4. My plans for the future are too indefinite.
5. I'm trying to decide between two or three possible options.
6. I'm pretty certain about the choice I will make.
7. My attitudes and outlook are becoming more like the people I know.
8. I want to know what choice I'm best suited for.
9. There are several options which I have already decided against.
10. I'm a lot happier now that my choice is clear to me.
11. The option I have chosen will affect the kinds of friends I will have in the future.
12. I don't know what I really want out of life.
13. I've become more realistic in my thinking about possible choices.
14. I won't let anything get in the way to my reaching my goal.
15. I don't have enough experience for certain choices.
16. I need information about various options.
17. I've changed my mind about what I wanted to choose, now that I've learned more about the option.

18. The more I learn about things, the more involved I become.
19. I need to find out what options are available.
20. I'm interested in too many options.
21. I'm more certain of what I don't want than what I do want.
22. I've decided on the choice I am going to make.
23. I hope the people connected with my choice will accept me.
24. I need to decide.
25. I know what's important to me, but I don't know what option would meet most of my needs.
26. The option I have chosen fits in with my personality.
27. I need to start thinking about future steps.
28. It's hard to know what to look for in a possible choice.
29. I need to know more about what is required for some of the options I am considering.
30. I feel I can overcome any obstacles in the way of my goal.
31. I will probably have to move away from here to act on my decision.
32. I can't decide because my interests keep changing.
33. I don't know if I have the right kind of personality for the choice I'm considering.
34. It's unlikely that I will change my mind about my plans.
35. People around me have certain expectations of me.
36. I don't know how to go about deciding.
37. There are not many opportunities for the choice that I really like.
38. I'm looking forward to getting started on my choice.
39. I think I'm ready to make another choice based on my decision.

ACDM ANSWER SHEET

| (K) | (L) | (M) | (N) |
|---------|---------|---------|---------|
| 1. A D | 2. A D | 3. A D | |
| 4. A D | 5. A D | 6. A D | 7. A D |
| 8. A D | 9. A D | 10. A D | 11. A D |
| 12. A D | 13. A D | 14. A D | 15. A D |
| 16. A D | 17. A D | 18. A D | 19. A D |
| 20. A D | 21. A D | 22. A D | 23. A D |
| 24. A D | 25. A D | 26. A D | 27. A D |
| 28. A D | 29. A D | 30. A D | 31. A D |
| 32. A D | 33. A D | 34. A D | 35. A D |
| 36. A D | 37. A D | 38. A D | 39. A D |

K = _____

L = _____

M = _____

N = _____

APPENDIX F

TREATMENT VERIFICATION CHECKLISTS

APPENDIX F

Checklist for Two-Chair Treatment

| | | | |
|-----|--|-----|----|
| 1. | Counselor clarifies the two part of the conflict? | Yes | No |
| 2. | Counselor clarifies the affective struggle between the two parts? | Yes | No |
| 3. | Client accepts formulation of the conflict and begins to work in two chairs? | Yes | No |
| 4. | Counselor maintains clear separation and contact between the two parts of the conflict? | Yes | No |
| 5. | Counselor directs client's attention to on-going experience and increases level of arousal? | Yes | No |
| 6. | Counselor directs client to heighten level of arousal (e.g., "say that again," "do that again")? | Yes | No |
| 7. | Counselor helps client to specify and express vague experience or awareness? | Yes | No |
| 8. | Session remains on task at least 90% of the time? | Yes | No |
| 9. | Two-chair experiment was implemented? | Yes | No |
| 10. | Procedures other than two-chair were used a great deal in the session? | Yes | No |

Checklist for Problem-Solving Treatment

| | | | |
|-----|--|-----|----|
| 1. | Problem is clearly defined and formulated? | Yes | No |
| 2. | Internal and external events used to describe problematic situation? | Yes | No |
| 3. | Irrelevant detail filtered out? | Yes | No |
| 4. | Brainstorming for general strategies of resolution? | Yes | No |
| 5. | Operational tactics generated? | Yes | No |
| 6. | Alternatives evaluated in terms of long and short term goals? | Yes | No |
| 7. | Choice of strategy and tactics made? | Yes | No |
| 8. | Has behavioral plan been developed? | Yes | No |
| 9. | Has plan been tried where appropriate? | Yes | No |
| 10. | Plan evaluated and adjusted where necessary? | Yes | No |

APPROVAL SHEET

This dissertation submitted by Katherine M. Clarke has been read and approved by the following committee:

Dr. Gloria J. Lewis, Director
Associate Professor and Chairperson
Guidance and Counseling, Loyola

Dr. Marilyn Sugar
Assistant Professor
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Associate Professor
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The final copies have been examined by the director of the dissertation and the signature which appears below verifies the fact that any necessary changes have been incorporated and that the dissertation is now given final approval by the committee with reference to content and form.

The dissertation is therefore accepted in partial fulfillment of the requirements for the degree of Doctor of Philosophy.

4-6-81

Date


Director's Signature