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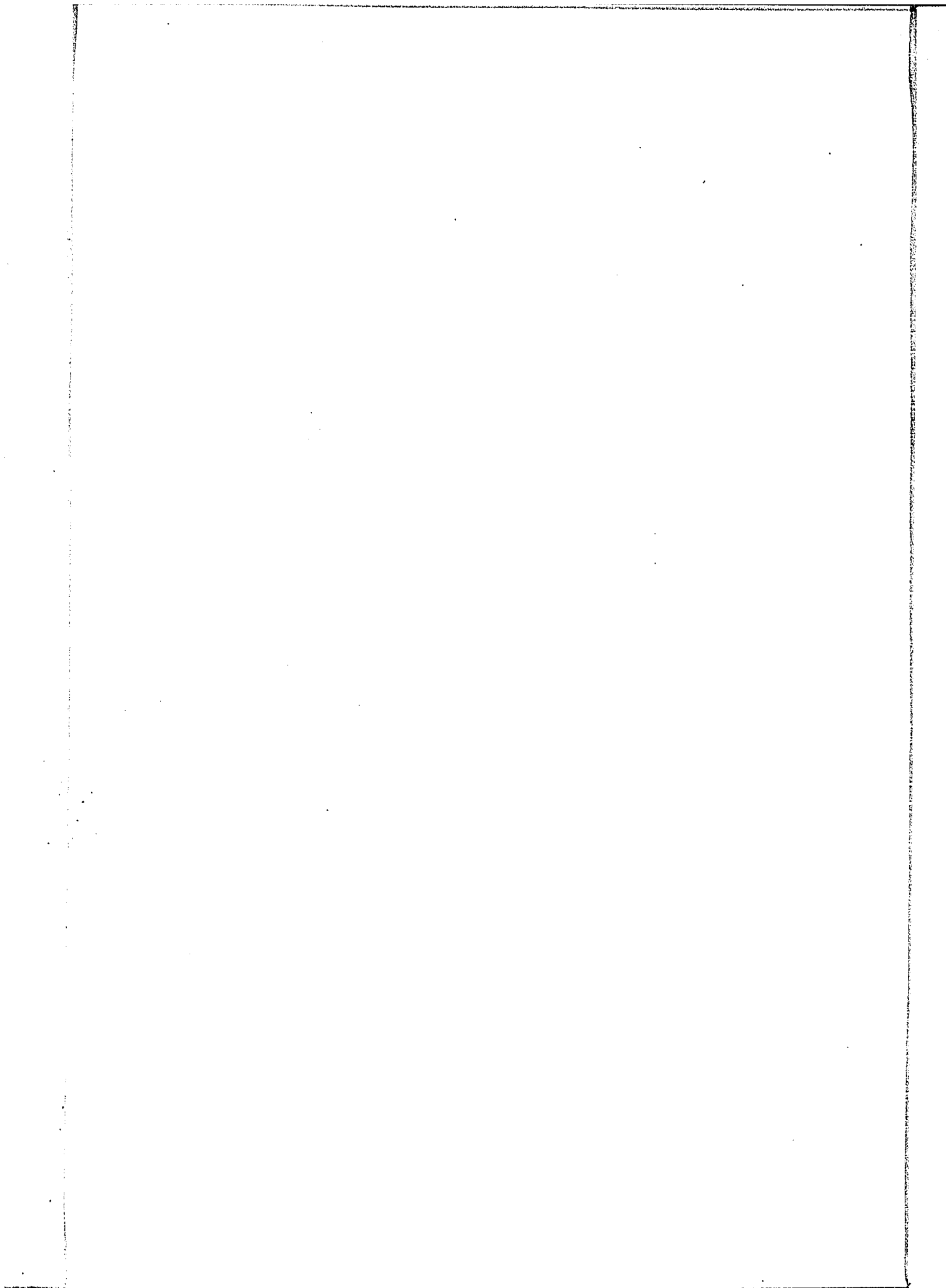
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Relative Preference for the Therapeutic Approaches
of G. A. Kelly and A. Ellis as a Function of
Locus of Control and of Situational Powerlessness

by Raymond P. Carey

Dissertation presented to the School of
Graduate Studies of the University of
Ottawa in partial fulfillment of the
requirements for the degree Doctor of
Philosophy



Ottawa, Canada, 1978

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CURRICULUM STUDIORUM

Raymond P. Carey was born in Youngstown, Ohio, on August 1, 1943. He received the Bachelor of Arts degree in Philosophy from Mount Angel Seminary, Saint Benedict, Oregon, in 1965; the Master of Arts degree in Counseling from the University of Oregon, Eugene, Oregon, in 1969; and the Master of Divinity degree in Theology from Saint Thomas Seminary, Seattle, Washington, in 1974. He was ordained a priest for the Roman Catholic Archdiocese of Portland in Oregon in 1970.

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CHAPTER ONE

Introduction and Review of Literature

One of the more prominent trends in contemporary psychotherapy has been a marked swing toward cognitively oriented approaches. Not only is the cognitive influence apparent in professional literature, but also in the proliferation of popular 'self-help' manuals and articles.

The umbrella of cognitive therapy covers a wide range of various techniques, all more or less focusing on cognitions and behaviors. There are, however, significant differences among cognitive approaches, and, as with other therapies, some are likely to be more preferred by clients in certain situations, or with particular presenting problems. Preference for therapy, as well as particular presenting problems, have been shown to be important considerations in the complex enterprise that is psychotherapy. Research has indicated that individual preference for therapy appears to be affected by at least two variables reflected in Rotter's social learning theory: a person's locus of control, viewed as characteristic style of cognitive activity, as well as the psychological situation.

It may be helpful to know whether, offered two similar yet different cognitively oriented therapeutic approaches, individuals' relative preference may differ as

a function of their characteristic style of cognitive activity. Likewise, it may be helpful to know whether their relative preference may differ as a function of components of a psychological problem.

As a means of addressing these two concerns, this research investigates relative preference for the cognitively oriented approaches of George A. Kelly and Albert Ellis as a function of locus of control and psychological situations depicting objective powerlessness.

This first chapter, then, reviews the pertinent literature, summarizes the rationale of the study, offers a statement of the problem and the hypotheses to be tested.

Cognitive Perspectives in Contemporary Psychotherapy

Cognitive Trends in Psychotherapy

The literature in contemporary clinical psychology devotes considerable attention to the emerging popularity of cognitively oriented approaches to therapy (Beck, 1976; Dember, 1974; Mahoney, 1977; Meichenbaum, 1974; Raimy, 1975; Weiner & Palermo, 1973). As a result, numerous and varied therapeutic applications appear in the literature. For example, Lazarus (1971) has emphasized the role of cognition in psychotherapy, while Yates (1975) has called for examination of cognitive variables for an understanding of effectiveness of systematic desensitization and other behavior modification methods. Bandura (1969, 1977) empha-

sized the role of vicarious learning processes and central mediators in human affect and performance. Problem-solving was recognized as a relevant therapeutic area (D'Zurilla & Goldfried, 1971; Haley, 1976) and clinical applications of self-control highlighted the importance of an interactionist perspective (Bandura, 1971, 1974; Goldfried & Merbaum, 1973; Kanfer, 1970; Mahoney, 1972; Thoresen & Mahoney, 1974). Research on applying conditioning models to thought patterns (Cautela, 1966, 1967; Homme, 1965); helplessness and depression (Beck, 1972, 1976; Seligman, 1975); self-instructional methods (Meichenbaum, 1974) give some indication of the direction and impact of cognitive therapy. Additionally, the crucial importance of cognition as a way of understanding human problems has been emphasized by Arieti (1968), a psychoanalyst who has called cognition the "Cinderella of the field of psychiatry." Bieber (1974), another analyst, has suggested irrational belief systems as the primary elements of psychopathology.

Thus the term 'cognitive therapy' is understood many ways in the literature. Meichenbaum (1974) offers a helpful descriptive definition. He envisions cognitive or semantic therapy as a generic term that refers to a variety of approaches which emphasize modifying the 'faulty' pattern of clients' cognitions and their premises, assumptions and attitudes. The focus of therapy in this perspective is on the ideational content involved in the symptom, i.e., irrational inferences involved and their premises. This formulation

of psychological problems in terms of incorrect premises and proneness to distort experience represents a sharp deviation from the psychoanalytic and stimulus - response formulations of psychological disorder. Cognitive theory generally views disorders and irrationality in terms of inadequacies in organizing and interpreting reality (Beck, 1976; Ellis, 1962; Kelly, 1955; Rainy, 1975; Rotter, 1954). Beck (1976), for example, maintains that psychological problems are not necessarily the product of mysterious, impenetrable forces but may result from commonplace processes such as faulty learning, making incorrect inferences on the basis of inadequate or incorrect information and not distinguishing adequately between imagination and reality. Thus, thinking can be unrealistic because it is derived from false premises, and behavior can be self-defeating because it is based on unreasonable attitudes. This conceptualization of emotional disturbance led Beck to label his and other cognitive approaches as 'common sense.'

One element common to cognitive approaches is that the therapist increases the range of alternatives available to the client by making explicit the process of the cognitive construction and reconstruction of attitudes (Loveless & Brody, 1974). From this perspective, the therapist's task may be viewed as examining specific cognitive-affective-behavioral patterns in order to formulate effective treatment plans.

A major commonality among cognitive theorists seems to be the effort to bring the understanding and treatment of emotional disturbances closer to everyday experience. Emotional disturbances are similar to the kinds of misunderstandings a person has experienced numerous times in his life (Beck, 1976). The cognitive therapist induces the client to apply the same problem-solving techniques he has used throughout his life in order that he may correct his present problems. Thus, psychological problems can be mastered by sharpening discrimination, correcting misconceptions and learning more adaptive attitudes. Since introspection, insight, reality testing and learning are cognitive processes, this approach has been labelled 'cognitive therapy' (Beck, 1976).

Considerable support for the foregoing principles of cognitive therapy and for its theoretical conceptualization of psychopathology has been provided by recent systematic studies. From this perspective, Mahoney (1974) has reviewed over 400 studies that directly or indirectly support the theoretical underpinnings of cognitive approaches. Similarly, Ellis (1977b), in examining cognitively oriented approaches to psychotherapy, lists an extraordinarily large number of research studies which he asserts provide empirical confirmation for the cognitive approach. Additionally, Ellis notes that he has omitted a 'huge amount' of corroborative clinical and anecdotal data listed in a comprehensive bibliography of rational-emotive therapy and cognitive-behavior

therapy. Other lengthy bibliographies have been compiled by Meichenbaum (1974, 1976) and Zingle and Mallett (1976). A meta-analysis of psychotherapy outcome studies by Smith and Glass (1976) reviewed hundreds of psychotherapy research experiments; results documented the impressive efficacy of the cognitive approach. More recently, DiGiuseppe, Miller and Trexler (1977) in a review of therapy outcome studies involving areas such as rational-emotive therapy, cognitive therapy, self-instructional training, cognitive-behavior therapy and cognitive restructuring, judged the results as generally positive and promising.

As further evidence of interest and experimentation in the cognitive approaches to psychotherapy, two recent publications have appeared. A cognitive behavior modification newsletter, edited by Meichenbaum, annually presents briefs of current research in cognitive therapy. The new journal Cognitive Therapy and Research, edited by Mahoney, publishes outcome studies as well as articles dealing with theoretical and methodological issues.

In sum, the literature in contemporary clinical psychology reveals considerable attention to various cognitively oriented approaches to psychotherapy. The section that follows presents major themes within cognitive therapy.

A Heuristic View of Major Themes among Cognitively Oriented Approaches to Psychotherapy

A number of theorists and therapists identify with the cognitive approach to psychotherapy, though under a variety of labels and with various modifications. Examples include Rotter (1954), 'social learning theory'; Kelly (1955), 'personal constructs theory'; Ellis (1962), 'rational-emotive therapy'; Meichenbaum (1974), 'cognitive behavior modification'; Maultsby (1975), 'rational behavior therapy'; Mischel (1976), 'cognitive social learning'; and Beck (1976), 'cognitive therapy.'

Victor Raimy (1975) in commenting on the marked swing toward cognitive explanations and approaches in psychotherapy, describes four major themes within cognitive therapy, each of which has generated its own unique approach: self-examination, explanation, vicariation and self-demonstration. To some extent, all four of these methods of making evidence available to the client overlap in actual practice. Four more or less specific therapeutic styles, however, seem to emerge from the strategies listed.

In self-examination, the client is encouraged to talk and think about himself and his problems in the hope that he can locate his misconceptions and find more adequate evidence which will modify or eliminate them. The Rogerian client-centered approach is the best example of the self-examination method (Raimy, 1975).

The use of explanation consists of explaining in some manner to the client evidence of information which is more valid than that which the client professes. The

therapeutic approach of Albert Ellis' rational-emotive therapy seems to best represent the use of explanation in psychotherapy.

In vicariation (or modeling or imitation), the client observes another performing behavior which the client cannot perform because of a lack or distortion of information. Much of the work on vicariation as a treatment procedure has been done by Bandura. Raimy also cites the 'fixed-role' technique of George A. Kelly as another example of using vicariation in treatment.

Self-demonstration is a procedure whereby the client is maneuvered into a situation where he can observe for himself that he has misconceptions and can obtain evidence from his self-observation that he can change his misconceptions. The self-demonstration method is a therapeutic application of everyday 'experiments' which are conducted universally (Raimy, 1975). This process consists of trying out behaviors to determine what happens and is the essence of George A. Kelly's theoretical and clinical technique.

As suggested above, although there is some overlap of these four methods in actual practice, they may be used as categories to describe how a therapist is proceeding at a given moment. They may be also seen as general descriptive strategies of cognitive therapeutic approaches.

Of the four general descriptive strategies of cognitive therapy offered by Raimy (1975), perhaps the active, directive attempts at changing cognitive strategies are best

represented by the approaches of George A. Kelly and Albert Ellis. Both theorists have contributed significantly to and generated a great deal of research in psychotherapy. Working independently in the 1950's, both Kelly and Ellis arrived at cognitively based repudiations of more traditional approaches. Rejecting stimulus-response determinism as well as the Freudian orientation, Kelly (1955) termed his approach 'personal constructs theory.' Ellis, on the other hand, having become disenchanted with his psychoanalytic background, originally called his approach 'rational psychotherapy' (Ellis, 1958), later re-titling it 'rational-emotive psychotherapy' (Ellis, 1962).

Continued interest generated by these original theoretical offerings of Kelly and Ellis is evidenced by the 1976 Nebraska Symposium on Motivation (Landfield, 1977), devoted entirely to personal constructs theory, and a recent issue of The Counseling Psychologist (1977, 7, 1), devoted entirely to a review of Ellis' work.

Since the present study investigates relative preference for the cognitive approaches of Kelly and Ellis, the section that follows presents more elaborate descriptions of their theoretical and therapeutic approaches.

Cognitively Oriented Approaches of George A. Kelly and Albert Ellis

This section presents the theoretical bases as well as therapeutic implications of the systems of Kelly and Ellis,

and concludes with a presentation of similarities and differences between the two approaches.

Theoretical and Therapeutic Approach of George A. Kelly

One of Kelly's underlying assumptions is that man exists in a real universe which he is gradually coming to understand. Man comes to know something of that universe only in so far as he makes interpretations of it (Kelly, 1969a); hence, he approaches an accurate awareness of his environment by a series of successive approximations (Bannister & Mair, 1968). Kelly assumes that the events of man's environment include internal events and behavior (Kelly, 1955).

Observing the successive approximations by which man approaches understanding of his environment, Kelly (1969a) proposed that man may be profitably viewed from the perspective of his 'scientist-like' aspects. While Kelly does not contend that each man acts as a professionally trained laboratory scientist, he does, nevertheless, contend that man, in trying to understand his environment, acts in a manner analogous to that of a scientist approaching his object of inquiry. Kelly's 'man the scientist-in-the-street' tests out his interpretations for their adequacy in predicting the world which he is gradually coming to understand (Kelly, 1955).

In Kelly's (1955) view, man not only discriminates and organizes the events in his environment, he also antici-

pates. The means by which man performs these activities are his personal constructs. Constructs, then, are seen as interpretations imposed upon events. A system of constructs which a person establishes for himself represents a network of pathways along which he moves. Kelly's implication is that constructs are not just optional or extras which may elaborate understanding of behavior, but that behavior cannot be seen in any meaningful way unless the constructions which are tested by it are appreciated. Thus, a person can be best understood to the extent that his system of constructs or interpretations are understood (Bannister & Mair, 1968). His constructs are tools used not only to discriminate and organize events, but also to anticipate the future and so make sense out of the world (Bannister & Mair, 1968).

Kelly (1969b) reflects his emphasis on individual personal constructs by his espousal of the philosophical perspective of constructive alternativism. Kelly refuses to accept any absolute construction of the universe; rather he maintains that reality is subject to many alternative constructions. Thus, man is bound by events to the extent that his ingenuity limits his potential for re-interpreting the events in his environment, and man selects those alternatives through which he is most likely to predict and control his environment. Therefore, theoretically, man can make any number of alternative interpretations of events;

some, however, are more efficient than others (Kelly, 1955). Parenthetically, inappropriate or maladaptive social or emotional behavior may be explained as the inability to modify part of one's construct system when it is no longer effective in construing events.

In summary, Kelly (Landfield, 1970) implies that assumptions and hypotheses are the tools of man-the-scientist-in-the-street as well as the professional scientist. Man chooses his alternatives as a result of his testing his assumptions and hypotheses. Man creates his own theory of life just as the scientist creates his theory for the same reasons. Not only does man erect structures of meaning, but man uses his theories in the anticipation of life events; consequently his behavior can be plotted within his construing of events (Landfield, 1970). Thus, the scientist-in-the-street theorizes, although his theorizing may not be so evident or related to rules of formal logic.

Kelly's view of man-as-scientist and his emphasis on alternative construction has implications for the way Kelly views psychotherapy. Kelly (1955) describes counseling or psychotherapy as a psychological process that changes one's outlook on some aspect of life by reconstruing life roles or the role one envisions for oneself. A client's desired changes necessarily involve an examination and testing of his personal constructs, as well as the examination of alternative constructions. Kelly saw psychotherapy as a kind of liberation which enabled the client to escape from

imprisoning contradictions of his own view of life (Ban-nister & Fransella, 1971).

The therapist's role is to help the client explore the implications of his personal constructs. The client's behavior offers the means for this exploration. Personal construct theorists view 'behavior' as a way of posing questions to test constructs, rather than viewing behavior as an answer in itself (Kelly, 1969c).

Kelly (1969c) sees therapy as a way of getting on with the human enterprise and he views the therapist's role as a collaborator with his client, a fellow experimenter in the undertaking of helping the client get on with his experiment in living.

Kelly views psychotherapy as an 'experimental process' in which constructions are devised or delineated and are then tested. "Psychotherapy is not an applied science, it is a basic science in which the scientists are the client and his therapist" (Kelly, 1969c, p. 220). The therapist helps the client to set up hypotheses and to design and implement experiments, using the psychotherapy room as a kind of laboratory. The therapist participates in the experiments and serves as a part of the validating evidence. As Kelly (1969d) states,

Indeed I suggest that the best scientist is the one who approaches his subject intimately as a clinician may be expected to approach it, and the best clinician is one who invites his client to join him in a controlled investigation of life (p. 60).

In summary, a client learns a 'scientific method' developing hypotheses and testing them 'experimentally,' both within and outside of the interview situation (Patterson, 1973). Thus, the client comes to view the therapy session as an opportunity in which he and his therapist generate and evaluate ways of considering the client's problems. The client also views his therapy session as the appropriate place to report whatever changes have occurred as a result of their work together and as a result of the client's experiences outside of therapy. Kelly's system, then, presents a psychology of personal constructs. Constructs are the unique patterns an individual employs in viewing his environment. Kelly assumes that an individual, much like a scientist-in-the-street, is capable of construing in an almost endless number of ways.

Psychological problems develop when an individual continues to think and behave in the same way even though these thoughts and behaviors have proven ineffective.

Psychotherapy in Kelly's system thus becomes an exploratory venture in which client and therapist join for the purpose of examining and testing the client's personal construct system. The therapist "is the client's fellow researcher who seeks first to understand, then to examine and finally to assist the client in subjecting alternatives to experimental test and revision" (Kelly, 1958, p. 82).

Theoretical and Therapeutic Approach of Albert Ellis

Ellis' theory strongly emphasizes the biological aspects of human personality (Ellis, 1962, 1973a). He maintains that man is born with the potential to be uniquely rational and straight thinking and a tendency to be a uniquely irrational and crooked thinking creature (Ellis, 1973a).

Ellis believes that man has powerful biological pre-dispositions to be self-preserving and pleasure-producing, including pre-dispositions to think, to use language, to think about his thinking, to be creative, to be sensuous and sexual, to love, to be interested in his fellow, to organize, to learn by his mistakes and to actualize some of his potential for life and growth. On the other hand, he also has exceptionally potent propensities to be self-destructive, to be a short-range hedonist, to avoid thinking things through, to shirk responsibilities, to procrastinate, to hate, to be callous, to make the same mistakes endlessly, to be superstitious, to be intolerant and dogmatic, to be perfectionistic and grandiose and to avoid actualizing his potentials for growth (Ellis, 1973a).

Human beings, being reared in social groups, spend most of their lives trying to impress, to live up to the expectations and outdo the performances of other people (Ellis, 1973a). Although man is always more or less gullible and highly suggestible, his suggestibility is

greatest during his early years. It is then that he is most subject to social pressures.

Ellis asserts that emotional maturity is a fine balance between the individual's caring and overcaring about having good interpersonal relationships; consequently, man tends to involve himself a good deal of the time in the most difficult task of trying to discriminate effectively between reasonable and unreasonable social expectations (Ellis & Harper, 1975).

In Ellis' view man tends to perceive, think, emote and behave simultaneously and interactionally. Man rarely, if ever, perceives or acts without cognizing, since his present sensations or actions are apprehended in a network of prior experiences, biases, memories and conclusions. Ellis (1962) states further that human emotion does not exist in itself, has no primacy over behavior, cannot, for the most part, be clearly differentiated from ideation and is largely controllable by thinking processes. Man rarely emotes without thinking since his feelings include, and are usually triggered by, an appraisal of what a given situation means and how important it is to him (Ellis, 1973a). An assumption of this view is that cognitions rather than emotions are amenable to reason (Ellis, 1962).

Rational-emotive theory (RET) accepts that human events are largely controlled by causal factors beyond the individual's will but holds that the human being has

the possibility of taking action in the present that will change and control his future; thus, RET accepts human beings as fallible, limited and biologically rooted animals; but it also accepts them as unique, symbol-producing and thought-creating persons who have unusual potential to build or rebuild their own emotions and behavior (Ellis, 1962).

This recognition of the individual's ability to determine, in good part, his own behavior and emotional experience is expressed in the A-B-C theory of personality incorporated in RET. A represents the existence of a fact, an event or the behavior or attitude of another person; C represents the reaction of the individual - emotional disturbance or unhappiness - that is presumed to follow directly from A. It is not A, however, that is the cause of C, but B, which is the self-verbalization of the individual about A. The recognition of this relationship leads to the possibility of changing and controlling one's attitudes and behavior in reaction to circumstances (Patterson, 1973).

RET holds that virtually all serious emotional problems with which humans are beset directly stem from their magical, superstitious, empirically unvalidatable thinking. Accordingly, no matter what traumatic experiences he may have been subjected to during his early or later life, the main reason why he is now disturbed is

because he now has some dogmatic, irrational, unexamined beliefs. Such common hypotheses are devoid of empirical referents.

Ellis (1962) identifies eleven such ideas that he considers irrational and "presently ubiquitous in Western Civilization and which would seem inevitably to lead to widespread neurosis" (p. 61):

- (1) The idea that there is a dire necessity for an adult human being to be loved or approved by virtually every significant other person in his community (p. 61).
- (2) The idea that one should be thoroughly competent, adequate and achieving in all possible respects if one is to consider oneself worthwhile (p. 63).
- (3) The idea that certain people are bad, wicked or villainous and that they should be severely punished for their villainy (p. 66).
- (4) The idea that it is awful and catastrophic when things are not the way one would very much like them to be (p. 69).
- (5) The idea that human unhappiness is externally caused and that people have little or no ability to control their sorrows and disturbances (p. 72).
- (6) The idea that if something is or may be dangerous or fearsome, one should be terribly concerned about it and should keep dwelling on the possibility of its occurring (p. 75).
- (7) The idea that it is easier to avoid than to face certain life difficulties and self-responsibilities (p. 78).
- (8) The idea that one should be dependent on others and need someone stronger than oneself on whom to rely (p. 80).

- (9) The idea that one's past history is an all important determiner of one's present behavior and that because something once strongly affected one's life, it should indefinitely have a similar effect (p. 82).
- (10) The idea that one should become quite upset over other people's problems and disturbances (p. 85).
- (11) The idea that there is invariably a right, precise and perfect solution to human problems and that it is catastrophic if this perfect solution is not found (p. 86).

These false ideas are almost universal in our society and when they are accepted and reinforced by continuous self-indoctrination, they lead to emotional disturbances or neurosis since persons cannot live up to them. The disturbed individual is unhappy because he is unable to achieve the unreasonable 'shoulds,' 'oughts' and 'musts' (Ellis, 1973a).

Given the prominence of irrational beliefs in Ellis' system, psychotherapy is seen as the curing of unreason by reason (Ellis, 1962). Man is seen as a rational being, able to avoid or eliminate most emotional disturbance or unhappiness by learning to think rationally.

RET aims to help the client minimize his dictatorial, dogmatic and absolutistic core philosophy so that he functions more efficiently. In doing so, RET purports to be 'vigorously scientific,' meaning that it is based on and consistently uses the principles of empirical validation and logical analysis rather than the principles of magic,

mysticism, arbitrary definition, religiosity and circular thinking (Ellis, 1971). Further, Ellis describes what 'vigorously scientific application' means:

... an active-directive cognitive-emotive-behavioristic attack on major self-defeating value systems - an attack not directed against the client, but against his unrealistic beliefs. The essence of effective psychotherapy according to RET is full tolerance of the client as an individual combined with a ruthless, hardheaded campaign against his self-defeating ideas, traits and performances (Ellis, 1973a, p. 169).

In RET, the therapist uses an active-constructive approach to cognitive-behavioral therapy change. He employs a highly persuasive intervention style to help the client learn to recognize his irrational, inconsistent and unrealistic perceptions and thoughts, and change these for more logical, more reasonable philosophies of life (Ellis, 1972).

The role of the effective therapist is to continually unmask his client's past, and especially, his present illogical thinking or self-defeating verbalizations by (a) bringing them forcefully to his attention; (b) showing him how they are causing and maintaining his disturbance and unhappiness; (c) demonstrating exactly what the illogical links in his internalized sentences are; and (d) teaching him how to rethink, challenge, contradict and reverbitalize these (and similar) sentences so that his internalized thoughts become more logical and efficient (Patterson, 1973).

The RET therapist makes this concerted attack on the disturbed person's illogical positions in two main ways. The therapist serves as a frank counter-propagandist who directly contradicts and denies the self-defeating propaganda and superstitions which the client has originally learned and which he is now self-instilling. As well, the therapist encourages, persuades, cajoles and occasionally insists that the client engage in some behavior which itself will serve as a forceful counter-propaganda agency against the nonsense he believes (Ellis, 1962, 1977a).

In sum, the therapist mainly employs a fairly rapid-fire, active-directive-persuasive-philosophic methodology (Ellis, 1973a).

Essentially RET is active, directive teaching. The RET therapist employs a wide variety of educational methods, including didactic discussion, behavior modification, bibliotherapy, audio-visual aids and activity oriented homework assignments (Ellis, 1973a). In fact, Ellis sees all effective psychotherapy as essentially educational in nature (Ellis, 1962).

RET holds that specific patterns of disturbance are learned; it also holds that they can be unlearned, although with some difficulty. Ellis not only shows the client what his disturbing beliefs are, but also directly and actively induces him to attack, challenge and work against these beliefs and to re-educate himself to think

and behave more efficiently (Ellis, 1973b).

Thus Ellis "like a good psychology professor" (Raimy, 1975, p. 137) sees therapy as an opportunity to change a client's faulty learning. More precisely, in a personal communication Ellis (1977a) described his therapy as "cognitive-affective-behavioral re-education."

In summary, RET is based on Ellis' biologically rooted theory of personality. Ellis maintains that the primary cause of unhappiness is the innate tendency to self-reinforce irrational beliefs learned at an early age through social interaction. Psychotherapy, then, is viewed as an educational endeavor which seeks to cure unreason with reason. Ellis sees the role of the therapist as that of an active, directive teacher who helps the client learn new ways of thinking, feeling and acting.

Similarities and Differences in the Two Approaches

Like other cognitive therapists, Kelly and Ellis share a common emphasis on cognitive components of behavior. The section that follows outlines some of the commonalities that Kelly and Ellis share, as well as some radical differences in their approaches.

Matarazzo (1965) has commented on the common cognitive elements of the two approaches. Both are aimed at changing strategies; both attempt to have a client view a situation in another way. Both place supreme import-

ance on the use of a quasi-scientific method for overcoming emotional disturbance. Both are active, directive and verbal in therapy; they view themselves as active agents in the changes a client makes. Both theorists consider conscious thought and its review to be the essence of psychotherapy.

Raimy (1975) views both Kelly and Ellis as therapists whose systems are designed to rectify clients' misconceptions. In this context, Raimy sees the misconception hypothesis as follows:

If those ideas or conceptions of a client or patient which are relevant to his psychological problems can be changed in the direction of greater accuracy where his reality is concerned, his maladjustments are likely to be eliminated (p. 7).

Brehm (1976) also has observed that Kelly and Ellis have generally similar orientations and concerns, although no theories of psychotherapy clearly focus on the exact same psychological issues as are addressed by theories of attribution. In Brehm's view, Kelly and Ellis share the three major themes of all theories of attribution: emphasis on cognitive processes, on the person's desire to control his environment, and on the person's need to understand cause and effect relationships in order to control his environment (Brehm, 1976). Finally, both Kelly and Ellis take a therapeutic approach which orients to the present and to the future

and both see psychotherapy as liberation from restricting thinking and behaving.

It is readily apparent, however, that in theory and therapeutic technique, there are radical differences between Kelly and Ellis. Whereas Ellis proposed a set of fairly fixed 'rational' perceptions that he believes most people should accept and use, Kelly, on the other hand, prescribes no definite or best way a person should construe a situation. He states only that one should try different ways to find a construction that is most effective (Karst & Trexler, 1970).

Ellis (1973a) maintains that man has a biologically rooted tendency toward irrationality. Kelly makes no such assertion.

Ellis sees the task of the therapist as a teacher involved in the task of re-education of the client; Kelly views the therapist as a collaborator and fellow-experimenter exploring various alternatives with his client.

Ellis teaches, persuades, cajoles a client and attacks irrational beliefs. He is a frank propagandist who directly contradicts and denies self-defeating propaganda (Ellis, 1962). By contrast, Kelly, while highly active and manipulative, constantly prods, pushes and stimulates a client and maintains a scientist's objectivity (Patterson, 1973). Kelly would help a client review data, allowing him to decide which, if any, reconstruction is most effective

for him (Kelly, 1955). Thus, in technique, Ellis' approach tends to be more dogmatic and prescriptive; Kelly's, more objective and less judgmental (Karst & Trexler, 1970).

One of the major differences between Ellis and Kelly, both theoretically and therapeutically, involves their respective positions on the role of disconfirmation. Ellis, a firm believer in the importance of disconfirming a client's irrational beliefs and faulty thinking, states his position as follows:

In most instances, he [the therapist] quickly pins the client down to a few basic irrational ideas which motivate much of his disturbed behavior; he challenges the client to validate these ideas; he shows him that they are extra-logical premises which cannot be validated; he logically analyzes these ideas and makes mincemeat of them; he vigorously and vehemently shows why they can't work and will almost inevitably lead to renewed disturbed symptomatology; he reduces these ideas to absurdity, sometimes in a highly humorous manner; he explains how they can be replaced with more rational, empirically based theses; and he teaches the client how to think scientifically, now and in the future, so that he can observe, logically parse and thoroughly annihilate any subsequent irrational ideas and illogical deductions that lead him to feel and act in a self-defeating manner (Ellis, 1973a, p. 185).

Kelly, on the other hand, takes an opposite position on the role of disconfirmation in therapy. He states:

One way of life need not be invalidated before the outcomes of another are examined. If a person in psychotherapy can free himself from the indicative moods of our language system long enough to entertain some novel hypothesis about other ways of

living, he can save himself and his therapist a lot of trouble overcoming the "resistances" and "false premises" of his previous outlook. Therapy could then become concerned with alternatives instead of involving the participants in long, intricate, and reductionistic analyses designed to disabuse the client of his 'neurotic' notions (Kelly, 1969d, p. 55).

And again:

It is very commonly believed by people who should know better that one is obligated to disconfirm one explanation before he dares entertain seriously the possibilities of any other (Kelly, 1964, p. 159).

In short, Kelly may be considered a more objective, less judgmental collaborator-scientist who assists the client in constructing alternatives (Kelly, 1955; Karst & Trexler, 1970). Ellis, on the other hand, may be considered a more dogmatic, prescriptive teacher-scientist whose job it is to expose and annihilate nonsense and teach more effective ways of thinking, feeling and behaving (Ellis, 1973a; Karst & Trexler, 1970).

While the approaches of Kelly and Ellis, as well as other cognitive therapies, have demonstrated considerable clinical promise, the need for continued research in cognitive therapy continues. Additionally, there is need for further research on parameters which influence the effectiveness of psychotherapy. The section that follows addresses these concerns.

Need for Research in Cognitive Therapy, in Client Preference for Therapy, and in the Role of the Psychological Problem

Recent systematic studies have provided considerable support for the approaches of Kelly and Ellis and other cognitively oriented theorists, as well as the cognitive role in psychopathology (DiGuiseppe et al., 1977; Ellis, 1977b). In view of the support for cognitive approaches, both Beck (1976) and Mahoney (1977b) recommend continued careful investigation of the elements contributing to the reported successes and caution that promising results should not lessen but rather stimulate research.

Similarly, Wein, Nelson and Odom (1975), in studying one of the major strategies of cognitive therapy, cognitive restructuring, point out that although the success of cognitive restructuring and other cognitive techniques has been demonstrated, "the parameters which influence their effectiveness have not been investigated" (p. 472). Thus Wein et al. underscore the importance of researching the parameters which influence the effectiveness of cognitive therapy. Specifically, their study suggests that individual differences among clients as well as the type of clinical problem may influence the effectiveness of various cognitive techniques.

In terms of parameters which influence counseling effectiveness, little attention has been given to client

preferences for different therapeutic approaches or to the possible ramifications of such preferences on therapeutic outcome as a function of individual differences (Holen & Kinsey, 1975).

Both logic and research outlining the impact of outcomes of counselor congruence and empathetic understanding imply that a client is unlikely to benefit from a therapeutic approach he finds unacceptable or believes to be ineffective (Holen & Kinsey, 1975). As Friedman and Dies (1974) suggest, it is doubtful that all clients react similarly to therapies requiring different levels of involvement, participation and control. For example, at Mendocino State Hospital in California, patients were allowed to choose techniques and therapists whom they felt best suited to their needs, and patients were encouraged to shop around to try different therapies. The Roche Report (1969) suggests that this program has resulted in less resistance and more involvement by the patients; however, no systematic evaluation of the program has been reported to date.

Devine and Fernald (1973) report that, as public interest and knowledge of different therapies have been increasing greatly in recent years, it is reasonable to expect that as awareness of treatments grows patients will not select therapy without comparing it to others. The purpose of the Devine and Fernald study was to evaluate the effect that a patient's preference for a particular therapy had on outcome.

They found that receiving a preferred rather than a randomly assigned or non-preferred therapy had a significant effect on outcome. The practical significance of this finding suggests that when circumstances permit, it may be advantageous for patients to learn about various techniques and allow them to select one most to their liking. They further conclude that the positive effect of receiving a preferred therapy may reflect a preference for a particular technique. Devine and Fernald (1973) suggest three possible explanations for their findings: 1) the client's expectation may be the single most important factor in determining therapeutic outcome; 2) subjects' efforts to justify their stated preferences; and 3) therapy-subject fit.

Consistent with the third explanation offered by Devine and Fernald (1973), Montaganes (1974) emphasizes that not all techniques are appropriate for all clients and stresses the importance of client-therapy fit. In this regard, Montaganes asserts:

To proceed blindly in the belief that there exists one theory or approach, that we are capable of working under any model, and that our client will benefit from whatever direction we choose for him, will only in the end weaken our therapeutic effectiveness (p. 44).

Goldstein and Stein (1976) in advocating prescriptive psychotherapy urge that both researchers and practitioners orient toward an individualized, differential, tailored, focused or prescriptive strategy both in the study and use

of psychotherapeutic methods. They further observe that maximizing the prescriptive utilization of psychotherapy is a largely unexercised procedure or methodology. Furthermore, they detail the indications for prescriptive psychotherapies. They specifically call for careful assignment of specific therapeutic strategies tailored for a specific problem from the wide range of problems that come to clinical attention. Their thesis is that clinical psychology is at the threshold of being able to prescribe therapies for specific patients with specific problems.

As previously cited, Wein et al. (1975) state that although the success of cognitive therapies has been demonstrated, the parameters which influence their effectiveness have not been fully investigated. They emphasize the relevance of the nature of the client's problem as a significant variable in addressing the effectiveness of cognitive therapies. In fact Holen and Kinsey (1975) suggest that extended research may discover that preference for a therapeutic approach may be a function of a factor such as a client's specific problem. They further suggest that in the past, research psychologists have perhaps concentrated too heavily on the somewhat superficial traits of counselors and clients, while failing to attend to the problem which brought the client to therapy in the first place.

In sum, the literature suggests that preference for therapeutic technique, more specifically client-therapy

fit, as well as the psychological problem or situation are important parameters and worthy of more detailed investigation.

Such detailed studies may be facilitated by a theoretical framework capable of accommodating individual differences as related to preference for therapeutic approach, as well as the psychological problem. Nowicki and Duke (1978) assert that Rotter's social learning theory may be a uniquely helpful theoretical perspective from which to investigate important facets of counseling. Thus, the section that follows introduces Rotter's social learning theory with particular attention to the theory's construct of locus of control, a major independent variable in the present investigation.

Locus of Control and Social Learning Theory as a Framework for Investigating Relative Preference for the Approaches of Kelly and Ellis

Rotter's social learning theory is among the more comprehensive clinically oriented attempts to address the relationship between cognition and social behavior (Rotter, 1954; 1970; Rotter & Hochreich, 1975). His social learning approach focuses on the client's learning process within a social setting, his cognitive activity, his expectancies, his values, his ability to implement new behaviors and his psychological or problematic situation. The sections that follow describe these major components of Rotter's social learning approach.

Overview of Rotter's Social Learning Theory

Rotter's social learning theory is a molar theory of personality that attempts to integrate two diverse trends in American psychology: the stimulus-response or reinforcement theories on the one hand and the cognitive or field theories on the other (Rotter, 1975). Rotter (1970) views the problems of psychotherapy as problems in how to effect changes in behavior through the interaction of one person with another; that is, "they are problems in human learning in a social situation or context" (p. 554).

Like other personality theories, Rotter's social learning theory takes implicitly or explicitly, a position on how to view human nature, and makes assumptions as to which concepts will be most useful in explaining human behavior. Phares (1976), examining Rotter's (1954) original formulation, summarizes those assumptions and implications. Phares asserts that since the unit of investigation for the study of personality is the interaction of the person and his meaningful environment, the emphasis of the theory is on learned social behavior. Furthermore, he asserts that there is unity to the personality and a purposeful quality to human behavior. Finally, Phares states that Rotter's social learning theory emphasizes both general and specific determinants, with special focus on expectancies, regarded as prime determinants of behavior.

In contrast to theories of personality which base their understanding of human behavior on the identification

of a strong single characteristic trait of the person, or on conflict between two equally strong traits or motivating forces, Rotter (1975) cites four classes of variables needed to address meaningfully an individual's behavior. Rotter indicates that the four classes of variables include behavior potentials, reinforcement value, the psychological situation and expectancy. He summarizes his theory in the following manner:

In its most basic form, the general formula for behavior is that the potential for a behavior to occur in any specific psychological situation is a function of the expectancy that the behavior will lead to a particular reinforcement in that situation and the value of that reinforcement (Rotter, 1975, p. 57).

'Behavior potential' refers to the potential of any given behavior to occur in any particular situation or set of situations as calculated in relation to any single reinforcements. The concept of behavior that Rotter uses is a broad one. It includes any action of the person that involves a response to some stimulus situation and that may be observed or measured either directly or indirectly. Behavior may thus consist of actual motor acts, cognitions, verbal behavior, non-verbal behavior or emotional reactions (Rotter & Hochreich, 1975).

Another major variable in Rotter's social learning theory is that of reinforcement value. This refers to degree of preference for any reinforcement to occur if the possibilities of their occurring were all equal; thus, reinforcement

value is a relative term. The value of a reinforcement is determined by its strength relative to that of other anticipated reinforcements. An important characteristic of reinforcements is that they usually do not occur entirely independently of one another; the occurrence of one reinforcement may have expected consequences for future reinforcements (Rotter & Hochreich, 1975).

The psychological situation is an essential aspect of Rotter's social learning theory and thus holds crucial importance for research in personality and psychotherapy as well as in psychotherapeutic practice (Rotter, 1954, 1955, 1970, 1975; Rotter & Hochreich, 1975).

The 'situation' in Rotter's social learning theory refers to the psychological situation or any part of the situation to which the individual is responding. The subjective reaction and the meanings the person himself gives to the situation are important; furthermore, the situation must also be describable in objective terms for scientific purposes.

'Expectancy' is defined as the probability held by an individual that a particular reinforcement will occur as a function of his specific behavior in a specific situation or situations (Rotter & Hochreich, 1975). The emphasis that Rotter places on expectancy sets his theory apart from most others. Rotter maintains that expectations are determined by an individual's previous experience and can be described quantitatively. Expectancies are subjective in nature and

are viewed as varying in generality. Two major kinds of expectancies emerge from the theory: situation-specific expectancy and generalized expectancies (Rotter & Hochreich, 1975). Specific expectancies are based on an individual's prior experience in given situations (Phares, 1976). The concept of generalized expectancy refers to the expectancy held by an individual in a variety of situations. It is assumed to be the result of accumulated experiences which generalize from one situation to other situations viewed as similar in some respect (Rotter & Hochreich, 1975).

Rotter (1975) describes the concept of expectancy as follows:

Expectancies in each situation are determined not only by specific experiences in that situation but also, to some varying extent, by experiences in other situations that the individual perceives as similar. One of the determinants of the relative importance of generalized expectancies versus specific expectancies developed in the same situations is the amount of experience in the particular specific situation (p. 57).

Thus, the relationship between specific expectancies and generalized expectancies may be viewed as a ratio: the relative importance of generalized expectancy goes up as the situation is more novel or ambiguous and goes down as the individual's experience in that situation increases (Rotter, 1975).

Efforts to investigate the relationship between expectancy and reinforcement led Rotter (1966) and his

associates to hypothesize the bi-dimensional variable of internal versus external locus of control. The construct of locus of control, which has generated voluminous research (Lefcourt, 1976; Phares, 1976; Rotter, 1975), serves as a major independent variable in the present study in cognitive therapy and is, therefore, reported in detail in the section immediately following.

The Construct of Locus of Control

Although the construct of internal versus external control of reinforcement developed out of Rotter's social learning theory, Rotter (1975) maintains that it is not the major or central concept in his social learning theory. The clearest expression of the meaning of internal versus external control of reinforcement appeared in the monograph which introduced the Rotter Internal-External Locus of Control Scale:

When a reinforcement is perceived by the subject as following some action of his own but not being entirely contingent upon his action, then, in our culture, it is typically perceived as the result of luck, chance, fate, as under the control of powerful others, or as unpredictable because of the great complexity of the forces surrounding him. When the event is interpreted in this way, by an individual, we have labeled this a belief in external control. If the person perceives that the event is contingent upon his own behavior or his own relatively permanent characteristics, we have termed this a belief in internal control (Rotter, 1966, p. 1).

As Lefcourt (1976) observes, since the locus of control construct was introduced into the psychological

literature in the early 1960's, there has been an overwhelming abundance of research pertaining to the perception of control. In addition to articles reviewing the research on locus of control (Joe, 1971; Lefcourt, 1966; Rotter, 1966, 1975; Throop & MacDonald, 1971) three books on locus of control have also appeared (Lefcourt, 1976; Phares, 1973, 1976).

Some indication of the impact and research utility of the construct of locus of control is suggested by the diverse and wide ranging list of topics to which it has been applied. Some of these include resistance to influence, achievement related behavior, social antecedents of locus of control, changes in locus of control, fatalism and psychopathology, response to aversive events, as a determinant of mastery over the environment, anxiety, adjustment and reaction to threat. Additionally, locus of control has been investigated with areas of more immediate interest to the present study, e.g., cognitive activity, therapeutic outcome, and preference for therapy.

Rotter (1975), reacting with surprise at the popularity of locus of control as evidenced by the large number of articles, theses and dissertations generated, issues a number of cautions and discusses limitations of the construct of locus of control. He maintains that many of the conflicting reports of research in behavioral prediction are rooted in a failure to understand the basic principles of his social learning theory. Specifically,

Rotter (1975) advises that studies of locus of control should be rooted within situational contexts, as called for in his social learning theory; furthermore, he accounts for conflicting reports of some research by pointing out that many researchers have inappropriately elevated locus of control to the function of a so-called behavioral trait. In their reviews, Phares (1976) and Lefcourt (1976) issue similar cautions.

Additionally, Rotter (1975) accounts for discrepancies in some studies by suggesting that there are two kinds of external locus of control orientations: 'passive externals' and the so-called 'defensive externals.' Defensive externals are those who verbalize external beliefs as a protestive device. Rotter (1975) suggests that defensive externals may be identified by their low scores on a measure of their generalized expectancies for interpersonal trust (Rotter, 1967, 1971).

Another area of controversy centers on the question of whether Rotter's Internal-External Locus of Control Scale (Rotter, 1966) taps a unidimensional or multidimensional construct. In his original presentation of the I-E Scale, Rotter (1966) reported two factor analyses of the scale, the results of which were not sufficiently reliable to suggest any clear-cut subscales within the test. Phares (1976) reports that whereas there is evidence for the existence of separate factors (Levenson, 1974; Mirels, 1970; Schneider & Parsons, 1970); however, there is much less evidence

that illustrates the separate factors' predictive ability. Whereas Phares (1976) reports some commonality in the conclusions of various authors, there is much disagreement which probably lies in the various methods of factor analysis employed.

Another consideration regarding factor structure relates to varying characteristics. More sophisticated populations may be more sensitized to the complexities of life than less sophisticated groups and thus show evidence of a different factor structure. Addressing some of the problems and misconceptions related to multidimensionality, Rotter (1975) maintains that approaching the question of multidimensionality in an either/or manner is contrary to a social learning approach to the nature of stable behavior.

While encouraging the psychometric development of new scales for tapping the dimension of locus of control, Phares (1976) states that the vast majority of studies in locus of control have employed Rotter's original I-E Scale; thus, he cautions that information gathered from those studies applies most directly to future investigations that employ the same scale.

Research studies on locus of control have yielded some interesting results relating to differences concerning the manner in which internals and externals function on a wide number of modalities, including cognitive activities (Phares, 1976). Results of studies with implications for differences in cognitive functioning are seen to have

special relevance for the present study on the cognitive therapeutic approaches of Kelly and Ellis.

Locus of Control and Cognitive Activity

In his original monograph, Rotter (1966) described locus of control as essentially perception of a causal relationship between behavior and reward. Consistent with this notion, Phares (1976) and Lefcourt (1976) reviewed studies that indicated locus of control is a correlate of the type of cognitive activity which facilitates the maintenance of personal causation.

Lefcourt (1976) asserts that the notion that locus of control is related to cognitive activity appeals to common sense. One who holds internal control expectancies should be more cautious and calculating about his choice, involvements and personal entanglements than an individual with external control orientations. Internality should entail more active cognitive processing of information relevant to the attainment of valued ends and should be reflected in the types of strategies that characterize an individual. Several studies support the relationship between locus of control and cognitive activity.

Seeman and Evans (1962) conducted the first study linking locus of control and cognitive activity. They sought to predict tubercular patients' knowledge about their disease. External-oriented patients were found to have less knowledge about tuberculosis than internal patients, thus supporting the assertion that internals avail themselves of information,

even if it has negative connotations for themselves, more than do externals.

In a similar study involving inmates in a federal reformatory, Seeman (1963) found that internals were more knowledgeable about the manner in which the reformatory was run, were more familiar with parole regulations and more cognizant of long-range facts that potentially could affect their future after release from the reformatory. All the inmates had been exposed to such information in an incidental fashion.

The Seeman studies indicate that internals appear more knowledgeable in terms of personally relevant information than do externals. Lefcourt (1976) assumes that these differences derive from the fact that internals believe that they can act in their own behalf and therefore require more information, while externals more readily accept dependency on more competent others and thus have less need of information.

Davis and Phares (1967) conducted a study in which they concluded that internals are more likely to seek information than externals in order to improve their likelihood of being effective. Upon later reflection, Phares (1976) asserted that internals possess higher levels of knowledge because they more actively seek to acquire such knowledge.

Not only do internals acquire more knowledge than externals, they take more effective utilization of knowledge

than externals. In a study reported by Phares (1968), internals and externals were compared in their use of information for decision making. In a simulation, the subjects' task was to determine the marriage suitability of several men and women. They had to recognize information provided about individuals and decide who should marry whom. The amount of information available and the degree of learning of that information were controlled. Nevertheless, Phares concluded that internals make better use of information than externals despite the fact that both might have equivalent funds of information.

Another method of studying cognitive activity is exemplified by Lefcourt and his associates. Lefcourt and Wine (1969) observed subjects as they attended to two experimental confederates in an interview setting. One confederate avoided eye contact with the subject while the other confederate behaved in a more typical social fashion. One of their findings was that internals looked at the person who avoided eye contact more often than they looked at the more conventional person. Additionally, internals looked at the person who avoided eye contact more often than did externals; likewise, internals made more observations of the persons than did externals. Lefcourt and Wine concluded that when there are uncertainties in a situation internals are more likely to pay attention to potentially relevant cues than are externals.

In another study, Lefcourt (1967) concluded that

externals do not adequately search for reinforcement properties, or that they fail to maintain the kind of cognitive awareness that might facilitate cognitive categorizing of situations so as to better attain reinforcement.

Additionally, three different studies in attention and reaction time (Julian & Katz, 1968; Lefcourt, Lewis & Silverman, 1968; Rotter & Mulry, 1965) indicated that internals devote more attention to decisions about skill-related matters than do externals. They also found that internals show considerably more variability than externals. Internals' attentiveness, concern and interest changed with the types of situations in which they were engaged. If the task offered a challenge to competence, then internals became more deliberate in their decision making during that task. Less skill-demanding tasks, on the other hand, elicited some carelessness and impulsivity from internals. Externals did not seem to draw such sharp distinctions about tasks as internals.

Throughout most of the research reviewed above, evidence has been presented that supports a relationship between locus of control and cognitive activity. Regardless of whether the focus has been on attention, deliberation, inquisitiveness, or utilization of information, internals have more often been found to be more active and alert individuals than have externals (Lefcourt, 1976).

In a study ostensibly concerned with verbal facility,

Lefcourt, Gronnerud and McDonald (1973) tested subjects on a battery of measures requiring different verbal skills. The last of these measures was an orally administered word association test which contained a number of words which were sexual double entendres. They recorded data which allowed for the observation of visible changes indicating that subjects were aware of the 'odd' nature of the stimulus list. Their results supported the contention that internals would be quicker at noting changes in the conditions around them and quicker to respond to their perceptions. Lefcourt et al. (1973) conclude that internals were not as easily duped for as long a period as were externals due to a greater readiness to recognize and cognitively come to terms with change.

Further evidence of the superiority of internals in cognitive processing is supported by DuCette and Wolk (1973). Using a simple problem-solving task they concluded that internals were better at using their experience on a task to improve their perception of performance on test data. They also concluded that internals were more accurate in remembering successes when feedback was provided, and that internals were more quick to deduce an invariant rule from an ambiguous situation, and to use the rule to solve a problem.

Two studies (Pines, 1973; Pines & Julian, 1972) suggest that two classes of variables may have influenced the performance differences reported in the previous studies, most of which were laboratory studies. The first variable may be

called 'the informational demands of the task'; the second could be described as the 'social demands of the situation.' Though there is considerable evidence that internals are superior to externals in their responsiveness to informational requirements, externals seem to be more conforming, more susceptible to influence and more sensitive to social demands (Pines & Julian, 1972). This led Pines and Julian to suggest that performance differences between internals and externals are not completely explicable in terms of belief in one's control over outcomes; rather, internals and externals may adopt different strategies in pursuit of goals. Internals may pursue goals by attending more carefully to the nature of the task. Externals may rely upon behaviors oriented toward the social agent in the situation. Additional work by Pines (1973) supports these conclusions.

In summary, a review of the literature on locus of control and cognitive activity indicates that there are important differences in the performances of internals and externals. Phares (1976), stating that internals are more cognitively active, describes the differences as follows:

[Internals] exhibit better learning and acquisition of material, they more actively seek information, they show a superior utilization of information or data once it is acquired, they are more attentive, alert, and sensitive than externals, and they seem to be more concerned with the information demands of situations than with any presumed social demands (p. 78).

As Lefcourt (1976) concludes:

Thus, it would seem that the assumed differ-

ences in cognitive activity between internals and externals have been demonstrated. Internals have been found to be more perceptive and ready to learn about their surroundings. They are more inquisitive, curious and efficient processors of information than are externals (p. 65).

Locus of Control and Psychotherapy

As stressed throughout the review of the literature, locus of control and related cognitive activity can be viewed within the whole framework of Rotter's social learning theory (Rotter, 1975). Speaking from the framework of his social learning theory, Rotter (1970) recommends that therapist, method and patient be carefully matched in order to maximize beneficial results from psychotherapy. For Rotter (1970), locus of control is an important aspect of that matching process.

Although there has not been a great deal of research utilizing locus of control in psychotherapy (Phares, 1976), Nowicki and Duke (1978) suggest that there should be differential reactions to psychotherapy as a function of locus of control.

Kilmann, Albert and Sotile (1975) used locus of control as a predictor of client-therapy compatibility. They interpreted their results as suggesting that external clients may achieve the most significant therapeutic benefits from a structured therapist intervention within a spaced-time format, while internal clients may require a therapist model of minimal control and structure to achieve maximum therapeutic gains.

Friedman and Dies (1974), varying the levels of involvement, participation and control of psychotherapeutic sessions, predicted that internally controlled individuals would respond more favorably to counseling in which they controlled the course of therapy. Conversely, they predicted externals would react well to the more structured treatments in which the therapy sessions were other-determined. Consistent with their predictions, they found that internals resist therapist control, take greater advantage of opportunities to individualize therapy and more often exert more client control than externals.

Kilmann and Howell (1974) found that internals are better therapeutic risks than externals, that they evidence greater effort to succeed and become involved in their therapy and that externals may require more extensive or more prolonged therapeutic contact than internals to achieve similar goals.

More pertinent to the present study, Morely and Watkins (1974) employed a paradigm using two types of rational-emotive techniques, modified and conventional. The modified rational-emotive technique excluded the open disputing of irrational beliefs. Clients were given insight into both irrational and rational beliefs and were helped to discriminate between them; however, they were not encouraged in attacking their irrational beliefs. Internals treated with the modified rational-emotive technique displayed the greatest therapeutic gains. These findings were reportedly due to the internals' predilection for selecting their own beliefs. Externally-

oriented clients treated with conventional rational-emotive techniques seemed to welcome more direct disputing of irrational beliefs.

Using client preference as a dependent variable, three other studies investigated client-therapist matching as a function of locus of control. Helweg (1971) had both college students and psychiatric inpatients view sound films of Ellis and Rogers each conducting initial interviews with a patient in their characteristic styles. As Helweg predicted, students and patients who preferred the directive interview approach (Ellis) over the non-directive (Rogers) were more external in their locus of control beliefs.

Jacobsen (1971) constructed composite profiles based on descriptions of proposed behavioristic and analytic therapists. Subjects were asked to imagine they were having psychological difficulties and to make selections of preferred therapists. As predicted, the internals chose the analytic therapists and the externals preferred the more behavioristically oriented therapists.

Wilson (1973) replicated Jacobsen (1971) and concluded that there was no evidence that the particular school of therapy espoused by the therapist is important; rather, the subjects' perception of the therapist's standing on the participation-control dimension is important. Wilson suggests that internals will prefer a therapy which allows greater patient-participation, depending upon the likelihood that a particular therapy will provide them with personal control

skills.

On the whole, these studies provide some insight into the role of locus of control in psychotherapy. The studies suggest that internals prefer and respond most favorably to the relatively indirect client-centered approaches; conversely, externals seem to prefer and respond most favorably to the more directive, structured and behaviorally oriented approaches.

Rotter (1975) takes issue with the utilization of the construct of locus of control outside the framework of his social learning theory. Helweg (1971), Jacobsen (1971) and Wilson (1973) are particularly vulnerable to criticism for failure to provide theoretical grounding in Rotter's social learning theory, and particularly for failure to explicitly provide an objective psychological problem while using locus of control.

Further criticism of the above studies may be levied on the grounds that they introduced the confounding variables of the personal characteristics of the therapist.

In conclusion, this section has presented an overview of Rotter's social learning theory, with particular attention to its construct of locus of control as well as the psychological situation.

Prior to presenting the methodological framework from which this study investigates the relationship between relative preference for the approaches of Kelly and Ellis and locus of control, the next section introduces the problem

of powerlessness which provides the psychological situations (i.e., the treatment conditions) for the study.

The Problem of Powerlessness from a Social Learning Perspective

The present investigation employs contextual descriptions of objectively defined powerlessness. These positions of powerlessness provide the psychological situations within which relative preference for therapy is investigated. This section, therefore, presents a social learning view of powerlessness and concludes with a comment on the problematic relevance of powerlessness to an adolescent population, as well as differential responses of internals and externals.

The concept of powerlessness has been viewed in many ways in the literature. Numerous theoretical conceptualizations have been proposed from historical, economic, philosophical, theological, sociological and psychological perspectives. As one might expect, considerable overlapping of conceptual influence occurs.

The massive socio-psychological literature of the last two decades has treated the phenomenon of powerlessness under a variety of different labels, among which are included 'alienation,' 'normlessness,' 'social isolation,' 'marginality,' 'hopelessness,' 'dissatisfaction' and 'helplessness' (Bamber, 1974; Davids, 1955a, 1955b; Dean, 1961; Gold, 1969; Hanna, 1971; Harper, 1973; Johnson, 1973; Keniston, 1968;

Nettler, 1957; Propper, 1970; Seeman, 1959; Seligman, 1975; Srole, 1956; Stokols, 1975; White, 1971; Ziller, 1969). Keniston (1971) has observed that the area is so ill-defined that anyone investigating within the area must carefully define what it is that he is studying.

Among the more significant attempts to introduce order in the area, Seeman (1959), employing the umbrella label of 'alienation,' housed a five-dimensional differentiation of the construct: meaninglessness, normlessness, isolation, self-estrangement and powerlessness. It is the fifth of these dimensions, powerlessness, which is of concern to the present study; additionally, of the five dimensions, powerlessness eventuated the closest theoretical ties with Rotter's social learning theory.

Originally, Seeman conceived of powerlessness as the specific expectancy or probability that an individual's behavior cannot determine the outcomes or reinforcements he seeks. In this original formulation, Seeman (1959) distinguished this type of powerlessness from the objective situation as some observer might see it; however, he had in mind the wider concept of man's relation to the larger social order.

Seeman, working with Rotter and Liverant (Rotter, Seeman & Liverant, 1962), accommodated his conceptualization of powerlessness, resulting in the distinction of powerlessness in our culture as being the result of luck, chance, fate or powerful others.

The present study employs the Rotter et al. (1962) concept of powerlessness and includes objective situational cues of powerlessness, using the theorized perceived sources of powerlessness, i.e., fate, chance and powerful others. From this perspective, objective powerlessness resulting from a situation in which fate renders one powerless may be understood as a circumstance from which "one cannot interfere with or change the course of events because they are pre-determined" (Rotter et al., 1962, p. 475). On the other hand, objective powerlessness resulting from a situation in which luck or chance renders one powerless suggests that "the world is unpredictable or that non-rational, non-deterministic influences are responsible for the occurrence of reinforcements" (Rotter et al., 1962, p. 475).

The present investigation extends the category of 'powerful others' to include 'powerful personally significant others' and 'powerful bureaucratic-institutional others.' This distinction appears to have important therapeutic implications. There is common sense appeal to the notion that there is a distinction between powerlessness due to institutional others, e.g, inability to resolve a conflict with an insurance company, and powerlessness due to personally significant others, e.g., inability to resolve a conflict with one's father. There may well be different therapeutic strategies to respond most appropriately to problems corresponding to this distinction.

More specifically, for the purposes of this study,

for both powerful personally significant others and powerful bureaucratic-institutional others, power "lies in the hands of other people, or influences much stronger than one's self" (Rotter et al., 1962, p. 475).

Thus, the present study employs four treatment conditions reflective of situations of objective powerlessness. The category of powerlessness in the face of personally significant others is reflected in a situation in which an adolescent male has no power to overcome his girlfriend's father's decision to terminate their relationship. The category of powerlessness in the face of bureaucratic-institutional others is reflected in a situation in which a young man is powerless as a result of bureaucratic incompetence. The category of powerlessness in personal fate is reflected in a situation in which an adolescent is powerless to pursue his life goals as a result of contracting a disease. Finally, the category of powerlessness in the face of chance is reflected in a situation in which a young man is powerless to pursue his academic goals as a result of a chance occurrence. In sum, in each of the situational contexts, the individual is rendered powerless as a result of the objectively described influences of fate, chance or powerful others.

From a more practical stance, a cursory perusal of contemporary developmental and adolescent psychological textbooks suggests the problematic relevance of powerlessness to an adolescent population. Among the numerous researchers who have investigated the problem, whether under the label

of powerlessness or other similar conceptualizations, are Davids (1955a, 1955b); Nettler (1957); Dean (1961); Srole (1956); Jackson (1973, 1974); Feldman (1972); Stinchcombe (1972); Bamber (1974); Byles (1968); Hanna (1971); White (1968); Harper (1972); Propper (1968); Propper and Clarke (1970); and Propper, Kiaune and Murray (1970).

Keniston (1968), commenting on powerlessness in adolescence, warns that it is an almost inevitable consequence of our modern society and that it affects our most talented youth. It should be noted that this concern seems to have been spawned by the rather wide-spread phenomenon of serious unrest and civil disobedience on campuses across the United States in the late 1960's. Perhaps one of the most important consequences of research in the area lies more in terms of orientation of focus rather than in specific results. No longer is research restricted to delinquent, disadvantaged, or emotionally disturbed populations, but now encompasses the developmental process of normal adolescence.

In sum, then, the present study offers objective parameters of four types of powerlessness problems which can be conceptualized and investigated within Rotter's social learning framework. Within the social learning framework, the literature on locus of control would support the contention that internals and externals may respond differently to various problems of powerlessness. For instance, internals, being more perceptive and more eager to learn, may be expected to try to understand the source

and nature of their powerlessness in an effort to gain some control. Since internals are more curious, more inquisitive and more efficient processors of information than are externals, they may be expected to seek more information about their situation. Externals, on the other hand, facing similar situations of powerlessness, may be less likely to attend to available informational cues and less likely to attempt to extract additional information that may be helpful to them. In short, differences may be expected since externals seem less able to scrutinize relevant information and may fail to recognize the choices available in their own responses and decisions (Lefcourt, 1976).

The following section presents a methodological format for investigating internals' and externals' relative preference for the therapeutic approaches of Kelly and Ellis within the contexts of the powerlessness problems.

Methodological Considerations

The primary interest of the present investigation is relative preference for the therapeutic approaches of Kelly and Ellis as a function of the cognitive activity associated with internal/external locus of control and systematically varied analogical contexts of powerlessness. In order to maximize participants' involvement in muted-role taking tasks, it is important to implement strategies that facilitate imaginative processes. This section,

therefore, reviews pertinent literature in this regard. It presents the theoretical base for muted-role taking as well as procedural considerations.

Muted-role Taking: Theoretical Base and Structural Procedures

A number of investigations have described the use of covert cognitive processes as employed in research strategies (Barber, 1964, 1975; Barber & DeMoore, 1972; Barber, Spanos & Chaves, 1974; Sarbin, 1972; Sarbin & Coe, 1972; Sarbin & Juhasz, 1970; Spanos, 1971; Spanos & Barber, 1972; Spanos & McPeake, 1973). Additionally, numerous laboratory studies have empirically validated the applicability of covert cognitive strategies in a wide range of tasks (Grossberg & Wilson, 1968; Juhasz, 1969; Mixon, 1972; Rimm & Bottrell, 1969; Spanos & Barber, 1972; Spanos & Ham, 1973).

The cognitive process of imagining consists of covert but active responding; it involves an ongoing synthesis of diverse sensory information with information retrieved from memory for the purpose of constructing and representing the hypothetical events referred to or implied by the suggestions (Neisser, 1972; Pavio, 1971; Sarbin, 1972; Spanos, 1973). "Thus imagining includes not only sensory imagery but a more general change in cognitive focus" (Spanos & Barber, 1976, p. 23).

In terms of theoretical bases for research strategies, Sarbin and associates (Sarbin, 1950, 1972; Sarbin & Allen, 1968; Sarbin & Juhasz, 1970) have made significant contri-

butions to the literature on imagination and muted-role taking. Sarbin (1972) states "that imagining may be fruitfully regarded as a form of hypothetical or 'as if' behavior, namely, muted-role taking" (p. 353). Muted-role taking, Sarbin suggests, is an active process rather than a passive 'looking at' quasi-objects in a hypothetical mind space. Central to Sarbin's theory is the assertion that man possesses complex systems for acquiring and processing knowledge, and at various levels of hypotheticalness. 'Hypotheticalness' for Sarbin serves as a synonym for 'supposition,' 'assumption,' and 'as-ifness.' Sarbin states that these skills liberate man from the constraints of the immediate environment. Through application of these skills, "he can interbehave with events that are spatially distant and temporally removed. He can 'entertain hypotheses' and re-locate himself in different times and places" (Sarbin, 1972, 339-340).

Barber, Spanos and their associates (Barber, 1975; Barber, Spanos & Chaves, 1974; Spanos, 1971; Spanos & Barber, 1974, 1976; Spanos & Ham, 1973; Spanos & McPeake, 1973) encompass Sarbin's viewpoint within a cognitive-behavioral framework: "Thinking and imagining with the themes that are suggested tend to produce both the overt behaviors and subjective experiences that are suggested" (Barber, Spanos & Chaves, 1974, p. 61).

Methodological procedures appropriate to the present study call for attention to two major aspects of muted-role taking: 1) criteria for construction of contextual descrip-

tions or problematic situations, and 2) the teaching of skills which facilitate active involvement.

Sarbin and Allen (1968), addressing the construction of contextual descriptions, specify two criteria particularly appropriate to this study. First, they emphasize the construction of experimental sets to engage the subjects in a high level of involvement. Secondly, and perhaps more importantly, they emphasize the structuring of experimental situations in sufficient detail so that common meanings or interpretations of the situations are possible.

The implementation of Sarbin and Allen's (1968) recommendations for the contextual descriptions employed in the present study is detailed in chapter two; the actual contextual descriptions are reproduced in Appendix C.

Rationale for the Present Investigation, Statement of the Problem and Hypotheses

The final section of the first chapter summarizes the rationale of the study as well as presenting the aim of the investigation; a statement of the problem precedes the presentation of the hypotheses to be tested.

Rationale for the Present Investigation

Two parameters that appear to influence the efficacy of psychotherapy are client-therapy fit (preference for therapy) and the problem that an individual brings to therapy.

Although preference for therapy has not been investigated extensively, the literature suggests that when more than one therapy is available to accommodate a particular problem, an individual's preference for therapy may be an important consideration.

A review of the literature suggests that Rotter's social learning theory offers an appropriate theoretical base from which to investigate preference for therapy as a function of a particular psychological problem. More specifically, with Rotter's social learning theory's construct of locus of control, one can distinguish internals and externals, who, in turn, differ in their cognitive activities. The literature suggests that there may be differences in therapeutic preference as a function of locus of control. Additionally, Rotter's social learning theory stresses the importance of an individual's particular psychological situation or problem; moreover, the literature in psychotherapy suggests that the presenting problem may be a parameter which influences therapeutic effectiveness.

The problem or psychological situation used in this investigation is that of objectively defined powerlessness. Contexts are designed to reflect four types of powerlessness; namely, powerlessness due to powerful significant others, powerful bureaucratic-institutional others, fate and chance.

The present investigation elicits relative preference for two cognitively oriented therapeutic approaches. The currently popular cognitive approach to therapy would

address problems of powerlessness by attending to an individual's process of appraising his powerlessness, by focusing on ideation which may serve to maintain a sense of powerlessness and by examining strategies for resolution. The present analog study employs the approaches of George A. Kelly and Albert Ellis, two prominent contributors to cognitive therapy whose approaches, while similar, also differ in both theory and practice. Relative preference for the approaches of Kelly and Ellis may be a function of the type of powerlessness problem and one's locus of control.

While employing the construct of locus of control, the present research differs from previous studies employing locus of control in psychotherapy in three major ways.

First, the present study accommodates Rotter's (1975) directive to attend to the psychological situation when using locus of control as an independent variable. Rotter has observed that attention to the psychological situation has gone almost wholly ignored in previous studies using locus of control.

Second, in previous studies using locus of control as an indicator of preference (Helweg, 1971; Jacobsen, 1971; Wilson, 1973), 'therapists' or descriptive characteristics of the therapists were a confounding factor in the choice of therapeutic approach. These studies may be accurately viewed as studies in preference for therapists rather than for therapeutic approaches in that they failed to control for such confounding variables as voice tone, physical appearance, dress, personality descriptions, etc. The present study

avoids that difficulty by employing standardized descriptions of theory and technique.

Third, the present study investigates preference for the therapeutic approaches of Kelly and Ellis as a function of objective contextual descriptions of powerlessness and as a function of locus of control. A search of the literature fails to reveal any investigations of relative preference for the approaches of Kelly and Ellis.

Thus, the present study appears to be timely in that it responds to the need for research in two parameters influencing therapeutic effectiveness: client-therapy fit, and the role of the psychological problem. Furthermore, the present study investigates these parameters with reference to two prominent contributors to cognitive therapy, George A. Kelly and Albert Ellis. Lastly, the present study attempts to employ the construct of locus of control within the larger framework of Rotter's social learning theory, specifically with reference to a psychological situation.

Statement of the Problem

The present study investigates relative preference for the cognitive therapeutic approaches of Kelly and Ellis as a function of the cognitive activity associated with internal and external locus of control, and as a function of situational descriptions of objective powerlessness. The four conditions of powerlessness include: powerful personally significant others, powerful bureaucratic-institutional others,

fate and chance.

Hypotheses

The literature on locus of control suggests that internals and externals exhibit differences in cognitive activity. These differences have been observed in studies relating locus of control to psychotherapy. Thus, one may expect differences between internals and externals in their relative preferences for the cognitive therapeutic approaches of Kelly and Ellis as a function of locus of control.

Additionally, Rotter (1975) suggests that locus of control is not the only variable to affect behavior; in fact, he cites specific situational demands as a foremost influence on behavior. Thus, as well, one may expect individuals to differ in their relative preference for therapeutic approach as a function of specific psychological situations.

Both of these expectations, however, may be considered somewhat tenuous in that, unlike previous investigations, in this research both variables are investigated simultaneously.

The hypotheses to be tested in the present study, then, are:

Hypothesis #1

There are significant differences between internals and externals on measures of relative preference for the cognitive therapeutic approaches of Kelly and Ellis.

Hypothesis #2

There are significant differences on participants' measures of relative preference for the cognitive therapeutic approaches of Kelly and Ellis among four conditions depicting situations of objectively defined powerlessness.

CHAPTER TWO

Research Design

This chapter presents the design employed in the study. It begins with a demographic description of the participants and their selection, assignment to treatment conditions and the criteria for retention of protocols for data analysis. Following this section, the chapter presents a flow chart illustrating the research procedure; it concludes by detailing the materials employed in the study and the procedure utilized.

Participants

Two hundred-fifteen upper division male students with an average age of 16.48 years, from Marist High School in Chicago, Illinois, comprised the participants whose data were submitted for analysis.

Ninety-five percent of the students from the all male suburban Catholic high school enroll in four year university programs following graduation; consequently, school admission policies reflect the demand for superior academic ability (the average IQ score (Otis) is 116, low end of the range being 105). Students at Marist are predominantly of middle to upper-middle socio-economic class and predominantly

from Irish, Polish and Lithuanian ethnic backgrounds.

Out of a pool of 783 upper division students, 261 were randomly assigned to the present study through a computer printout listing every third student. Of those students originally assigned to the study, protocols of 215 participants comprised the final data pool. Participants' protocols were excluded from data analysis on either of the following criteria: 1) failure to complete any pretesting or posttesting instruments (the I-E Scale, The Interpersonal Trust Scale, the comprehension test and the research questionnaire); or 2) failure to achieve a score greater than 60% on the comprehension test.

According to scores on Rotter's I-E Scale, participants were designated as either internals (<10), moderates (<15) or externals (>15), reflecting approximately one standard deviation above and below the obtained mean ($\underline{M} = 12.16$; $\underline{SD} = 3.68$; Rotter's reported $\underline{M} = 10.00$; $\underline{SD} = 4.20$). Internals, moderates and externals were then randomly assigned to one of four treatment conditions depicting situations of powerlessness. Assignment to treatment conditions took the configuration presented in Table 1. Figure 1 presents a flow chart illustrating the research procedure utilized.

Description of Materials

Pretest Measures

Pretest instruments used in this investigation were included with tests of achievement and occupational interest

Table 1

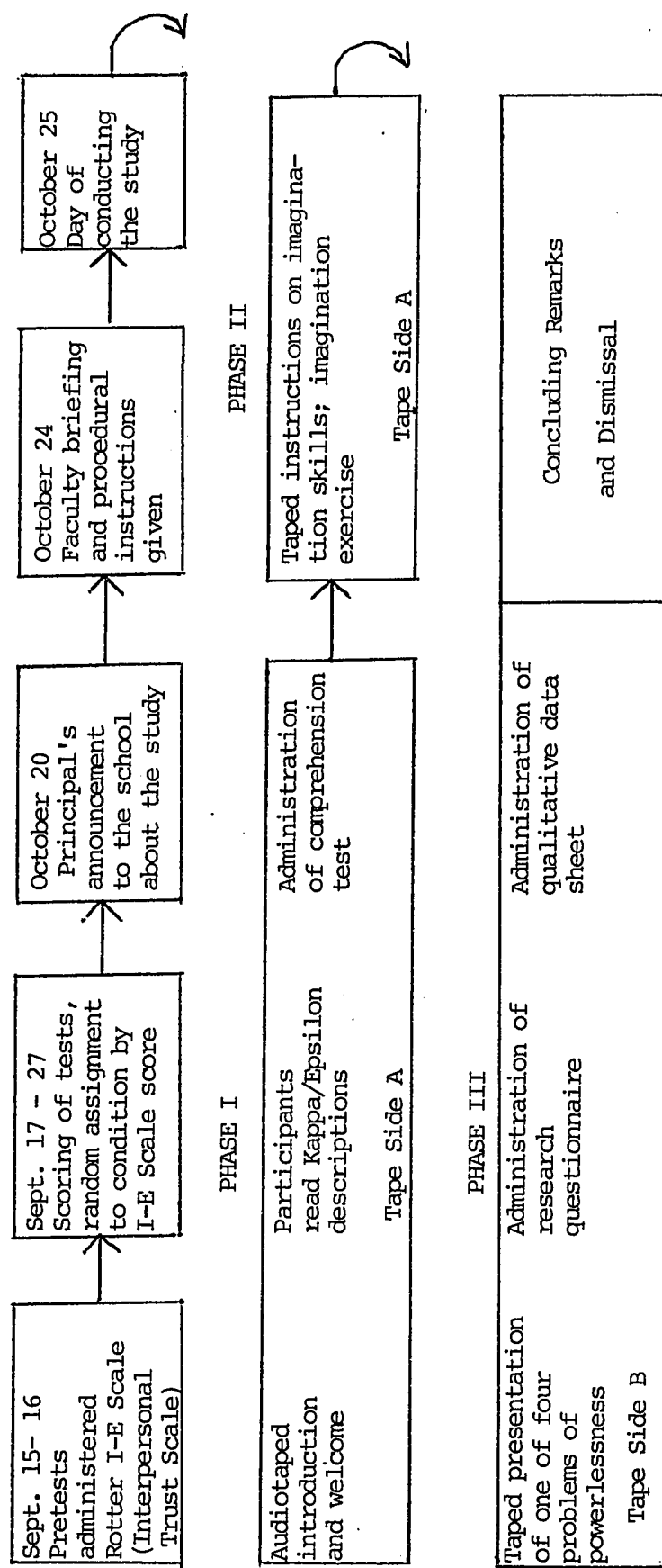
Cell totals representing assignment of participants to treatment condition by level of locus of control

N = 215

Level of Locus of Control	Treatment Condition 1	Treatment Condition 2	Treatment Condition 3	Treatment Condition 4
Internals	13	13	15	10
Moderates	24	27	29	26
Externals	14	15	16	13
Totals	51	55	60	49

FIGURE I

Flow chart illustrating research procedure



administered to upper division students each fall at Marist High School. Included in this cluster were The Rotter Internal-External Locus of Control Scale and The Interpersonal Trust Scale.

Rotter's original I-E Scale (Rotter, 1966), reproduced in Appendix A, has been used in the vast majority of I-E researches (Phares, 1976). It is an additive scale comprised of 23 items and six filler items for a total of 29 items, designed to measure generalized expectancy for locus of control of reinforcement. The I-E Scale is scored in the external direction. Internal consistency estimates reported by Rotter (1966) range from .65 to .79. As Rotter observes, noncomparability of items in an additive scale of this type makes it difficult to achieve high estimates of internal consistency. Phares (1976) contends that test-retest reliability for the I-E Scale appears adequate. Rotter (1966) reported reliabilities for several samples that vary from .49 to .83, depending on the time interval and the sample involved. These coefficients are close to the .48 to .84 reported by Hersch and Scheibe (1967).

Although numerous other measures of locus of control have appeared in the literature (Berzins & Ross, 1970; Collins, 1974; Dies, 1968; Gozali & Bialer, 1968; Joe, 1971; Lefcourt, 1966, 1972, 1976; Levenson, 1973; Mirels, 1970; Nowicki & Duke, 1974; Nowicki & Strickland, 1973; Throop & MacDonald, 1971), extensive research has been conducted on Rotter's I-E Scale. Phares (1976) suggests that since Rotter's

scale is a known quantity, it may be most serviceable for research use. It was, therefore, selected for use in this research project.

In the early phase of I-E research, it became obvious that 'externality' was not a unitary concept (Hamsher, Geller & Rotter, 1968; Phares, 1976; Rotter, 1975). 'Passive' externals were distinguished from 'defensive' externals, who really maintained the generalized expectancies for control of internals but, for fear of failure, expressed their expectancies like externals (Phares, 1976; Rotter, 1975).

Rotter considered the construct of interpersonal trust as a possible explanation. Defining interpersonal trust as "an expectancy held by an individual or group that the word, promise, verbal or written statement of another individual or group can be relied on" (Rotter, 1967, p. 651), he constructed The Interpersonal Trust Scale. Rotter (1975) reported that so called 'defensive' externals tend to score low on interpersonal trust. The Interpersonal Trust Scale, then, was administered in this study to allow for examining any possible difference on dependent measures between defensive and passive externals. The Interpersonal Trust Scale is an additive test of interpersonal trust with a balanced Likert-like five point format in which a high score suggests trust for a variety of social agents, such as parents, teachers, other students, politicians and news media. The scale contains 25 trust items and 15 filler items added to obscure the nature of the test. Rotter (1971) reports an internal

consistency of .76, and retest reliabilities for five weeks, three months, and seven months were, respectively, .69, .68 and .56.

In the construct validity of the scale, Rotter (1967) employed a sociometric method using two college fraternities and sororities. This study indicated that the scale could significantly predict sociometric ratings of trust in peer groups. A number of other studies (Getter, 1966; Katz & Rotter, 1969; Leon, 1974; Massari & Rosenblum, 1972; Roberts, 1967; Rotter & Stein, 1970) have demonstrated the construct validity of the scale in regard to its ability to allow for prediction of complex trust-related behavior.

The Interpersonal Trust Scale is reproduced in Appendix B. Results obtained on the Interpersonal Trust Scale are reported in chapter three.

Research Instruments

The research instruments created by the author and his colleagues for the present study and two companion studies included standardized descriptions of the therapeutic approaches of Kelly and Ellis, a comprehension test on the descriptions, a research questionnaire and a qualitative data sheet. Each of these instruments is described in detail in the section that follows.

A yellow cover sheet on Packet #1 gave short instructions for reading the descriptions of the therapeutic approaches of Kelly and Ellis that followed. To control for either recog-

inition of a name or for simple identification, the actual descriptions as well as subsequent references called Kelly's therapy Kappa therapy and Ellis' approach Epsilon therapy.

The descriptions of Kappa and Epsilon therapies were of approximately equal length, being five pages (Appendix D). The material was prepared to control for order effects, such that half the participants read the description of Kappa therapy first while the other half read the description of Epsilon therapy first. The descriptions were constructed with the goal of accurately and adequately representing the theoretical bases and therapeutic implications of each theorist in a way that would be easily grasped by intelligent upper division high school students. Major sources consulted in the construction of the descriptions were Ellis (1962, 1967, 1971, 1972, 1973a, 1973b, 1977b), Kelly (1955, 1958, 1969a, 1969b, 1969c, 1969d) and Patterson (1973). After preliminary revisions, the descriptions of Kappa and Epsilon therapies were submitted to 21 eminent therapists and/or theorists whom the literature revealed to be familiar with either or both Kelly and Ellis. They were invited to review the descriptions of the approaches of Kelly and Ellis and offer critical comments and revisions. Eleven of the 21 returned the materials with corrections and suggestions for revision (Ellis, 1977a; Epstein, 1977; Harper, 1977; Jurgeovich, 1977; Karst, 1977; Lazarus, 1977; Mahoney, 1977; Maultsby, 1977; Patterson, 1977; Raimy, 1977; Trexler, 1977). The original descriptions of Kelly and Ellis were revised to reflect as many of the criticisms and suggestions as possible.

The description of Ellis' approach, moreover, is almost entirely reflective of Ellis' own critical rewriting of the original description (Ellis, 1977a).

The final drafts of the descriptions were then employed in a pilot study. Participants in the pilot study (44 grade 12 and 13 students in Ottawa) were asked to offer criticism of the descriptions in terms of the following criteria: clarity and readability, ease of comprehension and coherence; and appropriate vocabulary. No criticism was offered. The descriptions were also presented to a panel of six teachers and were judged as being acceptable within the norms of upper division students' reading and comprehension skills.

A comprehension test on the descriptions of Kappa and Epsilon therapies, printed on azure blue paper, followed Packet #1 in the manila envelope containing each participant's materials. The 20 item multiple-option test (Appendix E) was constructed as a screening instrument to discriminate students who had comprehended the descriptions of both therapies as well as the differences between the therapies. The test was constructed from items submitted by three experienced high school teachers, all of whom worked independently of each other. All three teachers, who were unfamiliar with the material, were asked to read it thoroughly as if they were preparing to present the material to their classes; they were then asked to construct a 20 item multiple-option test which would tap students' comprehension of both thera-

pies as well as differences between them. From the items submitted by the teachers, 25 were selected for inclusion in the comprehension test employed in the pilot study. Following the pilot study, an item analysis of the comprehension test revealed the five items which students most often answered incorrectly. These five items were deleted from the test so that the final form of the comprehension test used in the actual experimental run was a 20 item multiple-option.

The research questionnaire, printed on rose-colored paper, consisted of 30 items set in multiple-option format. Items were designed to gather information in two major areas: components of relative preference for the therapeutic approaches of Kelly and Ellis, and participants' levels of involvement in the study. Research plans called for submission of each of the sets of items to factor analysis to determine appropriate grouping of item scores prior to further data analysis. The research questionnaire was constructed from an original pool of 64 items which were employed in the project's pilot study. Following an item analysis, items which predominantly elicited neutral or "no opinion" responses were eliminated. The final form of the research questionnaire appears in Appendix F.

A qualitative data sheet was designed to elicit responses from participants regarding such matters as their impressions of the project, what they found most and least interesting and several other similar items. This instrument (Appendix G) was designed to allow participants to offer their reactions and to furnish information on a form other than one prepared for computer scoring.

Audio-taped Presentations

Side A of the cassettes contained a standard presentation for all four treatment conditions whereas Side B was unique to each of the four treatment conditions. Side A as well as the four versions of Side B were all recorded by an experienced public speaking instructor. Transcriptions appear in Appendix C.

The first segment of Side A (4'32") included a welcome and an introduction to the nature of the study. The intent of the introductory remarks was to describe briefly the work of psychotherapy and to indicate the central importance of research in the area of therapy, as well as to welcome their participation in evaluating the therapeutic approaches of Kelly and Ellis. The first segment of Side A concluded with procedural instructions. The second segment of Side A (14'13") included a mini-lesson on the importance and power of imaginative techniques along with an introductory example; it concluded with an imagination exercise and procedural instructions.

Side B of each tape contained a description of a problem situation in which participants were asked to do muted-role taking. Each treatment condition was exposed to one of four problem contexts of powerlessness, which required participants to think with the themes that were suggested. The four problematic contexts each contained appropriate cognitive, behavioral and affective components, as well as

an explicit strategy to enhance the participants' level of experience (Barber, 1975; Barber et al., 1974; Spanos, 1974, 1977). The construction of the individual powerlessness contexts was based on the conceptualization of powerlessness provided by Rotter et al. (1962).

Before the experimental run, the written texts of the four tapes were submitted to an informal panel of graduate students in clinical psychology. The panel had been furnished copies of Seeman's (1959) and Rotter et al.'s (1962) articles as well as demographic data concerning the research sample. Each panelist was asked to comment on the consistency of each text to theoretical construct, appropriateness of adaptation of concepts of fate, chance and powerful others to common usage, and appropriateness of language for the group intended; furthermore, panelists were requested to provide suggestions to improve or enhance the descriptive contexts.

After revision, the contexts were then submitted to participants in the research project's pilot study. Interviews were secured with participants in which they were asked to assess believability and relevance of contexts, as well as the ease with which they would be able to imagine them. Participants indicated that the contexts seemed realistic, believable and imaginable. There was no reported difficulty in terms of comprehension of content vocabulary.

Table 2 presents the distribution of powerlessness problems across conditions.

Table 2

Type of powerlessness problem and presentation time by treatment condition

Treatment Condition	Type of Powerlessness Problem	Presentation Time
Condition 1	Powerlessness in the face of personally significant others	6'22"
Condition 2	Powerlessness in the face of bureaucratic-institutional others	5'54"
Condition 3	Powerlessness in the face of personal fate	6'23"
Condition 4	Powerlessness in the face of chance	5'35"

Procedure

Pretesting, Assignment of Participants and Preparatory Considerations

The two pretest measures included the Rotter I-E Scale and The Interpersonal Trust Scale, measures included in the general test battery administered to upper division students each fall at Marist High School. The testing extended over a two day period, concluding 39 days before the experimental run. Faculty members, assigned to monitor the testing program, advised students that the battery included some 'personal' as well as 'general' opinionaires, and that responses were for research purposes and would be held in confidence.

Following initial assignment of participants to a treatment condition on the basis of I-E Scale scores, lists indicating room numbers and names of randomly assigned juniors and seniors were provided appropriate administrative officers of the school. Since classes for all upper division students would be suspended as required on the morning of the experimental run, regular upper division instructors were available for administrative assignment as monitors of the study.

On a Friday morning, five days prior to the experimental run, the school principal made a general announcement to all upper division students via the public address system. His announcement advised the students that Marist High School

had accepted an invitation by researchers from the Faculty of Psychology of the University of Ottawa, and that all upper division students had been selected to participate in an interesting and informative study related to clinical psychology. He further advised them that the study would be conducted on the following Wednesday morning, therefore necessitating a schedule revision. Details were promised for the homeroom period of the next school day.

On the same day he made the public address announcement, the principal issued a written memorandum to the faculty advising them of a faculty meeting for the following Tuesday morning. The purpose of the meeting was to provide a full briefing on the nature of the research project to be conducted the following day.

At the faculty meeting, after providing a general description of the purpose and nature of the research for the full faculty, the researcher met with the monitors assigned to his eight allotted classrooms. One alternate monitor, a member of the guidance department of the school, also was in attendance. Each item in the monitor's experimental kit¹ was presented and explained in full detail. Special attention was given to the administration manual (Appendix H). All

¹The experimental kit contained the following items: an attendance list, a cassette tape player, a cassette tape, individual manila envelopes for each participant (HB pencil, Packet #1, comprehension test, research questionnaire, qualitative data sheet), the administration manual, and answer sheet envelopes.

questions were answered in full except those regarding the nature and function of the pretest measures or the hypotheses of the study. The meeting with the faculty monitors was closed with the invitation for private advisement of the researcher of any personal or professional objections to monitoring the study. Monitors were assured of replacement without question or administrative reprisal of any kind. No objections were forthcoming, and thus faculty assignments remained as published by the administration.

Experimental Run

On Wednesday morning, October 25, 1977, upper division students reported, as usual, to their first or homeroom period of the day (8:45). During this period, students were reminded of the special schedule for the morning and were advised of the room numbers to which they should report at 9:00. They were further advised that the special project would run from 9:00 to 10:28, after which the regular schedule would resume. At 9:00, after the students had reported to their assigned rooms and attendance had been taken, the faculty monitor distributed brown manila envelopes asking participants not to open them until requested. When the distribution was completed, participants were instructed to remove the HB pencil and record their names and student identification numbers on the spaces provided on the envelope's back flap. The final preliminary

instruction was the monitor's call for attention to the cassette tape that introduced the project.

The taped introduction Side A welcomed participants to the project, thanked them for their cooperation, and indicated the importance of research in the sciences; furthermore, the introduction offered some general comments about psychotherapy and advised participants that they were being asked to evaluate two different approaches to helping people in psychotherapy. At the end of the introductory remarks, the tape asked students to remove Packet #1 and follow the instructions on the yellow cover sheets. Via the administration manual, monitors were asked to allow approximately 15 minutes, according to need, for students to study the descriptions of the psychotherapeutic approaches. Monitors then instructed participants to return Packet # 1 to their manila envelopes and remove the blue-colored packet from their envelopes. This packet contained the comprehension test on the material contained in Packet #1; it was not a timed test. Participants were reminded to place their names and identification numbers in the appropriate spaces on the answer sheet. After participants completed the test, monitors were instructed to collect the answer sheets and insert them in the appropriately labelled envelope in the experimental kit. After instructing participants to return their blue packets to their envelopes, monitors again called participants' attention to the cassette player.

The second segment of Side A described the nature

of creative imagination, taught some imaginative skills (Barber et al., 1974; Spanos, 1977), and presented two sample exercises in imagining. These skills and exercises, as indicated on the tape, prepared participants to imagine with the themes suggested on Side B. Side B contained one of four descriptions of a problem of powerlessness. Following the presentation of Side B, the tape requested participants to remove the research questionnaire from their envelopes. After all participants answered the 30 questions on the research questionnaire, monitors collected the answer sheets and placed them in the appropriate envelope in the experimental kit.

Finally, monitors asked participants to remove the white sheet from their envelopes and respond to the items thereon. Having completed the qualitative data sheets, participants returned all their materials to the manila envelopes, and the manila envelopes to the monitor's experimental kit.

Following an announcement of the room in which the researcher would be located throughout the day, participants were invited to bring any questions. Monitors then dismissed participants that they might resume regularly scheduled activities.

In sum, this chapter has presented in detail the research design employed in this study. It began with a demographic description of the participants, their selection, assignment to treatment conditions and the criteria for

inclusion in data analysis. Following the description of participants, the chapter described the materials employed in the study and concluded with a description of the procedure.

CHAPTER THREE

Presentation of Results

This chapter presents the results of the study in three main sections. The first section reports results of the pretest measures, Rotter's I-E Scale and his Interpersonal Trust Scale, as well as results of the comprehension test; the section concludes with a report of preliminary data analysis. The report includes a presentation of the factor analyses performed on the research questionnaire and the construction of scales used in the statistical testing of the hypotheses.

The second section of the chapter reports on the statistical testing of the study's hypotheses, while the final section concludes the chapter with a report on results of further statistical analyses to which the data were submitted for clarification.

Preliminary Data Analysis

Pretest Measures

Distribution of I-E Scale scores among the sample was consistent with that of an earlier investigation of a comparable sample (Carey, 1976). Participants were designated as internals (<10), moderates (<15), or externals (>15), reflecting approximately one standard deviation above and below the mean for internals and externals ($\bar{M} = 12.16$; $SD =$

3.68). Distributions are presented in Table 3.

The mean score obtained on the Interpersonal Trust Scale was 67.04 ($SD = 7.63$). This mean approximates the 65.77 ($SD = 8.82$) reported by Wright and Tedeschi (1975), and the 66.86 ($SD = 10.66$) reported by Chun and Campbell (1974). Since the reported means were obtained on a university population, the slightly higher mean of 67.04 obtained on this high school age sample seems in order.

As indicated in chapter one, externals who score low on interpersonal trust may be considered defensive externals rather than passive externals. For the present study, externals whose scores on Rotter's Interpersonal Trust Scale were less than one standard deviation below the mean were considered defensive externals. Thus of the 58 externals participating in the study, 45 were designated passive externals and 13 were designated defensive externals in accordance with Rotter's (1975) caution. Results of statistical considerations regarding passive and defensive externals are presented below.

Comprehension Test

The comprehension test on the descriptions of the therapeutic approaches of Kelly and Ellis was used as a screening instrument. The research plan called for exclusion from further analysis protocols of any participants who achieved scores lower than 60% on the 20 item multiple-option comprehension test. Protocols of 18 participants were

Table 3

Designation of participants as internals, moderates or
externals on the basis of scores of Rotter's Internal -
External Locus of Control Scale

N = 215

(M = 12.16) (SD = 3.68)

Designation	I - E Scale scores	<u>n</u>
internal	< 9	51
moderate	> 9 < 15	106
external	> 15	58

excluded on this criterion. From the 215 participants whose protocols were retained, comprehension test scores yielded a mean of 16.79 ($SD = 2.34$), or an average score of 83.95%.

Factor Analyses of Research Questionnaire

The research plan called for two separate factor analyses of the 30 item research questionnaire. The factor analyses were to serve as guidelines for appropriate grouping of items into scales to be employed in further analyses.

The first factor analysis was performed on the 10 items relating to participants' involvement in the study. The second factor analysis was performed on the 18 items relating to participants' relative preference for the therapeutic approaches of Kelly and Ellis. Results of both analyses are reported below.

Factor Analysis of 'Involvement' Items

To test whether the 10 involvement questions included in the research questionnaire were tapping different dimensions of participants' engagement in the study, a principal factors analysis, without iterations and with eigenvalues set at a minimum 1.0, was performed. From the varimax rotation that followed, two orthogonal factors were extracted. Table 4 presents the items' factor loadings, along with means and standard deviations obtained from the items' raw scores.

Examination of the results of the factor analysis

Table 4

Varimax rotated factor structure of research questionnaire items measuring participants' levels of 'involvement' in the project

<u>N</u> = 215				
Item	Factor 1	Factor 2	Mean*	<u>SD</u> *
05	.74	.24	4.19	1.38
06	.11	.77	3.40	1.37
12	.39	.63	4.98	1.05
13	.09	.67	3.56	1.51
14	.35	.63	4.39	1.12
18	.74	.21	4.16	1.19
19	.80	.22	4.18	1.27
24	.79	.27	4.15	1.08
25	.85	.14	4.13	1.35
30	.24	.73	3.78	1.34
Eigen- value % of vari- ance	4.71 47.10	1.34 13.40		

*Means and standard deviations are computed from raw scores

suggests that the items measuring participants' involvement in the study be grouped into two mutually exclusive scales, an imagination scale and an interest scale. For inclusion in either scale, an item had to load at least .50 on a factor and at least .20 less on the second factor.

The Imagination Scale

The imagination scale, represented in Table 5, is principally comprised of items dealing with relative success in performing the muted-role taking tasks; for example, "How well were you able to imagine that you were in this situation and were having the problem described?" (item 25). Given that the Likert-like format of the items offered a seven point scale (0 - 6), items comprising the imagination scale appear to offer a relatively stable index of imaginative involvement since the obtained raw score means of the five items range from 4.13 to 4.19. Items are scored in ascending order, e.g., the higher the score, the greater the success at muted-role taking tasks.

The imagination scale means of the 215 participants was 20.81 with a standard deviation of 5.12. The obtained scale scores ranged from 2 to 30; the possible range of scoring on the imagination scale is 0 to 30. Thus, the scale mean of 20.81 indicates that participants report being able to clearly imagine in accordance with task instructions.

The Interest Scale

The interest scale, represented in Table 6, is

Table 5

Means, standard deviations and factor loadings of research questionnaire items comprising the imagination scale

Item	<u>N</u> = 215		
	Mean *	<u>SD</u> *	Loading on Factor 1
05	4.19	1.38	.74
18	4.16	1.19	.74
19	4.18	1.27	.80
24	4.15	1.08	.79
25	4.13	1.35	.85
	20.82	5.12	

* Means and standard deviations are computed from raw scores

Table 6

Means, standard deviations and factor loadings of research questionnaire items comprising the interest scale

<u>N</u> = 215			
Item	Mean*	<u>SD</u> *	Loadings on Factor 2
06	3.40	1.37	.77
12	4.98	1.05	.63
13	3.56	1.51	.67
14	4.37	1.12	.63
30	3.78	1.34	.73
	20.10	4.64	

*Means and standard deviations are computed from raw scores

comprised principally of items dealing with participants' levels of interest in aspects of the study; for example, "How interesting were the descriptions of the two therapies?" (item 6), or "On the whole, I found the project to be (0) extremely interesting . . . (6) not at all interesting" (item 30). Items comprising the interest scale, though somewhat less stable than the items comprising the imagination scale, appear to offer an acceptable measure of interest since all item loadings exceed .62. Obtained means of interest scale items, however, indicate greater range (3.40 to 4.97) than do means of items comprising the imagination scale (4.13 to 4.19).

The interest scale means of the participants was 20.10 with a standard deviation of 4.64. The range of obtained scale scores spanned the possible range: 0 - 30. Thus, the interest scale mean of 20.10 indicates that participants report being interested in the project.

Items comprising both the imagination scale and the interest scale were weighted equally at one.

Factor Analysis of 'Preference' Items

The 18 items designed to measure components of participants' relative preference for the therapeutic approaches of Kelly and Ellis were submitted to factor analysis to provide guidelines for item grouping.

As with the 'involvement' items, the 'preference' items were submitted to a principal factors analysis, without

iterations and with eigenvalues set at minimum 1.0. In the varimax rotation that followed, three orthogonal factors emerged. Table 7 presents the items' factor loadings along with raw score means and standard deviations.

Examination of the results of the factor analysis suggests that the items measuring participants' components of relative preference for the therapeutic approaches of Kelly and Ellis (all scored in Kelly's direction) be grouped into three mutually exclusive scales: the alternatives-irrationalities scale, the preference scale, and the experimenter-teacher scale. For inclusion in a scale, an item had to load at least .50 on a factor and at least .15 less on the other factors.

The Alternatives-Irrationalities Scale

The alternatives-irrationalities scale, represented in Table 8, is entirely comprised of items which invite agreement with Kelly's emphasis on alternatives or Ellis' emphasis on identifying irrational beliefs; for example, "Therapy A assumes that at the end of therapy you'll be better able to generate and evaluate alternative ways of doing things; Therapy B assumes that you'll be better able to spot and change irrational thoughts and behaviors" (item 23). Factor loadings of the five items comprising the alternatives-irrationalities scale range from .70 to .80. In composition of the scale, items were weighted equally at one.

Table 7

Varimax rotated factor structure of research questionnaire items measuring participants' 'preference' for the therapeutic approaches of Kelly and Ellis

<u>N</u> = 215					
Item	Factor 1	Factor 2	Factor 3	Mean*	<u>SD</u> *
01	.18	.76	.13	3.58	1.94
02	.35	.24	.16	3.29	1.89
03	.25	.54	.16	3.85	2.16
04	.13	.62	.26	3.70	1.83
07	.38	.81	.02	3.85	1.96
08	.02	.13	.87	3.44	1.84
09	.30	.18	.76	3.41	1.87
10	.53	.34	.14	3.52	2.10
11	.80	.08	.10	4.21	1.77
15	.47	.46	.19	3.27	1.78
16	.57	.46	.23	3.50	1.94
17	.58	.31	.09	3.82	1.92
21	.55	.71	.06	3.77	1.91
22	.71	.43	.12	3.90	1.87
23	.70	.21	.26	3.93	1.78
26	.78	.25	.01	3.92	1.85
27	.73	.37	.06	3.96	1.80
28	.55	.70	.04	3.85	1.83
Eigen- value	8.40	1.30	1.09		
% of var- iance	47.60	7.20	6.10		

* Means and standard deviations are computed from raw scores

Table 8

Means, standard deviations and factor loadings of research questionnaire items comprising the alternatives - irrationalities scale

<u>N</u> = 215			
Item	Mean*	<u>SD</u> *	Loadings on Factor 1
11	4.21	1.77	.80
22	3.90	1.87	.71
23	3.93	1.78	.70
26	3.92	1.85	.78
27	3.96	1.80	.73
	19.92	7.41	

*Means and standard deviations are computed from raw scores

The alternatives-irrationalities scale mean ($N = 215$) is 19.92 with a standard deviation of 7.41. The obtained scale scores ranged from 0 to 30, representing the full possible range. Thus, the scale mean of 19.92 indicates that participants report agreement with Kelly's therapeutic approach of examining alternatives.

The Preference Scale

The preference scale, represented in Table 9, is principally comprised of items which invite participants to express a relative preference for the therapeutic approaches of Kelly or Ellis; for example, "All things considered, in seeking help for this problem, I would: strongly prefer Epsilon Therapy to . . . strongly prefer Kappy Therapy" (item 21). Factor loadings of the five items comprising the preference scale range from .54 to .81. In composition of the scale, items were weighted equally at one.

The preference scale mean ($N = 215$) is 18.76 with a standard deviation of 7.58. The obtained scale scores range from 0 to 30, representing the full possible range. The scale mean of 18.76 indicates a preference for Kelly's therapeutic approach.

The Experimenter-Teacher Scale

The experimenter-teacher scale, represented in Table 10, is composed of only two items, both of which invite participants to express agreement either with Kelly's self-ascribed role as an experimenter or with Ellis' self-ascribed

Table 9

Means, standard deviations and factor loadings of research questionnaire items comprising the preference scale

<u>N</u> = 215			
Item	Mean *	<u>SD</u> *	Loading on Factor 2
01	3.58	1.94	.76
03	3.85	2.16	.54
04	3.70	1.83	.61
07	3.85	1.96	.81
21	3.79	1.91	.71
	18.76	7.58	

* Means and standard deviations are computed from raw scores

Table 10

Means, standard deviations and factor loadings of research questionnaire items comprising the experimenter-teacher scale

<u>N</u> = 215			
Item	Mean*	<u>SD</u> *	Loading on Factor 3
08	3.44	1.84	.87
09	3.41	1.87	.76
	6.86	3.19	

*Means and standard deviations are computed from raw scores

role as a teacher in therapy; for example, "Therapist A views himself as more a teacher than anything else; Therapist B views himself as more a fellow experimenter than anything else" (item 8). Factor loadings of the two items are high: .86 and .76. Both items are weighted equally at one in composition of the scale.

The experimenter-teacher scale mean ($N = 215$) is 6.86 with a standard deviation of 3.19. The obtained scale scores range from 0 to 12, representing the full possible range. The scale mean of 6.86 indicates a slight agreement with Kelly's view of his therapeutic role as experimenter.

t-tests on Means of Defensive and Passive Externals

To determine any differences in means between defensive and passive externals, scores from the following scales were submitted to t-test analysis: imagination scale, interest scale, alternatives-irrationalities scale, preference scale and experimenter-teacher scale (Table 11).

Two-tailed t-tests on imagination scale and interest scale scores yielded t-ratios of .24 (56), ($p > .05$) and .57 (56), ($p > .05$), respectively.

On the three dependent measures scales, two-tailed t-tests yielded the following t-ratios: alternatives-irrationalities scale, $t = 1.44$ (56), ($p > .05$); preference scale, $t = .70$ (56), ($p > .05$); and experimenter-teacher scale, $t = .35$ (56), ($p > .05$).

Since there were no significant differences on any

Table 11

Results of t-tests comparing the average scores of participants classified as defensive externals and those classified as passive externals with reference to specific scales on the research questionnaire

Scale	Mean score: Defensive externals (<u>n</u> = 13)		Mean score: Passive externals (<u>n</u> = 45)		<u>df</u>	<u>t</u>
		<u>SD</u>		<u>SD</u>		
Alternatives-Irrationalities	16.08	9.70	19.80	7.77	56	1.44
Preference	17.38	10.72	19.18	7.28	56	.70
Experimenter-Teacher	7.00	3.56	6.62	3.36	56	.35
Imagination	19.38	4.66	19.78	5.32	56	.24
Interest	19.92	3.17	19.18	4.34	56	.57

*would indicate $p < .05$

scores of defensive and passive externals, no further distinction among externals was made for any subsequent data analysis.

Pearson Product-Moment Correlation between I-E Scale Scores and Comprehension Test Scores

To determine whether comprehension test scores should be used as a covariate in subsequent statistical analyses, a Pearson product-moment correlation coefficient between I-E Scale scores and comprehension test scores was computed. Since the obtained coefficient was not significant ($r = .03$, $p > .05$), comprehension test scores were not employed as a covariate.

In sum, this section has presented descriptive statistics with reference to research instruments employed in the present study. Also the section reported on two factor analyses performed on the research questionnaire, the first on the 'involvement' items and the second on the 'preference' items. Based on factor loadings involvement items were grouped to form two scales: the imagination scale and the interest scale. Likewise, based on factor loadings, preference items were grouped to form three scales: the alternatives-irrationalities scale, the preference scale and the experimenter-teacher scale.

Finally, the section reported that t -tests between means of defensive externals and passive externals yielded no significant difference. Similarly there was no signifi-

cant correlation between I-E Scale scores and comprehension test scores.

Testing of the Hypotheses

For the purpose of statistical analysis, the two hypotheses presented at the conclusion of chapter one are phrased here in the null form:

Hypothesis #1

There are no significant differences between internals and externals on measures of relative preference for the therapeutic approaches of Kelly and Ellis.

Hypothesis #2

There are no significant differences on participants' measures of relative preference for the therapeutic approaches of Kelly and Ellis among the four conditions of powerlessness.

To test the hypotheses, data from the three dependent measures scales, the alternatives-irrationalities scale, the preference scale and the experimenter-teacher scale were submitted to three univariate analyses of variance. Univariate analyses of variance were judged to be appropriate statistical methods since the three scales were constructed from items which loaded highly on three orthogonal factors generated by a varimax rotation.

Analysis of Variance on the Alternatives-Irrationalities Scale

Analysis of variance on the alternatives-irrationalities scale failed to yield statistically significant results for either main effects (level of locus of control, $F(2,203) = 1.86, p > .05$; treatment conditions, $F(3,203) = 1.38, p > .05$). Additionally, interactions were not statistically significant ($F(6,203) = .39, p > .05$). Table 12 summarizes the results of the analysis of variance.

Thus, statistically non-significant findings on the analysis of variance for the alternatives-irrationalities scale results in a failure to reject both null hypotheses.

In order to establish the likelihood of actually finding statistically significant results given the parameters of the study, the power of the statistical contrasts was calculated. Statistical power values were obtained for the F ratios generated by the analysis of variance for both of the main effects, level of locus of control (68%) and treatment conditions (58%).

Analysis of Variance on the Preference Scale

Analysis of variance on the preference scale failed to yield statistically significant results for either main effects (level of locus of control, $F(2,203) = 2.12, p > .05$; treatment conditions, $F(3,203) = 1.39, p > .05$). Additionally, interactions were not statistically significant ($F(6,203) = .85, p > .05$). Table 13 summarizes the results of the analysis of variance.

Table 12

Results of analysis of variance for the alternatives-
irrationalities scale of the research questionnaire:
Level of locus of control by treatment conditions

<u>N</u> = 215				
Source	<u>ss</u>	<u>df</u>	<u>ms</u>	<u>F</u>
Main effects	428.25	5	85.65	1.56
Level of Locus of Control	204.46	2	102.23	1.86
Treatment Conditions	228.57	3	76.19	1.38
2-way interactions	127.94	6	21.32	.39
Explained	556.18	11	50.56	.92
Residual	11,180.06	203	55.07	
Total	11,736.25	214	54.84	

* would indicate $p < .05$

Table 13

Results of analysis of variance for the preference scale
of the research questionnaire: Level of locus of control
by treatment conditions

<u>N</u> = 215				
Source	<u>ss</u>	<u>df</u>	<u>ms</u>	<u>F</u>
Main effects	485.10	5	97.02	1.71
Level of Locus of control	240.49	2	120.25	2.12
Treatment Conditions	237.44	3	79.15	1.39
2-way interactions	290.10	6	48.35	.85
Explained	775.21	11	70.47	1.24
Residual	11,521.41	203	56.76	
Total	12,296.63	214	57.46	

* would indicate $p < .05$

Thus, non-significant statistical findings on the analysis of variance for the preference scale results in a failure to reject both null hypotheses.

In order to establish the likelihood of actually finding statistically significant results given the parameters of the study, the power of the statistical contrasts was calculated. Statistical power values were obtained for the F ratios generated by the analysis of variance for both the main effects, level of locus of control (68%) and treatment conditions (66%).

Analysis of Variance on the Experimenter-Teacher Scale

Analysis of variance on the experimenter-teacher scale failed to yield statistically significant results for either main effects (level of locus of control, $F(2,203) = 1.06$, $p > .05$; treatment conditions, $F(3,203) = 1.01$, $p > .05$). Additionally, interactions were not statistically significant ($F(6,203) = .53$; $p > .05$). Table 14 summarizes the results of the analysis of variance.

Thus, non-significant statistical findings on the analysis of variance for the experimenter-teacher scale results in a failure to reject both null hypotheses.

In order to establish the likelihood of actually finding statistically significant results given the parameters of the study, the power of the statistical contrasts was calculated. Statistical power values were obtained for the F ratios generated by the analysis of

Table 14

Results of analysis of variance for the experimenter-teacher scale of the research questionnaire: Level of locus of control by treatment conditions

<u>N</u> = 215				
Source	<u>ss</u>	<u>df</u>	<u>ms</u>	<u>F</u>
Main effects	51.95	5	10.39	1.01
Level of Locus of Control	21.81	2	10.91	1.06
Treatment Conditions	31.23	3	10.41	1.01
2-way interactions	32.61	6	5.44	.53
Explained	84.56	11	7.69	.75
Residual	2089.95	203	10.30	
Total	2174.51	214	10.16	

*would indicate $p < .05$

variance for both of the main effects, level of locus of control (39%) and treatment conditions (40%).

In sum, analyses of variance on all three dependent measures scales of the research questionnaire yielded statistically non-significant results for the hypothesized main effects, thus resulting in a failure to reject both null hypotheses.

In order to arrive at an understanding and explanation of these results, the data was submitted to further analyses. Results are reported in the following section.

Further Statistical Analysis

In an attempt to facilitate the interpretation of statistically non-significant findings for the main effects hypothesized in chapter one, three additional statistical procedures were performed. They included t-tests on participants' mean preference scores for Kelly's approach or for Ellis' approach, correlations between selected research measures, and two subsequent analyses of variance on imagination scale scores and on interest scale scores.

Since means for all three dependent measures scales revealed that participants favored Kelly's therapeutic approach, data was submitted to further analysis to ascertain whether there was a significant difference in favoring Kelly's approach over Ellis' approach.

On each of the three scales, two scores were obtained

for each participant. First, items were scored in Kelly's direction. Second, items were re-scored in Ellis' direction. Grouped by locus of control, participants' scores on the three scales were submitted to t -tests for paired means on the alternatives-irrationalities scale (Table 15), on the preference scale (Table 16) and on the experimenter-teacher scale (Table 17).

On the alternatives-irrationalities scale, all three groups of participants significantly preferred Kelly's therapeutic approach over Ellis' approach (internals, $t(50) = 6.6$, $p < .001$; moderates, $t(105) = 6.87$, $p < .001$; externals, $t(57) = 3.64$, $p < .001$).

Likewise, on the preference scale, all three groups of participants significantly preferred Kelly's therapeutic approach over Ellis' approach (internals, $t(50) = 5.12$, $p < .001$; moderates, $t(105) = 4.19$, $p < .001$; externals, $t(57) = 3.55$, $p < .001$).

On the experimenter-teacher scale, differences were less pronounced than on the other two scales. Internals and moderates significantly preferred Kelly's approach ($t(50) = 3.04$, $p < .01$; $t(105) = 2.29$, $p < .05$). Externals, though they preferred Kelly's approach over Ellis' on the two item scale, did not do so significantly ($t(57) = 1.59$, $p > .05$).

Next, scores were grouped by treatment condition and were submitted to t -tests for paired means on the alternatives-irrationalities scale (Table 18), on the preference

Table 15

Results of t-tests comparing participants' preferences for the therapeutic approaches of Kelly or Ellis as indicated on the alternatives-irrationalities scale of the research questionnaire when participants are grouped by locus of control designations

Locus of Control Designation	<u>n</u>	Mean score		Mean score		<u>df</u>	<u>t</u>
		Kelly Preference	<u>SD</u>	Ellis Preference	<u>SD</u>		
Internals	51	21.57	7.11	8.43	7.11	50	6.60***
Moderates	106	19.64	6.96	10.36	6.96	105	6.87***
Externals	58	18.97	8.30	11.03	8.30	57	3.64***

P < .001

Table 16

Results of t-tests comparing participants' preferences for the therapeutic approaches of Kelly or Ellis as indicated on the preference scale of the research questionnaire when participants are grouped by locus of control designations

Locus of Control Designation	n	Mean score Kelly		Mean score Ellis		df	t
		Preference	SD	Preference	SD		
Internals	51	20.57	7.77	9.43	7.77	50	5.12***
Moderates	106	17.89	7.10	12.11	7.10	105	4.19***
Externals	58	18.78	8.20	11.22	8.20	57	3.55***

*** $p < .001$

Table 17

Results of t-tests comparing participants' preferences for the therapeutic approaches of Kelly or Ellis as indicated on the experimenter-teacher scale of the research questionnaire when participants are grouped by locus of control designation

Locus of Control Designation	<u>n</u>	Mean score		Mean score		<u>df</u>	<u>t</u>
		Kelly Preference	<u>SD</u>	Ellis Preference	<u>SD</u>		
Internals	51	7.41	3.32	4.59	3.32	50	3.04**
Moderates	106	6.67	3.01	5.33	3.01	105	2.29*
Externals	58	6.71	3.38	5.29	3.38	57	1.59

** p < .01

* p < .05

scale (Table 19) and on the experimenter-teacher scale (Table 20).

On the alternatives-irrationalities scale, participants in all four treatment conditions significantly preferred Kelly's therapeutic approach over Ellis' therapeutic approach (condition 1, $t(50) = 7.14$, $p < .001$; condition 2, $t(54) = 4.64$, $p < .001$; condition 3, $t(59) = 3.29$, $p < .01$; condition 4, $t(48) = 5.46$, $p < .001$).

Likewise on the preference scale, participants in all four treatment conditions significantly preferred Kelly's therapeutic approach over Ellis' therapeutic approach (condition 1, $t(50) = 5.78$, $p < .001$; condition 2, $t(54) = 3.73$, $p < .001$; condition 3, $t(59) = 2.42$, $p < .05$; condition 4, $t(48) = 3.16$, $p < .01$).

Again on the experimenter-teacher scale differences were less pronounced than on the other two scales. Participants in treatment conditions 1, 2, and 4 significantly preferred Kelly's therapeutic approach over Ellis' therapeutic approach (condition 1, $t(50) = 2.47$, $p < .05$; condition 2, $t(54) = 2.27$, $p < .05$; condition 4, $t(48) = 2.60$, $p < .05$). In treatment condition 3, participants preferred Kelly's approach over Ellis', though not significantly ($t(59) = .65$, $p > .05$).

To observe the relationship between I-E Scale means and participants' levels of involvement in the project, Pearson correlation coefficients were computed for I-E Scale scores and imagination scale scores and interest scale scores

Results of t-tests comparing participants' preferences for the therapeutic approaches of Kelly or Ellis as indicated on the alternatives-irrationalities scale of the research questionnaire when participants are grouped by treatment conditions

*** $\bar{p} < .001$

Table 19

Results of t-tests comparing participants' preferences for the therapeutic approaches of Kelly or Ellis as indicated on the preference scale of the research questionnaire when participants are grouped by treatment conditions

N = 215

Treatment Condition	<u>n</u>	Mean score		Mean score		<u>df</u>	<u>t</u>
		Kelly Preference	<u>SD</u>	Ellis Preference	<u>SD</u>		
Condition 1	51	20.45	6.73	9.55	6.73	50	5.78***
Condition 2	55	18.89	7.75	11.11	7.75	54	3.73***
Condition 3	60	17.53	8.11	12.47	8.11	59	2.42*
Condition 4	49	18.37	7.46	11.63	7.46	48	3.16**

*** p < .001

** p < .01

* p < .05

Table 20

Results of t-tests comparing participants' preferences for the therapeutic approaches of Kelly or Ellis as indicated on the experimenter-teacher scale of the research questionnaire when participants are grouped by treatment conditions

Treatment Condition	n	Mean score		Mean score		df	t
		Kelly Preference	SD	Ellis Preference	SD		
Condition 1	51	7.14	3.29	4.86	3.29	50	2.47*
Condition 2	55	6.96	3.14	5.04	3.14	54	2.27*
Condition 3	60	6.27	3.18	5.73	3.18	59	.65
Condition 4	49	7.16	3.13	4.84	3.13	48	2.60*

* $p < .05$

from the research questionnaire. A coefficient matrix is presented in Table 21.

I-E Scale scores correlated significantly in a negative direction with imagination scale scores ($\underline{r} = -.18$, $p < .01$). Similarly, I-E Scale scores correlated significantly in a negative direction with interest scale scores ($\underline{r} = -.12$, $p < .05$). Since the I-E Scale is scored in the external direction, these correlations suggest that externals reported lower imaginative involvement and interest in the project than did internals.

Interestingly, comprehension test scores were correlated significantly with imagination scale scores ($\underline{r} = .12$, $p < .05$), and with interest scale scores ($\underline{r} = .31$, $p < .001$). This finding suggests that participants who demonstrated a greater comprehension of the descriptions of the approaches of Kelly and Ellis also reported higher levels of involvement in imagination tasks and interest in the project. As might be expected, imagination scale scores correlated significantly with interest scale scores ($\underline{r} = .54$, $p < .001$).

The correlation between I-E Scale scores and imagination scale scores was significant ($\underline{r} = -.18$, $p < .01$), suggesting that internals reported higher imaginative involvement than did externals. In order to test for significance between main effects of locus of control and treatment conditions, and for interactions, imagination scale scores were submitted to a univariate analysis of variance.

The analysis of variance failed to yield statisti-

Table 21

Pearson product-moment correlations between I-E Scale scores, comprehension test scores, imagination scale scores (research questionnaire) and interest scale scores (research questionnaire)

<u>N</u> = 215				
	I-E Scale	Comprehension Test	Imagination Scale	Interest Scale
I-E Scale	1.00	.03	-.18**	-.12
Comprehension Test	.03	1.00	.12*	.31***
Imagination Scale	-.18**	.12*	1.00	.54***
Interest Scale	-.12*	.31***	.54***	1.00

* $\underline{p} < .05$
 ** $\underline{p} < .01$
 *** $\underline{p} < .001$

cally significant results for either main effects (level of locus of control, $F(2, 203) = 2.52, p > .05$; treatment conditions, $F(3, 203) = 1.49, p > .05$). Additionally, interactions were statistically non-significant ($F(6, 203) = .75, p > .05$). Table 22 summarizes the results of the analysis of variance.

Thus, although there is a significant relationship between imagination scale scores and I-E Scale scores, there is no significant difference between internals and externals, regardless of treatment conditions.

The correlation between I-E Scale scores and interest scale scores was statistically significant ($r = .12, p < .05$), suggesting that internals reported higher interest in the project than did externals. In order to test for significance between the main effects of level of locus of control and treatment conditions, and for interactions, interest scale scores were submitted to a univariate analysis of variance.

The analysis of variance failed to yield statistically significant results for either main effects (level of locus of control, $F(2, 203) = 1.36, p > .05$; treatment conditions, $F(3, 203) = .21, p > .05$). Additionally, interactions were statistically non-significant ($F(6, 203) = 1.83, p > .05$). Table 23 summarizes results of the analysis of variance.

Thus, although there is a significant relationship between interest scale scores and I-E Scale scores, there is no significant difference between internals and externals, regardless of treatment conditions.

Table 22

Results of analysis of variance for the imagination scale of the research questionnaire: Level of locus of control by treatment condition

<u>N</u> = 215				
Source	<u>ss</u>	<u>df</u>	<u>ms</u>	<u>F</u>
Main effects	245.19	5	49.04	1.89
Level of locus of control	130.62	2	65.31	2.52
Treatment Conditions	110.96	3	36.99	1.49
2-way interactions	117.02	6	19.50	.75
Explained	362.22	11	32.93	1.27
Residual	5255.46	203	25.89	
Total	5617.67	214	26.25	

*would indicate $p < .05$

Table 23

Results of analysis of variance for the interest scale of the research questionnaire: Level of locus of control by treatment condition

<u>N</u> = 215				
Source	<u>ss</u>	<u>df</u>	<u>ms</u>	<u>F</u>
Main effects	71.22	5	14.24	.67
Level of Locus of Control	57.89	2	28.95	1.36
Treatment Conditions	13.60	3	4.53	.21
2-way interactions	232.82	6	38.80	1.83
Explained	304.05	11	27.64	1.30
Residual	4310.84	203	21.24	
Total	4614.89	214	21.57	

*would indicate $p < .05$

In sum, the further statistical analyses performed on the data revealed that participants exhibited definite preferences between the two approaches. When items were keyed first in Kelly's direction, then in Ellis' direction, obtained means were compared on the three dependent measures scales. Cell means in all twelve combinations of treatment condition by level of locus of control indicated a preference for Kelly's approach. This preference for Kelly's approach was significant on the alternatives-irrationalities scale and the preference scale both by I-E level and by all four treatment conditions. On the experimenter-teacher scale, internals and moderates, as well as participants in treatment conditions 1, 2, and 4, significantly preferred Kelly's approach over Ellis' approach.

Additionally, I-E Scale scores were found to correlate significantly with both imagination scale scores and interest scale scores. However, when participants were grouped by level of locus of control and by treatment condition, analyses of variance yielded statistically non-significant results on both scales.

Summary of Findings

Results of analyses of variance on the three dependent measures scales of the research questionnaire were statistically non-significant. Consequently, there is a failure to reject the two null hypotheses presented for statistical testing. Thus, within the parameters of the present study,

there is no significant difference between internals' and externals' relative preferences for the therapeutic approaches of Kelly and Ellis, nor is there a significant difference when participants are grouped according to treatment condition.

Additionally, further statistical analyses revealed a definite preference for Kelly's approach over Ellis' approach regardless of participants' levels of locus of control or treatment conditions.

Finally, although imagination scale scores and interest scale scores of the research questionnaire were significantly correlated with I-E Scale scores, analyses of variance on the respective scales yielded no significant differences when participants are grouped by level of locus of control or by treatment condition.

The results presented in this chapter are discussed in chapter four.

CHAPTER FOUR

Discussion

Chapter four, divided into three sections, discusses the findings reported in the previous chapter. The first section elaborates the findings of the study, followed by a section which presents qualifications for interpreting these results. The chapter concludes with a section which offers suggestions for future research.

Discussion of Findings

The aim of the present study was to investigate two parameters influencing therapeutic effectiveness: client-therapy fit and the role of the psychological problem. The study investigated these parameters within the framework of Rotter's social learning theory. More specifically, the study employed the construct of locus of control as well as psychological situations reflective of problems of powerlessness as indicators of participants' relative preference for the cognitive therapeutic approaches of Kelly and Ellis. Results reported in chapter three did not support hypothesized differences on the basis of locus of control, nor those hypothesized as a function of particular problems of powerlessness.

Interpretation of these statistically non-significant findings should be made in light of the statistical power values of F ratios obtained on the three scales of the research questionnaire which comprised the dependent measures. Power values of 68 (locus of control) and 58 (treatment conditions) were obtained for the F ratios on the alternatives-irrationalities scale. This suggests that the statistics on this scale had a likelihood of 68% and 58%, respectively, of locating an effect size in the event there was an actual effect to be picked up; likewise, power values of 68 (locus of control) and 66 (treatment conditions) obtained for F ratios on the preference scale suggest a likelihood of 68% and 66% of picking up a contrast.

On the third scale of the research questionnaire, the experimenter-teacher scale, power values of 39 (locus of control) and 40 (treatment conditions) are understandably much lower than the power values reported for the F ratios obtained on the alternatives-irrationalities scale and on the preference scale. The experimenter-teacher scale is comprised of only two items and, therefore, is a less robust measure than the other two scales.

In considering power values, Cohen (1977) discusses a number of factors which may influence the power of statistical contrasts, notably, sample size and methodological precision. In the present investigation, although the sample size appears to be adequate ($N = 215$), in retrospect, the sample may have had characteristics that impeded eliciting the phenomena being

investigated. Participants were above average intellectually, ethnically and religiously parochial, academically oriented, male and adolescent. These factors may have contributed to masking actual differences.

In terms of the actual research situation, conditions appeared to facilitate optimal results. The experimental run was executed without difficulty and self-reports of participants revealed that they were interested in the project; furthermore, high scores on the imagination scale of the research questionnaire suggest that participants were able to accommodate instructions for the muted-role taking tasks.

With regard to the dependent measures employed in the investigation, scales on the research questionnaire were constructed from independent items which loaded highly on three orthogonal factors (.50 and above). Although the questionnaire designed for the present project appears to have desirable psychometric properties, further development and refinement of the instrument may eventuate in greater precision.

In short, the obtained power values suggest that the likelihood of obtaining significant contrasts was less than optimal. Given the results of the present study, although locus of control may offer adequate gross distinctions in cognitive activity, it is possible that investigating components of relative preference for two explicitly cognitively oriented therapies may require more precise differentiation. The study did reveal a relationship between locus of control and imagination ($p < .01$) and interest ($p < .05$) which might

have been expected based on the literature on cognitive activity and varying levels of locus of control; however, given the complexity of preference and the added complexity of two cognitive therapies as well as the specific nature of problematic contexts, locus of control may have been too gross a measure of cognitive activity.

Since its introduction, the construct of locus of control has provided a fruitful area for research. More specifically, it has provided a substantial body of evidence (Phares, 1976; Lefcourt, 1976) for different cognitive activities among internals and externals. This cognitive activity, however, is based on a measure of generalized expectancies for reinforcement. Recent developments within social learning theory (Mischel, 1973, 1976) suggest that more precise differentiation may be possible. Mischel (1973), in offering a more cognitive reconceptualization of personality within a framework of social learning theory, speaks of five 'person variables.' These include construction competencies, encoding strategies and personal constructs, behavior-outcome and stimulus-outcome expectancies in particular situations, subjective stimulus values and self-regulatory systems and plans. He suggests that individuals differ in their competence or ability to generate desired cognitions and response patterns; likewise, he maintains that differences in behavior may also reflect differences in how individuals categorize a particular situation: that is, people differ in the manner in which they encode, group and label events, and in the

manner in which they construe themselves and others. Additionally, performance differences in any situation depend on differences in expectancies and specifically on differences in the expected outcomes associated with particular response patterns and stimulus configurations. Likewise, differences may also be due to subjective values of expected outcomes in a situation. Finally, Mischel maintains that individual differences may reflect differences in self-regulatory systems and plans that each individual brings to the situation. Perhaps attention to the interactive properties of these person variables may enhance predictions based on differential cognitive activities. Even in this regard, Mischel (1976) cautions against treating these person variables as global trait-like dispositions, and "removing them from their close interaction with situational conditions and thus limiting their usefulness" (p. 152).

In a similar vein, Rotter (1975) has cautioned that locus of control is limited in its ability to account for a major portion of variance. Thus, although the literature indicates that rather clear differences may be demonstrated between the cognitive activities of internals and externals on specific tasks, the variance accounted for by locus of control becomes much less distinct when the investigation is housed within the wider framework of Rotter's social learning theory, particularly with regard to the psychological situation.

Both in Rotter's conceptualization of social learning theory and in more recent reconceptualizations of social learning theory (Bandura, 1977; Mischel, 1973, 1976), the psychological situation has held a preeminent position. This study presented the psychological situation in terms of Rotter et al.'s (1962) tripartite distinction of powerlessness in terms of fate, chance and powerful others, with a further subdivision in the latter category of powerful institutional others and powerful personally significant others. There were no differences among participants' relative preference measures by treatment conditions. To facilitate understanding of those results, qualitative data obtained from the participants was examined. These data indicate that, indeed, the very nature of the powerlessness problem was an important factor in their expression of relative preference for therapy. Item #9 on the qualitative data sheet asked participants to rank five sources of influence on their preference. Table 24 (Appendix I) presents percentages of participants who ranked 'the nature of the problem or situation' as having the greatest influence on their expression of preference. Percentages range from 77% to 43% by treatment condition; over 58% of participants indicated that 'the problem' was the primary source of influence on their preference. Thus, at least two explanations accounting for non-significant statistical results emerges. First, the kind of powerlessness problem may have had minimal influence on participants' expression of relative preference for the approaches of Kelly

and Ellis. Perhaps Rotter et al.'s (1962) theoretical distinction of powerlessness in terms of fate, chance and powerful others has limitations with regard to its functional utility. Secondly, regardless of any subtleties or differences in the problems of powerlessness, the strong preference for Kelly's approach may have over-ridden any possible differential effects of the problems. The statistically significant preference for Kelly's approach was reflected by all three levels of locus of control and by all four treatment conditions on both the alternatives-irrationalities scale and on the preference scale. Furthermore, on the experimenter-teacher scale, internals and moderates, as well as participants in treatment conditions 1, 2 and 4, significantly preferred Kelly's approach over Ellis' approach. Clearly then, regardless of level of locus of control or of treatment condition, participants significantly preferred Kelly's approach for the problems of powerlessness presented. This result would per se preclude finding differences due to main effects. Possibly also, Kelly's approach, in that it does not appear judgmental, appealed to a typical adolescent concern for tolerance and appreciation of democratic principles. It is also plausible that participants saw Kelly's approach of generating alternatives as more accommodating of objective powerlessness problems than Ellis' emphasis on irrational beliefs.

Additionally, that participants were rather young adolescents may itself have influenced their response to

powerlessness problems. One may speculate that their preference for Kelly's approach in the context of powerlessness may be related to the complex developmental process itself. The very ambiguity and lack of predictability associated with powerlessness may well be reflective of typical adolescent identity concerns, rebellion against authority, as well as frustrations associated with living in an imperfect world while holding idealistic expectations. Thus, it is possible that the adolescents in this investigation, having become involved in the powerlessness contexts presented, may have viewed Ellis' approach as more authoritarian and restrictive. Conversely, they may have seen Kelly's approach as more sympathetic to the particular needs of struggling adolescents in situations of powerlessness.

Interestingly, in a study employing a similar methodology and sample, Fatis (1978) presented problem situations of shyness rather than powerlessness. He obtained preferences for Kelly's approach as well as preferences for Ellis' approach as a function of internal locus of control and differential problems of shyness. Apparently, for some adolescents, whether the problem is one of powerlessness or one of shyness influences preference for therapeutic approach.

In sum, perhaps the clearest finding of this study is that, given problems of powerlessness with this sample, there is a clear preference for Kelly's therapeutic approach over Ellis'. That participants reported their clear preference as being strongly influenced by the problem is supportive of

Holen and Kinsey's (1975) assertion that the nature of the problem is an important variable in therapy preference; furthermore, these results support continued attention to Goldstein and Stein's (1976) call for prescriptive psychotherapies. In short, even with the rather homogeneous subset of cognitive therapies, it seems to make a difference which approach is offered for the general category of problems of powerlessness.

Qualifications on Interpretation of Results

This section presents several qualifications within which results of the study should be interpreted.

The obtained results are indicative only of the population sampled: bright, Catholic, male, university-bound, mid-western United States, upper division students; as such, this sample reflects a rather select adolescent population. It may be that less academically oriented adolescents respond differently to the approaches of Kelly and Ellis for particular problems of powerlessness. The age of the participants, as well, would call for caution in interpreting the results: the stage of adolescence per se is a volatile, unpredictable developmental stage.

Additionally, that the investigation was conducted in an academic setting, both permitted and facilitated some rather stringent investigatory requirements. Requiring 215 conscripted participants to study documents containing novel

and complex material, to receive and implement audio-taped instructions on imagination tasks and, finally, to respond to objective and subjective research instruments is an experimental demand exercised perhaps most appropriately in an academic setting. Given a bright, academically oriented sample, it is not surprising that participants reported enjoying learning about 'Kappa' and 'Epsilon' therapies. Also not surprisingly, participants viewed the comprehension test as the least enjoyable aspect of the project. Thus, a limitation on interpreting the results is based on the fact that the data were obtained in an academic setting; concomitantly, this investigation, being an analog study, is limited by its quasi-experimental and highly controlled conditions.

Suggestions for Future Research

Although the present study found no statistically significant differences between internals and externals on measures of relative preference for therapeutic approach, it did reveal statistically significant preference for Kelly's approach for all levels of locus of control in all four conditions (on two of the three dependent measures scales of the research questionnaire). That such a clear preference for either therapeutic approach was obtained lends, at least, indirect support for the contention that preference is a therapeutic consideration worthy of further

attention.

Specifically, within the area of cognitive therapy, that such a clear preference was obtained between two cognitive therapeutic approaches is indicative of Mahoney's (1977) and Beck's (1976) concern that so-called 'cognitive therapy' conduct an 'in-house' investigation. Perhaps not only is it important to examine components of therapeutic preference across the gamut of therapies, but also to attune to the subtle differences within theoretically similar therapeutic systems.

Furthermore, research investigating preference for therapy as a function of cognitive activity may consider Mischel's (1973) cognitive social learning person variables. As suggested above, perhaps attention to the interactive properties of these person variables may enhance predictions based on differential cognitive activities.

Since the research design of the present study called for an examination of preference as a function of internality and externality in problems of powerlessness, one can only conjecture about whether significant preference for Kelly's approach was due to the overall attractiveness of Kelly's approach or to the apparent suitability of Kelly's approach for problems of powerlessness. In this regard, it may be informative to include problematic contexts representative of different categories of problems in addition to problems representative of powerlessness. Powerlessness, for example, represents only one of five

dimensions of alienation outlined by Seeman (1959). Perhaps problems reflective of the other four categories of alienation may be helpful in understanding relative preference for therapy. The four categories include meaninglessness, normlessness, isolation and self-estrangement. This research approach may help clarify the question posed above; resolution of this question may in turn encourage comparison of various combinations of cognitive therapies.

Finally, it may be of interest to extend the investigation to populations other than that represented by the sample in the present study. These may include adolescents who more closely approximate the expected range of intelligence scores, adolescents whose mean I-E Scale score is more in the internal direction than that of the present sample, older adolescents as well as various groups of adults differing in occupational levels, educational levels, age, and, perhaps, groups varying in social skills. Of particular interest would be an examination of preferences as a function of sex-role differences. Accommodation of the present study for females, however, would call for consequent methodological modifications; of immediate methodological concern would be the problematic contexts.

In sum, extensions of this study may focus on preference for therapeutic approach with particular attention to the following parameters: different types of cognitive therapies, different types of problematic contexts, Mischel's social learning person variables and different populations.

ABSTRACT

This study examined relative preference for the cognitively oriented therapeutic approaches of Kelly and Ellis. Levels of locus of control and four treatment conditions depicting types of powerlessness situations served as independent variables. Participants were 215 upper division male college preparatory students from a Chicago Catholic high school. Internals, moderates and externals were randomly assigned to one of four treatment conditions and exposed to standardized written descriptions of the two therapeutic approaches. Following a comprehension test on the descriptions, an audio-taped mini-lesson on imaginative skills and muted-role taking was presented. After a practice trial, each treatment condition received a taped presentation depicting one of four types of powerlessness: in the face of personally significant others, bureaucratic-institutional others, personal fate or chance. Participants' responses to a research questionnaire were submitted to factor analyses to provide guidelines for subsequent scale construction. Three scales served as dependent measures: an alternatives-irrationalities scale, a preference scale and an experimenter-teacher scale. Analyses of variance performed on each of the scales yielded no statistically significant differences as a function of locus of control or of treatment conditions, nor were statistically significant interactions observed. Further statistical analysis revealed a

significant preference for Kelly's approach both by all levels of locus of control as well as by all four treatment conditions. These findings were discussed and limitations on their interpretations were presented. Suggestions for future research were offered.

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APPENDIX A

Internal-External Locus of Control Scale

INSTRUCTIONS

This is a questionnaire to find out the way in which certain important events in our society affect different people. Each item consists of a pair of alternatives lettered "A" or "B." Please select the one statement of each pair (and only one) which you more strongly believe to be the case as far as you are concerned. Be sure to select the one you actually believe to be true rather than the one you think you should choose or the one you would like to be true. This is a measure of personal belief: obviously there are no right or wrong answers.

Please answer these items carefully but do not spend too much time on any one item. Be sure to find an answer for every choice. Blacken the appropriate column "A" or "B" on your answer sheet for each item depending on which you choose as the statement more true.

In some instances you may discover that you believe both statements or neither one. In such cases, be sure to select the one you more strongly believe to be the case as far as you are concerned. Also try to respond to each item independently when making your choice; do not be influenced by your previous choices.

Now before beginning with the first item, please be sure to indicate your name and student number on the answer sheet. Thank you for your cooperation.

1. A: Children get into trouble because their parents punish them too much.
B: The trouble with most children nowadays is that their parents are too easy with them.
2. A: Many of the unhappy things in people's lives are partly due to bad luck.
B: People's misfortunes result from the mistakes they make.
3. A: One of the major reasons why we have wars is because people don't take enough interest in politics.
B: There will always be wars, no matter how hard people try to prevent them.
4. A: In the long run people get the respect they deserve in this world.
B: Unfortunately, an individual's worth often passes unrecognized no matter how hard he tries.
5. A: The idea that teachers are unfair to students is nonsense.
B: Most students don't realize the extent to which their grades are influenced by accidental happenings.
6. A: Without the right breaks one cannot be an effective leader.
B: Capable people who fail to become leaders have not taken advantage of their opportunities.
7. A: No matter how hard you try some people just don't like you.
B: People who can't get others to like them just don't understand how to get along with others.
8. A: Heredity plays the major role in determining one's personality.
B: It is one's experiences in life which determine what they're like.
9. A: I have often found that what is going to happen will happen.
B: Trusting to fate has never turned out as well for me as making a decision to take a definite course of action.

10. A: In the case of the well-prepared student there is rarely if ever such a thing as an unfair test.
B: Many times exam questions tend to be so unrelated to course work that studying is really useless.
11. A: Becoming a success is a matter of hard work, luck has little or nothing to do with it.
B: Getting a good job depends mainly on being in the right place at the right time.
12. A: The average citizen can have an influence in government decisions.
B: This world is run by the few people in power, and there is not much the little guy can do about it.
13. A: When I make plans, I am almost certain that I can make them work.
B: It is not always wise to plan too far ahead because many things turn out to be a matter of good or bad fortune anyhow.
14. A: There are certain people who are just no good.
B: There is some good in everybody.
15. A: In my case getting what I want has little or nothing to do with luck.
B: Many times we might just as well decide what to do by flipping a coin.
16. A: Who gets to be the boss often depends on who was lucky enough to be in the right place first.
B: Getting people to do the right thing depends upon ability, luck has little or nothing to do with it.
17. A: As far as world affairs are concerned, most of us are the victims of forces we can neither understand nor control.
B: By taking an active part in political and social affairs the people can control world events.
18. A: Most people don't realize the extent to which their lives are controlled by accidental happenings.
B: There is really no such thing as "luck."

19. A: One should always be willing to admit mistakes.
B: It is usually best to cover up one's mistakes.
20. A: It is hard to know whether a person really likes you.
B: How many friends you have depends on how nice a person you are.
21. A: In the long run the bad things that happen to us are balanced by the good ones.
B: Most misfortunes are the result of lack of ability, ignorance, laziness, or all three.
22. A: With enough effort we can wipe out political corruption.
B: It is difficult for people to have much control over the things politicians do in office.
23. A: Sometimes I can't understand how teachers arrive at the grades they give.
B: There is a direct connection between how hard I study and the grades I get.
24. A: A good leader expects people to decide for themselves what they should do.
B: A good leader makes it clear to everybody what their jobs are.
25. A: Many times I feel that I have little influence over the things that happen to me.
B: It is impossible for me to believe that chance or luck plays an important role in my life.
26. A: People are lonely because they don't try to be friendly.
B: There's not much use in trying too hard to please people, if they like you, they like you.
27. A: There is too much emphasis on athletics in high school.
B: Team sports are an excellent way to build character.

28. A: What happens to me is my own doing.
B: Sometimes I feel that I don't have enough control over the direction my life is taking.
29. A: Most of the time I can't understand why politicians behave the way they do.
B: In the long run the people are responsible for bad government on a national as well as on a local level.

APPENDIX B
Interpersonal Trust Scale

INSTRUCTIONS

This is a questionnaire to determine the attitudes and beliefs of different people on a variety of statements. Please answer the statements by giving as true a picture of your own beliefs as possible. Be sure to read each item carefully and indicate your beliefs by marking the appropriate item number on your answer sheet.

If you strongly agree with an item, mark the appropriate item space with the number 1. If you mildly agree with the statement, mark the appropriate item space with the number 2. If you feel the item is about equally true as untrue, mark the appropriate item space with the number 3. If you mildly disagree with the statement, mark the appropriate item space with the number 4. If you strongly disagree with the statement, mark the appropriate item space with the number 5.

- 1 Strongly agree
- 2 Mildly agree
- 3 Agree and disagree equally
- 4 Mildly disagree
- 5 Strongly disagree

1. Most people would rather live in a climate that is mild all year around than in one in which winters are cold.
2. Hypocrisy is on the increase in our society.
3. In dealing with strangers one is better off to be cautious until they have provided evidence that they are trustworthy.
4. This country has a dark future unless we can attract better people into politics.
5. Fear of social disgrace or punishment rather than conscience prevents most people from breaking the law.
6. Parents usually can be relied upon to keep their promises.
7. The advice of elders is often poor because the older person doesn't recognize how times have changed.
8. Using the Honor System of not having a teacher present during exams would probably result in increased cheating.
9. The United Nations will never be an effective force in keeping world peace.
10. Parents and teachers are likely to say what they believe themselves and not just what they think is good for the child to hear.
11. Most people can be counted on to do what they say they will do.
12. As evidenced by recent books and movies morality seems on the downgrade in this country.
13. The judiciary is a place where we can all get unbiased treatment.
14. It is safe to believe that in spite of what people say, most people are primarily interested in their own welfare.
15. The future seems very promising.
16. Most people would be horrified if they knew how much news the public hears and sees is distorted.
17. Seeking advice from several people is more likely to confuse than it is to help one.
18. Most elected public officials are really sincere in their campaign promises.

19. There is no simple way of deciding who is telling the truth.
20. This country has progressed to the point where we can reduce the amount of competitiveness encouraged by schools and parents.
21. Even though we have reports in newspapers, radio and television, it is hard to get objective accounts of public events.
22. It is more important that people achieve happiness than that they achieve greatness.
23. Most experts can be relied upon to tell the truth about the limits of their knowledge.
24. Most parents can be relied upon to carry out their threats of punishment.
25. One should not attack the political beliefs of other people.
26. In these competitive times one has to be alert or someone is likely to take advantage of you.
27. Children need to be given more guidance by teachers and parents than they now typically get.
28. Most rumors have a strong element of truth.
29. Many major national sport contests are fixed in one way or another.
30. A good leader molds the opinions of the group he is leading rather than merely following the wishes of the majority.
31. Most idealists are sincere and usually practice what they preach.
32. Most salesmen are honest in describing their products.
33. Education in this country is not really preparing young men and women to deal with the problems of the future.
34. Most students in school would not cheat even if they were sure of getting away with it.

35. The hordes of students now going to college are going to find it more difficult to find good jobs when they graduate than did the college graduates of the past.
36. Most repairmen will not overcharge even if they think you are ignorant of their specialty.
37. A large share of accident claims filed against insurance companies are phony.
38. One should not attack the religious beliefs of other people.
39. Most people answer public opinion polls honestly.
40. If we really knew what was going on in international politics, the public would have more reason to be frightened than they now seem to be.

ANSWER SHEET

NAME: _____ STUDENT NUMBER: _____

YEAR IN SCHOOL: _____ AGE: _____

_____ 1.	_____ 11.	_____ 21.	_____ 31.
_____ 2.	_____ 12.	_____ 22.	_____ 32.
_____ 3.	_____ 13.	_____ 23.	_____ 33.
_____ 4.	_____ 14.	_____ 24.	_____ 34.
_____ 5.	_____ 15.	_____ 25.	_____ 35.
_____ 6.	_____ 16.	_____ 26.	_____ 36.
_____ 7.	_____ 17.	_____ 27.	_____ 37.
_____ 8.	_____ 18.	_____ 28.	_____ 38.
_____ 9.	_____ 19.	_____ 29.	_____ 39.
_____ 10.	_____ 20.	_____ 30.	_____ 40.

- 1 STRONGLY AGREE
- 2 MILDLY AGREE
- 3 AGREE AND DISAGREE EQUALLY
- 4 MILDLY DISAGREE
- 5 STRONGLY DISAGREE

S: _____

-F: _____

GT: _____

APPENDIX C

Experimental Tapes, Sides A and B

Experimental Tape

Side A

(1) 4' 45"

Good morning. We are a research team from the University of Ottawa in Ontario, Canada, and would like to welcome you to this morning's presentation. We are here in your school this morning to conduct an important project. We are in training as clinical psychologists, and as clinical psychologists are acutely concerned with how to help people the most effectively. The help we attempt to give people we call therapy.

In order to know how to help people most effectively, it is absolutely essential for us to conduct research. Perhaps the following example will illustrate the importance of research in the helping sciences.

Imagine that you have a sister who is seriously ill. You are very concerned about her health and, of course, would want the very best of medical care for her. Imagine further, if you will, that her surgeon wants to meet with you. He describes two different procedures that might possibly help your sister. The most natural question in the world for you to ask would be "Which procedure would be best for my sister?" The doctor says, "I recommend 'procedure A.'" How does he know? Research. Either the

surgeon has done research himself, or more likely he is familiar with the research others have done. In fact research is so important that some doctors spend their whole careers just doing research.

Clinical psychologists have the same needs for research. We need to continually ask ourselves, "How can we help people who come to us for therapy the most effectively?" In order to answer that question we need to do research.

This morning we are inviting you to join us in a research project that hopefully will teach us something about therapy. We are going to offer you the opportunity to learn about two different types of therapy; for the sake of the study they are called Kappa therapy and Epsilon therapy. We need your evaluations. Therapy is still a relatively new field and we are learning more and more about it. We need to know why therapy works. How does it help people? Why does one type of therapy help some people more than another type? We need your evaluations and we are sincerely appreciative of all the help you can give us this morning.

By the way, we also hope that you will find this a valuable and interesting learning experience. This project is similar to the kinds of research projects you will be invited to participate in, should you attend university in the future.

You might be wondering why we are here at Marist High School to do this research project. This is a complex project which could well have direct implications for helping people who seek therapy. In order to conduct the research project properly we need to have participants who have good creative and good imaginative skills. In short, we need participants from a school which has a solid academic reputation. Marist has such a reputation.

We would like to thank your Principal, Brother Anthony, and your faculty for the invitation to Marist, and for their full cooperation in helping to prepare for this morning's project.

And now let us proceed. Your teacher has issued to each of you a large Manila envelope. Please remove Packet #1 from your envelope; that's the Packet with the yellow cover sheet. Please read the short instructions and proceed. Thank you.

(2) 16' 5"

Now that you have read through the two types of therapy, and have completed the test, we would like to introduce you to the next part of our project.

This part of our study deals with the imagination. It illustrates how vivid and powerful the imagination can be.

You know, last year in Canada was a pretty important year for us. For the first time in the whole history of our country we were able to host the Olympic Games. For years preceding the actual games themselves, Canadians were involved in preparing for and eagerly awaiting the arrival of athletes and representatives from different countries coming to participate in the Olympic Games in Montreal.

Historically larger countries like the United States and the Soviet Union dominate the Olympic Games. They generally win most of the gold, silver and bronze medals -- and that was the case again in Montreal.

Traditionally the "glory" events of the games are the track and field events. Canada, the host country, had really only one hope for a medal in track and field. Greg Joy in the high jump.

Let me set the stage for you. It was late on a dark, cold, rainy, dreary day in Montreal. It was the last day of the track and field events. Rain poured through the open roof of the new Olympic Stadium; people huddled in the stands, chilled and cold. Greg Joy was the only hope Canada had for the silver medal. Everyone in the stadium focused on him.

Nineteen year-old Greg Joy, who not long before competed in high school track meets, now stood on the floor of the massive Olympic Stadium facing the bar and

knowing that over 65,000 people in the stands were watching him. He could feel them almost wishing him over the bar. Imagine what it would be like, standing there soaked in your track suit, looking at the bar. Literally millions and millions of people around the world had their eyes on Greg Joy. Imagine the tension, the pressure on Greg that day.

How could someone handle all that pressure? How could Greg Joy ignore all those things that were going on around him? Quite simply through concentration and through the power of his imagination. By concentrating on the bar, by looking straight ahead, by closing out the rumble in the crowd, by not allowing himself to think about the television audiences. By concentrating only on the bar he was able to focus all his energy.

As Greg stood there he began to rehearse how he was going to jump over that bar. He just stood there rocking back and forth, concentrating on the bar. He could feel himself running towards the bar. He could feel himself pushing off, pushing off, arching his body higher and higher, curving and backing over the bar. He imagined that scene over and over again. In his imagination he could hear above the noise of the crowd. He could imagine hearing the gentle thump of his track shoes on the astro-turf as he approached the bar. He could feel his muscles tense and tighten as he pushed off and went up and over the bar as he stood

there rocking and preparing and staring at that bar until he had rehearsed it over and over again, and could feel himself going over the bar.

All of this was a function of Greg's imagination. By imagining what he would think, feel and do, he was able to prepare himself mentally and physically to clear that bar. And he did.

The imagination is an extraordinarily powerful tool. One of the fascinating things that psychologists are discovering is that everyone has the potential to imagine in a very real and very vivid and very lively way.

All of us are able to imagine as vividly as Greg Joy, by concentrating on thoughts and feelings that are suggested to us. Athletes use their imaginations; actors use their imaginations; all of us can use our imaginations. Our imaginations are powerful, vivid and lively.

Most people can imagine effectively by closing their eyes and rehearsing a scene, closing out all the distractions that would prevent them from thinking and feeling and being in the scene that is presented to them. In a short while we will be asking you to use the power of your imagination to enter into a situation. As a preparation for that exercise we would like to invite you to do an imagination scene now, one we hope you will enjoy.

I would like to invite you now to sit back and relax, close your eyes -- it's a Catholic school, trust your neighbor, he won't lift your wallet -- just close your eyes and try to think the thoughts that I suggest to you. Feel the feelings that I describe, even the physical changes that I describe too. Just sit back now and relax and close your eyes and imagine yourself on a Saturday morning in May, early May, and you're in the country and staying at a cabin that is rustic and in its own way very comfortable. It is very early in the morning; the sun is not quite up yet. You wake up feeling very rested and relaxed, feeling strong physically -- you feel good. It's Spring, you've had a hard winter and you're very pleased to see all the new signs of life that you've seen lately.

It is early in the morning, shortly before dawn, and you decide to get up out of bed and go out to the countryside and just enjoy the freshness of nature. So you get out of bed and climb into your most comfortable jeans; you slip on a sweat shirt, you slip on your sneakers; they're good friends, you know them well and they know you well. You go outside and the chill of the early Spring morning air hits you and it feels good, it feels good on your face and you breathe deeply into your lungs and you can feel the fresh air going into your lungs. You can feel how strong you are, how healthy you are, you're glad to be there. It's good to be alive. You

begin to walk down the dirt road, you hear the sounds of pre-dawn, you hear all the activity going on in the woods, all the animals, the chipmunks. The road is a little bit moist yet with dew, it feels good and you think how good that road is for running. You think maybe you will run back on your way home to the cabin.

You continue to walk. The sun is coming up and it is beautiful, it is magnificent to see the dawn. You are glad to be there, walking along. You come across a clearing, a meadow, and you see a big log there. You decide to go over and sit down on the log and just enjoy the beautiful sunrise before you. You sit on the log, your hand reaches out and you can feel the damp bark. You wonder how long the log has been there. You sit down on it, you look ahead and see the sun now stronger and stronger and you begin to feel a little of that sunlight on your forehead and on your hands and it feels warm and it feels good. You are breathing that deep morning air. You feel good, you feel healthy, and you can hear the birds singing and when you concentrate only on the birds singing it sounds like a tremendous noise; it sounds like the only thing going on in the world, those birds singing and talking and chirping. You can hear the early morning breeze blowing through the trees. The sun feels warmer and warmer; it feels good. You look out over the meadow and see the sunlight shining on the dew on the grass in the meadow, glistening, and

you think how beautiful that is, and you know that the dew won't be there long.

On the edge of the meadow, just near the beginning of the trees, you see a big doe and her fawn and they are beautiful and they look strong and healthy. You think about how really good it is to be there in that meadow sitting on that log and enjoying the beauty around you. You begin to notice a rumbling in your stomach that tells you you're hungry, you feel the tension of a stomach that's anxious for breakfast. That feels good too. You begin to think about what you might like for breakfast, you think about fresh sizzling bacon. You begin to hear that bacon sizzling in the pan and think about how good that's going to taste. You smell it and it smells good. You think how good a stack of pancakes might taste, hot steaming pancakes with that bacon. You're really beginning to get hungry now and you can feel that in your stomach. You think about how strong you feel, how good you feel, and you remember that moist dirt road and think you'd like to challenge it, you think you'd like to run it on the way back to your cabin. You decide to get up and run back, and you do so.

. . . (15 second pause) . . .

I hope you enjoyed imagining being in the meadow. I like that scene. It's one of my favorite scenes as a matter of fact. Everytime I imagine being in that meadow,

I imagine it in a different way. I can actually smell the smells of the forest as I am walking through it. And when I think the thoughts about how good it is to be there, and how healthy I feel, I can actually feel that in my muscles. I can actually feel that in my body. And when I imagine the dew on the grass, I really think I can see it, I can picture it clearly in my mind. When I listen for the birds, I can really hear those birds. The imagination is really a powerful tool.

Shortly we will be asking you to imagine being in a problem situation, so that you might help us to evaluate the two therapies that you have learned about, Kappa therapy and Epsilon therapy.

Please relax now for a moment as we ask your monitor to advance the tape to the end and to flip it over to Side B. Thank you.

Experimental Tape

Side B

Condition 1 - Powerful Significant Others

Imagine now that you are in the situation that I am about to describe. Try to think the thoughts and feel the feelings that are presented in this situation.

For some time now you have been going with a girl you like very much. She's pretty, she's nice, she's bright, she's really fun to be with. She enjoys many of the same things you do, and you always seem to have a good time together.

For the last few months you have spent a lot of time together. You've seen her several times a week; you have spoken to her on the phone, often several times a day. Your friends really like her too. They all consider you lucky. You think you love her and you wonder if it's obvious to everyone else that you love her. Then one night you call her. She answers the phone very upset and crying. You wonder what's wrong. She's never been like this. She can hardly talk at all, but she manages to tell you that she can no longer see you or talk to you, even on the phone.

You're surprised. You're shocked. You ask her, "Why?" She doesn't answer but tells you she has to go

and she hangs up the phone. You're really bothered. You ask yourself, "What was that all about?" It's like it's unreal. It's like you're numb. You ask yourself, "What did I do?" You can't figure it out. You think and think, you try to sleep later, though you can't, and you just cannot understand what is going on.

The next day you call her but her father answers the phone and he tells you in no uncertain terms that you are not permitted to talk to or to see his daughter again. He won't tell you why. He won't offer any explanation at all.

You go over to her house. You keep thinking that you have to talk to them. They won't answer the door. You wait. You walk around the neighborhood. You're just totally confused; you just don't understand what's going on.

After several attempts to talk to her, to talk to her father, to talk to somebody, you become just increasingly upset. You think, you wonder, you question, over and over in your mind, and still you don't know why she can't talk to you, why she can't see you. You wonder if she might be pregnant.

The thought really scares you.

But then you think to yourself, what if she is pregnant? Don't you have a right to know that? If she is, shouldn't you be involved with any plans? You think, "If she is

pregnant, who is her father to decide that I shouldn't be informed about that?" But then you think, "How do I know? No one tells me anything at all." You're bothered; you're confused. You think and think, but you just don't know what's going on.

You haven't eaten much; you haven't slept much. You feel a sudden pain, like off and on, in your stomach. You feel tired, yet you can't sleep. You feel exhausted and yet you can't rest. All you do is think about and wonder about what could be going on.

You've tried to call her, but no way. You've tried to see her; no way. You have tried to talk to her father. He has no patience and absolutely refuses to talk with you. You've watched the mails like a hawk, thinking and hoping she might answer your letters. Nothing. Everywhere you have turned, there are nothing but stone walls. You are being eaten alive with worry and confusion, and you can't even find out why. You're angry; you're frightened; mostly, you're confused. You can't talk to your own parents, they wouldn't understand.

Then you recall that a friend of yours once told you that he went to a therapist for help and he spoke well of his experience. You think to yourself, "This thing is bothering me. Maybe he can help. What have I got to lose?" You decide to consult a therapist.

. . . (pause 5 seconds) . . .

Now we'd like to ask you to reach into your envelopes and take out the packet with the pink cover sheets. Continue thinking the thoughts and feeling the feelings described in the problem situation. Then please read the directions and respond to the questions.

CONDITION 2 - Powerful Institutional Others

Imagine now that you are in the situation that I am about to describe. Try to think the thoughts and feel the feelings that are presented in this situation.

Imagine that it is toward the end of April in your senior year in high school. You are eager to graduate. You have enjoyed your time at Marist and like most of your classmates you have been busy about the process of taking college boards and writing to different universities that you think you might like to attend. You have applied to three universities. Two of them have already notified you that you are accepted. The third, however, Notre Dame University, is the one that you really want to attend, and you haven't heard a word from them. You have made a number of attempts to contact Notre Dame to find out at what stage your application was, all to no avail. You have written

several letters, you have made several phone calls. No one seems to know anything. You're thinking, "Can't they locate my file?" You wonder if the Admissions Committee has made its decisions yet. You wonder, "Why don't they have any information?"

You begin to get more and more frustrated and begin to think that no one is able to give you the information you want.

You begin to think about what a really difficult process it is to apply and be accepted by a university that you really want to attend. Secretaries seem to run the world, and yet they also seem to run it with no information whatever. Everywhere you turn you are told that they're sorry, they wish they could help you but they don't have the information you need.

You're worried that the bank will not be willing to grant you a loan to attend the university because you have not been accepted by Notre Dame. You're concerned that the scholarship that you won through your father's employment is in jeopardy because you haven't been able to produce a letter of acceptance to Notre Dame. As the days go by and as May comes closer, your concern increases, your frustration increases, and you begin to feel that you just have no information available to you whatsoever. You have the empty feeling in your stomach that you have no

direction that you can go.

You keep thinking, "Someone has the information; someone, somewhere, must know what I want to know but no one seems to know who that person is." You keep hearing about an 'admissions committee.' "Who is on the admissions committee?" You have never gotten an answer to that question. You can't seem to get a name of a professor or an officer or a chairman of that admissions committee. The more you think about it, the more frustrated you become.

Also your life has become more difficult for you in other ways. You're worried about your recent loss in appetite. You are concerned that you sleep very, very restlessly these days. You worry that your concentration on your courses here at Marist has begun to deteriorate noticeably. You're worried about your final marks now, something you never really had to worry about before. You snap at your family. You're finding that Notre Dame really is running your whole world. You watch the mails. Every time the phone rings you think it must be someone calling you, and yet nothing.

You've gone to your counselors, you've gone to your vice-principal, and asked for suggestions. They told you to go on up to Notre Dame, go up to South Bend, see what kind of information you could get. You go and meet nothing but stone walls. You get the same answers in person that you got on the phone. No one seems to know anything.

You become frightened. You become confused. You become angry. You are starting to realize that life for you is just really a very difficult and painful experience right now.

Then you recall that a friend of yours once told you that he went to a therapist for help and he spoke well of his experience. You think to yourself, "This thing is bothering me. Maybe he can help. What have I got to lose?" You decide to consult a therapist.

. . . (pause 5 seconds) . . .

Now we'd like to ask you to reach into your envelope and take out the packet with the pink cover sheets. Continue thinking the thoughts and feeling the feelings described in the problem situation. Then please read the directions and respond to the questions.

CONDITION 3 - Fate

Imagine now that you are in the situation that I am about to describe. Try to think the thoughts and feel the feelings that are presented in this situation.

Imagine that it is toward the end of April in your senior year here at Marist. You are enjoying the Springtime

and looking forward to graduation. You have been accepted at Notre Dame University. You have always wanted to go to Notre Dame, and you are thinking about how nice it will be next Fall.

Part of your acceptance and registration requirements are that you get a physical examination by a physician. You think it's a good idea anyway because you have had a kind of chronic cough and sore throat lately, and you have been a little concerned about that. You go to your physician and he conducts his examination. You're thinking he seems to be spending an awfully long time listening to your chest and looking at your sore throat. You feel your heart jump as he tells you that he is not too happy with what he hears in your lungs, and he would like to send you to a chest specialist. You try to look calm, but your voice is shaky as you ask, "What's happening to me?"

"Well, let's just see what the specialist has to say."

Fortunately, the chest specialist is able to see you within a couple of days. He conducts his examination and tells you that he wants to run some tests because he doesn't like what he hears either. Now you are really worried. It must be serious. "Why me? What's going on?"

After reviewing the results of a whole battery of tests, the chest specialist tells you that he is really sorry to have to inform you that you have a very rare kind of virus.

He says the virus is similar to tuberculosis. You go numb when he tells you that your lungs have been damaged somewhat and that in order to prevent further damage and in order to treat the virus you will have to be isolated and placed in a sanitarium for quite some time. You sit there in the doctor's office and you can't believe this is really happening to you, but you know it is.

You ask him how long you would have to be in this special hospital. "Quite some time," he says, "at least two years."

Two years?

The numbers echo through your brain.

Two years? You think, "My God, what kind of fate is this? What did I do to deserve this? Why me? . . . Two years! . . . Geez, that means I can't go to Notre Dame. I can't go anywhere. Can I see my family? Can I see my girl? Can I see anybody? . . . Two years! . . ."

It seems like forever. You are still in a daze as you thank the doctor and leave his office.

The more you think about it, the more confused you get, the more depressed you get, the more you keep asking yourself over and over again, "Why is this happening? Why is this happening?" You asked the doctor, was it something you ate, was it genetic, did it run in the family or something? He told you, "No, it is a virus, and you are one

of the few that are more susceptible to the virus."

You talk to your folks about it, and they're really upset, and you're upset; why you? You go and talk to your parish priest; he's really a nice guy and has known you since you were a kid. But he really can't help you much either.

Arrangements have been made and you have only a couple days now before you leave for the hospital, and you're still confused. You're not sure what to do, not sure what direction to turn, what to think. You haven't been sleeping well; you haven't been eating well either. You go back to your family physician and he gives you something to help you sleep; but you're still confused about what's going on in your life.

Then you recall that a friend of yours once told you that he went to a therapist for help and he spoke well of his experience. You think to yourself, "This thing is bothering me. Maybe he can help. What have I got to lose?" You decide to consult a therapist.

. . . (pause 5 seconds) . . .

Now we'd like to ask you to reach into your envelope and take out the packet with the pink cover sheets. Continue thinking the thoughts and feeling the feelings described in the problem situation. Then please read

the directions and respond to the questions.

CONDITION 4 - Chance

Imagine now that you are in the situation that I am about to describe. Try to think the thoughts and feel the feelings that are presented in this situation.

Imagine that it is early in the summer and you have just graduated from Marist. You are looking forward to attending Harvard University in the Fall. You have started your summer job and things look good. Ever since you can remember, you have always thought and dreamed about going to Harvard. You've pictured yourself living in Boston and going to Harvard. It's one of the oldest schools in the United States; it's got prestige, a tremendous faculty, tremendous graduates. President Kennedy went to Harvard. You've always wanted to go to Harvard.

Even when you applied to a few other schools, you knew it was mostly just for show. You didn't really care even when they sent you letters of acceptance and you let the deadline for pre-registration pass. You've always wanted to go to Harvard. You have always been preparing for it. You were really pleased when you got the letter from Harvard indicating that your grades were excellent and in order, that your college board scores were very high and

were acceptable to them, and that they were pleased with the letters of recommendation in your file.

You were also very pleased to be told that they had narrowed their list of acceptances to 315 and that you were on that list. You didn't pay too much attention to the part of the letter that told you they could only accept 300. You were sure you were in. And so when the letter came beginning, "We regret to inform you that . . ." you could hardly believe it. You could hardly believe that you were one of the fifteen dropped, that you were not, after all, being admitted to Harvard; that you now were not admitted anywhere. You started to think about it. You read the letter carefully. It said, "at random 300 names were selected from the list of 315." At random. What the hell does that mean? You think to yourself, "Random. Does that mean the flip of a coin? Does that mean some computer flipped a coin and my name is out? Does that mean that because of the flip of a coin all the hopes I ever had, all the dreams I ever had about going to Harvard are now down the drain?"

As time goes on, you begin to get more and more confused, more worried. You ask yourself, "What am I going to do? How can I ever plan anything? Is this the way life is? Is life one big series of flips of the coin? Is chance going to decide everything for me?"

You're really dazed and worried because you are losing sleep and can't eat well. You're worried because your family and friends are beginning to notice changes in you. You wonder what it's all about. What can you do?

Are you supposed to go on 'hold' until a computer decides to flip a coin in your favor? You've tried to talk to people; you've talked to some of your teachers at Marist, and they shrugged their shoulders with you and said, "Gee, that's too bad, sorry to hear that." They couldn't provide an answer why. You talked to your parish priest, a nice old fellow who has known you since you were a kid. He couldn't tell you why. You wonder where you go from here. What can you plan on, what can you do. It's really hard to predict. You're beginning to worry because you're not feeling well, not sleeping well, and can't pinpoint anything other than luck that got you rejected from Harvard. There's no reason; it's just chance; just pure random chance. You wonder what you can do. You're becoming confused and depressed.

Then you recall that a friend of yours once told you that he went to a therapist for help and he spoke well of his experience. You think to yourself, "This thing is bothering me. Maybe he can help. What have I got to lose?" You decide to consult a therapist.

. . . (pause 5 seconds) . . .

Now we'd like to ask you to reach into your envelope and take out the packet with the pink cover sheets. Continue thinking the thoughts and feeling the feelings described in the problem situation. Then please read the directions and respond to the questions.

APPENDIX D

Packet #1, Descriptions of Kappa and Epsilon

PACKET #1

This packet includes descriptions of two types of therapy. For the sake of this study we will refer to them as Kappa and Epsilon to designate the two different approaches to therapy.

Please read each very carefully. You will have approximately fifteen minutes to study both descriptions very thoroughly. At the end of the time period you will be given a test to allow you to assess your understanding of each therapy.

KAPPA THERAPY

I INTRODUCTION

Kappa therapy focuses on a client's ability to seek out and to find various alternative solutions to his problem(s). Together the Kappa therapist and the client try to consider alternative thoughts and behaviors which will provide him a "better" understanding of the nature of his problems and ways of changing them.

The central assumption of Kappa therapy is that there are many different ways of thinking about events and, therefore, many possible ways to behave. Man develops psychological problems when he continues to think and behave in the same ways, even though those ways have proven to be continually ineffective. Man has, however, the ability to find solutions to his problems by learning to generate and to consider alternatives so that he can choose the one which might be most appropriate or "best" for him.

II OVERVIEW OF PROCESS

A. Goals

The overall goal of Kappa therapy is to provide an opportunity for a client and the therapist to try to understand the client, and to assist him in considering alternative solutions to his problems. The most important means of handling problems effectively is to learn to consider

alternative thoughts and behaviors so that the client learns new ways of dealing with troublesome situations.

In addition to assisting the client to solve immediate problems, Kappa therapy also aims to provide the client with the practiced skill of generating thoughts and behaviors so that he can avoid what would formerly have been potential problems.

At the end of therapy, the client doesn't have 'the answer,' but rather has a vantage point for a wider, more comprehensive view of his potentials.

B. Flavor

By focusing on the client and therapist's search for alternatives, the overall flavor of Kappa therapy is the atmosphere of an experimental, exploratory venture. In this experimental, exploratory environment both the client and the therapist generate and test new solutions for the problems the client brings to therapy.

In this therapeutic atmosphere of scientific experimentation the client can learn to anticipate alternative thoughts and behaviors, and their impact. The client brings his recent day to day experiences to therapy, and along with his therapist examines those experiences in the atmosphere of an exploratory venture. The Kappa therapist encourages the client to keep in touch with others so that he may learn more about how they view 'their world.' Because of the

contact with the therapist, this atmosphere of scientific experimentation opens up new types of experiences for the client.

Sometimes, especially for clients who have particular difficulty in generating alternatives, a Kappa therapist might ask the person to approach problem situations as someone he admires might approach those problem situations. This, in turn, makes it easier for the client to learn to consider situations from different vantage points.

III THERAPIST'S RESPONSIBILITIES

The Kappa approach to therapy emphasizes the therapist's skills and ability to understand the client's needs, and to help him generate alternative ways of looking at his problems, as well as possible outcomes and implications of the client's thoughts and behaviors. The client is helped to obtain the greatest possible benefit from the experimentation he does with the therapist.

During therapy the Kappa therapist presents the client with difficult life situations. Together they attempt to resolve their problems in a manner which is in the best interest of the client. This technique is designed to "pull" the client through the normal succession of life experiences at an accelerated pace.

In a similar manner, the therapist also presents the client with past situations to offer the client the opportunity of generating new alternatives. In effect, then, the client has the opportunity to practice considering alternatives to both the present and former problem situations.

The Kappa therapist also serves as a representative of the social world. He provides a human reaction typical of the reactions a client is likely to meet outside of therapy. The therapist, however, would never condemn, reject or approve the client's thoughts, behaviors, or any of the alternatives the client has generated. His role is only to inquire and to examine, always with the goal of teaching the client to inquire about and to examine his own alternatives.

IV CLIENT'S RESPONSIBILITIES

The client in Kappa therapy comes to view the therapy session as an opportunity in which he and the therapist generate and evaluate alternative ways of considering the problems of the client. The client also views his therapy session as the appropriate place to report whatever changes have occurred as a result of their work together, and as a result of the client's experiences outside of therapy.

The client brings to therapy feedback he receives from others as a result of changes he has made. He would also be encouraged to offer any questions or comments he has

regarding the changes he is experiencing.

Kappa therapy views the client as the central figure in his own therapy. He collects feedback on his behavior, suggests adjustments and decides which, if any, of the alternatives considered in therapy are useful and should be maintained.

In sum in Kappa therapy a client learns a scientific method (generating alternatives, trying some out, getting feedback) for the solution of the problems or difficulties he is facing.

EPSILON THERAPY

I INTRODUCTION

Epsilon therapy focuses on the therapist's ability to help a client change whatever irrational thinking, inappropriate feelings and self-defeating behaviors are causing his problem(s). The Epsilon therapist maintains that people's problems are largely a direct result of irrational thinking. The therapist attempts to recognize the irrational thinking which is causing a client difficulty and to help him think more rationally and change.

Epsilon therapy assumes that man is naturally rational as well as naturally irrational. When he is thinking and behaving rationally, man tends to be more effective, happy and competent. When he is thinking and behaving irrationally, man tends to be ineffective, unhappy and incompetent.

Man's irrational thinking largely originates in his inborn tendency to think irrationally and in the early learning which he acquires from his culture and from his environment. When man accepts these irrational thoughts as part of his everyday way of life, instead of actively disputing and changing them, those thoughts cause him problems. The Epsilon therapist views man as having the ability to avoid or eliminate most emotional disturbance or unhappiness by learning to think more rationally.

II OVERVIEW OF PROCESS

A. Goals

The overall goal of Epsilon therapy is to identify and to eliminate the most troublesome irrational thoughts that the client has. Some of these almost universally accepted irrational thoughts are:

1. I must perform competently and be approved or loved by everyone who is important to me, or else I am a rotten person.
2. Others must treat me kindly, considerately and fairly, and if they don't they are bad people and should be punished.
3. My life must be easy and comfortable, and it is terrible, horrible and awful when things do not go the way I would like them to go.

These thoughts, as well as others, are irrational because they are unrealistic and impossible to live up to, or simply wrong.

The Epsilon therapist maintains that it is not situations which directly upset people, but rather the irrational ideas people experience in certain situations. It is the task of the Epsilon therapist to help a client change his self-defeating thoughts and behaviors so that his thinking and behaving become logical and rational, and so that his emotional reactions become more appropriate.

B. Flavor

By focusing on the client's irrational thinking, Epsilon therapy basically consists of curing unreason with reason by

teaching appropriate feelings, and by requiring the practice of more satisfying behaviors. The overall atmosphere in which Epsilon therapy is conducted is one of "re-education." Re-education in straight thinking, appropriate feeling, and satisfying behaving, replaces the biologically pre-disposed and the early illogical learning the client had acquired. Once old irrational thought patterns are identified and rejected, more rational thought patterns are substituted so that a client is able to avoid or eliminate most problems by thinking straight, and behaving in new ways.

Some of the main steps in Epsilon therapy are:

1. To identify a client's irrational thoughts, and to help him understand how and why he thinks irrationally. A client is then prepared to see the relationship between his irrational thinking and his unhappiness or disturbance.
2. To show a client no matter how or when he started thinking irrationally, he is maintaining his disturbance by continuing to think illogically.
3. To help a client change his thinking, to abandon his irrational ideas and to adopt more rational ways of looking at his problems.

III THERAPIST'S RESPONSIBILITIES

The Epsilon approach to therapy assumes that clients have the capacity for growth and health, but the potential is so held back by long-standing irrational attitudes, beliefs and emotions that only an active, direct effort on

the part of the therapist will be significantly more effective in uncovering and utilizing that potential than will be passive or non-directive methods of therapy.

The therapist assumes an active teaching role to re-educate a client. He uses logic, reason, teaching, suggestion, persuasion, confrontation and homework assignments of reading and behaving to show clients what their irrational beliefs are, how they have led to present problems, and how to change them. The Epsilon therapist continually unmask past and especially present irrational thinking.

Thus an Epsilon therapist makes a concerted attack on the client's illogical positions in two main ways: 1) the therapist serves as a frank counter-propagandist who directly contradicts and invalidates the irrational beliefs and superstitions which the client originally learned. 2) The therapist encourages, persuades, cajoles and urges that the client engage in some assigned activities which will serve as forceful counter-propaganda against the irrationalities he believes.

V CLIENT'S RESPONSIBILITIES

A client in Epsilon therapy is assigned readings to broaden the base of knowledge he has built with his therapist. A client is urged to learn the principles of Epsilon therapy well so that he can begin to identify the irrational ideas

he is having.

Once a client begins to identify the irrationalities, he is now able to challenge them and continually change them by replacing them with more rational behaviors, thoughts and feelings.

A client concludes therapy encouraged to continue reading Epsilon materials and to continue to identify and to challenge his irrational thoughts, to acknowledge and to change his inappropriate feelings, and to engage in more satisfying behaviors.

APPENDIX E

Comprehension Test on Packet #1

DIRECTIONS:

Below you will find twenty questions based on the material you have just read on Kappa Therapy and Epsilon Therapy. Please read each question carefully, review all the possible answers offered, and select the option that best answers each item. Blacken the letter of your choice in the appropriate space on the accompanying answer sheet. Please be sure to use the pencil provided you.

1. Kappa Therapy tends to have primarily a:
 - a) teaching approach
 - b) disconfirming approach
 - c) scientific approach
 - d) comforting approach
2. The goal of the Epsilon Therapist is:
 - a) to replace the client's negative, self-defeating thoughts and behaviors
 - b) to teach the client to be consistent in his behavior
 - c) to recognize and help the client evaluate possible implications and outcomes
 - d) to change the client's environment
3. The Epsilon Therapist maintains that people's problems are a direct result of:
 - a) parental influence
 - b) feelings of inadequacy
 - c) irrational thinking
 - d) lack of love
4. According to Epsilon Therapy, man's irrational thinking is largely a result of:
 - a) a domineering, authoritative mother
 - b) a permissive childhood environment
 - c) brain injury or cerebrovascular accident
 - d) an inborn tendency and early learning

5. In Kappa Therapy it is important that the therapist:
 - a) approve the client's behavior
 - b) reject the client's irrational ideas
 - c) disapprove some of the client's alternative solutions
 - d) examine the client's alternative solutions with him
6. The goal of Kappa Therapy is:
 - a) to help the client develop straight thinking
 - b) to help the client acquire listening skills
 - c) to help the client understand how his problems originated
 - d) to help the client examine many different ways of thinking and behaving
7. At the conclusion of Kappa Therapy, the client is encouraged to:
 - a) use the scientific method (experimentation) to solve problems
 - b) establish deep and lasting friendships
 - c) become more spontaneous in his choices
 - d) do careful and consistent monitoring of his irrationalities
8. One of the main ways the Epsilon Therapist attacks the client's illogical thinking is:
 - a) by directly contradicting the irrational beliefs and superstitions the client has learned
 - b) by encouraging the client to talk about his beliefs in order to uncover the unconscious
 - c) by inviting the client to generate as many alternative thoughts as he can
 - d) by directing all his attention to his past failures
9. Epsilon Therapy has as the overall goal the:
 - a) identification and elimination of the client's most upsetting irrational thoughts, feelings and behaviors
 - b) identification of possible alternatives
 - c) identification of more sociable acts
 - d) identification of the client's emotions

10. The focus of Kappa Therapy is on the:
 - a) therapist's ability to teach learning skills
 - b) client's ability to trust the therapist
 - c) client's ability to seek and evaluate alternative solutions to problems
 - d) therapist's ability to teach the client to express his feelings
11. The client reads about and learns the principles of Epsilon Therapy to:
 - a) make deeper and more lasting relationships
 - b) identify and challenge irrational ideas he is having
 - c) be able to interpret his own dreams
 - d) be able to instruct others who are having problems
12. The Kappa Therapist, with the client:
 - a) considers the client's feelings to better understand why the client acts as he does
 - b) considers changing the environment so it won't be threatening to the client
 - c) seeks out the irrational thoughts that are the cause of the client's difficulties
 - d) considers alternative thoughts and behaviors to provide better ways of solving the problem
13. The Epsilon Therapist strives to unmask past and especially present:
 - a) behavioral alternatives
 - b) communication difficulties
 - c) repressed guilt feelings
 - d) irrational thinking
14. In Epsilon Therapy the therapist's role is chiefly one of:
 - a) listening to whatever the client wants to discuss
 - b) experimenting by asking the client to assume the role of someone he admires
 - c) teaching the client a more rational approach
 - d) comforting the client in his distress

15. The overall environment of Epsilon Therapy is one of:
 - a) experimentation
 - b) re-education
 - c) affirmation
 - d) confrontation
16. In Kappa Therapy the problem is seen as being due to:
 - a) unfulfilled affectional needs
 - b) continuing to think and behave in ineffective ways
 - c) inborn biological tendencies
 - d) a harsh or cruel environment
17. According to Epsilon Therapy, man is effective, happy and competent when:
 - a) his affectional needs are fulfilled
 - b) he thinks and behaves rationally
 - c) he successfully generates alternatives
 - d) he reaches the stage where everyone likes him
18. The Kappa Therapist presents the client with past problem situations to offer the client the opportunity to:
 - a) re-experience the feelings he had in those situations
 - b) discover the irrational thinking he engaged in at that time
 - c) resolve whatever guilt there might still be
 - d) generate alternative solutions he might have employed more effectively
19. During Kappa Therapy sessions the client:
 - a) reports whatever changes have occurred, and the feedback he receives from others
 - b) reports whatever irrational beliefs have been influencing his behaviors
 - c) concentrates on past experiences
 - d) concentrates on the therapist's evaluation
20. The Kappa Therapist assumes that:
 - a) the client is naturally rational as well as irrational
 - b) the client's parents are ultimately the source of his problems
 - c) the client will overcome his difficulties if he receives enough love and affection
 - d) the client has the ability to solve problems by choosing the best of many possible solutions for him

APPENDIX F
Research Questionnaire

RESEARCH QUESTIONNAIREDirections:

Thank you for all your efforts so far. Now we have arrived at the heart of this research project. Your responses to the questions that follow are crucial in helping to evaluate the two therapies presented above.

You will notice that several items below address the same concepts from only slightly different points of view. With each item we are interested in your immediate impression. Please respond to each item as you think at that moment, without referring to other items.

Two other things are essential in responding to the items that follow these directions:

1. that you continue to imagine yourself in the problem situation described above;
2. that you place the mark indicating the response of your choice in the appropriate column on the answer sheet. As you know, computer scoring is a very sensitive process -- please blacken only the bracketed area of your choice.

Now please take a moment and try to imagine yourself in the problem situation once again. Then proceed with item #1 and continue to the end. Thank you very much.

1. With this particular problem, I would:
 - 0 strongly prefer Epsilon Therapy
 - 1 moderately prefer Epsilon Therapy
 - 2 only slightly prefer Epsilon Therapy
 - 3 have no preference
 - 4 only slightly prefer Kappa Therapy
 - 5 moderately prefer Kappa Therapy
 - 6 strongly prefer Kappa Therapy

2. Therapist X would neither condemn nor approve; Therapist Y would serve as a frank counter-propagandist who contradicts and invalidates.
 - 0 I strongly agree with Therapist X
 - 1 I moderately agree with Therapist X
 - 2 I only slightly agree with Therapist X
 - 3 I have no opinion
 - 4 I only slightly agree with Therapist Y
 - 5 I moderately agree with Therapist Y
 - 6 I strongly agree with Therapist Y

3. Therapy A's goal is to identify and eliminate the most troublesome irrational thoughts; Therapy B's goal is to assist in considering alternative solutions.
 - 0 I strongly agree with Therapy A
 - 1 I moderately agree with Therapy A
 - 2 I only slightly agree with Therapy A
 - 3 I have no opinion
 - 4 I only slightly agree with Therapy B
 - 5 I moderately agree with Therapy B
 - 6 I strongly agree with Therapy B

4. Therapy X emphasizes your questions and comments on changes that are being made; Therapy Y emphasizes your learning to identify continuing irrational ideas.
 - 0 I strongly agree with Therapist X
 - 1 I moderately agree with Therapist X
 - 2 I only slightly agree with Therapist X
 - 3 I have no opinion
 - 4 I only slightly agree with Therapist Y
 - 5 I moderately agree with Therapist Y
 - 6 I strongly agree with Therapist Y

5. How well were you able to imagine yourself in this problem situation?
- 0 not at all able
 - 1 barely able
 - 2 only somewhat able
 - 3 more or less able
 - 4 fairly able
 - 5 almost fully able
 - 6 fully able
6. How interesting were the descriptions of the two therapies?
- 0 extremely interesting
 - 1 very interesting
 - 2 fairly interesting
 - 3 more or less interesting
 - 4 only somewhat interesting
 - 5 not very interesting
 - 6 not at all interesting
7. In my opinion, in choosing the therapist who would help me most with this problem, I would:
- 0 strongly prefer a Kappa Therapist
 - 1 moderately prefer a Kappa Therapist
 - 2 only slightly prefer a Kappa Therapist
 - 3 have no preference
 - 4 only slightly prefer an Epsilon Therapist
 - 5 moderately prefer an Epsilon Therapist
 - 6 strongly prefer an Epsilon Therapist
8. Therapist A views himself as more a teacher than anything else; Therapist B views himself as more a fellow experimenter than anything else.
- 0 I strongly agree with Therapist A
 - 1 I moderately agree with Therapist A
 - 2 I only slightly agree with Therapist A
 - 3 I have no opinion
 - 4 I only slightly agree with Therapist B
 - 5 I moderately agree with Therapist B
 - 6 I strongly agree with Therapist B

9. The overall atmosphere of Therapy X is that of an experimental, exploratory venture; the overall atmosphere of Therapy Y is one of 're-education.'
- 0 I strongly agree with Therapy X
 - 1 I moderately agree with Therapy X
 - 2 I only slightly agree with Therapy X
 - 3 I have no opinion
 - 4 I only slightly agree with Therapy Y
 - 5 I moderately agree with Therapy Y
 - 6 I strongly agree with Therapy Y
10. Therapy A teaches to identify and challenge irrational thinking, acknowledge and change inappropriate feelings and to engage in more satisfying behavior; Therapy B teaches the scientific method (generate alternatives, try some out, get feedback).
- 0 I strongly agree with Therapy A
 - 1 I moderately agree with Therapy A
 - 2 I only slightly agree with Therapy A
 - 3 I have no opinion
 - 4 I only slightly agree with Therapy B
 - 5 I moderately agree with Therapy B
 - 6 I strongly agree with Therapy B
11. Theory X holds that you can best overcome this problem by curing unreason with reason; Theory Y holds that you can best overcome this problem by evaluating all the possible alternative solutions.
- 0 I strongly agree with Theory X
 - 1 I moderately agree with Theory X
 - 2 I only slightly agree with Theory X
 - 3 I have no opinion
 - 4 I only slightly agree with Theory Y
 - 5 I moderately agree with Theory Y
 - 6 I strongly agree with Theory Y
12. While participating in this project, I concentrated on the material presented about:
- 0 95% of the time
 - 1 80% of the time
 - 2 70% of the time
 - 3 50% of the time
 - 4 35% of the time
 - 5 20% of the time
 - 6 5% or less of the time

13. At the conclusion of this project, I might
- 0 ask to be included as a participant in a similar project on therapy
 - 1 be willing to participate if I were aware of another similar project
 - 2 participate if asked
 - 3 participate if asked by a researcher
 - 4 participate if asked by a friend
 - 5 participate only as a special favor to a friend
 - 6 not participate under any circumstances
14. In terms of the effort that I put into this project, I would say that I
- 0 worked to the best of my ability
 - 1 worked very hard
 - 2 worked fairly hard
 - 3 made an effort
 - 4 made at least some effort
 - 5 didn't make too much of an effort
 - 6 really didn't make any effort
15. Theory A assumes that the problem is due to accepting irrational thinking; Theory B assumes that it is due to continuing to think and behave in ways that are no longer effective.
- 0 I strongly agree with Theory A
 - 1 I moderately agree with Theory A
 - 2 I only slightly agree with Theory A
 - 3 I have no opinion
 - 4 I only slightly agree with Theory B
 - 5 I moderately agree with Theory B
 - 6 I strongly agree with Theory B
16. Therapy X maintains that sessions are opportunities to generate and evaluate alternative solutions; Therapy Y maintains that sessions involve identifying irrational ideas and replacing them with more rational ideas.
- 0 I strongly agree with Therapy X
 - 1 I moderately agree with Therapy X
 - 2 I only slightly agree with Therapy X
 - 3 I have no opinion
 - 4 I only slightly agree with Therapy Y
 - 5 I moderately agree with Therapy Y
 - 6 I strongly agree with Therapy Y

17. In this problem situation, Therapy A would provide you a more rational approach; Therapy B would attempt to help you to evaluate a wide range of approaches.
- 0 I strongly agree with Therapy A
 - 1 I moderately agree with Therapy A
 - 2 I only slightly agree with Therapy A
 - 3 I have no opinion
 - 4 I only slightly agree with Therapy B
 - 5 I moderately agree with Therapy B
 - 6 I strongly agree with Therapy B
18. How successful were you at avoiding distractions while imagining the situation?
- 0 not at all successful
 - 1 barely successful
 - 2 only somewhat successful
 - 3 more or less successful
 - 4 fairly successful
 - 5 almost fully successful
 - 6 fully successful
19. How well were you able to imagine feeling as in the situation?
- 0 not at all able
 - 1 barely able
 - 2 only somewhat able
 - 3 more or less able
 - 4 fairly able
 - 5 almost fully able
 - 6 fully able
20. How similar is the described problem to any you may have encountered?
- 0 not at all similar
 - 1 barely similar
 - 2 only somewhat similar
 - 3 more or less similar
 - 4 fairly similar
 - 5 very similar
 - 6 extremely similar

21. All things considered, in seeking help for this problem, I would:
- 0 strongly prefer Epsilon Therapy
 - 1 moderately prefer Epsilon Therapy
 - 2 only slightly prefer Epsilon Therapy
 - 3 have no preference
 - 4 only slightly prefer Kappa Therapy
 - 5 moderately prefer Kappa Therapy
 - 6 strongly prefer Kappa Therapy
22. Therapy X encourages challenging irrational thoughts and replacing them with more rational thoughts; Therapy Y encourages getting feedback on alternatives considered and choosing which, if any, are useful and should be maintained.
- 0 I strongly agree with Therapy X
 - 1 I moderately agree with Therapy X
 - 2 I only slightly agree with Therapy X
 - 3 I have no opinion
 - 4 I only slightly agree with Therapy Y
 - 5 I moderately agree with Therapy Y
 - 6 I strongly agree with Therapy Y
23. Therapy A assumes that at the end of therapy you'll be better able to generate and evaluate ways of doing things; Therapy B assumes that you'll be better able to spot and change irrational thoughts and behaviors.
- 0 I strongly agree with Therapy A
 - 1 I moderately agree with Therapy A
 - 2 I only slightly agree with Therapy A
 - 3 I have no opinion
 - 4 I only slightly agree with Therapy B
 - 5 I moderately agree with Therapy B
 - 6 I strongly agree with Therapy B
24. How successful were you at maintaining the thoughts that were described?
- 0 not at all successful
 - 1 barely successful
 - 2 only somewhat successful
 - 3 more or less successful
 - 4 fairly successful
 - 5 almost fully successful
 - 6 fully successful

25. How well were you able to imagine that you were in this situation and were having the problem described?
- 0 not at all able
 - 1 barely able
 - 2 only somewhat able
 - 3 more or less able
 - 4 fairly able
 - 5 almost fully able
 - 6 fully able
26. The overall goal of Therapy X is to identify and eliminate the most troublesome irrational thoughts at the root of this problem; the overall goal of Therapy Y is to provide understanding and assistance in considering alternative solutions to this problem.
- 0 I strongly agree with Therapy X
 - 1 I moderately agree with Therapy X
 - 2 I only slightly agree with Therapy X
 - 3 I have no opinion
 - 4 I only slightly agree with Therapy Y
 - 5 I moderately agree with Therapy Y
 - 6 I strongly agree with Therapy Y
27. Therapist A would expect you to learn to identify and challenge any irrational thoughts you might have; Therapist B would expect you to learn to generate and try alternative solutions to your problem.
- 0 I strongly agree with Therapist A
 - 1 I moderately agree with Therapist A
 - 2 I only slightly agree with Therapist A
 - 3 I have no opinion
 - 4 I only slightly agree with Therapist B
 - 5 I moderately agree with Therapist B
 - 6 I strongly agree with Therapist B
28. In contacting a therapist to help me with this problem, I would:
- 0 strongly prefer a Kappa Therapist
 - 1 moderately prefer a Kappa Therapist
 - 2 only slightly prefer a Kappa Therapist
 - 3 have no preference
 - 4 only slightly prefer an Epsilon Therapist
 - 5 moderately prefer an Epsilon Therapist
 - 6 strongly prefer an Epsilon Therapist

29. In general, how realistic would you say this problem situation might be?

- 0 not at all realistic
- 1 barely realistic
- 2 only somewhat realistic
- 3 more or less realistic
- 4 fairly realistic
- 5 almost fully realistic
- 6 fully realistic

30. On the whole, I found this project to be:

- 0 extremely interesting
- 1 very interesting
- 2 fairly interesting
- 3 more or less interesting
- 4 only somewhat interesting
- 5 not very interesting
- 6 not at all interesting

APPENDIX G
Qualitative Data Sheet

Name: _____ Student Number: _____

1. What part of this research project did you find the MOST interesting?
2. What part of this research project did you find the LEAST interesting?
3. What about Kappa Therapy impressed you:
favorably?

unfavorably?
4. What about Epsilon Therapy impressed you:
favorably?

unfavorably?
5. What about the problem situation that you imagined seemed most important, or stands out most in your mind?
6. Have you ever had a problem like this before?
7. What would be your estimate of the percentage of men your age who have had this particular problem? _____ %
8. Have you made a tentative choice for your career? If yes, what are your present plans?

9. Please rank order the following in terms of the amount of influence it had in your preference of therapy (e.g., 1 = most influence; 2 = next most influence;)

_____ the nature of the problem or situation
_____ really liked Kappa therapy
_____ really liked Epsilon therapy
_____ really disliked Kappa therapy
_____ really disliked Epsilon therapy

Any other factors?

10. Please circle any of the following names you have heard or read about:

Carl Rogers
Albert Ellis
Sigmund Freud
George Kelly
M. C. Balouse

APPENDIX H
Administration Manual

ADMINISTRATION MANUAL

This manual contains detailed instructions about the conducting of this experimental session. Please read it over carefully. The more thoroughly familiar you are with the overall procedure, the more readily you will be able to handle any questions students might ask.

PRELIMINARIES

After the students are seated and any administrative procedures have been attended to (an attendance list is included in the Experimental Kit), please distribute an individual brown Manila envelope to each student, asking them not to open them until requested.

When all the students have a Manila envelope, please ask them to open the envelopes and remove the pencils. (Since the answer sheets used in the experiment are to be computer-scored, it is essential that the students use the pencils provided.) Please request that they record their name and student number on the envelope in the spaces provided on the back flap. (Students can find their identification numbers printed on their school ID cards.) Then please call their attention to the cassette tape you are about to play. Indicate that the tape will introduce the research project they're being asked to help with.

PHASE I -- TAPED INTRODUCTION

When the students are at attention, please begin to play the cassette tape, SIDE A. The introduction -- this segment lasts approximately four minutes and forty-five seconds -- will welcome the students to the research project, and thank them for their participation.

The introductory remarks will indicate some basic facts about what psychotherapy is, and will instruct the students that they are being asked to evaluate two different approaches to helping people in psychotherapy. At the end of the first segment, the tape will ask the students to open their envelopes and remove Packet #1 (yellow cover sheet). PLEASE SEE THAT THEY REMOVE ONLY PACKET#1. AT THIS POINT PLEASE PRESS THE 'STOP' BUTTON ON THE PLAYER, LEAVING THE TAPE IN POSITION. The tape will ask the students to spend approximately fifteen minutes carefully reading the material. Please monitor the time and, according to the students' needs, after about fifteen minutes, ask the students to remove the blue-colored packet from their envelopes. This packet contains a test on the material just read, and an answer sheet. Please remind the students to put their names and student numbers on the answer sheets. The test is not timed.

PHASE II -- IMAGINATION SEQUENCE

When the students are finished with the test, please

collect the answer sheets and place them in the appropriately marked envelope in the Kit. Please ask the students to return the blue packet to their envelopes.

Please call their attention once again, and invite them to listen to the tape you are about to play. When they are prepared, please start the cassette player. (The tape should be in the exact same position it was just before the students began to read Packet #1.)

This segment of the tape (which lasts approximately sixteen minutes and five seconds) will describe the importance of creative imagination, teach some imaginative skills, and present a sample exercise in imagining. As the tape will explain, this is to prepare the students to imagine that they are having the clinical problem to be described on Side B of the tape.

During this part of the study, it is of absolute importance that all the students are at maximum attention. If you anticipate that there will be an interruption (e.g., other students in the hallways changing classes), please delay starting this section of the study.

At the end of the taped sequence describing an imagination scene involving a meadow, the tape will request that you run it to the end of Side A on "fast forward," turn the tape over, and immediately press the "play" button to start Side B. On Side B there will be a detailed description of a clinical

problem which the students will be asked to imagine.

After the presentation of the "problem," the tape will request the students to reach into their envelopes and remove the packet with the pink sheets. This packet is entitled Research Questionnaire. (While they are doing that, please switch off the tape player -- it will not be employed further in the experiment.) The Research Questionnaire has its own answer sheet (8½ x 11). AGAIN, PLEASE REQUEST THE STUDENTS TO INDICATE THEIR NAMES AND STUDENT NUMBERS IN THE SPACES PROVIDED AT THE TOP RIGHT-HAND SIDE OF THE ANSWER SHEET.

AFTER ALL THE STUDENTS HAVE ANSWERED THE 30 QUESTIONS ON THE RESEARCH QUESTIONNAIRE, PLEASE COLLECT THE LARGE ANSWER SHEETS AND PLACE THEM IN THE APPROPRIATELY LABELLED ENVELOPE IN THE KIT.

THEN PLEASE REQUEST THAT THE STUDENTS REMOVE THE ONE PAGE QUESTIONNAIRE (WHITE SHEET) FROM THEIR ENVELOPES, AND RESPOND TO THE ITEMS. When they are finished with those, please ask them to return all their materials to their envelopes, and return the envelopes to your Kit.

With the time remaining, we would very much appreciate it if you would discuss the experiment with the students. Your observations, comments and summaries of student responses will be most welcome.

Thank you, very much for your patience and assistance.

APPENDIX I
Table 24

Table 24

Percentage of participants ranking 'the problem' as exerting the greatest influence on their therapeutic preference

<u>N</u> = 215				
Treatment Condition	<u>n</u>	Missing Observations	<u>n</u> ranking problem 1st	%
Condition 1	51	8	33	77%
Condition 2	55	3	26	50%
Condition 3	60	7	23	43%
Condition 4	49	7	42	74%
Totals	215	25	111	58%