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**LA THÈSE A ÉTÉ
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Relative Preference for Two Cognitively-Oriented
Therapeutic Approaches to Problems of Shyness as
a Function of Locus of Control

by Michael Fatis

Dissertation presented to the School of
Graduate Studies of the University of
Ottawa in partial fulfillment of the
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CURRICULUM STUDIORUM

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TABLE OF CONTENTS

Chapter	Page
I Introduction	1
Review of the Literature	3
Shyness: Theoretical Considerations and Prevalence	3
Cognitively-Oriented Therapeutic Approaches and Preference	12
Introduction to Cognitively-Oriented Approaches to Therapy	12
Client Preference for Therapy	15
The Cognitively-Oriented Approaches of George A. Kelly and Albert Ellis	17
Basic Theoretical Constructs: George A. Kelly	19
Treatment of Shyness Based on Kelly's Approach	22
Basic Theoretical Constructs: Albert Ellis	23
Treatment of Shyness Based on Ellis' Approach	27
Contrasts Between the Two Approaches	28
Locus of Control and Social Learning Theory: A Framework for Investigating Relative Preference for Therapy	31
Methodological Considerations: Muted Role-Taking	41
Purpose of the Present Investigation, Statement of the Problem and Hypotheses	43

Chapter	Page
Purpose of the Present Investigation	43
Statement of the Problem and Hypotheses	46
II Research Design	48
Participants	48
Materials	49
Pretest Measures	49
Research Instruments	54
Audio-Taped Presentations	57
Procedure	58
Preparatory Considerations	58
Experimental Run	60
III Presentation of Results	62
Preliminary Data Analysis	62
Pretest Measures	62
Comprehension Test	65
Factor Analysis of Research Questionnaire	65
Factor Analysis of 'Involvement' Items	65
The Imagination Scale	66
The Interest Scale	69
Factor Analysis of 'Preference' Items	69
The Preference Evaluation Scale	72
The Judgement Scale	72
The Experimenter-Teacher Scale	75

Chapter	Page
t-tests on Means of Defensive and Passive Externals	75
Pearson Product-Moment Correlation between I-E Scale Scores and Comprehension Test Scores	77
Testing of the Hypotheses	79
Analysis of Variance on the Preference Evaluation Scale	80
Analysis of Variance on the Judgement Scale	82
Analysis of Variance on the Experimenter- Teacher Scale	84
Summary of Findings	98
IV Discussion	99
Discussion of Findings	99
Limitations on Interpretation of Results	106
Suggestions for Future Research	107
Abstract	109
References	111
Appendices	122
Appendix A: Internal-External Locus of Control Scale	122
Appendix B: Interpersonal Trust Scale	128
Appendix C: Stanford Survey on Shyness	134
Appendix D: Experimental Tapes, Sides A and B	146
Appendix E: Packet #1, Descriptions of Kappa and Epsilon	170

Chapter	Page
Appendix F: Comprehension Test on Packet #1	182
Appendix G: Research Questionnaire	187
Appendix H: Qualitative Data Sheet	196
Appendix I: Administrative Manual	199
Appendix J: Table 24	204
Appendix K: Table 25	206

LIST OF TABLES

Table		page
1	Cell totals following the assignment of participants to treatment condition by locus of control designation	50
2	Type of shyness problem and presentation time by treatment condition	59
3	Designation of participants as internals, moderates or externals on the basis of scores on Rotter's Internal - External Locus of Control Scale	63
4	Varimax rotated factor structure of research questionnaire items measuring participants' levels of 'involvement' in the project	67
5	Means, standard deviations and factor loadings of research questionnaire items comprising the imagination scale	68
6	Means, standard deviations and factor loadings of research questionnaire items comprising the interest scale	70
7	Varimax rotated factor structure of research questionnaire items measuring participants' 'preference' for the therapeutic approaches of Kelly and Ellis	71
8	Means, standard deviations and factor loadings of research questionnaire items comprising the preference evaluation scale	73
9	Means, standard deviations and factor loadings of research questionnaire items comprising the judgement scale	74
10	Means, standard deviations and factor loadings of research questionnaire items comprising the experimenter-teacher scale	86

Table

page

11	Results of t-tests comparing the mean scores of participants designated as defensive externals and those designated as passive externals with reference to specific scales on the research questionnaire	78
12	Results of analysis of variance for the preference evaluation scale of the research questionnaire: Level of locus of control by sex encounter by situational-dispositional	81
13	Results of analysis of variance for the judgement scale of the research questionnaire: Level of locus of control by sex encounter by situational-dispositional	83
14	Results of analysis of variance for the experimenter-teacher scale of the research questionnaire: Level of locus of control by sex encounter by situational-dispositional	85
15	Means and standard deviations for the preference evaluation scale scores of the research questionnaire and number of participants per cell: Locus of control designation by other sex-same sex encounter	87
16	Results of t-tests comparing scores from the preference evaluation scale of the research questionnaire for participants in the other sex-same sex encounter condition when participants are grouped by locus of control designation	88
17	Results of analysis of variance for the preference evaluation scale of the research questionnaire: Level of locus of control by other sex encounter	89
18	Results of analysis of variance for the preference evaluation scale of the research questionnaire: Level of locus of control by same sex encounter	91

Table		page
19	Scheffe post hoc comparisons of preference evaluation scale score means of participants in the same sex encounter condition by locus of control designation	92
20	Pearson product-moment correlations between I-E Scale scores, comprehension test scores, imagination scale scores (research questionnaire) and interest scale scores (research questionnaire)	93
21	Results of analysis of variance for the imagination scale of the research questionnaire: Level of locus of control by sex encounter by situational-dispositional	95
22	Results of analysis of variance for the interest scale of the research questionnaire: Level of locus of control by sex encounter by situational-dispositional	96
23	Scheffe post hoc comparisons of interest scale score means by locus of control designation	97
24	Power values of F ratios on the preference evaluation, judgement and experimenter-teacher scales of the research questionnaire for the main effects of level of locus of control, sex encounter and situational-dispositional	205
25	Results of t-tests comparing participants' preferences for the therapeutic approaches of Kelly or Ellis as indicated on the preference evaluation, judgement and experimenter-teacher scales of the research questionnaire	207

Figure

1	Flow chart illustrating research procedure	51
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CHAPTER ONE

Introduction

The increasing complexity of human society in the 1970's, with its advances in technological sophistication, has resulted in increasingly greater difficulty in fulfilling social needs (Coleman, 1976). Prospects for enduring and mutually supportive relationships become lessened with increased mobility. Social scientists, investigating the dynamics of human relationships, have been yielding insights into the problems faced by modern man. One such major problem is the phenomenon of shyness. Increasingly, shyness has emerged as a contemporary social-psychological phenomenon of concern. Both the popular media as well as literature in the social sciences reflect a growing concern for the painfully inhibiting, restrictive, lives that many shy people experience. Preliminary surveys among high school and college students suggest that the incidence of shyness is at such epidemic proportions as to be called, justifiably, a social disease; moreover, there is evidence that shyness problems will increase as social forces increase isolation, competition and loneliness (Zimbardo, 1977).

The growing concern for the plight of the numerous people who suffer from problematic shyness is

reflected by recent recommendations that psychotherapeutic procedures may be applied, beneficially, for problematic shyness. Investigators speaking from a social-psychological perspective have suggested that cognitively-oriented therapeutic approaches may effectively address the problem of shyness. By focusing on cognitions, attributions and behaviors which serve to maintain shyness rather than on global personality traits, they point out that the cognitive approaches seem to address meaningfully the problem of shyness.

There is, however, a wide array of cognitive therapeutic approaches, and, while the cognitive therapies share a common emphasis on conscious thoughts, beliefs and expectations, they differ in theory and in the technique. The approaches of Albert Ellis and George A. Kelly are two such cognitively-oriented therapies which differ in theory and technique. Each would approach the problem of shyness somewhat differently. It would be helpful to know if the differences may result in client preferences for one or the other approach.

It may be that individual differences in clients as well as the various components of shyness may alter responsiveness to a particular technique and thus have important implications for therapeutic intervention. The present investigation examines differences in relative preferences for the two cognitively-oriented approaches as a function of the cognitive activity associated with

internal and external locus of control and contexts reflecting systematic variation of components of shyness.

The remainder of the first chapter reviews the pertinent literature, states the problem and presents the hypotheses to be tested in the investigation.

Review of the Literature

Shyness: Theoretical Considerations and Prevalence

Among the researchers who have made significant contributions to the understanding and appreciation of the psychological implications of shyness are Cattell (1943a, 1943b, 1945, 1946, 1947, 1948, 1950, 1965, 1973); Cattell and Warburton (1961); Cattell, Eber and Tatsucka (1970); Comery (1961, 1969); Comery and Jamison (1969); Zimbardo (1976, 1977); and Zimbardo, Pilkonis and Norwood (1974).

Cattell, as well as Comery, have both come from the ranks of trait psychologists. They have identified shyness as a personality factor, i.e., a source trait, or as a surface trait. Over the past forty years, Raymond B. Cattell has written numerous books and articles describing a model of personality in which shyness is represented as a basic trait. He defines shyness as one of the 'characteris-

tic expressions' or surface traits that connotes the negative pole of a continuous personality factor he has labelled "H" (Cattell et al., 1970). The H-person is one who is intensely shy, tormented by an unreasonable sense of inferiority, slow and impeded in expressing himself, disliking occupations with personal contacts, preferring one or two close friends to large groups and not "able to keep in contact with all that is going on around him" (Cattell et al., 1970, p.91). From his research findings, Cattell (1965) views shyness as a trait which is substantially determined by heredity; furthermore, he has indicated that shyness is not modifiable by environmental events but declines steadily with age; i.e. "shyness of an excessive kind tends naturally to cure itself" (Cattell, 1965, p.95).

Unlike Cattell, Comery (1969) has identified shyness as a core factor in his taxonomy of personality traits. He has found shyness to be a trait characterized by different combinations of the following: seclusiveness, lack of social poise, avoidance of social contact, avoidance of social activities, loss of words, self-consciousness, submissiveness, reserve, stage fright, inferiority and fear of speaking (Comery, 1969).

In general, Cattell's and Comery's research is heavily weighted toward assuming shyness to be an inherited, stable dimension of human personality. A significantly

different theoretical orientation to the phenomenon of shyness is represented by the work of Zimbardo and his colleagues.

Zimbardo set out to study shyness as a complex social-psychological process rather than from the traditional perspective as a personality trait. A particular objective of his research has been to understand the dynamics of the self-labelling process and the biased explanations of a person's own reactions which differentiate those persons who describe themselves as 'shy' and 'not shy' (Zimbardo, 1976). His (1976) orientation essentially rejects the notion that shyness is an inherited, immutable trait and substitutes instead a reconceptualization of shyness as a learned response style to social interactions. Thus, Zimbardo (1976) defines shyness as "a culturally-shaped mode of self-perception involving excessive concerns for social evaluation and self-monitoring of behavior" (p. 9). Shyness typically involves an attribution of personal stress, social discomfort etc., as internally generated and not as evidence of the stimulus properties of a given social environment. It results in inappropriate labelling processes and biased information processing.

Reporting on a shyness research project with young people ($N = 1200$), Zimbardo (1977) concluded that "shyness is common, widespread, and universal" (p. 13).

More than 80% of those surveyed reported that they were shy at some point in their lives; approximately 32% of those surveyed considered themselves "presently shy". More than merely not liking their shyness or finding it undesirable, many considered their shyness a personal 'problem'; in fact, the negative consequences of shyness were so extreme that more than half of the shy subjects declared that they could use therapeutic help for their problem (Zimbardo, 1977).

Zimbardo et al. (1974) report that among the most frequently reported negative consequences of shyness are that it:

- (1) creates social problems and makes it difficult to meet new people, make new friends, or enjoy potentially good experiences;
- (2) has negative emotional correlates, e.g. depression, isolation, loneliness;
- (3) makes assertive and expressive behavior difficult;
- (4) limits others' positive evaluations of one's personal assets;
- (5) allows many incorrect social evaluations to be made and to persist unchallenged;
- (6) creates difficulties in thinking clearly and in verbal communication;
- (7) encourages excessive self-preoccupation or self-consciousness.

As a result, Zimbardo views shyness as a complex pattern of responding with non-verbal as well as verbal components, manifested at physiological, cognitive and behavioral levels.

Among the dominant physiological reactions obtained by self-report measures (Stanford Survey on Shyness) of people who consider themselves presently shy are increased pulse (54%); blushing (53%); perspiration (49%); butterflies in one's stomach (48%); and a pounding heart (48%) (Zimbardo et al., 1974). Reported cognitive correlates include self-consciousness (85%); concern for impression management (67%); concern for social evaluation (63%); negative self-evaluation (59%); thoughts of the unpleasantness of the situation (56%); and thoughts about shyness in general (46%) (Zimbardo et al., 1974). Observed behavioral correlates include silence (80%); lack of eye contact (51%); avoidance of others (44%); avoidance of taking action (42%); and low speaking voice (40%) (Zimbardo et al., 1974). Thus, it seems that the public behavior of a shy person may be best characterized by its absence, while his private world may be filled with intense thoughts, feelings and psychological reactions.

These physiological, cognitive and behavioral correlates of shyness seem to be elicited by a wide range of situations, circumstances and agents. Zimbardo et al., (1974) in their initial investigation with college and high school students ($N = 800+$) report a rather extensive,

if not exhaustive list of elicitors of shyness. Two categories of elicitors are suggested, situations and other people. Situations which elicit shyness include group settings where one is the focus of attention, large groups, new situations, social situations, situations in which one is being evaluated, small social groups, one-to-one different sex interactions and situations requiring assertiveness. Other people who elicit shyness include strangers, opposite sex groups, authorities by virtue of their knowledge or their role and same sex groups. Although the list of elicitors is a helpful first step in understanding the problem of shyness, two cautions are in order in terms of drawing conclusions from these findings (Pilkonis, 1977); first, the designated categories of elicitors are not mutually exclusive and second, in the real world, shyness may be compounded by multiple interaction of elicitors.

In an effort to understand the phenomenon of shyness, Zimbardo focuses on the processes of self-attribution and labelling. Zimbardo (1976) makes a distinction in contrasting situational/dispositional shyness. This distinction decides the person's perception of the relative consistency vs. flexibility of his shyness. According to Zimbardo (1976), this distinction also helps understand ways in which the individual's shyness becomes dispositionally

meaningful for him (what it tells him about himself as a person).

Surprisingly, very few of the physiological, cognitive and behavioral correlates of shyness or the elicitors of shyness differentiate between people who are dispositionally shy and people who are situationally shy (Zimbardo et al., 1974). It appears that the crucial difference between the dispositionally shy and situationally shy lies not in objectively different experiences but rather in the attribution of the causality of shyness: Consequently, the difference lies in whether or not a person chooses to use the label shy. Dispositionally shy blame themselves; situationally shy blame the situation (Zimbardo et al., 1974; Zimbardo, 1977).

Zimbardo and his colleagues assert that there is a clear tendency for the dispositionally shy to report experiencing more elicitors and correlates of shyness; thus, the self-attribution of shyness appears to be the result not of differential elicitors and correlates, but rather more frequent and compounding ones. The worlds of the dispositionally shy and situationally shy are similar in what triggers shy responses; consequently, the self-attribution of shyness is founded not in 'objectively' different experiences but rather in the attribution of causality for shyness. People who regard themselves as shy, view shyness as residing within themselves. It is viewed as a trait which is carried across different situations

and which produces idiosyncratic reactions; consequently, the shy person's responses in these situations tell them something about themselves. In contrast, the non shy view certain situations as instigating temporary, discrete reactions which are usually appropriate and normal (Zimbardo, 1976).

The preoccupation of the shy person with himself or herself appears to stem from overindulging the normal feedback processes of self-monitoring and social evaluation (Zimbardo, 1976). It is possible to accept a label without concrete evidence to support it and our search for explanations is thereafter biased (Zimbardo, 1977). An event may provide confirmations of one's shyness, or it can be, simply, an unpleasant event that gets one 'uptight'. Those people who label themselves shy, seem to react in ways that subsequently confirm and maintain the validity of their labelling process. "They come to act more like personality trait theorists than empiricists" (Zimbardo, 1976, p. 41).

It would appear that cognitively-oriented therapies which emphasize an objective analysis of the external elicitors of shyness (stressing their situational specificity), attend to the cognitive concomitants which may serve to maintain 'shyness' and which demand empirical reporting of discrete symptoms may provide effective treatment (Zimbardo, 1976). More specifically,

therapy for shyness may profitably incorporate encouraging shy people to externalize its locus of causality and to objectify highly specific internal responses to shyness eliciting stimuli (Zimbardo, 1976). Shyness may be attenuated when one can step out of one's usual identity either through role playing or through total absorption in a specific task. Likewise, cognitive techniques may be helpful in lessening excessive self-consciousness and altering negative self-evaluations. Furthermore, some shy people would presumably benefit most from social skills training, while others may require interventions aimed at changing their evaluation of their experience as well as their behavior (Pilkonis, in press).

It appears, then, that a shy person may benefit from a therapeutic strategy which modifies excessive self-monitoring and social evaluation. Similarly, therapy should deal explicitly with cognitive factors like damaging self-instructions, idiosyncratic interpretation of events, unrealistic expectancies and distorted premises which may serve to maintain the affective and behavioral components of shyness. Finally, therapy for shyness should focus on attributional processes which result in the label shy (Zimbardo, 1976, 1977; Pilkonis, in press). In this regard, Brehm (1976) notes that the cognitively-oriented therapies which focus on an individual's cognitive processes and which emphasize a person's desire to control his environment as well as a person's need to understand cause

and effect relationships in order to control the environment share the major aspects of concern in the attribution process. In sum, it appears that the cognitively-oriented approaches to therapy may be the therapeutic mode of choice in the treatment of shyness.

Interestingly, this recommendation reflects a notable and growing trend toward increased utilization of cognitive therapies (Raimy, 1975; Mahoney, 1977a). In addition to treating shyness, cognitive approaches have been proposed as applicable to a wide range of clinical problems (Mahoney, 1977a; DiGiuseppe, Miller & Trexler, 1977). The next section provides a brief introduction to cognitively-oriented approaches to therapy.

Cognitively-Oriented Therapeutic Approaches and Preference

Introduction to Cognitively-Oriented Approaches to Therapy

Cognitive therapy is a generic term that refers to a variety of approaches which emphasize modifying the pattern of clients' cognitions, premises, assumptions and attitudes (Meichenbaum, 1974). The focus of therapy in this perspective is on the ideational content involved in the symptom, i.e., irrational inferences and false premises which maintain the client's discomfort.

From the cognitive theoretical perspective, psychological problems may be understood in terms of

inadequacies in organizing and interpreting reality, incorrect premises and a proneness to distort experience (Beck, 1976; Kelly, 1955; Ellis, 1962; Rotter, 1954; Raimy, 1975). The task of a cognitive therapist is to assist a client to more effective interpretations of his environment and his responses to it, more effective behaviors and more appropriate affective responses (Beck, 1976).

Recent systematic studies have provided considerable support for the principles of cognitive therapy. Exhaustive reviews by Mahoney (1974) and Smith and Glass (1977) generally support the theoretical bases of cognitive therapy as well as effectiveness as measured by outcome studies. Additionally, reviews by Ellis (1977b) and DiGiuseppe et al. (1977) lend additional support for the efficacy of cognitive therapeutic approaches. Parenthetically, that cognitive therapy is a fertile research area is attested to by the comprehensive bibliographies compiled by Murphy and Ellis (1977), Meichenbaum (1974, 1976) and Zingle and Mallett (1976).

It should be noted, however, that cognitively-oriented contributors attend to conceptual, affective and behavioral processes with considerably different focus. Self-assigned labels of some prominent contributors to the literature in cognitive therapy reflect this differing emphasis: 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".

The differing emphasis among contributors is reflected in differences in therapeutic technique; for example, while some approaches focus upon the validity of certain of the client's cognitions, others focus upon the cognitive construction process itself. Approaches may differ as well in the manner that behavior is utilized as part of the therapeutic process. While some focus sharply upon feedback to a variety of behaviors, others prescribe specific behaviors or teach specific skills which in turn influence the feedback process.

In view of the differing emphasis among cognitively-oriented approaches, the clinical treatment of shyness may be enhanced by specifying initial guidelines for intervention. This greater specificity may be obtained by identifying whether a particular cognitive approach may be preferable for certain individuals in specific circumstances.

Client preference appears in the clinical literature as an important variable in psychotherapy. Individual preference for therapeutic approach relates to the

appropriateness of a particular treatment mode. The section that follows presents the literature on client preference.

Client Preference for Therapy

Investigation of client preference for therapy is a relatively recent activity. The earliest study reported in the literature was an exploratory investigation in which state hospital patients were allowed to choose the therapists and techniques they considered most appropriate, following a review of options. Preliminary reports suggest greater patient participation in their therapy; follow-up reports, however, have not appeared (The Roche Report, 1969).

Pierce (1972), investigating preference for treatment in an analogue study utilizing an inpatient population, found that treatment preference of patients in each of three groups appeared to reflect the treatment orientation of their wards. Additionally, the data revealed differences as a function of the mean MMPI profiles of the three groups.

In a systematic study investigating preference and therapeutic outcome, Devine and Fernald (1973) observed that when patients received their preferred therapy, therapeutic gains were significantly greater than those achieved by patients who were randomly assigned to therapeutic conditions. Devine and Fernald interpret these therapeutic gains to be a function of patients'

having received their preferred therapy. Three explanations are posited for these findings: First, the client's expectation may be the single most important factor in determining therapeutic outcome; second, the effect may be due to subjects' efforts to justify their stated preferences; third, that there may be a therapy-subject fit, e.g., specific approaches may be better suited to different individuals (Devine & Fernald, 1973). Furthermore, they assert that where circumstances permit, it may be advantageous to have clients learn about techniques so they may select the approach they prefer.

With regard to therapy-subject fit, Montagnes (1974) asserts that not all therapeutic approaches and theories are appropriate for all clients. In a similar vein, Friedman and Dies (1974) express doubt that all clients would respond similarly to various types of therapeutic approaches.

In sum, preference appears to be a significant component of client-therapy fit. Preliminary evidence suggests that preferred treatments may significantly facilitate positive outcomes; thus, earlier research attention given to preference for therapy appears to have been a fruitful effort and one worthy of further research.

The present research utilizes relative preference

as a means of obtaining insight into more or less preferred techniques within the cognitively-oriented approaches and thus providing greater specificity in the treatment of shyness. The major interest of the investigation is to examine relative preference between two cognitively-oriented therapies which differ in technique and in the strategy each may employ in the treatment of shyness.

In the section which follows the approaches of Kelly and Ellis are described and applied to the treatment of shyness. Contrasts between the two approaches are noted.

The Cognitively-Oriented Approaches of George A. Kelly and Albert Ellis

This section of the chapter presents descriptions of the theoretical and therapeutic approaches of George A. Kelly and Albert Ellis, the two cognitively-oriented theorists whose approaches are employed in this investigation.

Both Kelly and Ellis have made significant contributions in the area of cognitive therapy; in turn, each has been responsible for generating considerable research.

Matarazzo, (1965) has outlined some elements common

to both approaches; both attempt to change clients' cognitive strategies and each emphasizes a scientific model in therapy. In contrast to less directive cognitive approaches, their respective approaches view the therapist as an active, directive and verbal agent. As well, Brehm (1976) has commented on the similarities. She noted that both approaches emphasize cognitive process, the person's desire to control his environment and the need to understand cause and effect relationships.

Additionally, Ellis (1978) has recently suggested that both approaches hold very similar views regarding the influence of cognitive factors in "dysfunctional and self-defeating behaviors" (p. 22).

Despite their many similarities, Kelly and Ellis differ significantly on theoretical bases for therapy, as well as on specific techniques; consequently, because of their differences, a therapist employing one approach rather than the other would address a problem of shyness from a different perspective and with different therapeutic techniques.

The sections that follow present the theoretical approaches of Kelly and Ellis and apply the approaches to the common problem of shyness.

Basic Theoretical Constructs: George A. Kelly

The Psychology of Personal Constructs (Kelly, 1955) was the culmination of Kelly's repudiation of the behavioristic and the psychoanalytic approaches; consequently, Kelly's present and future-oriented view of constructive alternativism, a somewhat unorthodox theory of personality, differs from the traditional psychological systems.

An underlying assumption of Kelly's theory is that man exists in a real universe. He makes three assumptions about that universe; (1) that it is real and not a figment of the imagination; (2) that it can be understood only in a historical context; and (3) that the universe is integral, so that in light of complete knowledge and a broad enough perspective, all events can be seen as interrelated. In addition to accepting that the universe contains real events and objects, Kelly also assumed events internal to the person are equally real (Bannister & Mair, 1968). Man comes to know something about the universe only insofar as he can make interpretations of it. Man approaches more accurate awareness of his environment by successive approximations. Observing these active exploratory propensities of man, Kelly (1969a) invited exploration of the concept "man the scientist". Kelly is not saying that the professionally trained laboratory scientist does the same things as his man-in-the-street-scientist, nor that all men are

good scientists; rather, Kelly suggests that there are some benefits in attending to the scientist-like qualities and endeavors of all men (Bannister & Mair, 1968). Kelly referred to his system as a "psychology of personal constructs". Constructs are likened to sets of goggles through which persons view the world. At times, the goggles distort images, which may lead a person to act in inappropriate ways. When people become aware of the distortion, the goggles may be adjusted to provide a better approximation.

More generally, a construct is a way in which some things are seen as being similar to and yet different from others. (Kelly, 1955). Kelly views a construct as essentially a two-ended affair involving a basis for considering likenesses and differences, and at the same time excluding certain things as irrelevant. The reality of a construct is in its use by a person as a device for discerning the world and consequently being able to anticipate its events more satisfactorily: Thus, a construct is explicitly a tool to allow not only discrimination and organization of occurrences but also anticipation of the future (Bannister & Mair, 1968). People can be understood to the extent that their constructs for ordering and anticipating events are understood.

Related to Kelly's theoretical formulation of personal constructs is his wider philosophical point of view of

of constructive alternativism. Constructive alternativism is a position which maintains that reality is subject to many alternative interpretations (Kelly, 1969b). Kelly suggests that an individual will choose that alternative through which he anticipates the greater possibility for interacting successfully with his environment. Although there may be any number of interpretations of a particular event, some may prove more fruitful than others. People choose alternative interpretations as a result of experiences in which assumptions and hypotheses are used to formulate personal theories about their experiences; in this respect, Kelly sees people acting in a similar manner as do scientists. As a result, man's behavior may be viewed within the framework of his unique interpretation of events (Landfield, 1970); in fact, Kelly implies that a person's constructs are more than just options which may sometimes elaborate understanding of a person's observable behaviors. Instead, he believes that behavior cannot be seen in any meaningful perspective unless the constructions which are being tested by it are understood (Bannister & Mair, 1968).

Because of Kelly's emphasis on an individual's personal constructs, treatment based on his approach must be individualized. Nevertheless, the section that follows offers a brief description of how a therapist working from Kelly's model may approach the treatment of shyness.

Treatment of Shyness Based on Kelly's Approach

A therapist working with a shy individual would view therapy as a process of reconstructing the client's life roles. Examining and testing the constructs which serve to maintain shyness, the therapist would join his shy client in exploring the implications of those constructs.

The therapist may, for example, ask the shy client to generate and evaluate other ways of thinking about his shy experiences. Likewise, the therapist may assist the client to anticipate future experiences of shyness and to generate alternative constructs and behaviors as adequate coping means. The therapist's purpose would be to free the shy person from his ineffectual and disturbing constructs and behaviors as well as to help him learn the efficacy of thinking and behaving in new ways. In this regard, the therapist uses the shy person's behaviors as a framework for asking new questions about shyness situations. He may even suggest a script for the shy person to act out as a means of providing him feedback on new behaviors. In short, the therapist, viewing himself as a fellow experimenter, attempts to help his shy client learn to experiment creatively in order to solve his own problems.

Psychotherapy from this perspective, is an 'experimental' process. A client's constructions are identified, reviewed and then examined in the 'real world'.

"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). In fact, in Kelly's (1969e) view,

The psychotherapy room is a protected laboratory where hypotheses can be formulated, test-tube sized experiments can be performed, field trials planned, and outcomes evaluated. Among other things, the interview can be regarded as itself an experiment in behavior. The client says things to see what will happen. So does the therapist. Then they ask themselves and each other if the outcomes confirmed their expectations. (p. 229)

Basic Theoretical Constructs: Albert Ellis

Trained as a psychoanalyst, as a practitioner, Ellis became dissatisfied with the results, the theory and technique of psychoanalysis. Increasingly, he became more interested in learning theory and was convinced that irrational, neurotic early learning persisted because individuals continued to reinforce and reindoctrinate their neurotic early learning (Ellis, 1962).

The biological roots of personality receive strong emphasis in Ellis' theory (Ellis, 1962, 1973a). Man has innate dual tendencies toward rationality as well as toward irrationality (Ellis, 1973b).

Ellis views man as a cognitively based, hedonistically oriented creature with the powerful biological predisposition to be self-preserving and pleasure producing, yet, he also sees man as having a similar biological tendency to be self-destructive and short-sighted in his hedonistic

pursuits. Man manifests his destructive tendencies by avoiding thinking things through, by shirking responsibilities and by deluding himself by maintaining perfectionistic and grandiose ideals (Ellis, 1973a).

Many of the self-destructive perfectionistic ideals are learned at an early age when he is most suggestible; consequently, man, as a social being, tends to spend a good deal of his life trying to impress others and to live up to the expectations he first learned as a child (Ellis, 1973a). Social and emotional maturity, then, is a fine balance between an individual's ability to discriminate effectively between reasonable and unreasonable social expectations (Ellis & Harper, 1975). Within this essentially biologically-rooted conceptualization of personality, Ellis focuses upon cognition without isolating cognition from emotion and behavior. Man rarely emotes and behaves without thinking since his feelings and behavior include and may be triggered by, a cognitive appraisal of his experience (Ellis, 1973a).

Ellis maintains that man's cognitive ability allows him to exercise a good measure of control over his behaviors, thoughts and emotions. In this regard, Ellis poses an A-B-C relationship, in which A is an activating event, B is a person's cognitive interpretation of the event, and C is a consequence. Ellis assumes that it is not A or events which cause undesirable consequences or emotional discomforts, but rather B, a person's interpretations about

the activating events which cause C. While man cannot always control A or C, he can in Ellis's view, control B, his interpretations and beliefs (Ellis, 1973a). Ellis maintains that regardless of a person's heredity, and regardless of traumatic experiences, the primary reason for the individual's current disturbance at point B is some dogmatic, irrational, non-validatable and usually unexamined beliefs (Ellis, 1962).

In his book Reason and Emotion in Psychotherapy, Ellis (1962) detailed eleven irrational beliefs, common in Western civilization. These irrational beliefs lead to and maintain neurotic reactions. Ellis included the following in his list of irrational beliefs:

- (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).

Ellis asserts that when these irrational beliefs are integrated into a person's belief system, they lead to emotional disturbance since they target unattainable, absolutistic expectations (Ellis, 1973a). The section that follows offers a brief description of how a therapist working from Ellis's model may approach the treatment of shyness.

Treatment of Shyness Based on Ellis' Approach

A therapist working with a shy individual would view therapy as a process of teaching him that his irrational beliefs are causing his shyness problem and that he may overcome the problem by thinking more rationally. The therapist may, for example, teach the client that it is not the shyness event itself (A) which causes the client's disturbance (C), but rather his beliefs and interpretations (B). The therapist would use a vigorously persuasive, confrontational style to disconfirm, directly, whatever irrational beliefs are serving to maintain the client's problematic shyness. In this process, the therapist teaches his client to monitor and challenge his self-defeating internalized statements, pointing out to him that his continuous irrational reindocctrination serves to maintain his shyness problem. By teaching the client to re-think, challenge and contradict his irrational beliefs, the therapist substitutes a more empirically valid and rational source of information about his shyness. The therapist sees his task as one of teaching a vigorously scientific methodology for more effective living (Ellis, 1973a).

As an integral component of this approach to therapy, the client is given homework assignments which stress

behavioral, cognitive and affective re-education. The therapist may, for example, demand that his shy client enter situations he finds difficult, monitor his irrational beliefs, dispute those beliefs and substitute more rational interpretations. This, in turn, would assist the shy client to practice more effective behaviors and to experience more appropriate emotions. Finally, the therapist, asserting man's tendency toward irrationality, would instruct the shy client that he would always have to monitor and dispute his irrational beliefs if he were to successfully overcome his shyness (Ellis, 1973a).

In sum, psychotherapy from this perspective is an active, directive teaching process. It is an opportunity to replace a client's faulty learning with sound teaching and also an opportunity for preventive teaching through cognitive-affective-behavioral re-education (Ellis, 1973b, 1977a, 1977c). According to Ellis (1962),

All effective psychotherapists, whether or not they realize what they are doing, teach or induce their patients to re-perceive or rethink their life events and philosophies and thereby change their unrealistic and illogical thought, emotion and behavior (p. 36-37).

Contrasts Between the Two Approaches

In their respective approaches, both Kelly and Ellis attend primarily to rectifying a client's misconceptions (Raimy, 1975) while helping the client to think and behave more effectively. Despite the many similarities in their

respective approaches, there are critical differences; more specifically, there are critical differences in the way each approach may be employed to help a person with a problem of shyness. From Ellis' perspective, for example, a therapist would assert that there are specific irrational beliefs that are maintaining the shyness problem and that they will continue to maintain the problem until they are replaced by more rational interpretations. From Kelly's perspective a therapist, while accepting that shyness has been ineffective, would assert simply that there are other ways of thinking and responding and, by experimentation, the client will find more effective ways. In Ellis' view, a therapist's role is primarily that of a teacher who actively persuades and confronts the client while teaching him to challenge and replace self-defeating thoughts, behaviors and emotions. The role of a therapist in Kelly's view, on the other hand, is to be a scientist who maintains his objectivity while functioning as a collaborator who helps design, implement and interpret the client's experiments in living.

Karst and Trexler (1970) characterize a fundamental difference in the two approaches: while Ellis' approach would tend to be more dogmatic and prescriptive, Kelly's approach would tend to be more objective and less judgemental.

Perhaps this major difference may be exemplified in the positions the two therapeutic approaches take on the relative value of disconfirmation in psychotherapy.

Ellis (1973a) "vigorously and vehemently" (p. 185) disconfirms a client's irrational ideas, beliefs, assumptions and conclusions, so that he is able to substitute for them more rational and logical approaches to the resolution of difficulties. By contrast, Kelly (1969d) focuses upon the consideration of alternatives rather than disabusing the client of "his 'neurotic' notions" (p. 55).

In sum, both approaches emphasize objective analysis of the external elicitors of shyness; additionally, both emphasize situational specificity and attend to cognitive concomitants which serve to maintain shyness. Paradoxically, in both theory and technique, the approaches of George A. Kelly and Albert Ellis clearly differ.

In view of the critical differences between the cognitive approaches of Kelly and Ellis, the recommendation that cognitively-oriented therapies are appropriate for shyness seems in need of greater specificity. In this regard, questions raised from the literature on client preference for therapy appear salient. Which therapeutic technique is preferable? For which client? Under what circumstances?

An investigation of preference for therapy in varying circumstances of shyness, with accommodations for individual differences would appear to contribute to gaining that greater specificity. Julian B. Rotter's (1954) social learning theory appears to provide a theoret-

ical framework from which to ask questions of therapeutic preference.

The next section introduces Rotter's social learning theory. The section also addresses the appropriateness of Rotter's social learning theory as a theoretical framework for the present investigation and focuses on its construct of locus of control as a correlate of cognitive activity.

Locus of Control and Social Learning Theory: A Framework for Investigating Relative Preference for Therapy

Consideration of relative preference for two therapeutic approaches to problematic shyness requires a theoretical framework capable of accommodating complexities both in individual differences as well as in situational contingencies. Nowicki and Duke (1978) suggest that one possibility for extracting more usable knowledge from complexities of psychotherapy is the adoption of Rotter's (1954) social learning theory. Citing social learning theory's attention to expectancies, behaviors and goals, they assert that the theory may be "a uniquely helpful theoretical perspective" (p. 6) from which to research therapy.

Rotter (1970) characterizes social learning theory as an expectancy learning theory which utilizes an empirical law of effect; furthermore, Rotter asserts that social

learning theory is more complex than most because it requires the analysis of four classes of variables: behaviors, reinforcements, psychological situations and expectancies. The relationship among the four classes of variables is described in the following summary.

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 that behavior will lead to a particular reinforcement in that situation and the value of that reinforcement. Stable personality characteristics arise because human beings are constantly abstracting and generalizing so that similarities develop in their responses to classes of situations. Behaviors develop functional equivalence, expectancies generalize across situations and the values of various classes of reinforcements become similar (Rotter, 1978, p. 1-2).

For Rotter, behavior includes any action of a person responding to stimuli: motor activity, cognitive activity, non-verbal or emotional reactions are all considered behaviors (Rotter & Hochreich, 1975). Reinforcement, in this theory, is anything that has an effect on the occurrence, direction or type of behavior elicited. Rotter defines the value of a reinforcement as "the degree of preference for any reinforcement to occur if the possibilities of their occurring were all equal" (Rotter, 1954, p. 107). The concept of reinforcement is closely related to both an individual's psychological situation and to his expectancies. In Rotter's (1954, 1955, 1970, 1975) view, the psychological situation is an important determinant of behavior. By 'psychological situation' Rotter refers

to personal experience and the subjective individual meanings a person attaches to his experience as well as referring to the environment. It is the psychological situation (Rotter, 1978) which gives rise to the fourth class of variables, expectancies. By 'expectancy' Rotter (1954) refers to an individual's subjective probability that a particular reinforcement will occur as a result of a particular behavior. Rotter (1966) distinguishes specific and generalized expectancies for reinforcement. Specific expectancies relate to a person's previous experience in situations perceived as highly similar if not identical; on the other hand, Rotter considers a generalized expectancy as that expectancy for reinforcement which obtains in situations which are more novel or ambiguous (Rotter, 1975).

In sum, Rotter's theory provides an emphasis on value, expectancy of reinforcement and situational specificity as determinants of human behavior.

The construct of locus of control of reinforcement was postulated as a means of investigating Rotter's hypothesized relationship between expectancy and reinforcement (Rotter, 1966). Rotter (1966) has asserted that locus of control has major significance in understanding the learning process in different situations and that "consistent individual differences exist among individuals in the degree to which they are likely to

attribute personal control to reward in the same situation" (p. 1). In addition, to these theoretical considerations, interest in the construct grew, as well, out of concern for problems encountered in psychotherapy (Lefcourt, 1976); thus, reviews of the literature in locus of control (Lefcourt, 1976; Phares, 1976) report not only differential cognitive activities but also differential responses to psychotherapy between people holding beliefs in internal control of reinforcement and those holding beliefs in external control.

The present investigation utilizes locus of control as an independent variable in examining an individual's relative preference for therapy. The section that follows summarizes the salient literature in locus of control which is pertinent to the present research design.

Rotter (1978) defines internal locus of control as the belief that one's own behavior, characteristics, or attributes determine what one's outcome will be. Additionally, he defines external locus of control as the belief that what happens to an individual is a result outside of one's control. Although the bi-dimensional variable of locus of control is not the central concept of social learning theory (since it represents only one aspect of one of four classes of variables), it has generated a great deal of attention (Rotter, 1975, 1978; Phares, 1976; Lefcourt, 1976). Rotter (1978) estimates that well over a thousand studies have been published covering a

wide range of applications of the construct.

In an earlier article addressing some problems and misconceptions about the construct, Rotter (1975) comments on the controversy regarding multidimensionality and the failure of most studies to root locus of control within the whole of social learning theory. Specifically, Rotter stresses that a number of researchers have ignored the importance of the psychological situation while utilizing locus of control. Failure to attend to the psychological situation eventuates in the fallacy of using locus of control as a personality trait. With regard to the question of multidimensionality of the Rotter Internal-External Locus of Control Scale (I-E Scale) (Rotter, 1966), several factors have been suggested (Mirels, 1970; Levenson, 1974; Schneider & Parsons, 1970). Rotter (1975) cautions that factor analysis of any particular scale is unable to reveal the true structure of a construct; additionally, Rotter suggests that the consideration of multidimensionality in an absolute manner is not consistent with his social learning approach. In this respect, Phares (1976) suggests that while several factors have been identified, there seems to be less evidence for the predictive ability of such factors. In any case, the vast majority of studies in locus of control have employed Rotter's original scale (Phares, 1976).

The paragraphs that follow examine the relationship between internal/external locus of control as measured

by Rotter's original scale and cognitive activity. As can be observed, the literature reveals much evidence in relating differences in locus of control to types of cognitive activity. In fact, Phares (1976) asserts that the single best indicator of the validity of the I-E Scale is the evidence demonstrating that internals are more active, alert or directive in attempting to control and manipulate their environments than are externals.

The notion that locus of control is related to cognitive activity appeals to common sense. As Lefcourt (1976) observes,

Persons holding internal control expectancies should be more cautious and calculating about their choices, involvements, and personal entanglements than are individuals with external control orientations (p. 52).

As well, there seem to be important differences in the performance of internals and externals. Recent reviews of the literature in locus of control by Phares (1976) and Lefcourt (1976) suggest that the differential cognitive activity of internals and externals may well account for performance differences. In this regard, internals are more cognitively active than externals. They exhibit more efficient learning and acquisition of material. Internals more actively seek information; once information is acquired, internals show superior utilization of data. Additionally, internals and externals differ in that internals are more attentive to informational demands of situations than are externals (Phares, 1976). In sum, Phares (1976) attributes the difference to internals' superior cognitive

processing activities,

The internals seem to acquire more information, make more attempts at acquiring it, are better at retaining it, are less satisfied with the amount of information they possess, are better at utilizing information and devising rules to process it, and generally pay more attention to relevant cues in the situation (p. 78).

Similarly, Lefcourt (1976), addressing the differential cognitive activities of internals and externals, concludes that internals have been found to be more perceptive and more eager to learn about their surroundings. He attributes greater inquisitiveness, efficiency in information processing and curiosity to the internal.

With regard to the external, Lefcourt (1976) maintains that he lacks the effective cognitive strategies that might enable him to examine and evaluate decisions and choices. Lacking these strategies, the external yields easily to external pressures.

The following paragraphs review studies in which differences in psychotherapeutic outcome and preference for therapy have been attributed to differences in locus of control.

Kilmann and Howell (1974), in an effort to identify an independent measure of the type of therapy most appropriate for a given client, used locus of control as a criterion measure; collectively, their findings suggest that internals are better therapeutic risks than externals.

Additionally, it is suggested that externals may require more intensive or more prolonged therapeutic contact in order to achieve similar goals; internals demonstrated greater efforts to succeed and seemed to become more involved in their therapy.

Friedman and Dies (1974) predicted that internally controlled individuals would respond more favorably to counseling in which they control the course of therapy. Results confirmed their prediction as well as suggesting that internals show resistance to the control implied in therapy; moreover, internal subjects took greater advantage of opportunities to individualize therapy and exerted more client control in the therapeutic process.

Morley and Watkins (1974) conducted a study using a modified and a conventional type of rational-emotive technique. Patients in the modified condition were given insight into irrational and rational beliefs and were helped to discriminate between them; there was no disputing of their irrational beliefs, however. Internals receiving modified rational-emotive treatment, perhaps due to their reliance on their own judgement, displayed the greatest therapeutic gains. Externally-oriented patients seemed to benefit most from conventional rational-emotive treatment, including direct disputing of irrational beliefs.

As a follow-up to an earlier study, Kilmann et al. (1975) sought to examine the difference between internals and externals in a structured group and in an unstructured group. Results were interpreted as tentatively suggesting that externals may achieve most significant benefits from structured intervention, while internals may require minimal control and structure to achieve maximum gains.

Nowicki and Duke (1978) examined client expectancies regarding counseling as a function of their locus of control. They found that although clients had stable expectancies regarding the counseling process, internals presented different problems, stayed in counseling a shorter time, but were rated as more improved than externals.

In sum, these studies support suggested differential effects in psychotherapy as a function of locus of control.

To date, the literature reveals only three studies addressing preference for therapy as a function of locus of control (Helweg, 1971; Jacobsen, 1971; Wilson, 1973). Helweg (1971) presented sound films of Ellis and Rogers conducting initial patient interviews to college students and to psychiatric inpatients. He predicted and found that participants who preferred Ellis, the more directive, were more external in their locus of control. Jacobsen (1971), controlling for visual impact, constructed composite profiles of behavioristic and analytic therapists. Internals

and externals were asked to imagine that they were having psychological difficulties. Asked to select a preferred therapist, internals preferred the analytic therapist while externals preferred the behaviorally-oriented therapist. In a replication of Jacobsen's study, Wilson (1973) concluded that rather than select a school of therapy, internals will select whichever therapy they judge likely to provide them with personal control skills. In sum, the studies in locus of control and psychotherapy are supportive of Rotter's (1970) contention that locus of control has "clear implications for psychotherapy procedures" (p. 568).

Since the design of the present investigation calls for participants to imagine themselves in controlled contexts of shyness, it is important that contributions from the literature on covert cognitive processes be methodologically implemented in order to maximize participants' involvement. The following section introduces that literature.

Methodological Considerations: Muted Role-Taking

Sarbin (1972) asserts "that imagining may be fruitfully regarded as a form of hypothetical or 'as if' behavior, namely, muted role-taking" (p. 353). The literature suggests that the cognitive process of muted role-taking is an on-going synthesis of diverse sensory information retrieved from memory for the purpose of constructing and representing the hypothetical events referred to or implied by suggestion (Neisser, 1972; Paivio, 1971; Sarbin, 1972; Spanos, 1973). In short, Sarbin (1972) asserts that man has complex cognitive capabilities which allow him to function at various levels of hypotheticalness. Similarly, addressing methodological means of exercising hypotheticalness, Barber, Spanos and Chaves (1974) assert that thinking and imagining with themes that are suggested tend to produce subjective experiences that are suggested.

With regard to the present investigation, theoretical consideration of the cognitive processes in muted role-taking imply that methodological considerations should attend to two major concerns: first, attention to Sarbin and Allen's (1968) criteria for construction of contextual descriptions of shyness; and second, the teaching of skills which facilitate active involvement (Spanos, 1977; Spanos & Barber, 1976; Barber et al., 1974).

Sarbin and Allen (1968) emphasize the necessity of designing experimental sets which serve to prepare participants for a high level of involvement. As well, they emphasize the importance of detailing descriptive contexts such that participants may share common meanings and interpretations. The more detail provided in a description, the more facilitative it is for participants.

Barber et al., (1974), reviewing the literature in strategies for imagining, assert that provision of an explicit strategy for imagining enhances the level of experience for participants. More specifically, they maintain that modelling procedures and direct instructions may enhance imagining; furthermore, teaching subjects to exclude competing thoughts and competing sensory input further strengthens imagining.

The final section of the chapter discusses the purpose of the investigation, presents a statement of the problem and concludes with a presentation of the hypotheses to be tested.

Purpose of the Present Investigation, Statement of
the Problem and Hypotheses

Purpose of the Present Investigation

Zimbardo and Pilkonis have made impressive contributions to the understanding of the phenomenon of shyness. This recent social-psychological reconceptualization of the shyness process has led to a general recommendation that cognitively-oriented approaches are appropriate for treatment' however, that general recommendation may benefit from greater specificity. The wide range of possible cognitively-oriented approaches vary in technique as well as in theoretical grounding. Such is the case with the approaches of George A. Kelly and Albert Ellis.

In addition to the wide range of cognitively-oriented therapeutic approaches, there is complexity implied in a social-psychological conceptualization of shyness. Primarily, this complexity is a function of multiple interaction of elicitors of shyness as well as of attributional processes contributing to the appraisal and maintenance of shyness.

Along with the wide range of cognitive therapies and the complexity of shyness, there is evidence that more complete treatment recommendations may well include an investigation of client preference for therapy. Preference for therapy in treatment of shyness may vary for a number of

reasons. Not only do people experience shyness differently, but also individual characteristics may influence their preference. Likewise, specific components of shyness such as types or numbers of elicitors and types of situations in which shyness is experienced may influence preference. Difference in preference, then, may be a function of individual characteristics and/or individuals' views that particular types of shyness problems may be treated most appropriately by a particular type of therapeutic technique.

Rotter's social learning theory offers an appropriate theoretical base from which to investigate preference for therapeutic technique as a function of shyness. More specifically, Rotter's construct of locus of control allows for distinction among more or less enduring cognitive styles. Along with its attention to individual differences as a function of locus of control, the theory focuses on the psychological situation as an important variable influencing behavior. Rotter's theory, then, provides a theoretical framework from which to investigate preference since it takes into consideration both individual differences and situational considerations.

Thus the purpose of the present investigation is to examine relative preference for the cognitively-oriented therapeutic approaches of Kelly and Ellis as a function of individuals' locus of control and of muted role-taking situations reflecting controlled components of shyness. A major aim of the investigation is to contribute greater specificity to the recommenda-

tion that cognitively-oriented treatment is appropriate for problems of shyness.

The difference in cognitive activity of internals and externals may be related to preferred modes within cognitive therapy. Internals are more perceptive, more eager to learn and more efficient processors of information than externals. As well, there is evidence that internals more carefully consider their choices and decisions and are more likely to attend to relevant cues. These characteristic cognitive approaches of internals and externals lead to the expectation of differences in expression of relative preference for therapy. However, the inclusion of a psychological situation in the present investigation renders previous findings tenuous. Thus, neither the current state of the literature on preference nor social learning theory supports directional prediction of preference in this instance.

Zimbardo's distinction of situational-dispositional shyness has only recently appeared in the literature and thus there is no empirical evidence which might guide in prediction of preference. Zimbardo does, however, offer theoretical rationale for the differing cognitive components, namely, attribution of causality which maintains the distinction. Since the two cognitive approaches differ in the roles they ascribe to attribution, disconfirmation and self-statements, one may expect differences in relative preference between participants in a chronic shy (dispositional) treatment condition and par-

ticipants in a more "normally" shy (situational) treatment condition. Expected differences may well be rooted in participants' judgment that one approach may be more applicable to their circumstances. Thus, one may expect differences in relative preference for the two cognitive approaches.

In outlining elicitors of shyness, Zimbardo lists both "same sex" objects and "other sex" objects as common elicitors. Again, as with the situational-dispositional distinction, the literature fails to reveal empirical evidence for prediction of preference. The present investigation, then, tests whether other sex-same sex elicitors are in fact impactful on individuals' preference for therapy. There is theoretical and logical appeal to the notion that the sex of the person who elicits shyness may influence the choice of a preferred treatment strategy.

Finally, Rotter's social learning conceptualization of determinants of behavior may lead one to expect interaction effects. For example, level of locus of control may interact with situational-dispositional shyness and/or with other sex-same sex encounter. Again, however, the state of the literature does not justify specific predictions of interaction effects.

Statement of the Problem and Hypotheses

The present investigation examines whether there are differences in relative preferences for the therapeutic approaches of Kelly and Ellis as a function of the cognitive activity associated with internal and external locus of control and contexts reflecting systematic variation of components of shyness.

The three hypotheses to be tested in the present investigation are:

Hypothesis #1

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

Hypothesis #2

There are significant differences on measures of relative preference for the therapeutic approaches of Kelly and Ellis between participants in the situationally shy and participants in the dispositionally shy problematic contexts.

Hypothesis #3

There are significant differences on measures of relative preference for the therapeutic approaches of Kelly and Ellis between participants in problematic contexts depicting other sex encounters and participants in problematic contexts depicting same sex encounters.

CHAPTER TWO

RESEARCH DESIGN

Chapter two presents the design and procedure utilized in this investigation. A description of participants is followed by a flow chart which illustrates the method. Concluding sections outline the materials and review the procedure employed.

Participants

The present investigation drew from a pool of 783 students ~~from~~ the 11th and 12th grades of an all-male Catholic preparatory high school. Two hundred and sixty-one students were randomly assigned to the research project by computer printout which listed every third upper division student. Because of incomplete protocols or other eliminative criteria, data from only 203 participants were analyzed. The average age of participants was 16.48 years. Participants were designated as internals (< 9), moderates (< 16) or externals (> 15) on the basis of their scores on Rotter's I-E Scale and then were randomly assigned to one of four treatment conditions each of which depicted a situation of shyness.

Participants were enrolled at Marist High School in suburban Chicago, Illinois. The school enjoys a reputation for academic excellence as reflected by the high percentage of graduate placement in four year universities (95%). The students are from predominantly middle to upper-middle socio-economic class and are predominantly from second and third generation Irish, Polish and Lithuanian families.

Fifty eight protocols were excluded on either of the following two criteria: 1) failure to complete any of the following pretest or posttest instruments; Rotter's I-E Scale, Interpersonal Trust Scale, the comprehension test, or the research questionnaire; or 2) failure to achieve a score greater than 60% on the comprehension test. Table 1 represents the assignment of participants to treatment conditions on the basis of I-E Scale scores.

Figure 1 illustrates the method employed in the investigation.

Materials

Pretest Measures

The Rotter Internal-External Locus of Control Scale, The Interpersonal Trust Scale, and the Stanford Survey on Shyness were included in a battery of interest and achievement tests administered at Marist at the start of the academic year.

A wide range of both objective and projective instruments designed to measure control of beliefs have

Table 1

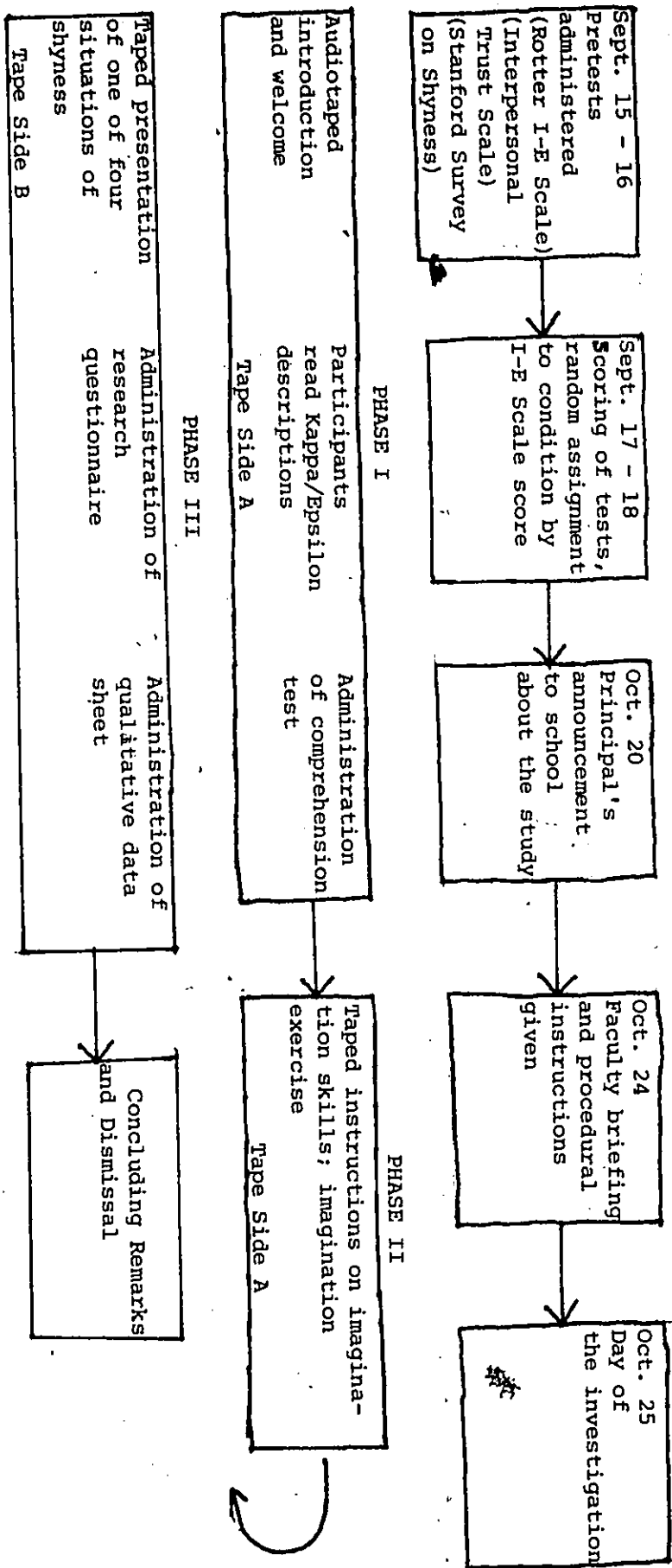
Cell totals following the assignment of participants to treatment condition by locus of control designation

N = 203

Locus of Control Designation	Treatment Condition 1	Treatment Condition 2	Treatment Condition 3	Treatment Condition 4
Internals	13	18	14	13
Moderates	23	25	19	18
Externals	15	16	15	14
Totals	51	59	48	45

FIGURE I

Flow chart illustrating research procedure



appeared in the literature (Berzins, Ross & Cohen, 1970; Collins, 1974; Dies, 1968; Gozali & Bialer, 1968; Joe, 1971; Lefcourt, 1966, 1972, 1976; Levenson, 1973; Mirels, 1970; Nowicki & Duke, 1974; Nowicki & Strickland, 1973; Reid & Ware, 1974; Throop & MacDonald, 1971). Rotter's I-E Scale, however, has been researched extensively and has demonstrated its utility over a wide range of predictive situations (Phares, 1976).

Rotter's original I-E Scale (Rotter, 1966) is an additive scale comprised of twenty-three items designed to measure generalized expectancy for locus of control of reinforcement. The I-E Scale is scored in the external direction, so that the higher the score the more external a subject is. Rotter reports internal consistency estimates ranging from .65 to .79. Reported test-retest reliabilities range from .48 to .84 (Phares, 1976; Rotter, 1966; Hersch & Scheibe, 1967). The wide range in coefficients may be attributable to differences in samples as well as time intervals involved. The I-E Scale is reproduced in Appendix A.

Conflicting and perplexing results among externals suggested that perhaps externality was not a unitary concept (Hamsher, Geller & Rotter, 1968; Rotter, 1975; Phares, 1976). Attempting to account for these discrepant results, Rotter (1975) suggested two types of externals: defensive and passive. Passive externals were considered "true" externals, while "defensive" externals articulated expectancies as externals from fear of failure; in Rotter's conceptualization

externals who score low on interpersonal trust are designated defensive externals.

Rotter's Interpersonal Trust Scale is a summative test with a Likert-like format; higher scores suggest greater degrees of interpersonal trust for a variety of social agents (Rotter, 1967, 1971). Rotter reports an internal consistency coefficient of .76, and test-retest reliabilities of .69, .68 and .56 depending on intervals, for the forty item scale. Fifteen of the forty items are filler items. Construct validity of the test has been demonstrated in a number of research reports (Rotter, 1967; Getter, 1966; Roberts, 1967; Katz & Rotter, 1969; Rotter & Stein, 1970; Massari & Rosenblum, 1972; Leon, 1974).

In the present investigation the Interpersonal Trust Scale has been administered to observe and accommodate any possible difference on dependent measures between defensive and passive externals. The Interpersonal Trust Scale is reproduced in Appendix B.

The Stanford Survey on Shyness (Zimbardo et al., 1974) was conceived, developed, tested and refined for use in a research project which sought to analyze the causes and the correlates of shyness.

The ninety-four item survey consists of a format which includes multiple choice, fill-ins and checklists. In addition to the usual kinds of demographic information (adapted for the present study), the survey covers the following areas: 1) self-reports of shyness including the willingness to label oneself as dispositionally

(chronically) or situationally (temporarily in specific contexts) shy, and also judgements of one's shyness relative to peers; 2) estimates of the prevalence of shyness in the general population and of its desirability; 3) elicitors of shyness among types of people and situations often encountered; 4) perceived correlates of shyness, including physiological reactions, behavioral manifestations, cognitive concomitants (thoughts and sensations), and the specific positive and negative consequences associated with being shy. Zimbardo et al. (1974) contend that the survey taps significant dimensions of the entire process and contents of shyness. The survey was administered as part of the experimental test battery as a relevance check for the psychological problem explored.

To date Zimbardo has not reported reliability and validity studies on the Stanford Survey on Shyness. Preliminary results suggest functional utility as a research instrument (Pilkonis, 1977). The Stanford Survey on Shyness appears in Appendix C.

Research Instruments

The section that follows describes the research instruments utilized in the present investigation. The standardized descriptions of the therapeutic approaches of Kelly and Ellis, a comprehension test, a research questionnaire and a data sheet were created by the author and two colleagues for the present and two companion studies. The paragraphs that follow describe each of the research instruments.

Descriptions of two psychotherapeutic approaches were contained in Packet #1. Packet #1 was prepared such that Kappa Therapy (Kelly's approach) was presented first to half the participants, while the remaining participants read the description Epsilon Therapy (Ellis' approach) first. The presentation of Kelly's approach was constructed from the following sources: Kelly (1955, 1958, 1969a, 1969b, 1969c, 1969d), Maher (1969) and Patterson (1973). The presentation of Ellis' approach was constructed from the following sources; Ellis (1962, 1967, 1971, 1972, 1973a, 1973b, 1977b).

Final drafts of both descriptions reflected revisions and suggestions of several recognized experts in the fields of personality and psychotherapy (Lazarus, 1977; Trexler, 1977; Epstein, 1977; Patterson, 1977; Mahoney, 1977b; Ellis, 1977c; Raimy, 1977; Jurgeovich, 1977; Harper, 1977; Maultsby, 1977; Karst, 1977). Parenthetically it may be noted that the description of Epsilon therapy reflects Ellis' own critical rewriting of the original description (Ellis, 1977c).

Following revisions, the descriptions were utilized in a pilot study in which participants were asked to comment upon the clarity and readability, ease of comprehension and coherence, and appropriate vocabulary of the descriptions. Participants in the pilot study judged the descriptions adequate on all criteria. Additionally the descriptions were reviewed by a panel of teachers who concurred with the findings obtained in the pilot study. The descriptions appear in Appendix E.

The comprehension test was a twenty item multiple-choice instrument designed to identify students able to comprehend the content of both descriptions.

Three experienced high school teachers submitted suitable questions based on the descriptions of Kappa Therapy and Epsilon Therapy. Twenty-five items selected from the list submitted by the teachers, were employed in the pilot study. A subsequent item analysis identified the five items most often answered incorrectly, which in turn were eliminated from the final form of the test. The comprehension test appears in Appendix F.

The thirty item multiple-choice research questionnaire was designed to elicit information regarding participants' relative preference for therapy as well as their levels of involvement in the investigation. Following factor analyses on the two types of items, items would be grouped to form appropriate scales.

The thirty items constituting the research questionnaire were selected from a pool of sixty-four items tested in the project's pilot study. A subsequent item analysis identified the items which most often elicited neutral responses. These items were eliminated from the final form of the questionnaire. The research questionnaire appears in Appendix G.

A ten item qualitative data sheet was designed to invite participants' responses regarding their impressions of the project. The qualitative data sheet appears in Appendix H.

Audio-taped Presentations

The four treatment conditions received an identical standard presentation (tape side A) as well as a problematic description of shyness unique to each condition (tape side B). The tapes were recorded by an experienced male public speaking instructor in a university sound studio. Transcriptions appear in Appendix D.

As illustrated in Figure 1, tape side A provided welcome as well as directions and instructions for the first two phases of the experimental run. It concluded with a presentation on imagination skills and an exercise which offered the participants the opportunity to practice the skills.

Side B provided information and instructions needed in phase three of the experimental run. It began with a presentation of one of four problems of shyness; the participants were invited to do muted role-taking prior to responding to the research questionnaire and the qualitative data sheet.

The research design called for presenting problematic situational contexts based on Zimbardo's social-psychological conceptualization of shyness. As called for in Zimbardo's situational-dispositional shyness distinction, the distinguishing component of the dispositional shyness condition was that of self-labelling as shy with a concomitant chronic self-blame; otherwise, the contexts which served as experimental shyness conditions

for the situational-dispositional distinction were identical. All four experimental conditions reflected shyness within a group setting. Nested within the major factors of situational-dispositional shyness was the further distinction between shyness in hetero-sexual circumstances and shyness in same sex circumstances.

Each shyness context reflected cognitive, behavioral and affective components unique to the situation described as well as instructions to facilitate participants' level of involvement (Barber, 1975; Barber, Spanos & Chaves, 1974; Spanos, 1977).

The results of the pilot study, in which the contexts were employed, suggested that the contexts were realistic, believable and imaginable. Table 2 presents the type of shyness problem assigned to each condition, as well as the running time for each taped presentation.

Procedure

Preparatory Considerations

Faculty members administered the pretests (Rotter's I-E Scale, Interpersonal Trust Scale and the Stanford Survey on Shyness) thirty-nine days before the experimental run. Students were informed that some 'personal' as well as 'general' opinionnaires were included among the academic tests being administered. Students were advised that the opinionnaires were confidential and for research purposes only.

Table 2

Type of shyness problem and presentation time by treatment condition

Treatment Condition	Type of Shyness Problem	Presentation Time
Condition 1	Situational shy; heterosexual group encounter	4'35"
Condition 2	Dispositional shy; heterosexual group encounter	6'09"
Condition 3	Situational shy; same sex group encounter	5'03"
Condition 4	Dispositional shy; same sex group encounter	6'43"

On Friday, October 20, 1977 the school principal announced that all upper division students had been selected to participate in an interesting and informative study related to clinical psychology; he announced that the study would be conducted on the following Wednesday morning therefore necessitating a schedule change.

On Tuesday, October 24, the researcher met with the faculty monitors assigned to the treatment conditions; one alternate monitor was also in attendance. Research materials were presented and explained in detail, in the sequence in which the materials were mentioned in the administrative manual (Appendix I).

Monitors' questions were answered with the exception of those regarding the purpose of the pretest measures or the hypotheses. Faculty monitors were assured of replacement without question or administrative reprisal if they had any personal or professional objections to monitoring the project.

Experimental Run

On Wednesday morning, October 25, students received room assignments. Students were advised that the project would 'run' approximately one and one-half hours. Once the participants were seated in the appropriately designated room, the monitors initiated the research procedure (Figure I) according to the instructions they had received via the administrative manual.

At the conclusion of the experimental run, participants were advised of the number of the room in which the researcher would be located for the remainder of the day. Participants were invited to bring their questions or to discuss the study further.

CHAPTER THREE

Presentation of Results

Chapter three presents the results of the investigation and is divided into three major sections. The first section reports results of the pretest measures and the comprehension test, as well as preliminary data analysis; it includes a rather detailed report on the factor analyses performed on the research questionnaire and the construction of scales used in the statistical testing of the hypotheses.

The second section reports on the statistical testing of the study's three hypotheses. The chapter concludes by reporting results of further statistical analyses.

Preliminary Data Analysis

Pretest Measures

Based on scores obtained on Rotter's I-E Scale, participants were designated as internals (<9), moderates (>8), or externals (>15), reflecting approximately .75 of one standard deviation ($\underline{M} = 11.90$; $\underline{SD} = 4.07$). Distributions are reported in Table 3.

The obtained mean score on the Interpersonal Trust Scale was 67.18 ($\underline{SD} = 7.58$). This mean approximates the 65.77 ($\underline{SD} = 8.82$) reported by Wright and Tedeschi (1975), and the 66.86 ($\underline{SD} = 10.66$) reported by Chun and Campbell (1974).

Table 3

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

N = 203

(M = 11.90) (SD = 4.07)

Designation	I - E Scale scores	<u>n</u>
internal	< 9	58
moderate	> 8 < 16	85
external	> 15	60

Since the means reported by Wright and Tedeschi and Chun and Campbell were obtained on a university population, the slightly higher mean of 67.18 obtained on this high school age sample seems in order.

As previously indicated, externals who score low on interpersonal trust may be considered defensive externals rather than passive externals. In the present investigation, 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 60 externals participating in the study, 44 were considered passive externals and 16 were considered defensive externals. Further implications of this distinction are discussed below.

The Stanford Survey on Shyness was administered to provide an indication of the incidence of shyness among participants. Data was obtained for descriptive purposes only. Of the 203 participants, 167 returned completed protocols. The protocols revealed that 97% reported experiencing shyness at some time in their life. Additionally, 45% reported experiencing such personal discomfort and social inhibition as to have considered their shyness a problem at some time in their lives. These findings approximate those reported by Zimbardo (1974, 1976, 1977).

Comprehension Test

The comprehension test on the description of the approaches of Kelly and Ellis was devised as a screening instrument. The research plan called for the inclusion for further analysis of protocols of participants who scored above 60% on the twenty item multiple choice test; based on this criterion, 22 participants were excluded from further analysis. From the 203 participants who were retained, the comprehension test scores yielded a mean of 16.84 ($SD = 2.4$), or an average score of 81.91%.

Factor Analysis of Research Questionnaire

The plan of the investigation called for two separate factor analyses of the 30 item research questionnaire to serve as a guide for the grouping of items for further analysis.

The first factor analysis was performed on the 10 items related to participants' involvement in the investigation. The second factor analysis was performed on 18 items concerned with participants' relative preference for the therapeutic approaches of Kelly and Ellis. The results of each are reported below.

Factor Analysis of 'Involvement' Items

A principal factors analysis was performed on the 10 items without iterations and with an eigenvalue of 1.

A varimax rotation produced two orthogonal factors. Table 4 presents the factor loadings, means and standard deviations of each item.

The results of the factor analysis suggest that the items measuring 'involvement' be grouped in either of two scales; an imagination scale and an interest scale. For inclusion in either scale, an item had to load above .60 on a factor and at least .20 less on the second factor. The items used in both scales were weighted equally for computation of scale scores.

The Imagination Scale

The imagination scale, represented in Table 5, is comprised of items relating to reported success in performing the muted role-taking tasks; for example, "How well were you able to imagine that you were in this situation and having the problem described?" (item 25). The items used a Likert-like, seven point scale (0 - 6), and were scored in an ascending order; e.g., the higher the score, the greater the participants' success on muted role-taking tasks. The mean of the five items appears to offer a relatively stable index of imaginative involvement since the means of the five items ranged from 4.14 to 4.34. The imagination scale mean for the 203 participants was 21.17 with a standard deviation of 5.65. The scale mean of 21.17 seems to indicate that participants reported they were able to imagine in the muted role-taking tasks.

Table 4

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

N = 203				
Item	Factor 1	Factor 2	Mean*	<u>SD</u> *
05	.73	.24	4.14	1.47
06	-.02	.71	3.12	1.50
12	.25	.71	4.79	1.16
13	.29	.53	3.48	1.61
14	.25	.67	4.41	1.20
18	.76	.24	4.31	1.19
19	.82	.24	4.22	1.49
24	.76	.36	4.34	1.24
25	.82	.17	4.16	1.53
30	.30	.75	3.63	1.61
Eigen- value	4.62	1.33		
% of variance	46.20	11.30		

*Means and standard deviations are computed from raw scores

Table 5

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

Item	N = 203		
	Mean *	SD *	Loading on Factor 1
05	4.14	1.47	.73
18	4.31	1.19	.76
19	4.22	1.49	.82
24	4.34	1.24	.76
25	4.16	1.53	.82
	21.17	5.65	

*Means and standard deviations are computed from raw scores

The Interest Scale

The interest scale, represented in Table 6, is comprised of 4 items relating participants' reported interest in various aspects of the investigation; for example, "How interesting were the descriptions of the two therapies?" (item 06), or "On the whole, I found the project to be: (0) extremely interesting . . . (6) not at all interesting" (item 30). The means of the interest scale items range from 3.19 to 4.78.

The interest scale mean was 15.93 with a standard deviation of 4.13. Since the maximum possible score was 24, the obtained mean (15.93) indicates that participants were clearly interested in the project.

Factor Analysis of 'Preference' Items

The 18 items concerned with relative preference for therapeutic approach were submitted to a principal factors analysis without iterations and an eigenvalue of 1. A varimax rotation produced three orthogonal factors; Table 7 presents the items' factor loadings along with their means and standard deviations.

The results of the factor analysis suggest that items concerned with relative preference (scored in Kelly's direction) be grouped in three mutually exclusive scales: the preference evaluation scale, the judgement scale and

Table 6

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

Item	<u>N</u> = 203		Loading on Factor 2
	Mean*	SD*	
06	3.12	1.50	.71
12	4.78	1.16	.71
14	4.41	1.20	.67
30	3.63	1.61	.75
	15.93	4.13	

*Means and standard deviations are computed from raw scores

Table 7

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

N = 203					
Item	Factor 1	Factor 2	Factor 3	Mean*	SD*
01	.60	.45	.24	3.08	1.94
02	-.02	.80	-.03	3.04	1.89
03	.60	.33	.15	2.84	2.20
04	.39	.06	.33	3.07	1.81
07	.65	.51	.23	2.88	2.00
08	.17	-.12	.86	3.24	1.88
09	.16	.36	.74	3.14	1.93
10	.55	.45	.25	2.77	2.07
11	.71	.08	.09	3.44	1.96
15	.51	.26	.19	2.71	1.83
16	.72	.25	.16	3.12	1.92
17	.73	-.02	.11	3.44	2.05
21	.73	.33	.24	3.14	1.95
22	.80	.00	.25	3.25	1.94
23	.76	.12	.10	3.34	1.99
26	.80	.06	.22	3.21	2.05
27	.88	.05	.19	3.28	1.95
28	.81	.38	.11	3.18	1.89
Eigen- value	8.65	1.20	1.11		
% of var- iance	47.60	7.20	6.10		

*Means and standard deviations are computed from raw scores

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. In construction of the scales, items were weighted equally.

The Preference Evaluation Scale

The preference evaluation scale represented in Table 8, is comprised of items which elicit a relative preference for Kelly's or Ellis' approach; for example "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" (item 03). The factor loadings of the eleven items of the preference evaluation scale range from .50 to .80.

The preference evaluation scale mean ($N = 203$) is 34.90 with a standard deviation of 16.60. The obtained scale scores ranged from 0 to 66, representing the full possible range; thus, the scale mean of 34.90 indicates that participants report a very slight relative preference for Kelly's approach.

The Judgement Scale

The judgement scale, represented in Table 9, is comprised of one item. The item elicits participants' relative preference for judgemental or non-judgemental approach; for example, "Therapist X would neither condemn nor approve; Therapist Y would serve as a frank counterpropagandist who contradicts and invalidates" (item 02). The factor loading

Table 8

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

Item	<u>N</u> = 203		
	Mean*	<u>SD</u> *	Loading on Factor 1
03	2.84	2.20	.60
11	3.44	1.96	.70
15	2.71	1.83	.51
16	3.12	1.92	.72
17	3.44	2.05	.73
21	3.14	1.95	.73
22	3.25	1.94	.80
23	3.34	1.99	.76
26	3.21	2.05	.80
27	3.24	1.95	.80
28	3.18	1.89	.81
	34.90	16.60	

*Means and standard deviations are computed from raw scores

Table 9

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

<u>N</u> = 203			
Item	Mean*	<u>SD</u> *	Loading on Factor 2
02	3.04	1.89	.80
	3.04	1.89	

*Mean and standard deviation computed from raw scores

of the item was .80.

The judgement scale mean ($N = 203$) is 3.04 with a standard deviation of 1.89. The obtained scale scores range from 0 to 6, representing the full possible range. The scale mean of 3.04 indicates a very slight relative preference for Kelly's approach.

The Experimenter-Teacher Scale

The experimenter-teacher scale, represented in Table 10, is comprised of only two items, both of which elicit participants' relative preference for either Kelly's self-ascribed role as experimenter or Ellis' self-ascribed 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 08). The factor loadings of the two items were .85 and .74.

The experimenter-teacher scale mean ($N = 203$) is 6.38 with a standard deviation of 3.22. The obtained scale scores range from 0 to 12, representing the full possible range. The scale mean of 6.38 indicates a slight relative preference for Kelly's view of his therapist role as experimenter.

t-tests on Means of Defensive and Passive External

Defensive and passive externals' scores from the imagination scale, interest scale, preference evaluation scale,

Table 10

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

Item	<u>N</u> = 203		Loading on Factor 3
	Mean *	<u>SD</u> *	
08	3.24	1.88	.86
09	3.13	1.93	.74
	6.38	3.22	

*Means and standard deviations are computed from raw scores

judgement scale and the experimenter-teacher scale were submitted to t -tests (Table 11).

Two-tailed t -tests on imagination scale and interest scale scores yielded t -ratios of .96 (58), ($p > .05$) and 1.75 (58), ($p > .05$), respectively.

On the three dependent measures scales, two-tailed t -tests yielded the following t -ratios: preference evaluation scale, $t = .78$ (58), ($p > .05$); judgement scale, $t = .89$ (58), ($p > .05$); and the experimenter-teacher scale, $t = .21$ (58), ($p > .05$), respectively.

There were no significant differences between defensive and passive externals on any of the scales, therefore, 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

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

In sum, this section has presented the descriptive statistics of the instruments used within the present investigation; additionally, two factor analyses performed on the

Table 11

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

Scale	Mean score: Defensive externals ($\bar{n} = 16$)		Mean score: Passive externals ($\bar{n} = 44$)		df	t
		SD		SD		
Preference evaluation	36.50	12.79	33.05	15.87	58	.78
Judgement	2.69	1.40	3.18	2.05	58	-.89
Experimenter-teacher	6.56	2.76	6.39	2.99	58	.21
Imagination	19.06	7.43	20.73	5.33	58	-.96
Interest	13.44	5.15	15.57	3.78	58	-1.75

* would indicate $p < .05$

research questionnaire, the first on the 'involvement' items and the second on the 'preference' items were reported. Based on factor loadings, 'involvement' items were grouped to form two scales; likewise, based on factor loadings, 'preference' items were grouped to form three scales. Finally, t-tests between means of defensive externals and passive externals yielded no statistically significant differences; similarly, there was no significant correlation between I-E Scale scores and comprehension test scores.

Testing of the Hypotheses

The three hypotheses presented at the end of the first chapter are stated here in their null forms, for the purpose of statistical analysis.

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 measures of relative preference for the therapeutic approaches of Kelly and Ellis between participants in the situationally shy and participants in the dispositionally shy problematic contexts.

Hypothesis #3

There are no significant differences on measures of relative preference for the therapeutic approaches of Kelly and Ellis between participants in problematic contexts depicting other sex encounters and participants in problematic contexts depicting same sex encounters.

To test the three hypotheses, data from the dependent measure scales, the preference evaluation, the judgement scale and the experimenter-teacher scale, were submitted to three univariate analyses of variance. Since the scales were constructed on the basis of three orthogonal factors, univariate analyses were considered most appropriate.

Analysis of Variance on the Preference Evaluation Scale

Analysis of variance on the preference evaluation scale scores failed to yield statistically significant results for main effects (level of locus of control, $F(2,191) = 1.67$, $p > .05$; sex encounter $F(1,191) = 1.79$, $p > .05$; situational-dispositional, $F(1,191) = .35$, $p > .05$). Three of the interactions were non-significant (level of locus of control with situational-dispositional, $F(2,191) = .79$, $p > .05$; sex encounter with situational-dispositional, $F(1,191) = .23$, $p > .05$; level of locus of control with sex encounter with situational-dispositional, $F(2,191) = .71$, $p > .05$); however, the interaction of level of locus of control with sex encounter was significant ($F(2,191) = 3.0$, $p < .05$). Table 12 summarizes the results of the analysis of variance.

Table 12

Results of analysis of variance for the preference evaluation scale of the research questionnaire: Level of locus of control by sex encounter by situational-dispositional

<u>N</u> = 203				
Source	<u>ss</u>	<u>df</u>	<u>ms</u>	<u>F</u>
Main effects	1,542.96	4	385.74	1.42
Level of Locus of Control	903.57	3	451.79	1.67
Sex Encounter	485.72	1	485.72	1.79
Situational-Dispositional	94.99	1	94.99	.35
2-way interactions	1,984.48	5	396.90	1.47
Level of Locus of Control X Sex Encounter	1,627.98	2	813.00	3.00*
Level of Locus of Control X Situational-Dispositional	214.94	1	214.94	.79
Sex Encounter X Situational-Dispositional	61.54	1	61.54	.23
3-way interactions	384.29	2	192.14	.71
Explained	3,911.73	11	355.61	1.31
Residual	51,748.74	191	270.94	
Total	55,660.47	202	275.55	

* $p < .05$

The analysis of variance on the preference evaluation scale scores yielded non-significant results; thus, the data do not allow rejection of the three null hypotheses.

To ascertain the likelihood of finding statistically significant results given the parameters of the study, power of the statistical contrasts were calculated for each of the main effects: level of locus of control, sex encounter, situational-dispositional. The power values obtained were 47%, 21% and 9% respectively.

Analysis of Variance on the Judgement Scale

Analysis of variance of the judgement scale scores failed to yield significant results for main effects (level of locus of control, $F(2,191) = .03, p > .05$; sex encounter, $F(1,191) = 3.56, p > .05$; situational-dispositional, $F(1,191) = .03, p > .05$). Additionally, there were no significant interactions. Table 13 summarizes the results of the analysis of variance.

The analysis of variance for the judgement scale yielded non-significant statistical results, thus disallowing rejection of the three hypotheses in their null form.

In order to ascertain the likelihood of finding statistically significant results given the parameters of the study, power of the statistical contrasts were calculated for each of the main effects: level of locus of control, sex encounter, situational-dispositional. The power values obtained were 4%, 1% and 36% respectively.

Table 13

Results of analysis of variance for the judgement scale of the research questionnaire: Level of locus of control by sex encounter by situational-dispositional

N = 203				
Source	<u>ss</u>	<u>df</u>	<u>ms</u>	<u>F</u>
Main effects	13.03	4	3.26	.90
Level of Locus of Control	.20	2	.10	.03
Sex Encounter	12.88	1	12.88	3.56
Situational-Dispositional	.11	1	.11	.03
2-way interactions	11.29	5	2.26	.62
Level of Locus of Control X Sex Encounter	3.99	2	1.99	.55
Level of Locus of Control X Situational-Dispositional	5.63	2	2.82	.78
Sex Encounter X Situational-Dispositional	1.58	1	1.58	.44
3-way interactions	3.91	2	1.95	.54
Explained	28.23	11	2.57	.71
Residual	691.44	191	3.62	
Total	719.67	202	3.53	

* would indicate $p < .05$

Analysis of Variance on the Experimenter-Teacher Scale

Analysis of variance on the experimenter-teacher scale scores failed to yield significant results for main effects (level of locus of control, $F(2,191) = .90$, $p > .05$; sex encounter, $F(1,191) = 2.0$, $p > .05$; situational-dispositional, $F(1,191) = .04$, $p > .05$); additionally there were no significant interactions. Table 14 summarizes the results of the analysis of variance.

The analysis of variance on the experimenter-teacher scale scores yielded non-significant results thus disallowing rejection of the three hypotheses in their null form.

To ascertain the likelihood of finding statistically significant results given the parameters of the study, power of the statistical contrasts were calculated for each of the main effects: level of locus of control, sex encounter, situational-dispositional. The power values obtained were 38%, 3% and 21% respectively.

In sum, analyses of variance on scores from the three dependent measures scales of the research questionnaire yielded non-significant statistical results for the hypothesized main effects, thus resulting in a failure to reject the null hypotheses. A significant interaction between level of locus of control and sex encounter, however, was observed. In an attempt at clarification of these results, data was submitted to further statistical analysis, reported below.

Table 14

Results of analysis of variance for the experimenter-teacher scale of the research questionnaire: Level of locus of control by sex encounter by situational-dispositional

<u>N</u> = 203				
<u>Source</u>	<u>ss</u>	<u>df</u>	<u>ms</u>	<u>F</u>
Main effects	40.95	4	10.24	.97
Level of Locus of Control	18.70	2	9.35	.90
Sex Encounter	20.78	1	20.78	2.00
Situational-Dispositional	.42	1	.42	.04
2-way interactions	69.04	5	13.81	1.33
Level of Locus of Control X Sex Encounter	61.22	2	30.61	2.95
Level of Locus of Control X Situational-Dispositional	.39	2	.20	.02
Sex Encounter X Situational-Dispositional	8.75	1	8.75	.84
3-way interactions	1.23	2	.61	.06
Explained	111.22	11	10.11	.97
Residual	1,982.55	191	10.38	
Total	2,093.77	202	10.36	

* would indicate $p < .05$

Additional statistical procedures included tests for simple effects on the level of locus of control with sex encounter on participants' scores on the three dependent measures scales, Pearson product-moment correlations between I-E Scale scores, imagination scale scores and interest scale scores. Finally, as suggested by the obtained correlations, analyses of variance were performed on the imagination scale scores and interest scale scores by level of locus of control.

Since the F ratio (3.0) for the interaction between level of locus of control and sex encounter was significant ($p < .05$), cell means from the preference evaluation scale of the research questionnaire (Table 15) were submitted to t -test analyses. The first t -test contrasted scores of internals in the other sex-same sex encounters. The obtained t (57) = 2.47, $p < .05$, indicates that internals prefer Kelly's approach in the other sex encounter while in the same sex encounter they favor Ellis' approach. The second t -test contrasted scores of moderates in the other sex-same sex encounters t (83) = .57, $p > .05$. The third t -test contrasted scores of externals in the other sex-same sex encounters: The obtained t value (t (58) = .70, $p > .05$) is non-significant (Table 16).

A one-way analysis of variance with level of locus of control and other sex encounter on scores from the preference evaluation scale yields a non-significant F ratio (F (2,107) = .17, $p > .05$) (Table 17); however, a one-way analysis of variance with level of locus of control and same sex encounter

Table 15

Means and standard deviations for the preference evaluation scale scores of the research questionnaire and number of participants per cell: Locus of control designation by other sex-same sex encounter

N = 203						
Locus of Control Designation	Other Sex Encounter			Same Sex Encounter		
	<u>n</u>	Mean	<u>SD</u>	<u>n</u>	Mean	<u>SD</u>
Internals	31	37.54	17.72	27	26.30	16.82
Moderates	48	36.42	14.32	37	38.49	18.98
Externals	31	35.29	14.00	29	32.55	16.30

Table 16

Results of t-tests comparing scores from the preference evaluation scale of the research questionnaire for participants in the other sex-same sex encounter condition when participants are grouped by locus of control designation

Locus of Control Designation	n	Other Sex Encounter		Same Sex Encounter		df	t
		Mean	SD	Mean	SD		
Internals	58	37.55	17.72	26.30	16.82	57	2.47*
Moderates	85	36.42	14.32	38.49	18.98	84	-.57
Externals	60	35.29	14.00	32.55	16.30	59	.70

*
p < .05

Table 17

Results of analysis of variance for the preference evaluation scale of the research questionnaire: Level of locus of control by other sex encounter.

<u>N</u> = 110				
Source	<u>ss</u>	<u>df</u>	<u>ms</u>	<u>F</u>
Between Groups	79.06	2	39.53	.17
Within Groups	24,933.62	107	233.02	
Total	25,012.68	109		

* would indicate $p < .05$

on scores from the preference evaluation scale yielded a significant F ratio ($F(2,90) = 3.78, p < .05$). Table 18 summarizes the results of the analysis of variance. A Scheffe post hoc contrast revealed a significant difference between the internal and moderate groups; thus, internals in the same sex encounters prefer Ellis' approach while moderates prefer Kelly's approach. The results of the Scheffe post hoc contrasts are summarized in Table 19.

In order to observe the relationship between I-E Scale scores and participants' level of involvement in the project, Pearson correlation coefficients were computed for I-E Scale scores and imagination scale scores and interest scale scores of the research questionnaire. A coefficient matrix is presented in Table 20.

I-E Scale scores correlated significantly (negatively) with imagination scale scores ($r = -.14, p < .05$); similarly, I-E Scale scores correlated significantly (negatively) with interest scale scores ($r = .21, p < .001$). Since the I-E Scale is scored in the external direction, these significant although low correlations suggest that internals reported greater imaginative involvement and interest in the project than did externals. Incidentally, comprehension test scores were correlated significantly with imagination scale scores ($r = .11, p < .05$), and with interest scale scores ($r = .21, p < .001$). Again, these significant but low correlations suggest that participants who demonstrated a greater comprehension of Kelly's and Ellis' approaches reported higher levels of

Table 18

Results of analysis of variance for the preference evaluation scale of the research questionnaire: Level of locus of control by same sex encounter

<u>N</u> = 93				
Source	<u>ss</u>	<u>df</u>	<u>ms</u>	<u>F</u>
Between Groups	2,332.07	2	1,166.04	3.78*
Within Groups	27,759.95	90	308.44	
Total	30,092.02	92		

* would indicate $p < .05$

Table 19

Scheffe post hoc comparisons of preference evaluation
scale score means of participants in the same sex
encounter condition by locus of control designation

<u>N</u> = 93		
	Differences between means	
	(2)	(3)
(1) Internals	12.42*	6.25
(2) Moderates		5.94
(3) Externals		

* $p < .05$

Table 20

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

N = 203

	I-E Scale	Comprehension Test	Imagination Scale	Interest Scale
I-E Scale	1.00	-.03	-.14*	-.21***
Comprehension Test	-.03	1.00	.11*	.21***
Imagination Scale	-.14*	.11*	1.00	.51***
Interest Scale	-.21***	-.21***	.51***	1.00

* $p < .05$

** $p < .01$

*** $p < .001$

imagination and greater interest in the project; furthermore, as one might expect, imagination scale scores correlated significantly with the interest scale scores ($r = .51$, $p < .001$).

These modest correlations between I-E Scale scores and imagination scale and interest scale scores suggest that internals reported higher imaginative involvement and greater interest in the project than did externals. In order to test for significant differences among levels of locus of control, scores from both scales were submitted to univariate analysis of variance.

Analysis of variance on imagination scale scores by level of locus of control yielded non-significant results ($F(2,191) = 1.31$, $p > .05$). Main effects and interactions for all variables are presented in Table 21; although there is a significant relationship between imagination scale scores and I-E Scale scores, there are no significant differences among participant groupings.

The analysis of variance on interest scale scores by level of locus of control yielded statistically significant differences ($F(2,191) = 4.25$, $p < .05$). Table 22 summarizes the results of the analysis. A Scheffe post hoc contrast revealed a significant difference between internals and externals ($p < .05$), suggesting that internals reported significantly greater interest in the project than did externals (Table 23). Examination of cell means of interest scale scores, however, reveals a strong interest in the project by

Table 21

Results of analysis of variance for the imagination scale of the research questionnaire: Level of locus of control by sex encounter by situational-dispositional

Source	N = 203			
	<u>ss</u>	<u>df</u>	<u>ms</u>	<u>F</u>
Main effects	150.08	4	37.52	1.18
Level of Locus of Control	83.67	2	41.84	1.31
Sex Encounter	55.21	1	55.21	1.74
Situational-Dispositional	13.13	1	13.13	.41
2-way interactions	180.57	5	36.11	1.14
Level of Locus of Control X Sex Encounter	16.01	2	8.01	.25
Level of Locus of Control X Situational-Dispositional	158.08	2	79.04	2.48
Sex Encounter X Situational-Dispositional	13.44	1	13.44	.42
3-way interactions	40.31	2	20.15	.63
Explained	370.96	11	31.72	1.06
Residual	6,079.17	191	31.83	
Total	6,450.13	202	31.93	

* would indicate $p < .05$

Table 22

Results of analysis of variance for the interest scale of the research questionnaire: Level of locus of control by sex encounter by situational-dispositional

<u>N</u> = 203.				
Source	<u>ss</u>	<u>df</u>	<u>ms</u>	<u>F</u>
Main effects	189.50	4	47.38	2.86*
Level of Locus of Control	140.70	2	70.35	4.25*
Sex encounter	47.87	1	47.87	2.89
Situational-Dispositional	.06	1	.06	.00
2-way interactions	53.64	5	10.73	.65
Level of Locus of Control X Sex Encounter	2.63	2	1.31	.08
Level of Locus of Control X Situational-Dispositional	39.56	2	19.78	1.20
Sex Encounter X Situational-Dispositional	9.67	1	9.67	.58
3-way interactions	35.23	2	17.61	1.06
Explained	278.37	11	25.31	1.53
Residual	3,162.64	191	16.56	
Total	3,441.01	202	17.04	

*would indicate $p < .05$

Table 23

Scheffe post hoc comparisons of interest scale score
means by locus of control designation

N = 203

	Differences between means	
	(2)	(3)
(1) Internals	1.41	2.16*
(2) Moderates		.75
(3) Externals		

* $p < .05$

participants in each of the three cells, in fact, the highest possible interest scale score is 20. Thus, while internals expressed greater interest, overall, the participants expressed being interested in the project.

Summary of Findings

Results of the analyses of variance of the preference evaluation scale, the judgement scale and the experimenter-teacher scale of the research questionnaire yielded statistically non-significant results for hypothesized main effects resulting in a failure to reject the null hypotheses.

A significant interaction effect was observed between the level of locus of control and other sex-same sex encounter; more specifically, internals preferred Kelly's approach in the other sex encounter while internals in the same sex encounter preferred Ellis' approach.

Subsequent to the observation of significant correlations between I-E Scale scores and imagination scale scores and interest scale scores from the research questionnaire, data was submitted to further analyses of variances. Results indicated no significant difference between level of locus of control and imagination scale scores. Internals' interest in the project, however, was significantly greater than that of externals, based on scores from the interest scale of the research questionnaire.

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

CHAPTER FOUR

Discussion

This chapter begins with a discussion of the findings reported in chapter three followed by a section presenting limitations in the interpretation of the results. The chapter concludes with suggestions for further research.

Discussion of Findings

The major purpose of the investigation was to examine relative preference for two cognitively-oriented therapeutic approaches as a function of locus of control and treatment conditions reflecting components of shyness.

With regard to the hypothesized main effects, results reported in chapter three are unable to support the predicted significant differences. That the power values of the obtained contrasts was low, Table 24 (Appendix J), could account for an inability to demonstrate reliable differences.

Cohen (1977) suggests that when statistical contrasts yield low power values, one should look to sample size as well as to methodology and instruments for possible explanations. The N of 203 participants appears to be sufficiently large to allow for demonstrable differences. The sample

may, however, have had other characteristics which possibly neutralized any reliable contrast. A discussion of these characteristics appears in the section on limitations of the investigation.

In terms of the research situation, the procedural instructions employed had previously been tested in a pilot study and found to be clear; similarly, instructions in imagination sequences reflected the imagination enhancement methods suggested in the literature (Spanos, 1977). Additionally, means and standard deviations obtained on the two involvement scales of the research questionnaire indicated that the methodological employment of muted role-taking was successful. Although the research questionnaire's scales were constructed from high factor loadings, it may be that the instrument is in need of further work to increase its precision.

Apart from low power values, it may be that there is no difference to be demonstrated. In this regard, failure to obtain statistically significant main effects on the first hypothesis suggests that although internals and externals may differ in cognitive activity, this distinction per se was not an effective discriminator. Perhaps any significant influence attributable to locus of control was overridden by participants' response to the situational specificity of the psychological context. Rotter's social learning theory, for example, maintains

that generalized expectancies become weaker in the face of situational specificity. It is conceivable, then, that the detailing of elicitors of shyness in the contexts obviated the influence of a generalized locus of control.

Findings of the present investigation do not support earlier studies which obtained significant results when locus of control was used as an indicator of therapeutic preference (Helweg, 1971; Jacobsen, 1971; Wilson, 1973). This may well be a function of the present investigation's employment of locus of control while providing detailed psychological situations.

With regard to the second and third hypotheses, failure to obtain statistically significant main effects suggests that perhaps the chronicity and self-blame which distinguishes dispositional from situational shyness was lost in the confluence of other interests; e.g., interest in the sexual component or a particularly strong interest in either of the therapeutic approaches. Furthermore, it is possible that the distinction obtains only when the types of shyness are overtly contrasted as would be the case, for example, in a repeated measures design.

Zimbardo's designation of other sex-same sex encounters as elicitors of shyness, however, does appear to be theoretically helpful. Although main effects did not obtain for this variable, when combined with level

of locus of control, an interaction effect emerges; more specifically, internals significantly differed in their preference for therapy in reference to other sex-same sex encounter ($t(26) = 2.47; p < .05$). It appears that when an internal focuses on an important other, in a context in which he experiences shyness, the gender of the important other significantly affects preference for the therapeutic approach. Internals in the same sex encounter contexts indicated a preference for Ellis' therapeutic approach ($M = 26.30$); internals in the other sex encounter context preferred Kelly's approach ($M = 37.55$).

That significant differences emerged between groups of internals may be seen as consistent with prior literature on the cognitive activity associated with internality. Since internals attend to informational cues and process, evaluate and utilize information more efficiently than externals, it seems reasonable to conclude that they made differential judgements between the two therapeutic approaches regarding their appropriateness to contribute to the resolution of a conflict arising out of a particular context (Phares, 1968, 1976; Lefcourt & Wine, 1969; DuCette & Wolk, 1973; Pines & Julian, 1972).

Wilson (1973) presents evidence that internals prefer a therapy contingent on the likelihood that it will provide them an increased measure of personal control skills; in this regard, perhaps internals in the same sex context judged shyness that restricted their personal effectiveness in.

that setting to be maintained by irrational beliefs. One may conjecture that adolescent males could be prepared to accept that shyness in same sex encounters is maintained by a system of irrational beliefs since the preponderance of their social skill development is within the framework of interaction of same sex peers. Social interactions with same sex members might be viewed as an area in which they have had the most practice. From this perspective, Ellis' emphasis on the eradication of irrational beliefs may have been seen as the most direct route to the restoration of personal control.

In terms of increasing personal control skills, internals in the other sex encounter context may have judged their ineffectiveness to be a result of their inability to generate more efficient alternative thoughts and behaviors. Perhaps participants construed their inhibiting shyness in this setting as an indication simply of a need to engage in the acquisition of social skills rather than as a function of irrationality. Although each may be equally disabling, heterosexual shyness may have been seen to be more likely at this stage of adolescent social development than same sex shyness. Kelly's therapeutic approach may have been viewed as more adequate to the cultural demands associated with acquisition of social skills in heterosexual interactions.

As reported in chapter three, additional findings emerged from the analysis.

The scores reported on both the imagination scale ($\bar{M} = 15.93$; range 0-24) suggest that participants were actively involved and interested in the investigation. This would suggest that research areas at an early exploratory stage might benefit from the alternative of utilizing the methodological procedures employed in this investigation. Specifically these findings support the use of imaginative procedures in an analogue study.

Although the imagination scale and interest scale means suggest an overall high level of reported involvement, there was a significant difference between internals and externals on the interest scale ($p > .05$). The mid-point on the interest scale being 12, both internals ($\bar{M} = 17.2$) and externals ($\bar{M} = 15.0$) clearly report an interest in the investigation.

Perhaps internals' greater interest in the investigation is attributable, at least in part, to their reputed efficiency in information processing, utilization, and inquisitiveness. The literature reviewed in chapter one may be seen as supportive of this interpretation.

An additional observation may be offered regarding the respective responses of internals and externals to the task demands of the investigation. Although there

was a significant difference between internals and externals on reported interest, there were no differences between internals and externals on reported levels of imaginative involvement. This may be seen as supportive of Spanos' (1977) assertion that imaginative involvement is primarily contingent upon participants' following imaginative instructions. Apparently in this investigation, if participants follow directions provided, they can imagine successfully regardless of varying levels of interest.

An additional analysis was performed in order to further evaluate participants' overall preference between the two therapies. On each of the three scales which comprised the dependent measures, two scores were obtained for each participant. The items were scored firstly, in Kelly's direction and secondly, in Ellis'. The 203 participants' scores on the three scales were submitted to two-tailed t-test for paired means. As reflected in Table 25 (Appendix K), there were no significant differences in participants' preferences. The means of all three scales, however, do reflect an overall favoring of Kelly's approach over Ellis'. Thus, when one examines participants' ratings of Kelly's and Ellis' approaches irrespective of the independent variables, one does not observe a significant preference for either therapeutic approach; apparently participants considered both approaches relatively equally

capable of responding to the types of shyness problems presented in this investigation.

Limitations on Interpretation of Results

Since the present investigation was conducted on Chicago Catholic adolescent university preparatory males, there are consequent limitations on observations and generalization of findings. Perhaps the major limitation on generalization of findings is that they ought to pertain to a similar sample. As well, the fact that the sample was rather select and may have had characteristics which served to contribute to lower power values on obtained contrasts. These characteristics may have included; high intellectual ability, a strong academic motive and orientation, their Catholicism, and perhaps the influence of a predominantly second generation European heritage.

A second qualification on the interpretation of the findings relates to the statistical power of the obtained contrasts on the dependent measures. The obtained power values of the F ratios indicate that there was a less than 50% chance of demonstrating an effect if one existed. These statistical power values suggest that future research may find significant contrasts.

Another limitation on the interpretation of the present investigation's results concerns the fact that only 167 of the total 203 participants' Stanford Survey on Shyness protocols were obtained. Thus, it was not possible to assess the full impact of participants' shyness with regard to preference for the therapeutic approach; neither was it possible to assess the incidence of shyness over the entire sample. It may be that some participants found "shyness" either too volatile or too personal a concern for the manner in which it was addressed by the instrument.

A final caution with reference to interpretation of results pertains to generalizability of findings to clinical settings since the results were obtained in an analogue study.

Suggestions for Future Research

The present investigation obtained a significant interaction in which the sex of the person encountered in a shyness situation was a significant factor. In view of this finding, it would be of interest to know if female participants yield similar results. Sex differences with regard to shyness situations may eventuate in differential preferences among treatment strategies.

With regard to Zimbardo's social-psychological

conceptualization of shyness, perhaps the introduction of the distinction between privately shy and publicly shy response styles (Pilkonis, in press) may add greater precision to future research. While the situational-dispositional model draws upon the attribution of a trait-like distinction, the private-public shy distinction draws upon the attribution of shyness on the basis of more specific behavioral referents. In future investigations employing locus of control and a similar methodology, the private-public shy distinction may allow for greater contrast in the type of shyness.

ABSTRACT

Differences in relative preference for the approaches of George A. Kelly and Albert Ellis were investigated as a function of the cognitive activity associated with internal and external locus of control, in addition to contexts reflecting systematic variation of components of shyness. Following pretesting on Rotter's I-E Scale, Interpersonal Trust Scale and the Stanford Survey on Shyness, 203 males from a college-prep, urban Catholic school were designated as either internals, moderates or externals and were assigned to one of four treatment conditions. Participants were exposed to standardized written descriptions of the approaches of Kelly and Ellis, after which they responded to a comprehension test on the material. Following audio-taped instructions on imagination enhancement, they were presented a trial opportunity for muted role-taking prior to participating in one of four tasks. The tasks depicted contexts reflective of situational shyness with heterosexual or same sex elicitors and dispositional shyness with heterosexual or same sex elicitors. Participants were asked to respond to a research questionnaire which was comprised of items utilized to assess participant 'involvement' as well as items to assess the dependent measure, relative 'preference'. The research questionnaire was subsequently submitted to two separate factor analyses, one for 'involvement' items and another for 'preference' items. The factor analysis of

involvement items provided guidelines for the establishment of an imagination scale and an interest scale; the factor analysis of preference items provided guidelines for the establishment of a preference evaluation scale, a judgement scale, and a teacher-experimenter scale.

Analysis of variance of the three preference scales failed to yield significant differences as a function of either locus of control or treatment conditions. An interaction effect between internality and other sex-same sex elicitors was, however, observed. Internals in the same sex condition significantly preferred Ellis' approach while internals in the other sex condition significantly preferred Kelly's approach. Data were submitted to further statistical analysis for clarification of results; limitations on interpretation of the findings were presented as well as suggestions for further study.

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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 jobs when they graduate than did the college graduates of the past.
36. Most repairman 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 pools 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
Stanford Survey on Shyness

W
3

STANFORD SURVEY ON SHYNESS

Although shyness is a fascinating psychological issue, there has been virtually no research done to increase our understanding of its dynamics and consequences. The present survey represents part of a general research program started at Stanford University (California, U.S.A.) by a team of students and faculty. It is being administered in a number of colleges on the mainland of the U.S.A. as well as in Hawaii, Japan, Mexico, England and Germany. Non-college groups are also being studied in several of these countries.

Please answer all questions as thoughtfully and frankly as you can. We are interested in your experiences, perceptions, and reactions to shyness. Your answers will be confidential.

Thank you for sharing this information with us.

Please circle the number preceding the most appropriate response, or fill in the blank where required.

SECTION A - BACKGROUND INFORMATION

NAME: _____ STUDENT NUMBER: _____

SEX: 1. Male
2. Female

- FAMILY HERITAGE: 1. Polish 4. German
2. Italian 5. Lithuanian
3. Irish 6. other: _____
- RELIGION: 1. none, atheist, or agnostic
2. protestant
3. catholic
4. jewish
5. other: _____

SECTION B - PERSONAL SHYNESS

Do you presently consider yourself to be a shy person?

1. yes 2. no

If you answered "no", was there ever a period in your life during which you considered yourself to be a shy person?

1. yes 2. no

If you answered "yes", was there ever a period in your life during which you considered yourself not to be a shy person?

1. yes 2. no

Do most other people who know you well consider you to be a shy person?

1. yes 2. no

Do acquaintances consider you to be a shy person?

1. yes 2. no

On the following scale of introversion-extroversion, circle the number which best represents how you would generally classify yourself. (Note: an introvert is defined as "one whose thoughts and interests are primarily directed inward." An extrovert is defined as "one primarily interested in others or in the environment.")

1. Extreme Introvert
2. Moderate Introvert
3. Slight Introvert
4. Neutral
5. Slight Extrovert
6. Moderate Extrovert
7. Extreme Extrovert

Compared to your peers (of the same age and sex), how shy would you estimate you are?

- I am:
1. much more shy
 2. more shy
 3. about average
 4. less shy
 5. much less shy

What percentage of the general population (from 0 to 100%) would you estimate are shy, that is, would label themselves as shy persons? (fill in your estimate)

_____ %

How desirable do you think shyness is as a personal characteristic?

1. very undesirable
2. undesirable
3. neither undesirable nor desirable
4. desirable
5. very desirable

Even if you labeled yourself in general as not shy, both past and present, have you ever experienced feelings of shyness?

1. yes

2. no

SECTION C - DIMENSIONS OF SHYNESS

NOTE: If you have never experienced feelings of shyness, please omit the remaining questions and answer only the last question (Section G), and you will have completed the questionnaire.

If you now experience, or have ever experienced feelings of shyness, please indicate which of the following situations, activities, and types of people elicit shyness in you.

(Place a check mark next to all of the appropriate choices.)

Situations and activities which elicit shyness in me:

- ☐ social situations in general
- ☐ large groups
- ☐ small, task-oriented groups (e.g., seminars at school, work groups on the job)
- ☐ small social groups (e.g., at parties, dances)
- ☐ one-to-one interactions with a person of the opposite sex
- ☐ situations where I am vulnerable (e.g., when asking for help)
- ☐ situations where I am of lower status than others (e.g., when speaking to superiors, authorities)
- ☐ situations requiring assertiveness (e.g., when complaining about faulty service in a restaurant or the poor quality of a product)
- ☐ situations where I am the focus of attention, before a large group (e.g., when giving a speech)
- ☐ situations where I am the focus of attention, before a small group (e.g., when being introduced, when being asked directly for my opinion)
- ☐ situations where I am being evaluated or compared with others (e.g., when being interviewed, when being criticized)
- ☐ new situations in general

Types of people who elicit shyness in me:

- ☐ my parents
- ☐ my siblings
- ☐ other relatives
- ☐ friends
- ☐ strangers
- ☐ foreigners
- ☐ authorities (by virtue of their role - police, teacher, superior at work)
- ☐ authorities (by virtue of their knowledge - intellectual superiors, experts)
- ☐ elderly people (much older than you)
- ☐ children (much younger than you)
- ☐ persons of the opposite sex, in a group
- ☐ persons of the same sex, in a group
- ☐ a person of the opposite sex, one-to-one
- ☐ a person of the same sex, one-to-one

SECTION D - REACTIONS TO SHYNESS

If you do experience, or have ever experienced feelings of shyness, which of the following physiological reactions are associated with such feelings? (Check all those that apply)

- ☐ blushing
 - ☐ increased pulse
 - ☐ "butterflies in the stomach"
 - ☐ tingling sensations
 - ☐ heart pounding
 - ☐ dry mouth
 - ☐ tremors
 - ☐ perspirations
 - ☐ fatigue
 - ☐ others (specify below)
-

If you do experience, or have ever experienced feelings of shyness, what are the overt behaviors which might indicate to others that you are feeling shy?

(Check all those that apply.)

- ☐ low speaking voice
 - ☐ avoidance of other people
 - ☐ silence (a reluctance to talk)
 - ☐ stuttering
 - ☐ inability to make eye contact
 - ☐ posture
 - ☐ avoidance of taking action
 - ☐ others (specify below)
-

If you do experience, or have ever experienced feelings of shyness, what are the specific thoughts and sensations associated with such feelings? (Check all those that apply)

- ☐ positive thoughts (e.g., feeling content with myself)
- ☐ no specific thoughts (e.g., daydreaming, thinking about nothing in particular)
- ☐ self-consciousness (e.g., an extreme awareness of myself, of my every action)
- ☐ thoughts that focus on the unpleasantness of the situation (e.g., thinking that the situation is terrible, thinking that I'd like to be out of the situation)
- ☐ thoughts that provide distractions (e.g., thinking of other things I could be doing, thinking that the experience will be over in a short while)
- ☐ negative thoughts about myself (e.g., feeling inadequate, insecure, inferior, stupid)
- ☐ thoughts about the evaluations of me that others are making (e.g., wondering what the people around me are thinking of me)
- ☐ thoughts about the way in which I am handling myself (e.g., wondering what kind of impression I am creating and how I might control it)
- ☐ thoughts about shyness in general (e.g., thinking about the extent of my shyness and its consequences, wishing that I weren't shy)

SECTION E - CONSEQUENCES OF SHYNESS

What are the positive consequences of being shy?

(Check all those that apply.)

- ☐ none, no positive consequences
- ☐ creates a modest, appealing impression; makes one appear discreet, introspective
- ☐ helps avoid interpersonal conflicts
- ☐ provides a convenient form of anonymity and protection
- ☐ provides an opportunity to stand back, observe others, act carefully and intelligently
- ☐ avoids negative evaluations by others (e.g., a shy person is not considered obnoxious, overaggressive or pretentious)
- ☐ provides a way to be selective about the people with whom one interacts
- ☐ enhances personal privacy and the pleasure that solitude offers
- ☐ creates positive interpersonal consequences, by not putting others off, intimidating them or hurting them

What are the negative consequences of being shy?

(Check all those that apply.)

- ☐ none, no negative consequences

- ___ creates social problems; makes it difficult to meet new people, make new friends, enjoy potentially good experiences
- ___ has negative consequences; creates feelings of loneliness, isolation, depression
- ___ prevents positive evaluations by others (e.g., my personal assets never become apparent because of my shyness)
- ___ makes it difficult to be appropriately assertive, to express opinions, to take advantage of opportunities
- ___ allows incorrect negative evaluations by others (e.g., I may unjustly be seen as unfriendly or snobbish or weak)
- ___ creates cognitive and expressive difficulties; inhibits the capacity to think clearly while with others and to communicate effectively with them
- ___ encourages excessive self-consciousness, preoccupation with myself.

SECTION F - SHYNESS, A PROBLEM?

If you labeled yourself as a shy person (either past or present), please respond to the questions in this section.

In general, do you (did you) like being shy?

1. yes

2. no

Do you (did you) consider shyness to be a problem?

1. yes 2. no

In deciding whether or not to call yourself a "shy person",
was your decision based on the fact that: (circle one)

1. you are (were) shy all of the time in all
situations
2. you are (were) shy at least 50% of the time,
in more situations than not
3. you are (were) shy only occasionally, but those
are (were) of enough importance to justify calling
yourself a shy person

SECTION G - JUDGEMENTS OF SHYNESS IN OTHERS

What behaviors on the part of another person would indicate
to you that this other person is feeling shy?

(Check all those that apply.)

- ☐ blushing
- ☐ low speaking voice
- ☐ inability to make eye contact
- ☐ avoidance of other people
- ☐ silence (a reluctance to talk)
- ☐ posture
- ☐ stuttering
- ☐ others (specify below)
-

APPENDIX D

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 'procédure 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

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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

here 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. 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 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 dog 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 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 - Situational shyness: opposite sex encounter,
group setting

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.

On Saturday afternoon a friend calls to invite you to a small party at his house that evening. Most of the people coming to the party will have dates. You have met most of the people before but really only know them very casually. You are hesitant to go until your friend mentions that Carol will be coming and that she won't have a date either. You are surprised she doesn't have a date, you are excited and you know now why he has called. He knows you have been interested in Carol for a long time. Even though you don't know many of the people well, you are excited about the possibility of getting to know Carol. You think about the fact that you have wanted to meet her for quite a long time, and now you will have a chance. You hope all will go well. Carol is exceptionally attractive, in fact, beautiful. You know that she isn't seeing anyone

on a steady basis and now you will have a chance. As you think about the party, you hope that everything will be alright.

You really hope Carol will like you and you begin to fantasize about taking her home, and hopefully going out with her again. You think about what to wear. You know you've got to look your best. You have to come across well if she is to like you.

At the party, Carol looks terrific. She seems right at home and appears to be having a good time. But you're not so sure you are. As you approach her to talk and to ask her to dance, the words just don't sound right. Someone else asks her to dance and you start thinking about how stupid you must look just standing there while she's dancing with someone else. You wonder what the friend who invited you must be thinking -- he knows you wanted to get to know Carol.

Throughout the party you are silent while the others are talking and having fun. Whenever you are near Carol, you can't seem to say the right things. You feel yourself blush. You find it difficult to maintain eye contact with Carol. As you realize how awkward you must look, your pulse seems to quicken and your heart pounds. You start to wonder what's going on. Your stomach has butterflies. Whenever you speak your voice is weak. You keep thinking everybody

must notice. You really are not impressing Carol.

After the party is over, you really feel lousy. You blew it. . . . What happened? You've always been able to talk to girls; you've always been able to dance with girls in the past. What about Saturday night made you act and feel like that? You've never acted or felt quite like that before. Why did you feel so strange all of a sudden? You keep thinking about and wondering about how you blew it with Carol, and you decide that you would like to talk to someone.

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 2 - Dispositional shyness: opposite sex encounter,
group setting

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.

On Saturday afternoon a friend calls to invite you to a small party at his house that evening. Most of the people coming will have dates. You have met most of them before but really only know them very casually. You are hesitant. You know there is no use in going but your friend mentions that Carol will be coming and that she won't have a date either. You're surprised that she doesn't have a date, you are excited and now you know why he has called. He knows you have been interested in Carol for a long time. Even though you don't know many of the people well, you are excited about the possibility of getting to know Carol. You think about the fact that you have wanted to meet her for quite a long time, and now you will have a chance. You hope all will go well though you know it probably won't. Carol is exceptionally attractive, in fact, beautiful. You know that she isn't seeing anyone on a steady basis and that now you would have a chance. As you think about the party you hope everything will be alright but deep down you know it won't.

You really hope Carol will like you and you even begin to fantasize about taking her home and maybe even going out with her again. You think about what to wear. You know you've got to look your best. You have to come across well if she is to like you.

Once at the party, Carol looks terrific. She seems right at home and appears to be having a good time. As usual, you are not having a good time. As you approach her, you try to talk, you want to ask her to dance. The words just don't come out. Someone else asks her to dance. You stand there wishing you hadn't even come. You start thinking about how stupid you must look standing there while she's dancing with someone else. You wonder what the friend who invited you must be thinking. He knows you wanted to get to know Carol. You thought for sure you would blow it anyway.

Throughout the party you are silent while all the others are talking and having fun. When you are near Carol, you can't seem to say anything. You feel yourself blush. You find it difficult to maintain eye contact with Carol. As you realize how awkward you must look, your pulse seems to quicken, your heart pounds. You think to yourself, it's the same old story. Your stomach has butterflies. Whenever you try to speak your voice is weak. You're sure everybody must notice. You really are not impressing Carol.

• After the party is over you feel lousy. You blew it again. . . It happened again. You always act and feel like that at parties. You wonder why. Why are you always this way? Why do you always feel like that? You decide to talk about it with someone.

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 - Situational shyness: same sex encounter,
group setting

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.

It's early September and you are at the campus of Notre Dame University: the first day of your freshman year. You have been looking forward to this day for so long. You have wanted to go to Notre Dame for as long as you can remember, and here you are, on your first day.

As you're taking your things up the stairs and placing them in your room, you learn that you are in a dormitory for upper classmen. You are thinking about that while you are unpacking. You wonder what tomorrow might bring. You're thinking about being in a dormitory with mostly upper classmen. You think, "Gee, that could really be a good thing; I might learn the ropes a lot quicker. They might tell me about good courses to take -- they might tell me about what courses to stay away from. They've learned a lot -- I can get a lot from them."

As you are unpacking your things, you think about these advantages of being in a dormitory with upper classmen. Even your roommate is an upper classman, though you haven't had a chance to meet him yet. You think to yourself, "I hope these guys like me. It's really important that they like me. I hope they think I'm a good guy." You also think to yourself, "If I want them to like me, they have to get to know me and there is no time like the present." So, you decide that just as soon as you get your things unpacked, you are going to begin to wander around the dormitory a little bit, meet some of the guys, say hello

and try to get to know some of them.

Walking down the halls, you begin to notice the new smells of the building that you live in now, you notice the different views of the campus from the windows, you begin to just walk around and look for some of the guys that might be there too. As you walk around hoping to run into some of the guys who live there, you begin to feel a little awkward, like you somehow don't belong. You notice your heart is pounding awfully fast. That's not like you. Gee, your pulse is really beating fast too. That's not like you either. You begin to wonder what's going on all of a sudden. You see some guys down the hall, obviously upper classmen, who seem to know their way around pretty well and you think you should meet them.

So you walk over to them. One of them looks up at you, seems like a nice fellow, asks you your name and you stammer. Can you believe it? You stammer, you blush and you feel like a real jerk. He asks you where you're from. It seems like it takes you forever to remember that you're from Chicago. You think to yourself, "He must think I'm a real jerk, and inside they're probably all laughing. Probably can't wait to tell all the other guys about the new weirdo in the house." You think, "What a fool I'm making of myself."

You very quickly excuse yourself and begin to walk

down the hall, feeling like you don't belong. You wonder what's happening. You have butterflies in your stomach. This is a brand new feeling for you. You've never felt this out-of-place before. What could be wrong all of a sudden? You go back to your room, grateful that you can close your door and just sit down on your bed and start to think about it. You can still feel your heart pounding. What is it about this place? You've never had that reaction before when you've met people. You shake your head, really surprised at yourself.

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 - Dispositional shyness: same sex encounter,
group setting

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.

It's early September and you are at the campus of Notre Dame University: the first day of your freshman year. You have been looking forward to this day for so long. You have wanted to go to Notre Dame for as long as you can remember, and here you are, on your first day.

As you're taking your things up the stairs and placing them in your room, you learn that you are in a dormitory for upper classmen. You are thinking about that while you are unpacking. You wonder what tomorrow might bring. You're thinking about being in a dormitory with mostly upper classmen. You think, "Is it going to be different here, or will it be more of the same? Will I get to know people here? Will I get to enjoy things other than classes, or will I still be like I've always been?"

As you are unpacking your things, you think about the advantages of being in a dormitory with upper classmen. Even your roommate is an upper classman, though you haven't had a chance to meet him yet. You think to yourself, "I hope these guys like me. I hope they think I'm a good guy."

You also think to yourself, "If I want them to like me, they have to get to know me, and there is no time like the present." So, you decide that just as soon as you get your things unpacked, you're going to begin to wander around the dormitory a little bit, and as hard as it is, you're going to try to meet some of the guys, and get to know them.

Walking down the halls, you begin to notice the new smells of the building that you live in now, you notice the different views of the campus from the windows, you begin to just walk around and look for some of the guys that might be there too. As you walk around hoping to run into some of the guys who live there, you begin to feel a little awkward, like you somehow don't belong. You ask yourself, "Is it going to be the same old thing?" You begin to notice some very familiar signs, your heart's pounding awfully fast, your pulse is really beating fast, you think to yourself, "Here we go again -- same old thing."

You see some guys down the hall, obviously upper classmen, who seem to know their way around pretty well, and you think you should meet them. While you're thinking, one of the guys says hello and asks your name. You stammer. Can you believe it? You stammer. You blush and you feel like a real jerk. You can't even look him in the eye. You wish you were back in your room with the door closed.

You shuffle your feet as he asks you casually where you're from. It seems like it takes you forever to remember you're from Chicago. You think to yourself, "He must think I'm a real jerk, and inside they're probably all laughing. Probably can't wait to tell all the other guys about the new weirdo in the house." You think, "What a fool I'm making of myself." You realize things aren't going to be any different here at Notre Dame.

You very quickly excuse yourself and begin to walk down the hall, feeling like you don't belong. It's going to be just like it's always been. You go back to your room grateful that you can close your door, and just sit on your bed and start thinking, "Why have I always been this way? It seems so easy for others to meet new people and to make conversation. They seem to feel so at ease and to enjoy it." You can still feel your heart pounding as you think, "It's always been pure hell for me."

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 E

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 has 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 unmasks 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.

IV 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 F

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 G
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 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

5. How well were you 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 H
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 I
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 J

Table 24

Table 24

Power values of F ratios on the preference evaluation, judgement and experimenter-teacher scales of the research questionnaire for the main effects of level of locus of control, sex encounter and situational-dispositional

Scale	Main Effect	Power Value
Preference Evaluation	Level of Locus of Control	47
	Sex Encounter	21
	Situational-Dispositional	9
Judgement	Level of Locus of Control	4
	Sex Encounter	36
	Situational-Dispositional	1
Experimenter-Teacher	Level of Locus of Control	38
	Sex Encounter	22
	Situational-Dispositional	3

APPENDIX K

Table 25

Table 25

Results of t-tests comparing participants' preferences for the therapeutic approaches of Kelly or Ellis as indicated on the preference evaluation, judgement and experimenter-teacher scales of the research questionnaire

$N = 203$

Scale	n	Mean score		Mean score		df	t
		Kelly Preference	SD	Ellis Preference	SD		
Preference Evaluation	203	31.65	15.05	28.35	15.05	202	1.56
Judgement	203	3.04	1.88	2.96	1.88	202	.30
Experimenter- Teacher	203	6.38	3.22	5.62	3.22	202	1.68

* would indicate $p < .05$