AN ABSTRACT OF THE THESIS OF

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Dr. James L. Firth

This study examined the effects of a group treatment of Self-Instructional Training (S.I.T.) with an institutionalized aged (65 or over) population. The purpose of the S.I.T. program was to increase the positive content of speech elicited in a structured social interaction. S.I.T., as developed for this study, followed Meichenbaum's three phase model. First was the educational phase, where the rationale and introduction were presented. Second was the rehearsal phase where therapeutic techniques were developed and modeled. Third was the application phase where newly acquired skills were practiced. Four groups (total N = 51) were randomly assigned to either the experimental group or the no-treatment control group at each of two residential care facilities. The S.I.T. program emphasized substitution of negative self-statements with positive self-statements aimed at developing a more successful repertoire of social interaction skills. Results were analyzed by comparing tabulated positive minus negative self-statements elicited during tape recorded standard interviews. Statistical analysis showed significantly more positive response sets for the experimental subjects on four of the ten hypotheses that reflected

the ten standard interview questions. The analysis of the combined

responses from the entire interview showed significant differences

favoring a positive response pattern for the experimental subjects.

These findings were interpreted to demonstrate the effectiveness of

S.I.T. for increasing positive speech content in an

institutionalized aged population. A case was made for increased

use of S.I.T. programs as a therapeutic means of ameliorating a

range of problems faced by the aged.

The Effects of Group Self-Instructional Training
on Positive Verbalizations
in an Aged Population

by

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CHAPTER I

INTRODUCTION

The literature in the field of gerontology has indentified the

combined experience of aging and institutionalization as pervasively

negative and destructive, both for the aged individual and society.

Tobin and Leiberman (1976) begin Last home for the Aged as follows:

> To live to an advanced old age may indeed be a
> blessing; but it may also be a curse. Living
> through the eighth and ninth decade of life can
> bring both personal deterioration and social
> losses. When less drastic efforts to adapt to
> these misfortunes fail, the elderly person and
> his or her family are often forced toward the
> more drastic solution of seeking institutional
> care. With each advancing year, the older
> person becomes increasingly aware that a
> catastrophic illness or a major loss in the
> social support system may necessitate this
> usually dreaded possibility.   (p. 1)

The institutionalized aged person, typically in the eight or ninth

decade of life (Tobin & Leiberman, 1976), has been keenly aware of

the losses and depersonalization of the institutionalization

process. Atchely (1977) states:

> Surely the fact that large numbers of people now
> live to reach old age is one of modern society's
> greatest achievements. Yet most people look
> forward to old age with fear and apprehension.
>   (p. 12)

The number of aged people in the United States is growing

dramatically. In 1900 there were approximately three million older

people (over age 65) comprising four percent of the total

population. By 1970 there was more than a sixfold increase to over

twenty million older people comprising almost ten percent of the population. By the year 2000, the number of older people could reach thirty-five million. This growth will take place a decade before the population bulge of the post-war baby boom reaches age sixty-five (Atchley, 1977).

There exists an increasingly pressing need to develop intervention strategies to offset the deleterious psychological effects of institutionalization. These intervention strategies should begin to focus on psychological variables of this population rather than on institutional variables, which have characterized the bulk of past research (Tobin & Leiberman, 1976, p. 210).

This study focused on the use of one intervention strategy, Self-Instructional Training. This therapy (S.I.T.) was developed and researched primarily by Meichenbaum (1977) and his associates at the University of Toronto. Chapter II will examine in some detail past uses of Self-Instructional Training (S.I.T.). Although, as of this writing, very little research was available on the application of S.I.T. programs with the aged, the use of these procedures with this population is seen as promising. As Meichenbaum (1974) states:

> The possibility of training elderly individuals
> to talk themselves into having a positive set
> represents a most exciting challenge. (p. 274)

The development of Self-Instructional Training is primarily a result of the merging of cognitive theories of behavior (Ellis 1977, Beck 1967), and Soviet theories of language acquisition and behavior regulation (Vygotsky 1963, Luria 1961). The Soviet psychologists emphasized the role of "inner speech" or "self talk" in mediation of

behaviors as children develop. This occurred through acquisition of sets of verbal regulations or "self-statements." These self-statements gradually became more complete, complex, and functionally successful as the child matured. In the developing child, the self-statements were initially audible, at least in part. Gradually, with maturity and experience, the regulatory self-statements became sub-vocal and part of the child's seemingly "automatic" cognitive processes (Cole 1969).

Ellis (1977) and Beck (1967) were primarily concerned with the extent to which an individual's cognitions or thoughts (referred to by Ellis as "beliefs") control affect and emotional perception. Ellis (1977) theorizes that a person's behavior and feelings reflect these "beliefs" much more than the actual events which occur in that person's physical environment. Beck (1967) proposes a similar theoretical basis for the nature of depression:

> The more negatively the patient thinks, the
> worse he feels; the worse he feels, the more
> negatively he thinks. (p. 289)

Meichenbaum (1977) developed Self-Instructional Training (S.I.T.) to apply the concept of acquisition of a learned set of self-instructions or self-statements (Vygotsky & Luria) to change or moderate problem behaviors.

The S.I.T. program consists of three phases. First is the educational phase. This phase involves presentation of the rationale of S.I.T. procedures and the theoretical basis for change of behavior and desired results. Second is the rehearsal phase. This phase emphasizes analysis of self-statements. Third is the application phase. Actual problem behaviors are dealt with during

this phase. The purpose was to experience the change that results from using the newly acquired self-statements developed in the rehearsal phase. The application phase uses role playing and actual problem situations (Meichenbaum 1977).

One of the central problems concerning successful or unsuccessful coping with institutionalization is the nature and quality of the aged person's cognitive repertoire (Engel 1968). Another central problem area concerns social disengagement, or the gradual decrease in inter-personal contact and involvement. This study focused on relationship quality which is one aspect of social disengagment, undermined by negative social interaction (Tobin & Leiberman, p. 184).

Statement of the Problem

The literature on aging reveals a pervasive atmosphere of negativism in institutional settings for the aged. One aspect of this negative climate is social disengagement and isolation. The work of Ellis and Beck and the Soviet psychologists Vygotsky and Luria suggests that internal thought processes are at least partially responsible for regulating behavior.

The purpose of this study was to investigate the potential of using Self-Instructional Training as a specific technique or therapy aimed at changing one aspect of the thought processes associated with social disengagement. This one aspect is the negative content of speech in social interactions. The goal of treatment was to influence a change toward more positive verbal content in speech in a social interaction of an institutionalized aged population.

The significance of this study was to take an initial step toward development of treatment strategies that were aimed at improving the quality of experience of the aged person in our society. Traditionally, research has centered on institutional effects and changing the quality of the institution in a physical or medical sense (Tobin & Leiberman 1976). A shift toward human values, human potentials, and the nature of successful coping within existing realities is long overdue.

Need for the Study

Theorists have suggested that "inner speech" plays an important role in behavior regulation and emotional perception (Luria 1961, Meichenbaum 1977). The negative effects of institutionalization on the aged have not been connected to research efforts using Self-Instructional Training (Meichenbaum 1974). This study attempted to apply S.I.T. techniques, which are based on the concept of the regulatory function of inner speech, to a specific facet of the negative effects of institutionalization.

Definitions of Terms

Self-Instructional Training--A cognitive behavior modification therapy developed by Meichenbaum (1977). The purpose of S.I.T. is to change a pattern of thoughts to modify problem behaviors or develop new skills. S.I.T. is a three phase verbal therapy. These phases are the (1) educational phase, (2) rehearsal phase, and (3) application phase. This three-phase treatment

assists the subject in developing behavior-regulating self-statements, or thoughts. The intention is to solve the target problem or in some way to change the style and content of thinking and acting on an environmental event. For this study S.I.T. is a treatment designed to increase the positive content of speech in a structured social interaction situation.

Inner Speech--Thoughts expressed in language which serve a regulatory or mediating function. Inner speech in this context is usually, but not always silent. Inner speech is synonymous with self-statements.

Positive Self-Statements--Inner speech specifically aimed at viewing a social interaction or other personally relevant interaction with the environment in a constructive, enhancing, mood elevating manner associated with successful coping.

Negative Self-Statements--Inner speech focusing on detrimental, damaging, or unhealthy actions or feelings about social and other environmental events. They are associated with unsuccessful coping.

Aged--For the purpose of this study, any person age 65 or older.

Positive or Negative Statements--Units of speech recognized as sentences, distinct phrases, or changes in meaning or content separated by pauses. The criteria for determination of positive or negative content are given in Appendix L.

Research Hypotheses

This study was designed to test the following hypotheses. These research hypotheses are stated in null form with an

alternative directional or "one tailed" hypothesis (Glass & Stanley 1970, p. 288). Hypotheses H_1 through H_{10} are reflected in the standard interview questionnaire used as the pre-test and post-test instrument. Hypohtesis H_T is equated with the results of comparison of the combined total of the responses to the entire interview.

Mean scores referred to in these hypotheses were calculated by averaging the remainder of positive statements minus negative statements for each interview question. The H_T mean score was calculated by averaging the remainder of the combined total of positive statements minus the combined total of negative statements.

Hypothesis 1

H_1: The mean score of the treatment group will not be significantly different from the mean score of the control group for question 1:

"Share with me your feelings about living here?"

Alternative Hypothesis 1

$H_{1.1}$: The mean score of the treatment group will be higher than the mean score of the control group for question 1.

Hypothesis 2

H_2: The mean score of the treatment group will not be significantly different from the mean score of the control group for question 2:

"What do you think about the people who work here?"

Alternative Hypothesis 2

$H_{2.1}$: The mean score of the treatment group will be higher than the mean score of the control group for question 2.

Hypothesis 3

H_3: The mean score of the treatment group will not be significantly different from the mean score of the control group for question 3:

"How do you feel about the other people who live with you, your neighbors?"

Alternative Hypothesis 3

$H_{3.1}$: The mean score of the treatment group will be higher than the mean score of the control group for question 3.

Hypothesis 4

H_4: The mean score of the treatment group will not be significantly different from the mean score of the control group for question 4:

"What can you tell me about you, now at this point in your life?"

Alternative Hypothesis 4

$H_{4.1}$: The mean score of the treatment group will be higher than the mean score of the control group for question 4.

Hypothesis 5

H_5: The mean score of the treatment group will not be significantly different from the mean score of the control group for question 5:

"Tell me something about activities or other things you participate in here."

Alternative Hypothesis 5

$H_{5.1}$: The mean score of the treatment group will be higher than the mean score of the control group for question 5.

Hypothesis 6

H_6: The mean score of the treatment group will not be significantly different from the mean score of the control group for question 6:

"How would you describe your physical health?"

Alternative Hypothesis 6

$H_{6.1}$: The mean score of the treatment group will be higher than the mean score of the control group for question 6.

Hypothesis 7

H_7: The mean score of the treatment group will not be significantly different from the mean score of the control group for question 7:

"How do you feel emotionally?"

Alternative Hypothesis 7

$H_{7.1}$: The mean score of the treatment group will be higher than the mean score of the control group for question 7.

Hypothesis 8

H_8: The mean score of the treatment group will not be significantly different from the mean score of the control group for question 8:

"Tell me about your family?"

Alternative Hypothesis 8

$H_{8.1}$: The mean score of the treatment group will be higher than the mean score of the control group for question 8.

Hypothesis 9

H_9: The mean score of the treatment group will not be significantly different from the mean score of the control group for question 9:

"Can you tell me about friends you have here?"

Alternative Hypothesis 9

$H_{9.1}$: The mean score of the treatment group will be higher than the mean score of the control group for question 9.

Hypothesis 10

H_{10}: The mean score of the treatment group will not be significantly different from the mean score of the control group for question 10:

"Will you share with me smoe thoughts about your future?"

Alternative Hypothesis 10

$H_{10.1}$ The mean score of the treatment group will be higher than the mean score of the control group for question 10.

Hypothesis T

H_T: The mean score of the treatment group will not be significantly different from the mean score of the control group for the combined total response to the interview schedule.

Alternative Hypothesis T

$H_{T.1}$: The mean score of the treatment group will be higher than the mean score of the control group for the combined total response to the interview schedule.

Limitations of the Study

The population under study was limited geographically to Linn and Benton Counties in Oregon's Willamette Valley. Because of the nature of the population as a whole in this region, the subjects in this study were fairly homogeneous in terms of race and cultural experience. The population included no typically recognized racial

minorities. There were no atypical cultural backgrounds prevalent in this population. The subjects were either born in the United States, or immigrated at a fairly young age from Western European countries.

This study did not explore the use of Self-Instructional Training with aged persons having organic brain syndrome or other forms of severe cognitive impairment. Cognitive impairment is seen as a continuum in aged populations from mild to severe forms (Eisdorfer & Friedel 1977). No generalizations are made about the effectiveness of Self-Instructional Training with the severely cognitively impaired.

Finally, this study did not compare S.I.T. with other therapies or treatments. A no-treatment control group was used. The relative effectiveness of S.I.T. can be inferred only from other studies examined in Chapter II which do use alternate treatment control groups.

Summary

Chapter I presented an overview of the background literature, rationale, and need for this study. The negative consequences of institutionalization and the aged were discussed. Theoretical components of Self-Instructional Training were presented in brief. S.I.T. in this study was a cognitive behavior modification procedure designed to enhance the positive content of speech in a social interaction.

The statement of the problem emphasized the need to put into use a therapy aimed at improving the human experience of aging complicated by institutionalization. Essential terms were defined. Some general limitations of the study were discussed and the research hypotheses were presented.

Chapter II will present a detailed review of the literature in the areas of the regulatory function of inner speech, S.I.T. research, and verbal reports as data.

CHAPTER II

REVIEW OF THE LITERATURE

This chapter will review the literature concerning the regulatory functions of inner speech on behavior. The first portion of the chapter will be concerned primarily with historical background and theoretical development. Following will be literature relevant to Self-Instructional Training used as a therapy program. Since the instrumentation presented in Chapter III depends on the collection of verbal statements, literature related to verbal reports as data will also be discussed.

The literature search was conducted using computer search procedures available at the Oregon State University Library. Principal use was made of the Library Information Retrieval Service (LIRS). One tool of LIRS that was particularly effective was the use of a citation search. For this procedure major references (Meichenbaum 1969, 1975, 1977, Vygotsky 1962, Luria 1961) were used to cross-index any study citing these references. This resulted in a fairly concise listing of research related to the use of Self-Instructional Training techniques or related methodologies.

Inner Speech and Behavior Regulation

In psychology, the term "inner speech" usually signifies soundless, mental speech, arising at the instant we think about something, plan or solve problems in our mind, recall books read or conversations heard, read and write silently. In all such instances, we think and remember with the aid of words which we articulate to ourselves. Inner speech is nothing but speech to oneself, or concealed verbalization, which is instrumental in the logical processing of sensory data, in their realization and comprehension within a definite system of concepts and judgments. The elements of inner

> speech are found in all our conscious
> perceptions, actions, and emotional experiences,
> where they manifest themselves as verbal sets,
> instructions to oneself, or as verbal
> interpretation of sensations and perceptions.
> This renders inner speech a rather important and
> universal mechanism in human consciousness and
> psychic activity.   (Sokolov 1972, P.1)

Pioneering theoretical and empirical research on the self-regulatiory aspects of speech was conducted by Vygotsky in the Soviet Union during the 1930's and 1940's. Vygotsky studied the acquisition and role of self-directed speech in the developing child (Zivin 1979).

According to Vygotsky's theory, the development of inner speech in the child served a fundamental regulatory role in motor and cognitive behavior. He concluded that the child's earliest pre-verbal development of symbol-based communication and later acquisition of complex cognitive function were developmental correlates of learned patterns of inner speech. The child's ability to understand and control events in the environment were directly related to acquired self-regulatory language-based cognitions. The function of inner speech served to formulate and execute appropriate motor and verbal responses (Vygotsky 1962).

Vygotsky theorized that inner speech acquisition and development shaped a procss through which the child learned to master language and environment. This process continued, frequently involving overt practice of self-regulatory speech, until about age five to seven. At that age, the child had acquired sufficient skill in silent thinking and awareness of social expectations to remove regulatory self-statements from audible speech (Zivin 1970).

It was Vygotsky's view that the regulatory function of inner

speech and verbal structure of thought did not disappear. Inner speech remained in the maturing child as a central regulatory function of motor and cognitive behavior. He maintained that this function could be demonstrated in adults of all ages through presentation of a new or complex problem. This often resulted in the resurfacing of audible regulatory self-statements in the adult (Vygotsky 1962).

Vygotsky's conceptualization of verbal mediation has radically changed the focus of research in behavioral and developmental psychology in North America (Meichenbaum 1977). Rather than conceptualizing the child, and later the adult, as mere respondents to stimulus properties of the environment, they are conceptualized as able to master, change, mediate, and comprehend their environment through verbal self-regulation (Vygotsky 1962).

> The process of mastering human experience is transmitted by speech and leads to formation of new methods of activity, a new inter-relationship between "mental functions," new functional systems and in the final analysis, to the origin of those "higher psychological functions." Luria, from Cole 1969, p. 128)
>
> ..'it is speech for oneself' serving above all to fix and regulate intellectual processes, (Ibid. p. 143)

A second Soviet psychologist, Luria, followed Vygotsky's earlier theoretical groundwork with development of research procedures to test hypotheses on self-regulatory speech (Zivin 1979). Luria also believed inner speech development in the child to be a self-regulatory phenomenon (Luria 1961).

Luria (1961) identified three stages in children by which voluntary motor behaviors came under verbal control. In the first

stage overt speech, usually from an adult, directed the child's behavior. The child's own overt verbal controls (self-statements) became an effective regulator of behavior in stage two. And finally, in the third stage, the child's own covert, or inner speech, assumed a self-governing role. His experimental procedures and results of his research provided strong evidence for acceptance of the self-regulatory role of speech in cognitive development (Meichenbaum 1972). His work provided the inspiration and framework for later work on self-regulatory speech in the United States and Canada (Meichenbaum 1969, 1974, 1977).

Following translation of Vygotsky's and Luria's writings, research was begun to examine the role and relationship of self-regulatory speech in problem behaviors and performance deficiencies in children (Flavell, Beach & Chinsky 1966). This research produced dramatic evidence that self-regulatory speech could be enhanced and manipulated in children to increase performance levels on problem solving tasks and change target behaviors, such as rule breaking and lying (Zivin 1979).

The concept of self-regulatory inner speech as proposed by Vygotsky and Luria was similar to Ellis's (1977) concept of the role of irrational beliefs on emotional consequences. To paraphrase Ellis, an individual may feel that emotional and behaviorial consequences are the direct result of an event in the environment. Actually, the emotional and behavioral consequences are a direct result of an individual's beliefs about the event (Ellis 1977, p. 6). These beliefs, as discribed by Ellis, are a set of damaging self-statements which elicit self-defeating behaviors. "With these

beliefs you could easily drive yourself to despair and depression" (Ellis, 1977, p. 7).

Beck (1967), similarly, viewed the primary component of depression as a set of maladaptive cognitive patterns. These patterns had sets of negative self-statements with three major focuses. The first was a pattern of interpreting experience in a negative way. The second was a pattern of viewing self in a negative way. The third consisted of viewing the future in a negative way (Beck 1967, p. 255). Beck provided some examples of these maladaptive self-statements:

> His cognitive response to a problem or
> difficulty is likely to be an idea such as "I'm
> licked," "I'll never be able to do this" or "I'm
> blocked no matter what I do."
> (Beck, 1976, p. 256)

The cognitive theories of emotional and behavioral problems proposed by Ellis and Beck were similar to those that Meichenbaum used in the development of Self-Instructional Training (Ellis & Grieger, 1977). Meichenbaum (1977) stated that many problem behaviors and behavioral deficits were the result of maladaptive or unsuccessful repertoires of regulatory self-statements. S.I.T. was developed by Meichenbaum as a procedure for learning adaptive or successful self-statement repertoires (Morris, 1975).

In the preceding pages the historical background and theoretical development of the role of inner speech in the regulation of behavior was presented. Similarities were found in the theoretical viewpoints of Vygotsky and Luria and the theories of Ellis and Beck. Meichenbaum's development of S.I.T. and research on S.I.T. will be presented in the following section.

Self-Instructional Training

In this section S.I.T., as outlined by Meichenbaum (1977), will be described in some detail. Studies using S.I.T. will be presented and discussed. Only one study was found utilizing S.I.T. techniques with an aged population. This study will be examined more closely.

Meichenbaum's development of S.I.T. techniques to modify patterns of inner speech aimed at specific behavior change grew out of his earlier research on schizophrenic speech and hyperactivity in children (Meichenbaum 1969, 1971). He recognized three primary components for modifying inner speech. The first was identification of maladaptive self-statements. The second was practice of substitute adaptive of successful self-statements. The third was practice using the newly acquired skills in low stress environments (Meichenbaum & Cameron 1975). Meichenbaum subsequently proposed a three stage program of S.I.T. The following from Meichenbaum (1977) summarizes the S.I.T. approach:

> The first phase, educational [underlines added]
> in content is designed to provide the client
> with a conceptual framework...From the
> conceptual framework, a number of behavioral and
> cognitive coping skills are offered for the
> client to rehearse, in the second phase of
> training. In the third phase the client is
> given an opportunity to practice his coping
> skills...(Meichenbaum 1977, p. 150).

Meichenbaum's S.I.T. program was proposed to include the educational phase, the rehearsal phase, and the application phase. This three phase S.I.T. program, as it applies to the present research, will be described in detail in Chapter III.

Since the mid-sixties, the use of S.I.T. has been prevalent in developmental psychology research with children (Zivin 1979). Self-

Instructional Training programs have been demonstrated to be effective with children for improving performance on problem solving tasks, moderating behavioral problems, and effecting attitudinal changes (Zivin 1979).

In other studies with children, Self-Instructional Training has been employed to increase attention span, and improve problem solving skills of hyperactive children (Meichenbaum & Goodman 1971). Several studies have achieved positive results for moderation of disruptive behavior, i.e., cheating and rule breaking (Coats 1979; Burren & Brucher 1978; Monahan & O'Leary 1971). Kanfer and Karoly (1972) employed verbal mediation to reduce fear of the dark in children and development of coping skills. Various studies have also been done with positive results on improvement of test performance and motor skill development in children using Self-Instructional Training methods (Meichenbaum 1977).

More recently, Self-Instructional Training has been used with adult populations in diverse settings focused on a variety of problem areas. Several studies were found using S.I.T. techniques aimed at alleviating problem behaviors. The following are brief summaries of some of these research applications.

Novaco (1975) employed S.I.T. techniques, as described by Meichenbaum (1977), to control chronic anger and aggression. Novaco used a group S.I.T. program emhasizing substitution of statements aimed at control of anger onset. Novaco (1975) found S.I.T. to be more effective than insight therapy for controlling anger.

Two studies were found in which S.I.T. procedures were used to reduce psychotic speech in schizophrenics (Meyers, Mercatoris &

Sirota 1976; Meichenbaum 1969). Both studies demonstrated a significant drop in the level of psychotic speech following treatment. The first study, however, was a case study and the second study had a very small sample population.

Holroyd and Andrasik (1978) used S.I.T. procedures to relieve somatic complaints. They found these cognitive treatment methods effective in reducing severity and frequency of tension headaches. Their procedures included an adequate sample size (40), but did not control the quality of the therapists involved in the treatment and control groups.

A number of studies were found using S.I.T. procedures to help reduce anxiety related problems. In general the results have been positive, indicating S.I.T. to be helpful in moderating anxiety disorders. This finding was consistent with the theories previously discussed of Ellis (1977) and Beck (1967). These anxiety based problems have included shyness (Mandel & Shrauger 1980; Glass, Gottman & Shmurak 1976), fear of lying (Girodo & Roehl 1976), and speech anxiety (Weissberg and Lamb 1977).

S.I.T. has been used in skill development in adults with some success. Cabush and Edwards (1976) found that S.I.T. procedures could significantly enhance the levels of response to target facilitative dimensions with counselors in training. Their study compared a S.I.T. skill development program with individual empathy based counseling. Only the S.I.T. procedures produced significant levels of change. One weakness of the study was a relatively small population sample (20). Study skills and maintenance of an exercise program were also significantly enhanced using S.I.T. procedures in

two case studies (Cohen, DeJames, Nocera & Ramberger 1980). Similar results were found in developing assertive behaviors (Gottman & Schwartz 1978).

Morris (1975) conducted research on the use of a group S.I.T. program to treat chronic depression. His population was drawn from outpatients of a mental health clinic who were previously diagnosed as having chronic depression. The subjects were drawn from waiting lists for treatment. He used a S.I.T. program conforming to Meichenbaum's model (1977). Subjects were randomly assigned to either a three week, six session, S.I.T. group, a six week six session S.I.T. group, or a six week, six session, insight therapy treatment group. There was a waiting list control group. Morris found a significant reduction of depression only in the S.I.T. treatment groups. The three week short term treatment group had a higher level of positive change than the six week S.I.T. group. Morris's study represents a well designed and controled experimental procedure using S.I.T. techniques and stands out as a model for S.I.T. research.

S.I.T. has been successfully used for a wide variety of behavioral and emotional problems in adult populations. Only one study was found, however, which related to both S.I.T. and the aged. There was a marked scarcity of research with this population group. Since S.I.T. has been useful for a variety of problems in adult populations, the need to apply these techniques to the problems of aging and institutionalization are evident.

Labouvie-Vief and Gonda (1976) applied S.I.T. techniques to performance on standardized intelligence tests by the aged. Through

development and practice of self-instructional statements relevant to solution strategies for test taking, Labouvie-Veif and Gonda were able to demonstrate significant improvement in intellegence test performance in the aged. They hypothesized that the role the aged individual is placed in by his environment tends to dictate what coping or problem solving self-statements are available for use. In the case of the role of the elderly in institutional settings, this role appears to be one of dependency, helplessness, incapability, and self-deprecation (Tobin & Leiberman 1976).

The procedures of the Labouvie-Vief and Gonda study included two treatment groups, Cognitive Training and Anxiety Training and two control groups, Unspecific Training and No Training. The cognitive procedures, while very similar in nature to Meichenbaum's (1977) S.I.T., were not presented in the three stage S.I.T. model (Meichenbaum 1977). Labovie-Vief and Gonda found that through emphasis of the subject's verbal self-monitoring during task completion, performance could be significantly enhanced by the aged on standardized intelligence tests. No significance was found in the Anxiety Training treatment group or the control groups.

> It was possible through training to produce
> significant increments in intellectual
> performance of the elderly. (Labouvie-Vief &
> Gonda 1976, p. 331)

This study illustrated the tremendous potential for use of S.I.T. techniques with the aged.

Verbal Reports as Data

The following section will present literature relevant to the use of recorded verbal statements as data. A case will be

presented for the reliability and value of using verbal reports to obtain information about cognitive processes.

Nisbett and Wilson (1977) in a general review of retrospective verbal reports and behavior criticized verbal reporting as reliable collectable data. Their criticism is based primarily on findings that people have difficulty accurately reporting on retrospective mental processes. Ericsson and Simon (1980) in a more recent article argued that verbal reports can be reliable as data if requested immediately after performance. They state that provided an individual is not an expert at a mental process, the process can be reported on with a high degree of accuracy. Once expert status is reached, then most mental processes become sub-vocal and are not easily recalled. Relevant to S.I.T. procedures, the participants will remain learners, or at the novice level throughout the program as new procedures are learned in the groups. Cognitive processes are actively kept at an immediate attention level as part of the goals of the treatment.

Behaviorists have counted eye twiches, lip movements, finger tapping, and other motor behaviors and considered these reliable indicators of experience (Ericsson & Simon 1980). The tabulation of verbal responses has been avoided. Verbal responses were considered to be reflections of internal thought processes or introspection (Ericsson & Simon 1980). Ericsson and Simon, after an extensive review of the literature and comparison studies of verbal reports and behavior, argue that verbal reports:

> ...with few exceptions seemed to satisfy the authors as basically consistant with observations of subject's performance. (p. 244)

...a number of studies have shown a high level
of congruence between verbal reports and other
behavioral measures in a variety of experimental
settings. (p. 247)

Ericsson and Simon (1980) conclude that verbal reports, as reliable data, are no different from other forms of collecting responses. Pressing a lever, pushing buttons, or measuring other cognitively controlled actions are only symbolic forms of the subject's verbal, vocal or sub-vocal activity. The authors argue further that verbalization is produced in task directed cognitive processes. Verbalization occurred as the subject attended the information and behaved accordingly. Relevant to the present study, the S.I.T. is the task directed cognitive process directed toward producing controlling self-statements to influence positive verbalization in social situations.

Additionally, Ericsson and Simon (1980) state that verbal responses are offered more freely and more accurately reflect behavior than written responses to paper and pencil tests. In fact, written responses were found to be linked to negative evaluation by authority and to censorship.

In the present study, coping statments or positive self-statements were specifically related to expressing positive verbalizations in social settings. The impact for change of these positive self-statements will be measured directly through tabulation of positive and negative statements tape recorded during the structured interviews. Ericsson and Simon's (1980) research suggested that this procedure would reliably measure the cognitive processes leading to the verbal behaviors being recorded.

Summary

The purpose of this chapter was to present the reader with an overview of literature pertaining to historical and theoretical aspects of self-regulating speech, the use of S.I.T., and the use of verbal reports as data.

CHAPTER III

RESEARCH DESIGN AND PROCEDURES

This study was designed to investigate the effects of a group treatment of Self-Instructional Training with an aged population on positive verbalization during a structured social encounter.

The experimental procedures of this study will be described in this chapter. These procedures will include the experimental design, the population sample and how it was selected, selection of interviewers, the treatment procedures, development of the measuring instrument, collection of the data, the hypotheses, and the statistical procedures used for analysis of the data.

Experimental Design

This study utilized the pre-test, post-test control group design (Campbell & Stanley 1968). Subjects in the treatment group received the full Self-Instructional Training program plus pre-assessment and post-assessment. Subjects in the control group received only pre-assessment and post-assessment.

The design of the study is presented graphically as follows:

Group 1   R O_1 x O_2

Group 2   R O_3 O_4

Group 3   R O_5 x O_6

Group 4   R O_7 O_8

An x represents exposure of the group to the treatment. O refers to the measurement process. R symbolizes randomization of assignment to the group. The left right dimension indicates order in time. X's and O's vertical to one another are simultaneous events.

Time Line

Treatment and control groups were involved simultaneously.

Control subjects received no treatment.

Pre-test   Self-Instructional Training   Post-Test

week 1   week 2   week 3   week 4   week 5

Population

Subjects consisted of 51 individuals drawn from the populations

of two adult residential care facilities in the cities of Albany and

Corvallis, Oregon during the month of June, 1982. These facilities

also had nursing care units. No subjects were drawn from the

nursing care component. Subjects were then randomly assigned to

either the experimental group or to the no-treatment control group

in each facility. Random assignments were made by means of a random

number table (Glass & Stanley 1970). Group members were pre-

screened by the experimenter using the Mental Status Questionnaire

(Kahn, Pollack & Goldfarb 1960, Appendix N). A score of 7 or higher

on the MSQ was required for participation in either of the control

or the experimental groups. A score of 7 was considered evidence of

absent or mild chronic brain syndrome. A 7 or higher score would be indicative of reasonably intact cognitive processes (Kahn, Pollack, & Goldfarb 1961).

The population description is detailed in the following chart:

	Site 1		Site 2	
	E1	C1	E2	C2
Youngest	65	72	65	71
Oldest	93	90	92	94
Mean age	84.8	83.4	81.5	85.5
Males	2	4	6	5
Females	11	9	7	7
n	13	13	13	12*

E represents the experimental group. C represents the control group. *There were not enough subjects at site 2 scoring 7 or more on the MSQ to even cell size.

Informed consent was obtained from each subject prior to commencement of the study, as outlined in requirements from the Human Subjects Committee at Oregon State University (Appendix M).

Interviewers

The five interviewers were volunteers composed of two Master's students in counseling at Oregon State University, two counselors with M.A. degrees, and one counselor with a Ph.D. All of the interviewers had previous training in interviewing techniques, counseling skills, and had completed a graduate level course, Counseling the Older Adult.

The role of the interviewer was to establish rapport, facilitate exploration of interview questions, and elicit the

baseline number of response statements for each question. The interviewers were not informed of the nature of the study or the purpose of the interview.

The interview usually lasted between 20 to 30 minutes. Some interviews were as long as 45 minutes due to irrelevant responses and history telling. Each subject of the two treatment groups and the two control groups was pre-interviewed within the week prior to the start of the training. In the week following training each subject in the treatment and control groups was post-interviewed.

The interviews were introduced as an information gathering process for gerontology research. Connection was avoided between the experimenter and the interviews. All interviews were tape recorded for later analyses.

Group Procedures

The experimental groups at both sites participated in the S.I.T. program described in detail in the following section. The control groups received only the pre-test and post-test interviews. Both experimental and control subjects otherwise continued their normal daily routines at the sites. The S.I.T. program was scheduled to avoid interference with normally scheduled activities at the sites. Questions by staff members and other residents about the nature of our "class" were answered with the general statement: "We are talking about positive thinking and we could only have so many people in the class."

The S.I.T. group in each facility was conducted in the morning, twice a week for three weeks. The group met for one hour. Each facility had a quiet room available with reasonably comfortable chairs.

Session 1

The first session focused on introduction of the group members as a whole to the leader and presentation of the class rationale (Appendix B). A chance was given for each member to say something about himself to the other group members and the leader. Goals for the first week of class were presented (Appendix C). The definitions of self-statements, and negative self-statements were discussed.

The group members and the leader discussed the concept of self-statements regulating verbal behavior. This discussion first centered around the example given the class (Appendix D). Subsequently, the leader provided a personal example relating to his anticipated performance in the class. Discussion then turned to examples provided by several group members.

Class concluded with a brief review of the class goals and rationale.

Session2

The second group session began with a review of the goals and rationale presented in session 1. Then the basic model to be used in the S.I.T. program was presented and discussed.

This was the basic S.I.T. model presented in the groups.

NS = a negative self-statement, which leads to-

NV = a negative verbalization, which results in-

NC = negative social consequences.

This sequence could be actively changed by self-preparation of attitude and desire to use positive sequencing. The resulting model was:

PS = positive self-statement which leads to-

PV = positive verbalization, which results in-

PC = positive social consequences.

Several examples were presented to the groups. First, the leader discussed the model presented in the second handout (Appendix D). The leader then modeled a personal example which the groups discussed. The group members then presented personal examples as time permitted.

Session 2 concluded with a review of the class goals and a discussion of the implications of changing one's personal social environment by using the positive self-statement set.

LEADER: "I think you can see what can happen by using positive self-statements to change your attitude about talking to other people in positive ways. If we are preparing ourselves mentally to have helpful, constructive, pleasant interactions, we will open the doors for more social contacts. People we talk to will be encouraged to speak to us again and both parties can feel good about the interaction, no matter how short or long, how serious or lighthearted the subject."

A homework assignment was handed out at the end of the group session (Appendix E).

LEADER: "Over the weekend I would like you to think about your own social interactions with all the people you come in contact

with. After an interaction, ask yourself how it went. If there are problems, or things just didn't feel right, examine the role of negative self-statements in your own responses and contacts with people. Try to write down three brief examples where negative self-statements may have caused or contributed to things not going as well as you might have wished them to."

Questions about the homework were answered and the session ended.

Session 3

The third group session continued the investigation and discussion of negative self-statement sets and how they resulted in negative consequences.

Homework assignments of several group members were discussed. Most group members did not return written results, but contributed verbal examples of encounters over the weekend. Countering positive self-statement sets were introduced for each of the homework examples and discussed in the group. This began the rehearsal phase of the S.I.T. program.

LEADER: "Taking this example we can see some of the possible alternative ways of responding in that situation. By first deciding to stop and think about our response, we set up an opportunity to use a more positive approach. Then we substitute positive self-statements even if our first impulse had been to think and respond more negatively. With a set of positive statements in place in our thinking, we can then respond in a way that improves the quality of our social exchange for both people involved."

This session continued with discussion of each example and

rehearsing alternative positive self-statements. The leader encouraged and reinforced group participation, rewarding all group responses, modeling positive interaction with group members, and motivating the more non-verbal group members to participate.

Session three concluded with a review of class goals (Appendix F) and the basic S.I.T. model.

Session 4

This group session continued the rehearsal phase. The group began with a review of the basic S.I.T. model and group goals (Appendix F). The discussion early in this session focused on one or two examples of negative sets from the first homework assignment. The development of countering positive sets was discussed. Substitution of the positive sets was rehearsed using the situations presented in the homework.

The concept was then introduced of using positive self-statements to prepare for social interactions. Group members were encouraged to view each contact with another person as a chance to use S.I.T. techniques.

Examples of positive self-statements to prepare for social interaction:

"What is it I want to do?"

"I want to be more positive."

"We talked about this in class."

"Try to listen to the other person and pick up feelings."

"I'm going to be more positive no matter what."

"I want my response to open up communication, not shut it off."

"I want to be friendly and open."

"I'll stop and think before I speak."

"I can take my time. I want to at least be positive myself."

LEADER: "By using positive self-statements like these we give ourselves a chance to think and choose a response before we speak. We are stopping the usual sequence of our conversations to give ourselves a chance to look at our attitude and allow a shift to a more positive way of responding to people. We always thought before speaking, but it was automatic. It happened so fast you were probably not aware of it. By stopping or slowing down our thought processes and using positive self-statements about desired results, we give ourselves a good opportunity to change things for the better. We stop the usual sequence of events that, maybe for some of us, has not been working so well. We open the door to substituting positive self-statements and increasing and improving our social contacts."

The leader modeled the use of these preparatory positive self-statements. The leader then substituted positive verbalizations for several examples.

Session 4 concluded with distribution of the second homework assignment (Appendix G). The homework was discussed and one example given.

Session 5

This session begins the application phase of the S.I.T. program.The basic format was introduced to the group as a four part sequence. The first step was to use preparatory self-statements as practiced to prepare for social encounters with an open, positive attitude. The second step involved the substitution or initiation

of positive self-statements concerning the specific social encounter. Third, the person responded or verbalized. The final step involved reflection with positive self-statements as reinforcers for performance and continued motivation to improve future performance.

LEADER: "Using this example, we first set up the opportunity for a positive exchange to occur by using our preparatory self-statements. We can then use our positive self-statements about this particular encounter to produce the desired result." This point was demonstrated with examples from the homework of group members.

The leader then introduced the use of reinforcing self-statements. This technique was used after the encounter to analyze the conversation, determine what took place and then reinforce oneself for gains made. This promoted change where needed and provided a pat on the back for a job well done. The principle was one of continued self-motivation and readjustment.

LEADER: "When we use the skills we are learning in this group, our friends here won't be around to encourage us. We practice here together, but we use our skills alone outside this group. Therefore, it's important that we encourage ourselves to try; ask ourselves what we might change or try differently next time; and pat ourselves on the back for a job well done. We can do all that with reinforcing self-statements."

The leader then modeled some examples of reinforcing self-statements. He then role played examples from homework assignments of group members. Role plays were debriefed by the group. The encounter sequence was examined for preparatory self-statements,

verbal content of responses, and reinforcing self-statements.

This session concluded with a review of the S.I.T. process as a four step procedure. Class goals were discussed, and successes by individual group members were pointed out and reinforced. The group as a whole was congratulated on attendance, effort, and mutual support. Continued self-motivation to try new strategies and to maintain an emphasis on a generally positive attitude toward others was strongly reinforced by the leader.

Session 6

The sixth group meeting began with a summary of the course. The rationale was reviewed. Goals were reaffirmed. The four phases of the S.I.T. program were presented and discussed.

The group members discussed any recent successes or failures encountered in their interpersonal contacts since the last meeting. These were debriefed in detail asking group members to verbalize preparatory statements, positive self-statements, and reinforcing self-statements they had used. Group members were then asked to give examples of how these techniques could prove helpful in anticipated future social encounters with friends, staff, or others. These examples were open for group discussion and encouragement.

The groups were congratulated and encouraged to refer occasionally to printed materials to refresh their memory of what they had learned. They were encouraged to work together to motivate and help each other. They were asked to continue to develop friendships and contacts that had formed as a result of the group experiences. This concluded the S.I.T. program.

The Instrument

The standard interview format (Appendix A) used as the pre-test, and post-test instrument was developed in accordance with the recommendations of Cannell and Kahn (1953) and Kerlinger (1964).

The ten questions that comprised the interview schedule were designed to be open ended and allow for elaboration and expansion of the question topic by the interviewer. It was the experimenter's intention to tap areas relevant to the frame-of-reference of the subjects in the current environment. Information sought in the questions required no special knowledge over and above discussion of events in daily living and personal feelings and concerns. Questions were stated in simple language.

The ten questions were selected from fifteen questions used in a smaller but similarly designed pilot study conducted at an alternate site in Albany, Oregon during the spring of 1982. Questions were selected on the basis of their ability to fulfill the research objectives described in the following paragraph.

The first research objective of the interview schedule was to provide an adequate quantity of responses to tabulate and meaningfully analyze as a behavior measure (Ericsson & Simon 1980). For this reason, a baseline of five responses per question was established. The questions needed to provide the subjects with enough potentially relevant material to meet that baseline figure. The second objective was to obtain responses from the subjects that had personal relevance to their emotional, social, and physical environment. Questions were, therefore, written to cover three main content areas. The first was the facility environment, including

place, staff, and other residents. The second was self, including feelings, activities, health, and attitudes. The third content area was significant others, including family, friends, neighbors, and roommates (if any).

Research objectives of this interview schedule were intended to provide an adequate behavior sample, and to obtain verbal behaviors that carried potential for positive or negative content in all three of the above areas.

Collection of Data

Pre-treatment interviews of the experimental and control groups were completed and tape recorded prior to the beginning of the S.I.T. program. Post-treatment interviews were completed and tape recorded within the week following completion of the S.I.T. At that time the tape recorded interviews were tabulated by the raters for positive and negative statement content.

The raters were composed of two of the interviewers and the experimenter. The raters did not tabulate their own interviews. Prior to the actual tabulation of the recorded interviews the raters were trained in identification of positive statements and negative statements according to the criteria (Appendix L). Training took place in two sessions. During the first session the criteria were discussed. Sample tape recorded interview question responses, obtained during the pilot study, were trial rated and discussed. This first session was approximately on hour long. During the second training session tape recorded responses from the pre-test interviews were used for trial ratings. This process continued with tabulations, question by question, until three consecutive questions

were identically rated by each rater. At this point the raters were considered trained.

The pre-treatment and post-treatment tape recorded interviews were then tabulated. This was a time consuming process which required almost two weeks to complete. During the tabulation process responses considered neutral, or not meeting either positive or negative statement criteria (Appendix L), were not counted in the tabulation. An example of a neutral statement was: "Then Harry and I traveled from Des Moines to Boise. That was in 1937." These responses were mostly history telling between interview question responses. The tabulations were made by putting talley marks in appropriate locations on the tabulation forms (Appendix I). The tabulation forms were then collected. There were two tabulation forms, one for the pre-interview and one for the post-interview assessment of each control and experimental subject. These forms were then keypunched at the Oregon State University Computer Center.

Research Hypotheses

Each question on the standard interview was analyzed statistically. In addition, the total number of positive and negative statements tabulated from the entire standard interview was analyzed. A research hypothesis was generated for each interview question and for the combined total response (H_T). The combined total response represents a summation of verbal behavioral observation over the entire structured social interaction of the interview. The H_T hypothesis provided the most powerful dependent variable to be studied (Glass & Stanley, 1970). This variable represented the most accurate reflection of the cognitive processes

involved during the subject's interaction with the interviewer (Ericsson & Simon 1980). This was due to the large size of the verbal behaviors obtained and the scope of the total interview.

The hypotheses were stated in null form for statistical analyses purposes (Courtney & Sedgwick, 1973). An alternate one-tailed directional hypothesis was also stated for each research hypothesis (Glass & Stanley, 1970).

Hypothesis 1

H_1: The mean score of the treatment group will not be significantly different from the mean score of the control group for question 1.

"Share with me your feelings about living here?"

Alternative Hypothesis 1

$H_{1.1}$:The mean score of the treatment group will be higher than the mean score of the control group for question 1.

Hypothesis 2

H_2: The mean score of the treatment group will not be significantly different from the mean score of the control group for question 2.

"What do you think about the people who work here?"

Alternate Hypothesis 2

$H_{2.1}$: The mean score of the treatment group will be higher than the mean score of the control group for question 2.

Hypothesis 3

H_3: The mean score of the treatment group will not significantly different from the mean score of the control group for question 3.

"How do you feel about the people who live with you, your neighbors?"

Alternative Hypothesis 3

$H_{3.1}$: The mean score of the treatment group will be higher than the mean score of the control group for question 3.

Hypothesis 4

H_4: The mean score of the treatment group will not be significantly different from the mean score of the control group for question 4.

"What can you tell me about you, now at this point in your life?"

Alternative Hypothesis 4

$H_{4.1}$: The mean score of the treatment group will be higher than the mean score of the control group for question 4.

Hypothesis 5

H_5: The mean score of the treatment group will not be significantly different from the mean score of the control group for question 5.

"Tell me something about activities or other things you participate in here?"

Alternative Hypothesis 5

$H_{5.1}$: The mean score of the treatment group will be higher than the mean score of the control group for question 5.

Hypothesis 6

H_6: The mean score of the treatment group will not be significantly different from the mean score of the control group for question 6.

"How would you describe your physical health?"

Alternative Hypothesis 6

$H_{6.1}$: The mean score of the treatment group will be higher than the mean score of the control group for question 6.

Hypothesis 7

H_7:   The mean score of the treatment group will not be significantly different from the mean score of the control group for question 7.

"How do feel emotionally?"

Alternative Hypothesis 7

$H_{7.1}$:   The mean score of the treatment group will be higher than mean score of the control group for question 7.

Hypothesis 8

H_8:   The mean score of the treatment group will not be significantly different from the mean score of the control group for question 8.

"Tell me about your family?"

Alternative Hypothesis 8

$H_{8.1}$:   The mean score of the treatment group will be higher than the mean score of the control group for question 8.

Hypothesis 9

H_9:   The mean score of the treatment group will not be significantly different from the mean score of the control group for question 9.

"Can you tell me about friends you have here?"

Alternative Hypothesis 9

$H_{9.1}$ The mean score of the treatment group will be higher than the mean score of the control group for question 9.

Hypothesis 10

H_{10}:   The mean score of the treatment group will not be significantly different from the mean score of the control group for question 10.

"Will you share with me some thoughts about your future?"

Alternative Hypothesis 10

$H_{10,1}$: The mean score of the treatment group will be higher than the mean score of the control group for question 10.

Hypothesis T

H_T: The mean score of the treatment group will not be significantly different from the mean score of the control group for the combined total response to the interview schedule.

Alternative Hypothesis T

$H_{T,1}$: The mean score of the treatment group will be higher than the mean score of the control group for the combined total response to the interview schedule.

Statistical Procedures

The decision level for retaining or rejecting all research hypotheses was established at $P < .05$. Raw scores were obtained by subtracting negative statement counts from positive statement counts.

To increase the power of statistical procedures used to test the hypotheses, the data from the two experimental groups and the two control groups was combined (Glass & Stanley, 1970). To test for homogeneity of the data between sites a one factor analysis of variance (ANOVA) was used (Glass & Stanley, 1970). The pre-test scores were the dependant variables and the sites were the independant variables for the ANOVA. If the pre-test scores did not differ by site, a two factor ANOVA was to be used to test the research hypotheses. If a significant between sight difference was found, a two factor analysis of covariance (ANCOVA) was to be used to test the hypotheses (Glass & Stanley, 1970).

Summary

The sample in this study was drawn from the populations of two residential care facilities. Subjects were randomly assigned to the experimental or control group within each site. All subjects were given a pre-treatment interview which was tape recorded. Experimental group subjects then participated in the S.I.T. program. The control group subjects did not receive treatment. All subjects were given a post-treatment interview which was tape recorded. The tape recorded responses were then tabulated by trained raters. ANOVA was used to test for between site differences in pre-test interview responses . The major statistical procedure used to test all research hypotheses was to be ANOVA or ANCOVA as appropriate.

Chapter IV will present a detailed analysis of the findings.

CHAPTER IV

PRESENTATION AND ANALYSIS OF THE DATA

Introduction

This chapter will present the findings of the statistical
analysis of the data. First a discussion of the pre-test analyses
for between site differences will be presented. This will be
followed by presentation of the findings concerning the research
hypotheses. This presentation will include tables illustrating
analyses of the data.

The Pre-test Findings

Pre-test data were analyzed to determine homogeneity of groups
at the two sites. This was done to determine the appropriate
statistical procedure to test the research hypotheses. The pre-test
scores were analyzed using ANOVA (Glass & Stanley 1970).

The hypotheses for the pre-test analyses were generated as sub-
hypotheses of the eleven research hypotheses. These sub-hypotheses
were stated in the null form for the purpose of statistical analyses
(Courtney & Sedgwick 1973). The following is an example of the form
of all eleven sub-hypotheses:

> Sub-H_1: The pre-test mean score of the treatment group
> will not be significantly different from the pre-test mean
> score of the control group for question 1.

The decision level was $p < .05$. The "F" statistic (Glass &
Stanley 1970) was used to test the sub-hypotheses. The analysis
showed that five of the pre-test scores differed significantly by
site. The results of the ANOVA are summarized in Table 1.

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Table 1. Summary of the pre-test mean score between site findings.

Sub-Hypothesis		F	P Value	Result at .05 Level
Sub H_1:	Feelings about environment	5.751	.020	rejected
Sub H_2:	Feelings about staff	.006	.937	retained
Sub H_3:	Feelings about neighbors	.199	.658	retained
Sub H_4:	Feelings about the present	.636	.429	retained
Sub H_5:	Feelings about activities	.532	.469	retained
Sub H_6:	Feelings about health	13.262	.007	rejected
Sub H_7:	Feelings about emotions	.001	.981	retained
Sub H_8:	Feelings about family	5.987	.018	rejected
Sub H_9:	Feelings about friends	5.511	.012	rejected
Sub H_{10}:	Feelings about future	6.892	.012	rejected
Sub H_T:	Combined response	2.28	.137	retained

The Research Hypotheses Findings

The pre-test analyses indicated that there were between site differences. Therefore ANCOVA was selected as the appropriate statistical procedure for the reasons described by Courtney and Sedgwick (1973):

> Analysis of Covariance is a statistical technique which combines the concepts of analysis of variance and regression to handle situations where the researcher cannot completely control all of the variables in his study. It is a precedure for treating the significance of differences among means, accounting for the influence of uncontrollable factors in the experiment. The analysis of covariance adjusts the means for uncontrollable factors using regression analysis procedures. In other words, it adjusts for control differences in the data. By making these adjustments, sample error is reduced and precision increased. (p. 1)

The "F" statistic (Glass & Stanley 1970) was used to test the null hypotheses. Analyses of the data yielded the following results.

Analysis of Hypothesis 1

Hypothesis 1

H_1: The mean score of the treatment group will not be significantly different from the mean score of the control group for question 1:

"Share with me your feelings about living here?'

Alternative Hypothesis 1

$H_{1.1}$: The mean score of the treatment group will be higher than the mean score of the control group for question 1.

The ANCOVA results appear in Table 2.

Table 2. Comparision of treatment and control groups on post-test tabulation of positive minus negative statements elicited concerning personal feelings about the environment (H_1).

SOURCE OF VARIATION	SUM OF SQUARES	DF	MEAN SQUARE	F	P VALUE
COVARIATE	8.854	1	8.854	.425	.518
MAIN EFFECTS	80.570	2	40.285	1.933	.156
SITE	5.515	1	5.515	.265	.609
TRMT	73.936	1	73.936	3.548	.066*
2-WAY INTERACTION					
SITE X TRMT	3.257	1	3.257	.156	.694
EXPLAINED	92.682	4	23.170	1.112	.362
RESIDUAL	958.652	46	20.840		
TOTAL	1,051.33	50	21.027		

(DF) is Degrees of Freedom)   *Not significant at the .05 level

The first hypothesis examined response patterns to the question: "Share with me your feelings about living here?" The responses concerned personal feelings about the environment of the institution. No significant difference was found between the response pattern of the treatment subjects and control subjects. The first hypothesis was retained at the .05 level.

Analysis of Hypothesis 2

Hypothesis 2

H_2: The mean score of the treatment group will not be significantly different from the mean score of the control group for question 2:

"What do you think about the people who work here?"

Alternative Hypothesis 2

$H_{2.1}$: The mean score of the treatment group will be higher than the mean score of the control group for question 2.

The ANCOVA results appear in Table 3.

Table 3. Comparison of treatment and control groups on post-test tabulation of positive minus negative statements elicited concerning personal feelings about staff (H_2).

SOURCE OF VARIATION	SUM OF SQUARES	DF	MEAN SQUARE	F	P VALUE
COVARIATE	113.507	1	113.507	11.229	.002**
MAIN EFFECTS	41.277	2	20.639	2.042	.141
SITE	9.277	1	9.277	.918	.343
TRMT	32.000	1	32.000	3.166	.082*
2-WAY INTERACTION					
SITE X TRMT	4.875	1	4.875	.482	.491
EXPLAINED	159.660	4	39.915	3.949	.008
RESIDUAL	464.968	46	10.108		
TOTAL	624.627	50	12.493		

*Not significant at the .05 level
**Note. This score indicates interaction of covariate and dependent variable was significant. Strong need shown for using ANCOVA to minimize error term.

The second hypothesis examined response patterns to the question: "What do you think about the people who work here?" The responses concerned personal feelings or thoughts about staff in the institution. No significant difference was found between the response pattern of the treatment subjects and the control subjects. The second hypothesis was retained at the .05 level.

Analysis of Hypothesis 3

Hypothesis 3

H_3: The mean score of the treatment group will not be significantly different from the mean score of the control group for question 3:

"How do you feel about the other people who live with you, your neighbors?"

Alternative Hypothesis 3

$H_{3.1}$: The mean score of the treatment group will be higher than the mean score of the control group for question 3.

The ANCOVA results appear in Table 4.

Table 4. Comparison of treatment and control groups on post-test tabulation of positive minus negative statements elicited concerning personal feelings about neighbors (H_3).

SOURCE OF VARIATION	SUM OF SQUARES	DF	MEAN SQUARE	F	P VALUE
COVARIATE	4.911	1	4.911	.198	.659
MAIN EFFECTS	274.393	2	137.196	5.522	.007
SITE	13.925	1	13.925	.650	.458
TRMT	262.710	1	262.710	10.574	.002*
2-WAY INTERACTION SITE X TRMT	24.778	1	24.778	.997	.323
EXPLAINED	304.082	4	76.020	3.060	.026
RESIDUAL	1,142.899	46	24.846		
TOTAL	1,446.980	50	28.940		

*Significant at .05 level

The third hypothesis examined response patterns to the question: "How do you feel about the people who live with you, your neighbors?" The responses concerned personal feelings about other

residents living with the subjects in the institution. The results showed a significant difference between the response patterns of treatment subjects and control subjects. The third hypothesis was rejected at the .05 level. Mean scores of post-test results are higher for treatment subjects than for control subjects (Table 13). The alternative hypothesis 3 is operational. Treatment subjects responded at significantly more positive levels than control subjects.

Analysis of Hypothesis 4

Hypothesis 4

H_4: The mean score of the treatment group will not be significantly different from the mean score of the control group for question 4:

"What can you tell me about you, now at this point in your life?"

Alternative Hypothesis 4

$H_{4.1}$: The mean score of the treatment group will be higher than the mean score of the control group for question 4.

The ANCOVA results appear in Table 5.

Table 5. Comparison of treatment and control groups on post-test tabulation of positive minus negative statements elicited concerning personal feelings about life in the present (H_4).

SOURCE OF VARIATION	SUM OF SQUARES	DF	MEAN SQUARE	F	P VALUE
COVARIATE	4.123	1	4.123	.238	.628
MAIN EFFECTS	26.802	2	13.401	.775	.467
SITE	6.764	1	6.764	.286	.532
TRMT	20.574	1	20.574	1.189	.281*
2-WAY INTERACTION SITE X TRMT	1.976	1	1.976	.114	.737
EXPLAINED	32.901	4	8.225	.475	.754
RESIDUAL	795.805	46	17.300		
TOTAL	828.706	50	16.574		

*Not significant at .05 level

The fourth hypothesis examined response patterns to the question: "What can you tell me about you, now at this point in your life?" The responses concerned personal feelings and thoughts about the subject's life at the present time. No significant difference was found between the response patterns of the treatment subjects and the control subjects. The fourth hypothesis was retained at the .05 level.

Analysis of Hypothesis 5

Hypothesis 5

H_5: The mean score of the treatment group will not be significantly different from the mean score of the control group for question 5:

"Tell me something about activities or other things you participate in here?"

Alternative Hypothesis 5

$H_{5.1}$: The mean score of the treatment group will be higher than the mean score of the control group for question 5.

The ANCOVA results appear in Table 6.

Table 6. Comparison of treatment and control groups on post-test tabulation of positive minus negative statements elicited concerning personal feelings about activities (H_5).

SOURCE OF VARIATION	SUM OF SQUARES	DF	MEAN SQUARE	F	P VALUE
COVARIATE	13.001	1	13.001	.584	.449
MAIN EFFECTS	27.142	2	13.571	.610	.548
SITE	5.121	1	5.121	.230	.634
TRMT	22.298	1	22.298	1.002	.322*
2-WAY INTERACTION					
SITE X TRMT	6.041	1	6.041	.272	.605
EXPLAINED	46.184	4	11.546	.519	.722
RESIDUAL	1,023.463	46	22.249		
TOTAL	1,069.647	50	21.393		

*Not significant at the .05 level

The fifth hypothesis examined response patterns to the question: "Tell me something about activities or other things you participate in here." The responses concerned thoughts and observations about involvement in activities or other events made available through the institution. No significant difference was found between the response patterns of the treatment subjects and control subjects. The fifth hypothesis was retained at the .05 level.

Analysis of Hypothesis 6

Hypothesis 6

H_6: The mean score of the treatment group will not be significantly different from the mean score of the control group for question 6:

"How would you describe your physical health?"

Aternative Hypothesis 6

$H_{6.1}$: The mean score of the treatment group will be higher than the mean score of the control group for question 6.

The ANCOVA results appear in Table 7.

Table 7. Comparison of treatment and control groups on post-test tabulation of positive minus negative statements elicited concerning personal feelings about physical health (H_6).

SOURCE OF VARIATION	SUM OF SQUARES	DF	MEAN SQUARE	F	P VALUE
COVARIATE	22.174	1	22.174	1.548	.220
MAIN EFFECTS	80.215	2	40.108	2.800	.071
SITE	8.195	1	8.195	.572	.453
TRMT	71.713	1	71.713	5.007	.030*
2-WAY INTERACTION SITE X TRMT	2.765	1	2.765	.193	.662
EXPLAINED	105.154	4	26.289	1.835	.138
RESIDUAL	658.846	46	14.323		
TOTAL	764.000	50	15.280		

*Significant at .05 level

The sixth hypothesis examined response patterns to the question: "How would you describe your physical health?" The responses concerned personal feelings and observations about the

subject's physical status. This included any medical problems, but was not limited to any one aspect of the subject's physical state of being. The results showed a significant difference between the response patterns of treatment subjects. The sixth hypothesis was rejected at the .05 level. Mean scores of post-test results were higher for treatment subjects than for control subjects (Table 13). The alternative hypothesis 6 is operational. Treatment subjects responded at significantly more positive levels than control subjects.

Analysis of Hypothesis 7

Hypothesis 7

H_7: The mean score of the treatment group will not be significantly different from the mean score of the control group for question 7:

"How do you feel emotionally?"

Alternative Hypothesis 7

$H_{7.1}$: The mean score of the treatment group will be higher than the mean score of the control group for question 7.

The ANCOVA results appear in Table 8.

Table 8. Comparison of treatment and control groups on post-test tabulation of positive minus negative statements elicited concerning personal feelings about emotional status (H_7).

SOURCE OF VARIATION	SUM OF SQUARES	DF	MEAN SQUARE	F	P VALUE
COVARIATE	3.486	1	3.486	.334	.566
MAIN EFFECTS	127.727	2	63.864	6.122	.004
SITE	13.299	1	13.299	1.275	.265
TRMT	116.130	1	116.130	11.132	.002*
2-WAY INTERACTION SITE X TRMT	1.740	1	1.740	.167	.685
EXPLAINED	132.953	4	33.238	3.186	.022
RESIDUAL	479.870	46	10.432		
TOTAL	612.824	50	12.256		

*Significant at .05 level

The seventh hypothesis examined response patterns to the question: "How do you feel emotionally?" The responses concerned personal feelings and observations about the subject's own emotions and emotional condition. The results showed a significant difference between the response patterns of treatment subjects and control subjects. The seventh hypothesis was rejected at the .05 level. Mean scores of the post-test results were higher for treatment subjects than for control subjects (Table 13). The alternative hypothesis 7 is operational. Treatment subjects responded at significantly more positive levels than control subjects.

Analysis of Hypothesis 8

Hypothesis 8

H_8: The mean score of the treatment group will not be significantly different from the mean score of the control group for question 8:

"Tell me about your family?"

Alternative Hypothesis 8

$H_{8.1}$: The mean score of the treatment group will be higher than the mean score of the control group for question 8.

The ANCOVA results appear in Table 9.

Table 9. Comparison of treatment and control groups on post-test tabulation of positive minus negative statements elicited concerning personal feelings about family (H_8).

SOURCE OF VARIATION	SUM OF SQUARES	DF	MEAN SQUARE	F	P VALUE
COVARIATE	4.270	1	4.270	.262	.611
MAIN EFFECTS	92.831	2	46.416	2.844	.068
SITE	26.625	1	26.625	1.631	.208
TRMT	65.399	1	65.399	4.007	.051*
2-WAY INTERACTION					
SITE X TRMT	.312	1	.312	.019	.891
EXPLAINED	97.414	4	24.353	1.492	.220
RESIDUAL	750.743	46	16.321		
TOTAL	848.157	50	16.963		

*Not significant at .05 level

The eighth hypothesis examined response patterns to the question: "Tell me about your family?" The responses concerned personal feelings, thoughts, and information about the subject's

family members. No significant difference was found between the response patterns of the treatment subjects and the control subjects. The eighth hypothesis is retained at the .05 level.

Analysis of Hypothesis 9

Hypothesis 9

H_9: The mean score of the treatment group will not be significantly different from the mean score of the control group for question 9:

"Can you tell me about friends you have here?"

Alternative Hypothesis 9

$H_{9.1}$: The mean score of the treatment group will be higher than the mean score of the control group for question 9.

The ANCOVA results appear in Table 10.

Table 10. Comparison of treatment and control groups on post-test tabulation of positive minus negative statements elicited concerning personal feelings about friends (H_9).

SOURCE OF VARIATION	SUM OF SQUARES	DF	MEAN SQUARE	F	P VALUE
COVARIATE	17.153	1	17.153	1.071	.306
MAIN EFFECTS	49.830	2	24.915	1.556	.222
SITE	9.222	1	9.222	.576	.452
TRMT	41.344	1	41.344	2.582	.115*
2-WAY INTERACTION SITE X TRMT	.772	1	.772	.048	.827
EXPLAINED	67.755	4	16.939	1.058	.388
RESIDUAL	736.598	46	16.013		
TOTAL	804.353	50	16.087		

*Not significant at the .05 level

The ninth hypothesis examined response patterns to the question: "Can you tell me about friends you have here?" The responses concerned personal feelings and thoughts about other residents in the institution or people who visited the subject from the community whom the subject considered friends. No significant difference was found between the response patterns of the treatment subjects and the control subjects. The ninth hypothesis is retained at the .05 level.

Analysis of Hypothesis 10

Hypothesis 10

H_{10}: The mean score of the treatment group will not be significantly different from the mean score of the control group for question 10:

"Will you share with me some thoughts about your future?"

Alternative Hypothesis 10

$H_{10,1}$: The mean score of the treatment group will be higher than the mean score of the control group for question 10.

The ANCOVA results appear in Table 11.

Table 11. Comparison of treatment and control groups on post-test tabulation of positive minus negative statements elicited concerning personal feelings about the future (H_{10}).

SOURCE OF VARIATION	SUM OF SQUARES	DF	MEAN SQUARE	F	P VALUE
COVARIATE	6.531	1	6.531	.515	.475
MAIN EFFECTS	150.116	2	75.058	5.924	.005
SITE	48.745	1	48.745	3.848	.056
TRMT	103.213	1	103.213	8.147	.006*
2-WAY INTERACTION SITE X TRMT	43.083	1	43.083	3.401	.072
EXPLAINED	199.729	4	49.932	3.941	.008
RESIDUAL	582.781	46	12.669		
TOTAL	782.510	50	15.650		

*Significant at the .05 level

The tenth hypothesis examined response patterns to the question: "Will you share with me some thoughts about your future?" The responses concerned personal feelings and thoughts or speculations about the subject's future, immediate or distant. The results showed a significant difference between the response patterns of the treatment subjects and control subjects. The tenth hypothesis was rejected at the .05 level. Mean scores of post-test results were higher for treatment subjects than for control subjects (Table 13). The alternative hypothesis 10 is operational. Treatment subjects responded at significantly more positive levels than control subjects.

Analysis of Hypothesis T

Hypothesis T

H_T: The mean score of the treatment group will not be significantly different from the mean score of the control group for the combined total response to the interview schedule.

Alternative Hypothesis T

$H_{T.1}$: The mean score of the treatment group will be higher than the mean score of the control group for the combined total response to the interview schedule.

The ANCOVA results appear in Table 12.

Table 12. Comparison of treatment and control groups on post-test tabulation of positive minus negative statements elicited during the entire standard interview procedure.

SOURCE OF VARIATION	SUM OF SQUARES	DF	MEAN SQUARE	F	P VALUE
COVARIATE	12,205.088	1	12,205.088	42.002	.001**
MAIN EFFECTS	13,224.451	2	6,612.225	22.755	.001
SITE	34.285	1	34.285	.118	.733
TRMT	13,203.021	1	13,203.021	45.437	.001*
2-WAY INTERACTION SITE X TRMT	85.354	1	85.354	.294	.590
EXPLAINED	25,514.893	4	6,378.723	21.952	.001
RESIDUAL	13,366.754	46	290.582		
TOTAL	38,881.647	50	777.633		

*Significant at the .05 level
**Note. This score indicates interaction of covariate and dependent variable was significant. Strong need shown for using ANCOVA to minimize error term.

Hypothesis T concerned the response patterns elicited during the entire social interaction of the structured interview. All the

response sets represented in the previous H_1 through H_{10} findings were combined to form the data for the H_T analysis. The results showed a significant difference ($p = .001$) between the total response pattern of treatment subjects and control subjects. The hypothesis T was rejected at the .05 level. Mean scores of post-test results were higher for treatment subjects than for control subjects (Table 13). The alternative hypothesis T is operational.

For the combined interview response sets, treatment subjects responded at significantly more positive levels than control group subjects (Table 13). The following chart provides control and experimental group mean scores adjusted for covariance using pre-test mean scores as covariate. Adjusted mean scores for all eleven research hypotheses are based on mean values of positive minus negative response scores with covariate adjustment.

Table 13. Comparison of adjusted post-treatment mean scores of experimental and control groups.

		Control Group	Experimental Group
H1:	feelings about environment	.44	2.85
H2:	feelings about staff	1.73	3.33
H3:	feelings about neighbors*	-2.65	1.94
H4:	feelings about the present	- .12	1.16
H5:	feelings about activities	.67	2.00
H6:	feelings about health*	-2.21	.17
H7:	feelings about emotions*	-1.48	1.54
H8:	feelings about family	.10	2.40
H9:	feelings about friends	.49	2.30
H10:	feelings about future*	-2.56	.30
HT:	combined response*	-10.59	22.64

*statistically significant at the .05 level

Summary

Analysis of the data showed no significant difference in post-test results between treatment group responses and control group responses for interview questions dealing with personal feelings about environment, staff, the present, activities, family, and friends (H_1, H_2, H_4, H_5, H_8, H_9). Significant differences were found in post-test results between response patterns of treatment subjects and control subjects for interview questions dealing with feelings about neighbors, health, emotions, and the future (H_3, H_6, H_7, H_{10}). A significant difference was also shown in post-test results between treatment and control subjects in the combined response patterns of the entire standard interview (H_T). These results are summarized in Table 14.

Table 15 presents descriptive data concering pre-test means and post-test means for the treatment group and control group at each site. The data are provided to show relative positions of response patterns before and after treatment.

Table 14. Summary presentation of F values and P values.

		F	P Value
Sub H_1:	feelings about environment	3.548	.066
Sub H_2:	feelings about staff	3.166	.082
Sub H_3:	feelings about neighbors	10.574	.002**
Sub H_4:	feelings about the present	1.189	.281
Sub H_5:	feelings about activities	1.002	.322
Sub H_6:	feelings about health	5.007	.030**
Sub H_7:	feelings about emotions	11.132	.002**
Sub H_8:	feelings about family	4.007	.051
Sub H_9:	feelings about friends	2.582	.115
Sub H_{10}:	feelings about future	8.147	.006**
Sub H_T:	combined response	45.437	.001**

** significant at .05 level

Table 15. Unadjusted pre-test and post-test mean scores of treatment and control groups by site. Numerical values represent the algebraic sum of positive and negative responses for each interview question (H_1 through H_{10}) and the combined response totals (H_T).*

	SITE 1				SITE 2			
	Treatment		Control		Treatment		Control	
	Pre	Post	Pre	Post	Pre	Post	Pre	Post
H_1:	- 1.08	2.30	2.54	.38	- .84	3.46	0	.41
H_2:	1.00	2.85	2.62	1.84	2.23	3.38	2.75	2.08
H_3:	- 3.62	1.76	.23	-1.46	- .31	2.07	.08	-3.92
H_4:	- 2.46	1.23	.07	.46	-1.15	1.00	-1.33	- .67
H_5:	.85	2.61	-1.00	.62	- .62	1.46	.08	.67
H_6:	- 1.46	- .31	-2.00	-2.23	-4.85	.53	-5.08	-2.08
H_7:	- 1.23	2.23	.85	-1.15	-1.00	.84	.33	-1.83
H_8:	- 1.85	1.76	.38	- .69	2.62	3.07	3.08	.91
H_9:	.08	2.77	1.23	.84	-1.23	1.92	- .33	0
H_{10}:	- 2.62	.30	.46	- .69	-3.00	.31	-3.75	-4.58
H_T:	-14.08	17.62	6.69	-2.46	-8.08	18.08	-3.33	-9.00

* Note. Data presented are descriptive and do not represent statistical analyses. There is no correction factor for between site differences.

CHAPTER V

SUMMARY

Introduction

This study investigated the use of a cognitive behavior modification technique, Self-Instructional Training (Meichenbaum, 1977), for changing the verbal content of speech in an aged population.

The method of measuring the change was direct analysis of tape recorded speech in response to standard interview questions. These verbal behaviors were tabulated to measure positive and negative content according to a set of criteria (Appendix L). These tabulations provided the means, through statistical analysis, of detecting differences in response content between response sets of the experimental and the control groups.

Response patterns to each of the interview questions were analyzed to detect any subtleties of change that might provide clues for more specific or efficient use of S.I.T. techniques with this population group.

The primary goal of the study was to influence and measure the change that occurred in the total interview interaction, combining all ten interview question response sets. The combined verbal responses of the treatment and control groups provided a broad sample of verbal behavior. The criteria for positive and negative response scoring were applied equally to response sets for each of the interview questions.

The following discussion serves to define the findings of this

study. Also presented are observations of the experimenter, relevance of the findings to the fields of counseling and gerontology, and recommendations for further research.

Discussion of the Pretest Data

The researcher had assumed that responses to interview questions would not differ significantly by site. The one way analysis of variance of pre-test data indicated that, in fact, the response patterns were significantly different by site. Analyses of mean scores of both positive and negative pre-test responses to H_1 through H_{10} and H_T were made to determine if there were any evident differences between the two sites. For example, was there a more global negativism or positivism from one site to the next, possibly due to staffing policies, age and/or disability of subjects, location of site, or some other intervening variable. No trend surfaced. The researcher speculates, first, that pre-test differences are due to the relatively small sample size of each cell in the four subject groups. Second, this study involves an aged population. They were an extremely diverse group of people made even more so by physical factors, medical factors, religious beliefs, family affiliations, etc. There are many reasons why this was not a homogeneous population sample. These groups were unique. Each person involved brought a life history that varied from a captain of a four masted sailing ship to the daughter of one of Oregon's oldest, most renowned pioneer families.

The diversity of this population represents a weakness and a strength of this study. The population diversity is a weakness because the population variables inherent in this size sample are

not easily controlled. Statistically, this heterogeneity can be corrected (Glass & Stanley 1970). Randomization of the subjects minimized the likelihood of any significant intervening population variable. It appears, however, that randomization did not eliminate the problem. It is a strength in that this study involves a sample of the target population intended for application of these procedures. The conditions met by this experimenter are quite likely to be very similar to those any researcher would face when working with the institutionalized aged. The findings of this study point toward use of a technique for cognitive and social change that can be used effectively in spite of the obstacles presented.

The findings relied on statistical correction to compensate for between site differences.

Discussion of H_1 through H_{10} Findings

The purpose of analyzing the hypotheses concerning each interview question was to examine the response differences between treatment and control subjects for each question to observe where significant differences occurred. The questions were designed to provide the respondent with subject matter that had personal relevance and potential emotional content. This framework was intended to allow each subject to experience a potent social interaction with another person. The questions generally covered three spheres of each subject's environment. These three spheres were (1) personal, self-orientated concerns, (2) social, family, significant others' concerns, and (3) environmental concerns related to the facility and staff.

three of the four questions from which significant differences were found were in the personal, self-orientated sphere. These are: "How would you describe your physical health? How do you feel emotionally? Will you share with me your thoughts about the future?" These results, in retrospect, are not surprising. Cognitive change techniques and strategies are largely introspective in nature. They involve self-appraisal, self-monitoring, auto-reinforcement, and auto-suggestion. The concerns that were discussed in the group were also largely involved in self-analysis and self-change.

The other question found significant was: "How do you feel about the people who live with you, your neighbors?" This question is in the social/family/significant others and the social/enviromental spheres. This question covered an important social context of the residential care facility resident. Many of the in-class role plays and homework discussions centered in incidents with neighbors. There may be a criticism here of teaching to the instrument. While these and similar topic areas (any area of social or personal concern was open for discussion) were covered, they were discussed, analyzed, and appropriate strategies developed for change on the basis of the relative effectiveness of the self-statements in use as coping skills. If, as a result, attitudes were changed and more positive coping capabilities developed, then our groups were successful in attaining some of our specific goals.

Conclusions drawn from this kind of observationally based analysis are certainly open to refutation and alternative sources of causation. There is still value to be gained, however, from their

discussion.

One alternative explanation might be that the hypotheses found significantly different represent subject areas that carry a typically heavier negative weighting. In fact, the mean score chart (Table 13) shows that the four rejected hypotheses (H_3, H_6, H_7, H_{10}) were the most strongly negative response sets of the control subjects. Perhaps S.I.T. procedures as employed in this study have greatest effectiveness with the most negatively perceived environmental aspects. It could be that hypotheses not found significant already were perceived in a relatively positive way by this population sample. Future researchers using this type of instrument could obtain a preliminary positive-vs-negative rating of interview questions to avoid such a pitfall.

Finally, caution is advised in generalizing from each individual question response pattern. These represent fairly small samples of behavior. When combined, however, the pattern is more powerful (Glass & Stanley 1970). The results can be stated with more confidence.

Discussion of H_T Findings

The combined interview response pattern is considered the most powerful and most relevant dependent variable. The criteria for identification of positive and negative statements (Appendix L) were applied equally to the responses to each question recorded during the interview. The combined response pattern reflects the purpose and result of the entire design of the study, namely, to increase the level of positive verbalization in a social context. The purpose was to produce or enhance in the treatment subjects a set of

self-instructions, or a pattern of thought, that would assist them in regulating their behavior with the goal of more positive social interactions. The combined post-treatment response analysis indicated that this, in fact, did occur.

Importance of the Study

The literature (Ellis & Grieger 1977, Beck 1967) suggests that a pattern of negative verbalizations exists as a fundamental component of depression. Conditions in institutions for the aged and the experience of aging in America (Lieberman & Tobin 1976, Engle 1968) are implicated as contributing to a pervasive sense of helplessness and hopelessness among our institutionalized elderly. This treatment is not offered as a panacea, or even intended to stand on its own as an intact therapeutic entity. It is intended to be a piece of a larger treatment regimine of cognitive therapies, group experiences, activities, environmental manipulations, and other interventions which, combined, may gain some ascendency over the institutionalization process, social disengagement, and other negative consequences still so prevalent (Atchely 1977).

This treatment produced an increase in the positive content of speech in an aged institutionalized population. It is implied that this is a desirable characteristic and indicative of an enhanced coping skill or set of skills.

The S.I.T. procedures utilized in this study could easily be adapted to other specific goals and needs with aged population groups. This is a therapy that is acceptable to this population and ties into naturally occurring coping mechanisms that may just be in need of fine tuning or reawakening (Meichenbaum 1977).

Previous studies have shown S.I.T. to be useful for improving a wide range of problem behaviors (Meichenbaum 1969, 1971, 1977, Novaco 1975, Morris 1975, etc.). Similarly, a wide range of problems could be approached with S.I.T. techniques with institutionalized aged and aged people who live in the community. The following are specific problem areas that appear promising for use of S.I.T. and further investigation:

Recommendations for S.I.T. Use and Further Research

1. Reality orientation: S.I.T. could be modified to incorporate S.I.T. techniques with a reality orientation program.

2. Family support: S.I.T. techniques could be useful tools for application with families of institutionalized aged persons to deal with communication problems, teaching coping strategies, encouraging independence in their aged relatives, etc.

3. Staff: There are a number of problem areas involving staff that would lend themselves to S.I.T. These include attitude toward residents, burnout, and communication skills training.

4. Psychopathologies: S.I.T. could be a useful tool for counseling and social work personnel to employ for amelioration of problems with depression, psychotic speech, anxiety, and potentially a range of other emotional and psychological problems.

5. Daily living skills: For the aged in both institutions and the community, S.I.T. could provide a means of maintaining cognitive ability to manage skills of daily living.

6. Fear of death: S.I.T. could have useful applications in institutions, the community, and hospices for dealing with fear of death and developing successful coping mechanisms for the terminally ill of all ages and their families.

The above recommendations are not intended to represent a complete list of potential uses and research areas. The topics are offered as examples of the diverse potential of S.I.T. programs.

Limitations

The following appear to be limitations of this research:

1.   Interview questions may have had different positive or negative weightings given by the subjects.

2.   The sample size (51) may have been too small, given the diversity of the subjects in terms of history, medical problems, physical limitations, psychological status, etc., to yield positive results that might otherwise have been found in the analysis.

3.   The training of raters may not have been intensive enough, as inter-rater reliability was not well established.

4.   A six session, three week program of S.I.T. may not be sufficient to elicit maximum results.

5.   Other methodolgies could be equally or more effective in producing the effects shown.

Recommendation for Replication

The following recommendations are made for replication of the study based on the above findings:

1.   Have interview questions rated by the population for positive to negative weighting.

2.   Increase the scope of the study to include institutions of varying size, location, multiple racial backgrounds, and larger sample size.

3.   Provide more structured training of raters and statistically determine inter-rater reliability.

4.   Compare S.I.T. programs of different duration.

5.   Compare the S.I.T. programs with alternate treatment modes.

Summary and Conclusion

This study has implications for a broad range of additionally related research.   Few studies were found using cognitive psychology methods with aged populations.   This appears to be a very promising area of research.

There are many myths about aging. One may be the inevitability of cognitive deterioration and social disengagement (Tobin & Leiberman 1976). This myth allows society to ignore deterioration of support systems and alternatives available to its aged citizens and to withdraw and disengage society's own social structures. This situation can change. These negative forces can be made more positive. There is a long way to go before that occurs. The need exists to stop observing and recording the consequences of negative forces and to begin to intercede with positive change agents and strategies. In short, the need for further research of S.I.T. and other change strategies in the field of gerontology is immense and broad in scope.

S.I.T. has been demonstrated to be effective at increasing the positive verbal content of institutionalized elderly. The results of the program were seen observationally by this researcher in the interest and enthusiasm most of the treatment participants demonstrated throughout the group sessions and subsequent visits made to the facilities. Nurses-aides and other care providers have commented many times on the change for the better of this or that individual who participated in the groups. Friendships were developed among neighbors in the facility where none existed before because mutual needs and commonalities had not been perceived or encouraged.

Everyone is moving through his or her own aging process and experience. Aging is an inevitable factor of life too often ignored. To do research in this area and place gerontology in a

place of prominence in one's professional discipline puts aging in a deeply personal perspective. Aging is the present and the future for everyone and needs to become a more valued factor in the mainstream of American culture.

Aging, like most raw experience, if nurtured, valued, and attended to, can be beautiful and blended into a lifelong lifestyle of self-actualization. If ignored, abused, and neglected, aging can also embrace a powerfully tragic set of circumstances and experiences. The goal of this project and the personal hope of this researcher was to move toward a more positive experience of aging in our culture for the benefit of all of us, the aged and the aging.

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INTERVIEW SCHEDULE

1. Share with me your feelings about living here?

2. What do you think about the people who work here?

3. How do you feel about the other people who live with you, your neighbors?

4. What can you tell me about you, now at this point in your life?

5. Tell me something about activities or other things you partici-pate in here?

6. How would you describe your physical health?

7. How do you feel emotionally?

8. Tell me about your family?

9. Can you tell me about friends you have here?

10. Will you share with me some thoughts about your future?

Rationale for Class Session 1

"In this class we will explore how what we say to ourselves and to others can effect our daily lives for better or worse. When I use the phrase, what we say to ourselves, I don't mean literally speaking outloud to oneself. I'm refering to thought: Thinking that controls our behavior; controls what we do and say. Thinking, I characterize, as silent talking to oneself about what's going on out there and what's to be done about it.

A large volume of research by educators, psychologists and behavioral scientists over the past thirty to forty years has conclusively shown a link between language, thought and behavior. What they are saying is: We think in language, or words. Thoughts are verbal, even if not spoken outloud. We think about all aspects of our world, our environment. We interpret everything, all the sensory stimulus by using our minds based on our experience, and what we already know and expect from the world. And we do this thinking with an uniquely human tool, language. Our thinking then directs or controls our behavior. What we say; where we go; what we read, eat, enjoy, hate, love, and even who we are, all our complex behaviors are controlled by our internal speech, thinking.

Now, I don't want to make our thought processes sound too simple. They are not. How thinking occurs and behavior results is very complex and not well understood.

Recently, however, research has shown that there are some simple techniques we can use to help develop more positive ways of dealing with the stresses and problems of our everyday lives.

The basic model of this technique is that sometimes problems or difficulties we have are made worse or are even a result of negative things we say to ourselves. Our own thinking and perception of what's going on can aggravate some of the things that go wrong in our lives. The reverse of that, and what we will try to accomplish in this class, is to develop and use positive things to say to ourselves or think to solve some of our problems, help our outlook be more positive, and increase our ability to work constructively and positively in dealing with others. I call that friendship power.

Let me give you one or two examples. How about filling out tax returns? If we say to ourselves, 'This is too complex. I just can't do it,' or we think, 'Heck with it, I'll just fill it out. I don't care if it's right or wrong.' we end up either paying someone else a large fee to do it for us, or getting in trouble with the I.R.S.

On the positive side. We might have said to ourselves, 'Well, I'm having trouble with this. I'll just stay calm and get one of those tax guides and just go through it step by step.', or 'John has always done his own taxes. I'll ask him for help.' With the positive strategies, the results would be quite different, and more helpful in our lives.

As another example. Let's look briefly at depression. Most people who are depressed tend to say grossly negative statements to themselves. They think things like: 'I'm worthless,' 'There's nothing I can do.', 'It's hopeless.', 'There's no way out.', 'What's the point of trying. Things can't be changed.', 'No one cares for

me.' With this kind of negative thinking the depression is continually supported and aggravated. The depressed person prevents him or herself from making any positive changes or exploring helpful options because of their own negative, self-destructive thinking. They are their own worst enemy. Studies have shown that by changing what a depressed person says to him or herself with positive and more rational statements, very rapid improvement can take place. They can develop positive strategies for dealing with their lives.

The purpose of our group is to apply these principles to our social interactions; conversations with people who work here, live here, friends, relatives, anyone we come in contact with. We will try to identify some of our own thinking, or things we are saying to ourselves that are negative and not productive. These negative self-statements might result in isolating us from others, and making both people involved not feel too good. We will identify negative thinking and then substitute more positive statements that can result in improving and increasing our social contacts. The benefits of doing this are many. All of us can improve the quality of our lives by so examining our thinking and then constructively changing where needed. I certainly include myself. Those of you who are already very positive thinkers and are good at making yourselves and others feel good are especially needed here to help all of us develop positive statements by sharing yours and giving your enthusiasm. If you're thinking, 'I don't want to listen to this. He has nothing to offer me. I don't need this. I don't like being in groups of people. How can I sneak out the door', then please stay with us. We want you in this group. And, you need us.

You can enjoy being with people. We can help each other. We can make our lives more fun, our relationships more satisfying, and be happier people, if we are willing to try."

As presented by Meichenbaum (1977), the rationale for the purpose of the group and the procedures to be used serves to enhance to participant's level of expectancy, encourage participation , and explain the theory and methods to be used in a believable, understandable format. The point of the rationale is not scientific accuracy, but to develop common understanding, interest, and motivation in the group toward a common goal.

> The purpose of providing a framework is not to convince the client-perhaps against his will- that any particular explanation of his problem is valid, but rather to encourage him to view his problem from a particular perspective and thus accept and collaborate in the therapy that will follow. (Meichenbaum 1977, p. 151)

Appendix C

POSITIVE THINKING
A CLASS BY JACK DUTRO

CLASS GOALS

TO UNDERSTAND THE RATIONALE FOR POSITIVE THINKING CLASS

TO GENERALLY IMPROVE OUR ABILITY TO ESTABLISH FRIENDLY CONTACT WITH PEOPLE

TO BUILD ON AND ENHANCE EXISTING RELATIONSHIPS TO MAKE THEM MORE REWARDING

TO BE ABLE TO IDENTIFY NEGATIVE SELF-STATEMENTS AND THE CONSEQUENCES OR RESULTS OF NEGATIVE THINKING AND CHANGE WHAT WE SAY AND DO TO BECOME MORE OPEN, FRIENDLY, AND POSITIVE

TO BE ABLE TO EVALUATE OUR SOCIAL CONTACTS AND REHEARSE IN OUR IMAGINATIONS TO PRACTICE POSITIVE SELF-STATEMENTS FOR NEXT TIME

TO REWARD OURSELVES WITH SELF-REINFORCING POSITIVE SELF-STATEMENTS FOR A JOB WELL DONE AND REMIND OURSELVES TO KEEP TRYING

TO REMEMBER WHAT WE LEARNED AND PRACTICED IN THIS CLASS TO CONTINUE TO CHANGE IN A POSITIVE WAY AFTER THIS CLASS IS FINISHED

YOU CAN DO IT IF YOU TRY!!!

POSITIVE THINKING
(OR, HOW TO BUILD FRIENDSHIP)
A CLASS BY JACK DUTRO

CLASS #1

GOALS

TO UNDERSTAND THE RATIONALE FOR THE POSITIVE THINKING CLASS

TO GENERALLY IMPROVE OUR ABILITY TO ESTABLISH FRIENDLY CONTACT WITH PEOPLE

TO BUILD ON AND ENHANCE EXISTING RELATIONSHIPS TO MAKE THEM MORE REWARDING

DEFINITIONS

SELF-STATEMENTS -- THINKING TO ONESELF, USUALLY SILENT, BUT NOT ALWAYS. THIS IS THE THINKING WE DO IN PREPARATION FOR A VERBAL RESPONSE OR OTHER BEHAVIOR RESPONSE. EXAMPLE: WALKING AWAY SILENTLY FORM A STRANGER BECAUSE YOU ARE THINKING, "I DON'T TRUST PEOPLE I DON'T KNOW. I WON'T SPEAK."

NEGATIVE SELF-STATEMENTS -- THINKING THAT RESULTS IN AN UNFRIENDLY ENCOUNTER, OR DOES NOT PROMOTE SOCIALIZING AND FRIENDSHIP. IN OTHER WORDS, THINGS WE SAY TO OURSELVES THAT RESULT IN OUR SAYING OR DOING SOMETHING THAT HAS UNDESIRABLE CONSEQUENCES FOR OUR RELATIONSHIPS WITHOTHER PEOPLE. THE PREVIOUS EXAMPLE IS A NEGATIVE SELF-STATEMENT.

HOMEWORK ASSIGNMENT #1

     TAKE A LOOK AT YOUR OWN SOCIAL INTERACTIONS DURING THE DAY. IF SOMETHING YOU SAID OR DID DIN'T COME OUT QUITE RIGHT OR HAD SOME NOT-SO-GOOD RESULTS, WRITE DOWN WHAT HAPPENED.

EXAMPLE: I DIDN'T TALK IN OUR GROUP

     NEGATIVE SELF-STATEMENTS -- "I DON'T NEED THIS GROUP, WHAT AM I DOING HERE ANYWAY." OR, "I DON'T HAVE ANYTHING IMPORTANT TO SAY." OR, "NO ONE CARES WHAT I SAY, SO I WON'T SAY ANYTHING."

     TRY TO WRITE DOWN THREE EXAMPLES.

(1)

(2)

(3)

APPENDIX F

POSITIVE THINKING
A CLASS BY JACK DUTRO

CLASS #2 (OR, WE ARE WHAT WE THINK

GOALS

TO GENERALLY IMPROVE OUR ABILITY TO ESTABLISH FRIENDLY CONTACT WITH PEOPLE

TO BUILD ON AND ENHANCE EXISTING RELATIONSHIPS TO MAKE THEM MORE REWARDING

TO LEARN TO IDENTIFY NEGATIVE THINKING (NEGATIVE SELF-STATEMENTS)

TO DISCUSS HOW TO SUBSTITUTE POSITIVE THINKING (POSITIVE SELF-STATEMENTS)

THE BASIC MODEL

EXAMPLE:

N.S. "I DO NOT WANT TO BE PART OF THIS DUMB GROUP. THIS IS A WASTE OF MY TIME. I CAN NOT DO IT. I WILL NOT DO IT."

N.V. "NO, I DO NOT WANT TO GO TO CLASS TODAY."

N.C. DOES NOT ENGAGE IN GROUP EXPERIENCE; PROMOTES SOCIAL ISOLATION

THIS SAME SITUATION CAN HAVE VERY DIFFERENT RESULTS IF THE PERSON INVOLVED IS WILLING TO STOP BEFORE SPEAKING AND THINK ABOUT A MORE POSITIVE ATTITUDE AND RESPONSE.

EXAMPLE:
P.S. "I AM A LITTLE UNSURE ABOUT THIS GROUP, BUT NOTHING VENTURED, NOTHING GAINED. I WILL TRY TO RELAX, BE MYSELF, AND BE FRIENDLY."

P.V. "YES, I WILL COME TO CLASS TODAY, I AM WILLING TO KEEP TRYING."

P.C. OPENS UP POSSIBILITIES FOR NEW SOCIAL CONTACTS; PROMOTES SOCIALIZATION AND FRIENDSHIP

HOMEWORK ASSIGNMENT #2

IN THIS ASSIGNMENT WE PLAN AHEAD TO USE POSITIVE SELF-STATEMENTS TO PROMOTE DESIRABLE CONSEQUENCES FROM A SOCIAL EXCHANGE OF SOME KIND. TRY TO PLAN AT LEAST THREE (3) ENCOUNTERS AHEAD OF TIME AND PRACTICE POSITIVE SELF-STATEMENTS TO PREPARE YOURSELF.

EXAMPLES: YOU ARE GOING TO MEET YOUR DAUGHTER. YOU MAY HAVE HAD AN ARGUMENT OR BE FACING SOME TYPE OF PROBLEM. SO YOU SAY TO YOURSELF, "I KNOW SHE WANTS WHAT IS BEST FOR ME. WE LOVE EACH OTHER." "BUT, I HAVE MADE MY OWN DECISIONS FOR A LONG TIME." "I'LL LET HER KNOW I APPRECIATE HER CONCERN, THEN REALLY WORK AT ENJOYING OUR VISIT." "I CAN ENJOY HER, AND STILL MAKE MY OWN DECISIONS WITHOUT ANGER OR RESENTMENT."

TRY IT!

(1)

(2)

(3)

POSITIVE THINKING
A CLASS BY JACK DUTRO

CLASS #3 (OR, YOU CAN WIN THEM ALL)

HOW DO WE DO IT?

PREPARE: THINK ABOUT SOCIAL ENCOUNTERS AHEAD OF TIME AND SUBSTITUTE POSITIVE SELF-STATEMENTS TO PROMOTE YOUR OWN FRIENDLINESS AND HELPFULLNESS. YOU CAN CREATE AN OPEN, POSITIVE ATTITUDE FOR YOURSELF.

REVIEW: AFTER A PERSON TO PERSON CONTACT OCCURS, EVALUATE WHAT HAPPENED. HOW DID YOUR THINKING AFFECT THE CONVERSATION AND RESULTS? WERE YOU BEING POSITIVE? ARE THERE SOME THINGS YOU WOULD LIKE TO CHANGE? THEN IN YOUR IMAGINATION REPLAY THE SITUATION SUBSTITUTING POSITIVE SELF-STATEMENTS.

REHEARSE: NOW TRY TO USE THE POSITIVE SELF-STATEMENTS YOU THOUGHT ABOUT TO CHANGE WHAT YOU SAY AND DO THE NEXT TIME YOU HAVE A SIMILAR SOCIAL ENCOUNTER. BY WORKING AT IT YOU CAN OPEN NEW DOORS TO FRIENDSHIP, INCREASE AND IMPROVE YOUR RELATIONSHIP, AND MAKE THE QUALITY OF LIFE BETTER.

REWARD: WHEN SOMETHING NEW YOU TRY WORKS AND YOU ARE BEING MORE OPEN AND POSITIVE OR YOU HELP SOMEONE OR MEET SOMEONE NEW, ANY KIND OF POSITIVE CHANGE, IT IS IMPORTANT TO CONGRATULATE YOURSELF AND GIVE YOURSELF ENCOURAGEMENT, A PAT ON THE BACK. TELL YOURSELF YOU DID A GOOD JOB, AND TO KEEP ON TRYING. ONLY MORE GOOD THINGS CAN RESULT.

SO IT IS IMPORTANT THAT WE ENCOURAGE OURSELVES TO TRY: ASK OURSELVES HOW WE DID: ASK OURSELVES WHAT WE MIGHT CHANGE OR IMPROVE ON NEXT TIME. AND THEN PAT OURSELVES ON THE BACK FOR A JOB WELL DONE AND SAY, "GOOD JOB, KEEP UP THE GOOD WORK."

POSITIVE SELF-STATEMENTS LEAD TO POSITIVE VERBALIZATIONS WHICH LEAD TO POSITIVE CONSEQUENCES.

TABULATION FORM

Rater_____

S Name_____

Pre_____Post_____

Statement Scale
_____

Question	Positive	Negative
1.		
2.		
3.		
4.		
5.		
6.		
7.		
8.		
9.		
10.		

- - - - - - - - -

Sub T	P	N		Sub T	P	N
1.	—	—		6.	—	—
2.	—	—		7.	—	—
3.	—	—		8.	—	—
4.	—	—		9.	—	—
5.	—	—		10.	—	—
				Total	___	___

I want to say a sincere thank you for your consent to participate in the class I'll be offering at Heart of The Valley. I look forward to your involvement in participation in my class. Your presence is important and valuable, and I can't emphasize that enough. I do need your help to make this work. As of now I plan to have the first class on Wednesday July 7th at 10:00 A.M. We will then meet each Wednesday and Friday afterwards at 10:00 A.M. for the next three weeks.

Once again, thank you. I look forward to seeing you on the morning on Wednesday July 7th.

Sincerely,

Jack Dutro
Counselor

Appendix K

I want to say a sincere thank you for volunteering to take part in
my class that I will be offering at The Mennonite Home. As we
discussed that class will begin after the 4th of July. I plan to
have the first class at The Mennonite Home in The Sun Room on
Tuesday July 6th at 10:00 A.M. We will meet each Tuesday and
Thursday after that for three weeks. I look forward to talking with
you in the class and having your participation. Your involvement is
very valuable and important. Again, I want to thank you. I am
excited about starting our first class on July 6th.

Sincerely,

Jack Dutro
Counselor

CRITERIA FOR IDENTIFICATION OF POSITIVE VERBALIZATIONS

Global Criterion: Verbalization could be preceded by a positive
self-statement.

Verbalizations concerning self

Views self in a nuturing, enhancing, self-reinforcing manner,
beneficial to building self-worth.

Express hope, useful options and/or constructive coping to personal
situations.

Deals with specific concerns and attempts to provide options for
resolution.

Views past constructively, providing useful coping skills for the
present.

Views future hopefully, had future goals, realistic but does not
dwell on the negative; responds to living rather than dying.

Coping successfully with physical limitations and disabilities.

Appreciative, thankful for the good things in life, past, present or
future.

Coping successfully with losses, does not depress mood.

Verbalizations concerning others

Views others in a constructive, socially enhancing light, builds
others self-esteem. offers others constructive alternatives to
problem situations.

Looks forward to family interactions, wants to be helpful, genuine
but not bitter, tolerant of others faults and weaknesses.

Views staff in a positive light as helpful, trying, caring, not
blaming.

Gives positive feedback about interviewer, neighbor, or others.

Statements that encourage further interaction or future contact,
friendliness (social engagement).

Attempts to enhance others mood and/or self-worth.

Complimentary statements of interviewer, neighbors or others.

Offers constructive advice, tries to be helpful.

Shows interest in another person, understanding and genuine.

Verbalizations concerning the environment

Views physical environment in an optimistic way.

Realistic and positive about the facility and its limitations, advantages and disadvantages.

Statement complimentary of the facility.

Statements concerning environmental conditions (weather, etc.) which tend to elevate mood.

CRITERIA FOR IDENTIFICATION OF NEGATIVE VERBALIZATIONS

Global Criterion: Verbalization could be preceded by a negative
                    self-statement.

Verbalizations concerning self

Views self in a non-nuturing, self-defacing, negative manner diminishing self worth.

Expresses hopelessness, cannot cope with personal situation.

Generalizes a sense of helplessness.

Views past in a harmful, depressing way.

Views future with futility and negativism, derides goals or any hope ofpositive change; responds to death rather than life.

Cannot cope with physical limitations and disabilities.

Dwells on negative events, carping about past, present, and future.

Coping unsuccessfully with losses, depresses mood.

Verbalizations concerning others

Views others in a destructive, socially degrading light, demeaning, negative about problem situations without offering alternatives.

Views staff in a negative light as lazy, uncaring, harmful, blaming.

Gives destructive feedback about interviewer, neighbor, or others.

Statements that discourage further interaction or future interaction or future contact, unfriendliness (social disengagement).

Attempts to depress, lower mood or emotional tone of interviewer or others.

Insults interviewer, neighbors, staff, or others.

Tries to sabotage conversations, cynical prodding.

Shows disinterest, non-caring attitude, phoneyness.

Verbalizations concerning the environment

Views physical invironment in a negative, down-grading way.

Derides facility and staff, focuses on disadvantages and limitations.

Statements concerning environmental conditions (weather, etc.) which tend to depress mood.

OREGON STATE UNIVERSITY

APPLICATION FOR APPROVAL OF THE HUMAN SUBJECTS BOARD

Principal Investigator*_____Jim Firth_____

Department_____Counselor Education_____Phone___4317_____

Project Title A group method of self-instructional training to_____
             increase positive verbalizations in an aged population.

Present or Proposed Source of Funding_N/A_____

Type of Project_____Faculty Research Project

            ___X____Graduate Student Thesis Project*
                    (Student's name_Jack Dutro_____)

The following information should be attached to this form. All material, including this cover sheet, should be submitted IN DUPLICATE to the Office of the Dean of Research, AdS A312. Feel free to call extension 3437 if you have questions.

1. A brief description of the methods and procedures to be used during this research project.

2. A list of the risks and/or benefits (if any) to the subjects involved in this research.

3. A copy of the informed consent document and a description of the methods by which informed consent will be obtained. (Information concerning the "Basic Elements of Informed Consent" is reproduced for your information on the back of this form.)

4. A description of the method by which anonymity of the subjects will be maintained.

5. A copy of any questionnaire, survey, testing instrument, etc. (if any) to be used in this project.

6. If this is part of a proposal to an outside funding agency, attach a copy of the proposal.

Signed_____Date_____
            Principal Investigator

*Note: Graduate Student Thesis projects should be submitted by the major professor as Principal Investigator.

This research will focus on the potential for a short term (3wks) teaching process in increasing positive verbal content of speech. The teaching method will be a small group with a ficilitator/teacher. Content will cover theory and rationale, exploration of negative thought content, contrasting positive thoughts, and delivery of positive statements in social settings. Results will be measured by analysis of verbal content of taped standardized interviews.

There are no evident risks involved in the study. Benefits include improved social functioning, increased social contacts, mood elevation, and smoother relationships with institutional staff.

Informed consent will be obtained verbally. Each potential group member will be screened and informed at that time of the nature of the groups including basic procedures, purpose, benefits, and voluntary participation. The procedures are open and straight forward. All questions will be answered. It is to the investigators advantage for the subjects to have a thorough understanding of the methods and goals of the group for motivational reasons.

Subjects participating in the study will be randomly assigned to treatment or control groups. Anonymity will be maintained in analysis and reporting of results by assigning members to participants that are identifiable only to the investigator.

MENTAL STATUS QUESTIONNAIRE

1. Where are we now?

2. Where is this place located?

3. What is the day of the month?

4. What month is it?

5. What year is it?

6. How old are you?

7. When is your birthday?

8. What year were you born?

9. Who is the president of the United States?

10. Who was the president before him?

Number of Errors	Presumed Mental Status
0-2	Chronic brain syndrome, absent or mild
3-5	Chronic brain syndrome, mild to moderate
6-8	Chronic brain syndrome, moderate to severe
8-9	Chronic brain syndrome, severe

(Kahn, Goldfarb & Pollack, 1961)