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A Comparative Study Of Three Methods For Raising Self-Esteem Among The Elderly

Laila Gitelle Melin Davidson
University of the Pacific

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A COMPARATIVE STUDY OF THREE METHODS FOR
RAISING SELF-ESTEEM AMONG THE ELDERLY

A Dissertation
Presented to
the Faculty of the Graduate School
University of the Pacific

In Partial Fulfillment
of the Requirement for the Degree
Doctor of Education

by
Laila Gitelle Melin Davidson

January 1982

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from the Sigma Kappa Foundation.

A COMPARATIVE STUDY OF THREE METHODS FOR
RAISING SELF-ESTEEM AMONG THE ELDERLY

Abstract of Dissertation

The negative psycho-socio-biological impact of attitudes toward aging in contemporary America is seen in the literature as stemming from two primary causes: from the positive emphasis on youth in the current culture, and from resulting subjective interpretation by the aging persons of the natural and individual changes which characterize the aging process. Older persons regard the changes as decrements.

Crucial to adjustment to the aging process is the concept of self. Positive self-esteem is regarded as leading to satisfactory adjustment. The literature has indicated the importance of and potential changeability of the concept of self.

This experiment was designed

- 1) to determine if educational involvement can raise self-esteem and
- 2) to test effects of three educational processes on the self-esteem of older people and to compare the effects to a control group.

The four groups included in the study consisted of:

- (1) a class which was learning about current-events of job preparation
- (2) a class which was learning about psychology, insight and self-awareness
- (3) a class which was learning about memory techniques and relaxation, and
- (4) a non-educationally involved control group.

All Ss were aged 60 or over. Each group consisted of 20 members. All of the groups received an 18-item (RDQ) mental-status and demographics questionnaire and the TSCS as pretest, and the TSCS as posttest 8 weeks later. Groups 1, 2, and 3 met for classes once each week, for 2 hours, for an 8-week semester.

The Campbell and Stanley Nonequivalent Quasi-experimental Design 10 was applied in this experiment. Null Hypothesis 2 stated that there would be no differences in self-esteem scores among the different groups. A paired observation t-test on the pre and post TSCS scores for each group was used to address Null Hypothesis 1. Highly significant differences between means for TSCS pre and posttests were found for group 2 (Psychology). Analysis of variance of pretest scores determined that the TSCS scores among the groups were significantly different. Analysis of covariance was then performed on posttest scores. Both Null Hypothesis were thus rejected.

Further examination of programs which attempt to enhance the self-esteem of older persons is recommended.

DEDICATION

TO ALL MY OWN

- . . . to those of mine, now gone,
whom I have learned from, and loved:
Zal zikhroyne livrokhe
- . . . to those of my present,
my exciting, beloved reality:
Zu lang, lebedicke yor
- . . . to my future dear ones
who will carry forward the creative concern
of all our Teachings:
Lang leben zalstu.

Especially to

My JERRY, RIEVA, and MARSHALL

(HUSBAND/BEST FRIEND, MOM, and BROTHER)

MY FIVE CHILDREN

AND TWO LITTLE ONES

AND MY DAD, HENRY

presented on the occasion of his 90th birthday

ACKNOWLEDGEMENT

and gratitude
is also extended

to the dear, beautiful U. of P. people:

Laura in Martin and Betty in Curriculum Libraries

Evy at her campus typewriter--at the "center of the universe"

Kay who directs that center so beautifully

Bernie, teaching from his pulpit

Ruth, gracing her table and others' lives

My excellent committee, Armand Maffia (Chairman) and Marc

Jantzen, Roy Timmons, Ann Zinck, also Marge Bruce

as well as Deans Smith and Jarvis

and in addition,

to Carl Rogers, my larger-than-life supervisor of lasting influence

to Dean Dale Hamreus, U.S.I.U., my good friend and critic

to patient, patient friends

and especially

to the dear, tired but willing Cohort of Elders but for whom

your life and mine would be so much poorer.

ABSTRACT

The negative psycho-social impact of attitudes toward aging in contemporary America is seen in the literature as stemming from two primary causes: from the positive emphasis on youth in the current culture, and from resulting subjective interpretation by the aging persons of the natural and individual changes which characterize the aging process. Older persons regard the personal changes as decrements.

Crucial in adjustment to the aging process is the concept of self. Positive self-esteem is regarded as leading to satisfactory adjustment. The literature has indicated the importance and potential changeability of the self-concept.

The problem of the study was to determine if educational involvement could raise self-esteem. The effects of three educational processes on the self-esteem of older people were tested and these effects were compared to a control group. The four groups included in the study consisted of:

1. a class which was learning about Current Events or Job Preparation;
2. a class which was learning about Psychology, including insight and self-awareness;
3. a class which was learning about Memory techniques and Relaxation; and

4. a noneducationally involved control group.

All subjects were aged 60 or over. Each group consisted of 20 members. All of the groups received a mental-status quiz, a demographics questionnaire, and the Tennessee Self-Concept Scale (TSCS) as pretests. The TSCS was administered eight weeks later as a posttest. Treatment Groups 1, 2, and 3 met for classes once each week for two hours for an eight-week semester.

The Campbell and Stanley Nonequivalent Control Group Design (10) was applied in this experiment. Null Hypothesis 1 stated that there would be no differences in changes of self-esteem scores in any of the treatment groups as a result of involvement in the experiment. Null Hypothesis 2 stated that there would be no differences in self-esteem scores among the different groups. Analysis of variance of pretest scores determined that the TSCS scores among the groups were significantly different and analysis of covariance was then performed on posttest scores. Both Null Hypotheses were thus rejected. A paired observation t-test on the pre- and post-TSCS scores for each group was used to further address Null Hypothesis 1. Significant differences between means for TSCS pretests and posttests were found for Group 2 (Psychology class).

The first hypothesis was rejected and, upon inspection of changes in individual groups, the data indicated that only in one group (Psychology) significant change had occurred. According to the question of the second hypothesis, it was found that one type of educational process (Psychology) was more effective in changing

self-esteem scores than were the other processes (Current-events/Job-preparation and Memory/Relaxation Training).

Further examination of several possible programs which attempt to enhance the self-esteem of older persons is recommended.

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CHAPTER I

INTRODUCTION

There are more elderly people in America today at one time than ever before and their psycho-social needs are not adequately met in the current youth-oriented culture (Zinman, 1979, report of Butler's presentation.). The 24 million people who are 65 and over represent the unprecedented figure of 11.4% of the current population. That percentage is expected to double within five decades.

Along with increasing numbers, the very process of aging as a social phenomenon has undergone great changes. Rosow (1973, pp. 82-86) notes that aging in contemporary society, once respected, is now negatively regarded. He indicates that there is ample evidence to contradict the cherished mythology about the later years being golden years in our society; instead, old age is seen currently as neither eagerly anticipated nor appreciated.

It has been noted that adaptation to the problems inherent in the aging process requires talents which many of the elderly were never required to develop. There are few, if any, guidelines for the aging to follow in the course of their daily lives. Yet survival in the aging group has been associated with the individual's self-view and his sense of continued usefulness, as well as physical factors (Butler, 1967, p. 1242).

At issue here is the problem of maintaining an adequate self-view by the older person as he goes through his adjustments to the aging process. Such self-consideration is seen as a primary and pivotal source of his capacity to adjust. For the most part his entire potential for coping with change, his and his society's, is usually left entirely to chance.

A turnabout of the concept of aging, from its negative connotation to an actualized "golden-years" reality, is a desirable remediation effort for the elderly. One such remediation effort is tried in this experiment. Changes are sought here in the self-esteem and are considered possible since references in the literature find self-esteem to be an aspect of personality which is both vulnerable and changeable.

For reasons which will appear later in the paper, education is the milieu chosen for the treatments here. This investigation raises the question: Can positive change in the self-esteem of elderly people be brought about through educational classroom procedures?

Statement of the Problem

The concept of self is regarded as a personality factor which involves a subjective sense of self-worth. The psycho-social factors of an individual's being become an identifiable self through the attitudinal reflection of social influences (Aronson, 1980, p. 6). The sense of self-worth is particularly seen as "the important linchpin in successful aging" (Schwartz, 1975, p. 470). Of note here is the change in self-concept concomitant with aging. The change appears to be in the negative direction. Rosow (1973, p. 82) has noted, for

example, that old age has become a unique stage of life in that a "systematic status loss" occurs for all its members. A major problem for the aging has been the need to cope with the many aspects of everyday living which have been affected by great variety and numbers of personal and environmental losses or changes.

Of perhaps equal impact on aging individuals, according to Rosow's (1973, p. 82) observation, is that as aging proceeds, the elderly are gradually excluded from the central functions and social participation on which self-concept and self-esteem are based. Considering the weighty influence of such prevailing, negative attitudes, one may be surprised at, yet understand the finding of Wolk (1976, p. 426) that a learned helplessness visible as a belief in external control, is not a by-product of growing old but is a serious practice of those aging people who undertake this defensive mode.

The loss of self-esteem is a national problem to millions of people and will predictably continue, as new members join the numbers of the aging. Whether a turnabout can halt the loss is the focus of this investigation. The concern here is to create a possible remediation for the loss of self-esteem of aging people through an educational program involving them. For this, several educational processes have been selected as treatment to investigate the possibility of changes in self-esteem of participants. This will be the focus of the inspection which appears on these pages.

Purpose/Significance of the Study

This investigator believes that an educational program to address the considerable loss in self-esteem of elderly people would be desirable and significant to a huge population. A program involving elderly people which would enable them to make changes and show positive gains, thereby raising their self-esteem is, in fact, seen as a necessity.

The pervasive American attitude of low regard for the elderly is seen as a reflection of today's youth-oriented culture (Rynerson, 1972, p. 23) and is evident throughout the society (Butler, 1975, *passim*). Medical professionals, family members and all likely support-personnel are seen as less than anxious to be helpfully involved with the elderly (Barrett, 1972, pp. 45 & 95; Butler, 1975, p. 4).

To the elderly, loss and change are suffered from many sources. To these people, also, the effects of loss and change appear to validate their jeopardized sense of adequacy. This verifies to the elderly person that it is he who is responsible for the societal disdain he brings about. As a result, resignation by older people to their losses of actual or attributed power is the most typical reaction (Rosow, 1973, p. 83). Accompanying this attitude is the crucial adaptation to aging which appears with other causes to have the effect of lowering the elder's concept of self (Schwartz, 1975, pp. 470-472).

Hypotheses

The choice of an educational milieu for the experiment was, as a search of the literature indicated, unique. It was reasoned by the investigator that such environments could be expected to provide measurable change. The aspect of self-change as "stimulating one's self to an action by responding as the other responds" (Mead, 1952, p. 366) implies change and justifies the treatment modality. This study was designed to investigate change in treatment environments and to answer the following questions of the hypotheses:

1. Will active involvement in organized education courses affect self-esteem scores in older persons more than no active involvement in any organized programs?

2. If organized educational courses affect self-esteem scores, will one type of educational program be more effective than another in changing the self-esteem scores?

Specific questions to be answered in the study are:

1. Do older persons enrolled in an adult education Psychology class demonstrate greater increase in self-esteem than older persons not actively involved?

2. Do older persons enrolled in an adult education Current Events or Job Preparation class demonstrate greater increase in self-esteem than older persons not actively involved?

3. Do older persons enrolled in an adult education Memory/Relaxation Training program demonstrate greater increase in self-esteem than older persons not actively involved?

The search of the literature which included ERIC (Educational Resources Information Center), sociology, education and psychology articles, dissertations and books, has led this investigator to assume that there has been no other recorded investigation treating changes in the self-esteem of elderly people as a result of educational procedures that were subject to measurement by pretest and posttest on a comparative basis.

Rationale

Studies devoted exclusively to comparative changes (in contrast to correlates) of self-esteem of the elderly are rare, according to the literature. The research in the present study has used a comparative method for measuring the effects of efforts to raise the self-esteem scores. Support for this methodology was found in a study by Lindell (1976, p. 4944). The importance of Lindell's research to this experiment lies with her findings which indicate that participation in group therapy can alter and increase the self-concept (see Examples of Studies which Measure Self-Esteem in Chapter II).

The educational milieu is seen by this writer and many others as a positive environment for the older student (see Chapter II). Not only is it regarded as necessary that the older person have opportunities for intellectual and social activity but also that he has ample opportunity for gains in his sense of competence and confidence (Kuypers & Bengston, 1973, pp. 192-196). It appears, according to many writers, that the chance to engage in intellectual and social activity, while increasing one's knowledge or ability, should also contribute to

an improvement in self-concept (Knowles, 1972, p. 10; Marcus, 1972, pp. 10, 22-24).

Learning is useful as a possibility to overcome the self-image threats of normal aging. The threats, which include withdrawal and passive resignation, have been considered almost inevitable accompaniments of aging since the notion of "disengagement" was empirically noted and popularized in the 60's (Henry & Cumming, 1959). Work of great importance is now being done to reverse what is almost universally recognized as that inevitable disengagement process.

The findings concerning learning possibilities for older students help to justify the assumptions and methodologies this investigator chose for her research in raising self-esteem. This experiment tested a program of remediation through educational processes. School participation was seen as providing an environment for possible gains in the self-esteem of the participants, as endorsed by Barrett (1972, pp. 52-53). The experiment described here was expected to indicate a method for mitigating the problems associated with self-esteem particularly in elderly people. The findings of Nemeth (1974, p. 4672B) who saw changes in self-esteem of her subjects after short-term (weekend) treatment provided an example to this writer in choosing intellectual stimulation in a limited time format for her subjects.

Use of Classes

As many observers have noted there would appear to be considerable esteem needs by the elderly. The experiment which follows includes an empirical examination of a possible way to affect those self-needs.

For this experiment, treatment by a variety of educational processes was selected for the elderly participants. These treatments included three classes (treatment groups) and one control group.

The classroom approach was chosen because high arousal and other factors seen below have been known to influence learning potential for older students (Gribben & Birren, 1973, pp. 763-764; Lair & Moon, 1972, p. 279; Lersten, 1974, pp. 1-10). Also, elderly subjects were attracted to classes, whereas an offering in individual or group therapy might be perceived by the elderly as stigmatizing, which is an attitude to be carefully avoided (Goffman, 1963, pp. 8-9). Offering the classes at recreation centers for seniors, also an original consideration, was rejected because of the difficulties of conducting a structured teaching and testing program in such an open environment.

Treatment Groups

Each treatment group included factors which were expected to influence self-esteem. The subject matter of the various treatment groups consisted of current-events, job-preparation, psychology, and memory/relaxation training.

A Current Events and a Job Preparation class were statistically pooled. Offered at two different Community College locations, these were the most popular classes at each site. Each had a long waiting list and enjoyed capacity enrollment, singular for the Community Service offerings. Current events in China and U.S. was the subject for the Current-Events class. It was primarily a lecture format. The Job Preparation program was CETA sponsored and consisted of lectures on

returning to the world of work. Current Events was one of the most requested offerings by the primarily leisure-oriented and financially adequate Santa Monica older students, and Job Preparation was as popular to the inner city, lower income Los Angeles community residents in the college neighborhood. Both classes were seen by this investigator as providing the high arousal (motivational) environment required.

Psychology was the second treatment subject selected. This group, too, had the reputation of providing a high arousal environment. In addition, the class content encouraged an increase in self-awareness and insight. The Psychology program, which combined two similar classes, was primarily a lecture series on the subject of developmental psychology and included occasional class discussions on the lectures. A specific amount of time was reserved after the lecture for a "coping" or counseling session in which members could share pertinent psychological problems which they wished to discuss in order to receive guidance. The lectures and coping sessions, in addition to providing high arousal, enabled the subjects to increase self-awareness and insight. These factors were identified as those which may affect self-esteem. The investigator taught this group.

The third treatment subject, Memory/Relaxation Training, was chosen because it, too, was designed to provide a high arousal, supportive environment and was designed to assure successful achievement. The subject matter was selected with emphasis on memory work because studies by Schonfield (1972, p. 256) and by Kahn, Zarit,

Hilbert and Niederhe (1975, pp. 1569-1570) have noted that one of the problems of greatest concern to the elderly, as seen by them, is memory "loss." The researcher had also heard frequent mention of memory as a problem from many of her elderly students and counselees. The investigator developed the Memory and Relaxation Training program and instructed it as well.

The Memory/Relaxation program undertaken by this group was designed to encourage successful achievement by providing a supportive environment, as recommended by Ross (1968, pp. 261-266). Each session included relaxation training which was expected to lessen learning stress and tension (Brown, 1974, p. 128) which was assumed would permit easier learning. Emphasis was on the student's subjective awareness of his success in an environment which provided positive support and pride of achievement. These factors were identified as those which may affect self-esteem.

A control group consisted of participants who received no structured program at all. This group had no educational program to theoretically provide relief from low self-esteem assumed to accompany the normal aging process. The control group could conceivably provide a means of comparison with the other subjects whose educational involvements may have effected changes in their self-esteem.

Because of the distinctive factors in the various treatment modalities, greatest self-esteem changes were anticipated in the multi-factored Memory/Relaxation training group, some in Psychology, and less in the Current Events/Job Preparation group. No change was expected in the Control group.

Measuring Instruments

Self-esteem, the factor being measured, presents aspects of ambiguity. The measuring scale used to note changes is one which appears with considerable frequency in the literature for this purpose: the Tennessee Self-Concept Scale (TSCS) (Fitts, 1964). Though the TSCS has often been used in research, the validity of the scale as a measure of the question of self-concept has been controversial. (Discussion of this appears in Chapter III.) An additional instrument, the Mental Status Questionnaire (MSQ) of Kahn, Goldfarb, Pollock, and Peck (1960, pp. 326-328), was also used. It is a 10-item rapid screening device which indicates adequacy of mental function and is considered to be a valid measure for determining mental status in the aged group. Another instrument, the Research Data Questionnaire (RDQ), developed by the investigator, was used to record demographic information which could be used to evaluate variables in the subject's background.

Procedure

The experimental procedure was designed to test the relative value of educational processes in raising the self-esteem of the elderly participants. Subjects for the three experimental groups were persons who enrolled in one of the subject-matter classes. Control-group members were obtained by requesting participation of elderly individuals who were members of community recreation centers or residents of local mobile home communities.

Each of the three treatment classes met for eight weeks, once weekly, for two hours per session. Each class member was pretested for mental function adequacy by the Mental Status Questionnaire, was asked personal information in the Research Data Questionnaire, and was pretested for a self-concept score by use of the Tennessee Self-Concept Scale. After the eight class sessions, each class member was tested again, using the Tennessee Self-Concept Scale as posttest.

The control group was tested by the same pretest battery during the first meeting with the researcher, and again by the TSCS at pre-established appointments eight weeks later.

The results of the pretest and posttest scores were analyzed. The data appear in the following chapters. The testing procedure to compare the effects of three educational processes on self-esteem scores of the elderly subjects is shown in Table 1.

Limitations

The study is limited by the fact that only 80 people, all of them from only one specific geographic area (Southern California), took part. It is also limited by the fact that there was no random selection; the 60 people who took part in the various experimental classes volunteered to do so. One must note that it took a certain amount of self-confidence for these people to leave their homes to attend any sort of class. It must also be taken into account that only certain people continue to seek new information. Further, only those who were ambulatory (could appear in class sites) and were literate in English could take part. Self-selection (volunteering) of appropriate

Table 1

Procedure of Testing in Experiment Comparing
Effects of Three Educational Processes in
Attempting to Raise the Self-Esteem
Scores of Elderly Subjects

Group	Pretest ^a	Posttest ^b
1 (Current events/Job preparation)	MSQ, RDQ & TSCS	TSCS
2 (Psychology)	MSQ, RDQ & TSCS	TSCS
3 (Memory/Relaxation training)	MSQ, RDQ & TSCS	TSCS
4 (Control)	MSQ, RDQ & TSCS	TSCS

^aWeek 1

^bWeek 8

treatment and control subjects pertained and groups were designed to be restricted to a small number (20 members each).

An additional factor concerns the time. Classes were restricted to the standard adult education semester of eight weeks and met once a week for two hours. Further, groups could only be superficially considered equivalent using age, literacy and ambulatory ability as criteria.

Assumptions

It was assumed that the various educational experimental groups were representative of students from adult public classes and that the noneducationally involved subjects represented noneducationally involved older people who met the criteria. It was also assumed that many elderly do have adjustment problems, that the participants in this research had normal intelligence, and that only certain older people go to school (e.g., those desiring self-improvement, etc.). It cannot be assumed that subjects from each class are perfectly equivalent (school locations, teachers, etc., are different).

The results of the experiment are anticipated to be generalizable to the large population of older people who are literate, and who may choose to become involved in self-improvement programs or classes or who elect to be noneducationally involved, as were members of the control group.

Definitions

The following terms are used in this study.

Elderly: Will be used to refer to all people 60 years of age and older. Other terms which will be used synonymously are older people, elders, aging, the aged.

Pronoun selection: Use of the pronoun "his" also refers to women members unless otherwise specified.

Self and change: References to self and the self in terms of change are based on formulations by Hayden (1979, pp. 547) who offers a conceptual system concerned with the likelihood and direction of any change in one's self view. The notion of the self which Hayden proposes is a conceptual system of hierarchically ordered dimensions, each containing a current and ideal view of the self. The relative meaningfulness of these views determines the likelihood and direction of change. ("For one to change, the alternative view of self must provide more implications than the current view.") Changes will be seen in variations in scores from pretest and posttest. Such changes will be measured on a standardized scale.

Change is seen as the basis within the individual for receiving and responding to new events. It arises from the cumulative record of adaptations to biological and social events which the person has made (Neugarten, 1977, p. 630).

The self is regarded by cognitive dissonance therapists as originating in at least two opposite aspects, resulting in conflicting impulses (as one would react in consideration of another, thereby

making a critical but social response) (Mead, 1952, pp. 355-357). Thus it is always in change.

The self reaction is usually expressed in grouped words. Self-concept, self-esteem, self-image, self-concern, self-attitude, self-regard, self-opinion, and self-worth will be used synonymously.

Self-esteem: As used in this study, self-esteem is conceptualized as a scale score on the Tennessee Self-Concept Scale. This score represents the total sum of related personality aspects including self-identity, self-acceptance, one's behavior, one's self in relation to his family, and one's self in relation to his society.

Mental Status Questionnaire: A set of questions used as part of the pretest battery devised by Kahn, Goldfarb, Pollack, and Peck (1960) to test mental functioning.

Research Data Questionnaire: A set of questions devised by the investigator and used in the pretest battery which provided demographic information regarding the participants (see Appendix B).

Tennessee Self-Concept Scale: Written by Fitts (1965), it was the standardized measurement instrument used in this study. It was used as part of the pretest battery and as the total posttest for all groups in the experiment. (See Appendix B.)

Summary

Many writers see that the problems of the elderly in coping with aging are reflected in aging people's low self-esteem. That lowered self-concept is the focus of this paper. Self-esteem has been found to be both vulnerable and changeable aspects of personality. It will

be demonstrated through this experiment whether self-esteem in the elderly can be raised through treatments in educational settings. The following chapter will review the pertinent literature and further illustrate the potential effectiveness of the educational milieu in producing changes in the self-concept of the aged.

The third chapter discusses the methodology in detail. The fourth chapter presents the findings and the analysis of the findings. The final chapter summarizes the study, suggests conclusions, and offers recommendations.

CHAPTER II

REVIEW OF THE LITERATURE

This chapter presents a review of research and related studies dealing with the elderly, their self-esteem, and learning processes which may enhance self-esteem. The chapter begins with an overview of the aging, the problems confronting them, and the effects of prevailing attitudes on the self-concept. A discussion follows on self-esteem, the importance of self-esteem to the elderly, and reports on studies which have suggested that self-esteem is changeable and can be raised. Strong evidence that the elderly can learn concludes the section.

The examination of the literature continues by noting learning programs to enhance self-esteem and the special education conditions the elderly may require. Throughout this chapter the literature selected for review was that which most directly related to the subjects of this study.

Aging

Increase in the Aging Population

Numerically, the aging present tremendous numbers. As shown, there are more elderly people in America today than there have ever been at one time before and their numbers are on the rise. Zubin (1973, p. 3) has pointed out that while only 2.7% of the population were age 65 or over in 1860, by 1970 the proportion of these elderly in

the total population had climbed to 9.1%. Butler, in an address at Columbia University in 1979 (cited by Zinman, October 1979 news report), noted that 24 million people, about 10% of the entire population, were age 65 or over. The National Institute on Aging in 1979 predicted that by the year 2020 there would be 45 million Americans over age 75 in comparison to those over age 65 today--25 million (Zinman).

Rappaport (1979, *passim*) has predicted that by the year 2030 the 65-or-older group may constitute as much as 21% of the population. If Rappaport's prediction comes true, there is a possibility that in five decades at least one in every five Americans will be over age 65.

This increase in the number of elderly people and in their proportion in the general population also increases the visibility of that group. It is becoming increasingly difficult to ignore the presence of the extremely heterogeneous group of older people in the society, and to fail to recognize their needs. It is difficult to ignore but for many, unfortunately, not impossible.

Historical Attitudes Toward Aging

Aging has not always been regarded as a problem. Barrett (1972) has traced the change in the way that the elderly and the society around them have viewed aging. In early America, before industrialization and the increase in urbanization, as people aged they retained their positions within the family group and in the society. They retained important decision-making roles in the family as patriarchs or matriarchs. Their advice was sought by other family members and they were deferred to and respected. In business, their knowledge,

expertise, and insight were regarded as valuable enough to compensate for any physical losses they might have experienced. Only physical infirmities, senescence, or death ended their careers.

Rynerson (1972, p. 22) has described the role change of elderly people and has emphasized the fact that today's elderly learned to conform to a different value system. The value system of their earlier society attached positive attitudes to aging. Now these same people are asked to accept a value system of a society which is negative toward all things connected with aging. There is little congruence between the experience which today's elderly expected to have in their later years and the reality of their situation.

Negative Regard of Today's Elderly Toward Themselves

With negative influences coming from the outside society and from the older person's own changing persona, the reaction of that older person is correspondingly negative. This is effective in his estimation of himself and results, typically, in a lowering of his self-esteem (Kahana, cited in Barry & Wingrove, 1977, p. 125). Marcus (1972, p. 5) cites Clark and Gallatin (1967) who note, "Aging is a cultural as well as a biological process . . . personal adaptation to it depends upon self-perception, a product of cultural norms and values." This has been true, of course, for passage to all stages but is now singularly difficult at the aging stage. Ziegler and Reid (1979, p. 977) observe that, in view of the problems, a "continuity of

one's self-image" would make it impossible to mitigate against the difficulties of adjustment in old age with ease.

Medical Impairment

High self-esteem here is associated with a rewarding activity level. Yet not all lives can be enhanced by promoting high self-regard activities. Not all older people can be helped.

Of the millions of elderly Americans, almost 5% are now in hospitals or nursing homes or otherwise require near constant care (National Center for Health Statistics, October 1981). Senility affects an estimated 3 to 4 million people Nelson reports (Los Angeles Times, October 7, 1981, Pt. 1, p. 1). Many physical problems cause dependency, hence a tacit withdrawal associated with low self-esteem. At this time, however, scientists, engaged in studies of Alzheimer's Disease and related disorders, believe their studies will not only benefit millions of victims of those diseases but will lead to a better understanding and improvement of normal aging. Certainly psycho-social improvements are required and need to be undertaken as well.

Adjustment Problems Associated with Aging

The list of adjustment problems of normal aging is lengthy and varies considerably from person to person (Kuypers, 1972, p. 168; Pfeiffer, 1977, p. 651; Rosow, 1973, pp. 82-84; Ward, 1977, pp. 227-228). Problems which tend to be typical are the loss of social and

financial status occasioned by mandatory retirement, environmental or physical loss or change, the deaths of spouse and peers, the breakup of the nuclear family, and the need to live on a fixed income in an inflationary economy (Barrett, 1972, pp. 7, 44-45). All authors note resulting changes in the self-concept with aging; most see the changes as declines. In the opinion of this investigator, successful adjustment may be limited to people with good self-esteem. Increases in self-esteem are therefore seen as a possible requirement for successful aging.

Strengths of the Aging

Life has great potential for happiness for many aged people. Those millions of elderly who are not institutionalized are coping with problems confronting them with varying degrees of success. For some, life seems useful and good. Since the 1960s, early retirement has become a practice with Americans. Many are healthier, live longer, and have the time and resources to enjoy life.

Social security has helped lift the elderly out of the depths of economic poverty and given them growing economic clout. Older consumers can afford to be freer with their money since major obligations like mortgage payments and college tuition are behind them. Madison Avenue recognizes an emerging "mature market" (Shulins, 1981, pp. A19-20).

Among aging Americans there has risen a formidable political bloc. In 1976, Americans over 65 comprised 11% of the population but cast 17% of the votes in the presidential election. The elderly lobby is one of

the nation's biggest, best-organized and most effective. The American Association of Retired Persons claims over 12 million members, the National Council of Senior Citizens has 4 million, and the Gray Panthers are 50,000 strong. These lobbyists have won many benefits for the elderly. Shulins finds that the media image of the elderly is improving as well. It is obvious, however, that while the positive regard is encouraging, it is limited in fact and effect.

Low External Regard: Low
Internal Reaction

It is obvious, too, that many older persons are still not relishing life to the fullest. Although their health permits them to be "on their own," they find it increasingly difficult to cope. External negative regard is a strong internal self-opinion determinant. Specific negative regard, mentioned earlier, originates in many sources. The message of a youth-oriented society is important in this regard. Rynerson (1972, p. 23) has cited the research of Klopfer (1965) who along with many writers has described that pervasive American attitudes were heavily influenced by the contemporary youth culture. Klopfer wrote that there is an undeclared war in America by the young against the old. He saw a sweeping tendency in the Western world to consider youth admirable, desirable and worthy of imitation. As a result, there is little doubt that the young have become a threat to the self-esteem of the aging and the aged.

Another frequent source of negative regard is family members. Those who are closely connected with the elderly are often as unsupportive as society at large. Barrett (1972, p. 45) has observed

that while family members are somewhat more ambivalent than the larger society in their attitudes toward their older members, they often express similar negative attitudes. In addition, members of the medical profession are often negative. Butler (1975, p. 4) has found that doctors and other medical professionals reported that they did not like to "bother" with the elderly, and that psychiatrists consider the problems of the aged as "untreatable."

In spite of a "golden years" myth, the evidenced negative regard is traced by some to a well-publicized paper. Gardner (in Los Angeles Times, October 9, 1981) reports that the present-day retirement places have attracted older people who have largely bought a sorry legend that old age is play time and nap time, not a time to be engaged in productive activities. The rapid growth of the "rocking chair" retirement homes and retirement communities is seen as a product of the disengagement theory, an influential description of an "ideal" of negative resignation for the elderly (pp. 21, 23-25).

The disengagement theory was postulated about 20 years ago by two middle-aged people in Kansas, Henry and Cumming (1959). They based their theory on a sample of white middle-aged Kansas males and regarded any deviation from the middle-aged model as negative and undesirable (Henry & Cumming, 1959, p. 383). The writers said the way in which you age successfully is to disengage yourself from what you have been doing in society all your life, and for society to disengage from you. According to their observations, aging seems to be a mutually understood and participated in pact between the aging person and society, one in which there is a tacit withdrawing of each, person

and society, each from the other. The aging person is considered to vest his personal decision-making needs onto external sources. He increases his dependence and becomes identified as a reactor, having given up initiating actions in his life (Bradley & Webb, 1976, p. 50). But the truth runs otherwise: The disengaged person is largely observed not as enjoying but as suffering from loss of power and self-esteem in his passive role (Neugarten, 1973, pp. 326-327). The fact is, as Gardner (1981) reports, that the theory got into the thinking of millions and became the rationale, the philosophical basis for public policy that is age-related.

In general, the elderly have taken the message of disengagement as a direction for their stage of life. Consequently, from the combined and pervasive negative message and the idealization of youth, our older population has suffered from loss of self-esteem. This low self-esteem may manifest itself in some of the following symptoms:

1. self-regard as inadequate, unhappy or depressed;
2. inability to develop or maintain interpersonal relationships;
3. inappropriate behavior or feelings under seemingly normal conditions;
4. inability to learn; and
5. physical symptoms such as pain or fears.

A Realistic Ideal

That aging may yet evolve into an admirable stage of life for older people has been described by many writers (Butler, 1975, pp. 17, 20; Kuypers & Bengston, 1973, pp. 192-196; Schwartz, 1975, pp.

470-472). Neugarten (1973, p. 327), for example, describes the more ideal alternative to the disengagement role in what has become known as the Activity theory. Thus seen, the elderly person maintains all his former interpersonal characteristics, continuing essentially his middle-age identity, until he is absolutely unable to do so. Decision making is continued by the aging person who retains his position as his own judgment source. He also experiences an unimpaired sense of being in control, of independence, and a continuing sense of his own adequacy (Bradley & Webb, 1976, p. 50). Elders are thus seen as interactive, involved and as retaining high self-esteem.

This mode is, effectively, the ideal of this research. Whereas many older people are unable to achieve this as a potential life-style, many more might be. Success orientation which is associated with high self-concept may effectively overcome the negative factors which afflict most of the elders of our time.

Self-Esteem

Definitions

While there is a lack of specificity in defining the concept of self, it is a widely observed state, as death is observed to be absence of life and is so understood. Self-esteem appears to be a composite of personality factors. The operational definition of self-esteem used here is as a score on the TSCS, the standardized scale used in this experiment. In the Tennessee Self-Concept Scale, the score provides the sum of related personality aspects including

self-identity, self-acceptance, one's behavior, one's self in relation to his family, and one's self in relation to his society.

Additional definitions from the literature include extensive references to self-concept as self-worth, self-identity, self-image, and self-role (Barrett, 1975, p. 25; Rosow, 1973, p. 82; Rynerson, 1972, p. 22).

Another description is also held here; of the self as responsive to internal as well as external sources of influence. This point of view appears in the cognitive dissonance definition (Breytspraak, 1973, pp. 7338-7339). In this, the concept of self is seen as having both a cognitive-normative component, and an affective component. The cognitive-normative component pertains to the individual's perception of the distance between what he actually is and what he would ideally like to be. The affective component has to do with the affect or sense of disturbance associated with this distance. Thus seen, the self is seen as constantly motivated to change to reduce the dissonance (Aronson, 1980, p. 147).

Self-Esteem as a Scale Score

Measurements of self-esteem are available as scores on a scale. Interpretation of scores may indicate a wide assortment of personality attributes. In addition to the qualities tested, a "high" or "low" score may provide a total picture in which there are subscores of great variety. A score, whether of a subset or a grand total, includes several factors and represents differences in an individual's personality aspects.

Within the aging individual, it is assumed by most writers of gerontological psychology/sociology that these differences lessen; that the total subset or grand scores are lower than they were during previous life stages. It is hoped here that the problem of lack of longitudinal studies of self-esteem will be rectified and changes over lifetime will be extensively examined. Reasonable accuracy exists, certainly, for short-term observations such as this.

Importance of Self-Esteem

A unique juxtaposition occurs in the realm of self-esteem. Whereas self-esteem is found to be low or "negative" in elderly people, its importance is considered paramount to their lives (Marcus, 1972, p. 47; Peters, 1971, p. 70; Rosow, 1966, p. 207). As noted, Schwartz (1975, p. 470) considers the maintenance of self-esteem or positive self-regard as "THE essential ingredient to successful aging." Other writers agree, albeit less dramatically. Grant (1969, document abstract) has stated, "How one views himself may be as dependent upon how one perceives his role in life as upon his age."

Self-Esteem: Measurement Hazards and Examples of Studies

Making the choice to test the self-concept rather than other personality variables resulted from several observations. It was noted that many writers (Aloia, 1974, pp. 5180-5188; Lindell, 1976, pp. 4944-4945) had by-passed the ambiguities of the concept by the usual research procedure of defining it in comparison to measurable correlates (Dyer, 1972, p. 398). Though it was tested specifically in

relation to older participants (Browne, 1973, p. 3519B; Crandall, 1975, p. 1824-A), problems of comparing levels of self-concept made it appear to be a difficult quality to assess and quantify.

Additional problems in measurement were noted from Zuckerman's (1979, p. 245) findings of a tendency for older subjects to self-serve (protect or enhance the self-esteem) in most but not all experimental paradigms. In typical experimental paradigms correlating age and self-concept, ego-feeding responses to test situations as well as the heterogeneity of the aged population were considered likely problems to be encountered.

In spite of all the hazards, reports of many correlational studies exist. Several follow which are concerned with self-esteem as a major dependent variable. For example, Aloia (1974, p. 5180B) correlated privacy options, locus of control, and self-esteem among elderly institutional respondents. Using a mixed population (community and institutional residents) of 184 aged people (mean age, 75.5 years), he constructed a 50-item Privacy Options Inventory. The analysis of data revealed a significant relationship between perceived privacy options and self-esteem. This presented privacy as important to self-esteem among aged people.

In 1976, Aronson and Graziano (pp. 363-367) used a photographic activity in which basics of photography were learned and practiced once weekly for six weeks. The study included a treatment group of 10 older persons (mean age, 76.1 years) with a control group of five (mean age, 74.4 years) attending an adult day center. The subjects

were pretested and posttested using a semantic differential instrument. It was found that the photographic activity was associated with significant increases in positive attitudes toward the concepts "older people" and "younger people." This was interpreted to indicate increases in the concept of self-and-others.

Peretti and Wilson (1975, pp. 131-135), considering the ever-growing number of male retirees in the American society, have sought to determine the effect of voluntary or involuntary retirement on emotional satisfaction, usefulness, self-image, emotional stability and interpersonal relationships in aged males. Testing male "retirement hotel" dwellers (67-70 years old) the investigators gave the 70 voluntary retirees and the 70 involuntary retirees a 35-item forced-choice questionnaire and interviewed each subject. Peretti and Wilson concluded that voluntary retirement tends to have a more positive overall effect on aged males than does involuntary retirement.

Reid, Haas, and Hawkings (1977, pp. 441-446) conducted a study in which a more positive self-concept correlated with a belief in one's internal locus of desired control. Examining 60 institutionalized subjects (mean age, 83 years) by a semantic differential self-concept scale, an internal-external locus of control measure and by nurses' ratings, the study found the relationship of positive self-concept and internal locus of control to be particularly prominent for the male subjects.

In contrast to the previously mentioned studies, Lindell (1976, pp. 4944-4945) conducted comparative research in which she sought to

test the effect of nurse-as-therapist congruence during group therapy as a factor in changing the self-concept of institutionalized aged. In each of two institutions where her experiment took place, Lindell had an experimental and a control group, a total of 39 subjects (age 65 and over). Self-concept scores were obtained from the subjects' responses to the TSCS which was administered pre- and post-group therapy sessions.

The experimental group met with the nurse therapist two times each week for an hour-long session for eight weeks. Seven selected group therapy sessions were chosen prior to the sessions to be videotaped and subsequently rated on the level of congruence by the nurse-therapist who used a congruence rating scale. The nurse-raters had received training in this procedure and achieved high reliability scores.

Pretest and posttest scores of the subjects were subjected to analysis of covariance. Findings showed a significant positive change in self-concept mean scores had occurred from pretest to posttest in the experimental group with no significant change in the control group. The findings indicate that the self-concept of the institutionalized aged can be altered and increased by participation in group therapy with a nurse as a leader.

As has been reported, the measurability of the self-concept has been frequently tested. The concept is obviously considered a quantifiable one by many researchers, although very few studies are comparative, as would appear in experimental "before and after" changes in a treatment program. This investigator believes that while correlational studies involve more safety in design, they appear to

limit the treatment possibilities and the explorations of change.

This study will compare levels of self-esteem comparatively.

The Possibility that Self-Esteem Changes

The question of whether changes can be effected in the concept of self was necessarily the springboard query when this research was first considered. If changes could not be effected, the most that could occur in the experiment was some learning by participants, or socializing. Would it be worth the effort?

The literature does not merely state, however, that self-esteem is amenable to change. It veritably assures this. Hence the experiment was formulated to examine probable changes.

These writers are several of many who have observed and/or tested such changes. Wylie (1974, passim) has written two compendia on the self-concept and definitely asserts that it changes. Neugarten (1977, p. 630) comments that ". . . because of the cumulative record of adaptations to both biological and social events, there is a continually changing basis within the individual for perceiving and responding to new events." Kahana and Coe (1969, p. 264) have asserted that self-esteem changes as identity changes. In addition, Barnes, Sack, and Shore (1977) describe changes in self-esteem as inevitable if an individual has sufficient self-awareness.

If the environmental factors distort reality, then a poor self-image may be formed . . . [but] awareness of environment . . . age . . . and physical condition determine the particular kind of relearning. . . . Man defines and perceives himself as he believes others perceive him, thus giving him a reflected or "looking-glass" self. (p. 508)

The writers believe that relearning to accommodate to internal and external changes is crucial. It appears to them to be the only way the changeable self-concept can "keep up" with the process of aging and can remain positive. Their empirical testimony offers ample proof of the possibility of change which is also examined here.

Rosow (1966, p. 218), as another example, writes that one expects changes in old age and that self-image is a strategic variable, since a shift in subjective age probably signals the crystallization and acceptance of a stable older role. He states, "We make no assumption that change will not occur in old age. Quite the contrary, we expect change, though we know little of its rate." In consideration of human adaptation, Busse (1960) in his chapter "The Older Patient" even notes the possibility of reversing impaired mental function status. Self-esteem would appear more pliable in comparison. Recommendations and methodologies for facilitating self-esteem change through learning will be examined in the next sections.

Enhancing Self-Esteem Through Learning

The theoretical value of a program of activity for the elderly, especially of an educational nature, has been described by many writers. Rosow (1966) records that a pervasive assumption of gerontologists is that the more active old people are, the happier and better adjusted they will be. The pursuit of education is considered here to be an aggressive activity. Pfeiffer (1977, p. 652) has also noted that a major task facing aging individuals is to remain active in order to retain function.

Evidence suggests that the educational milieu can provide a satisfactory environment for the older student. Not only can the older person have opportunities for intellectual and social activity, but he also has ample opportunity for gains in his sense of competence and confidence (Kuypers & Bengston, 1973, pp. 192-196). The chance to engage in intellectual and social activity, while increasing one's knowledge or ability, should also contribute to an improvement in self-concept. All the advantages mentioned are part of the treatment programs here.

An additional beneficial condition is seen as a sense of connectedness (Peters, 1971, p. 71) which is obviously part of the educational milieu. Peters equates more activity with better adjustment and to this investigator, Peters is identifying the classroom milieu as an ideal locale for activity involved in the anticipated changes. Peters' observation is also consistent with Maslow's (1954, pp. 43-44) listing of belongingness as an important and basic human need. Rupp, Danish, and Duffy (1967, p. 1142) note that ". . . maintenance of clear sensorium and successful adaptation to aging . . ." are possible through continuing functional activity. Following are statements from additional writers who share this belief. Barns, Sack, and Shore (1977, p. 502) find it advisable for elderly people to ". . . try new skills in a relatively safe environment [as of the classroom] . . . to achieve realistic appraisal of social and interpersonal relationships and to increase self-esteem." The writers point out that people ". . . change, learn and mature" as a

result of their interpersonal and social relationships and experiences, and that all theories of personality development seem to deal with such interactions as necessities of growth.

Bandura and Walters (1963, p. 107) state that the cognitive processes involved in the performance of learning help one to learn how to be effective in a socially "imitative" response such as in the control of one's own actions. They are also seen here as helping in thinking out and evaluating alternative actions, and in supporting or altering the self-concept.

Neugarten (1973, pp. 328-329) reports that high life satisfaction was found in many older persons who were active and involved and, given a relatively supportive environment, older persons will choose activities that offer them most ego involvement and that are most consonant with their long established value patterns and self-concepts. Such opportunities can be offered in the educational environment.

Studies Relating Learning to Self-Concept

Several examples which relate learning to self-concept appear in the literature. Aldredge (1973, p. 1618-B) tested to determine what differences exist in the self-concept of elderly women in relation to expressed acceptance of self and expressed acceptance of others. Testing 195 women's club members who were 61 years of age or older by group interviews, the investigator administered a self-and-other acceptance scale and a personal data sheet. She found that self-concept correlated with the educational level attained earlier in life,

was influenced by significant others, but was not affected by loss of spouse. The research of Kaplan (1973, p. 92) found that negative self-concept which was perceived as "self-derogation" was "relatively great" among the less educated white females, more educated Negro males, and less educated white males he tested.

Noting the effect of previous training, Blum and Jarvik (1974, pp. 364-373) examined the intellectual performance of octogenarian twin survivors as a function of education and initial ability. Their follow-up test occurred 20 years after the first one. The mean age at the time of the first measurement was 64.

The investigators used five subtests from the Wechsler-Bellevue scale and a simple tapping test of eye-hand coordination. It was found that the initially more able (estimated by vocabulary scores) declined less in tests in a cognitive battery than did the initially less able. The better educated showed less decline than the less educated. It was postulated that continued intellectual activity throughout the life span may protect against intellectual decline. Learning is seen as potentially providing continuing benefits, a notable observation propounded by Guilford in 1967 (pp. 439-461).

Theories of aging, and the disengagement premise in particular, have, as noted earlier, received widespread empirical attention. An example is seen in the experimental attempt to retard or reverse the disengagement process conducted by Nemeth (1974, p. 4672B). She used a randomly selected sample of elderly people. With laboratory training as her treatment program, Nemeth used three measures as

indices of change. She found the elderly subjects' behavior was amenable to change, that change could occur in the short-term (weekend) treatment workshop, and that her laboratory training program did offer a feasible and practical approach toward retarding or reversing the disengagement process in the subjects.

The findings concerning learning possibilities for older students helped to justify the assumptions and methodologies this investigator chose for her research in raising self-esteem. Especially useful in this experiment were the findings of Aronson and Graziano (1976, pp. 363-365). In these the elderly showed the ability to react to manipulated environment with modified attitudes. Of interest also is the conclusion of Nemeth (1974, p. 4672B) described above, who indicated that change in self-concept, in a direction away from disengagement, could be effected in a short-term program. Thus, from reviewing the literature, the writer concluded that in the educational milieu, the short (eight weeks) treatment programs could be expected to provide environments for changes in self-esteem of the elderly participants. Further, she believed that scores of self-esteem could be gathered so that the data could be examined, compared and analyzed. These events did indeed occur and will be examined at length in later chapters.

As has been shown, there have been many advocates of continuing education. Whether specific educational processes may prove to be the sites of changes in the self-esteem of participants will be seen in examinations of the treatment programs here.

Educational Processes

Learning Programs to Enhance Self-Esteem

Before attention is given to an examination of the experiment, attention must be given to several questions which are basic to it. The first of these is verification, from the search of the literature, of the belief that there is a likely connection between learning programs or educational processes and self-esteem and, if this does exist, that it may be expected to change self-esteem. Such a connection does indeed appear frequently in the literature.

Knowles (1972, p. 10), an advocate of continuing education, notes that such learning fits the need for personal development felt in later adulthood; the need to find ". . . a new self identity." Marcus (1972, p. 3), who also endorses lifelong education, states:

The most important aspect of the older aged learner for the educator is his concept of himself, which is likely to have been "damaged" by the experience of coming to be regarded by himself and others as "old."

In addition to learning being important to the self-image, it provides the confidence of having continuing abilities, a strong aspect of self-esteem for many people. Learning as such is advocated by many.

Landsman (1963, p. 39) and Blum and Jarvik (1974, p. 364) believe that education is nothing less than a requirement for the intellectual survival of the aged. The writers find that continued intellectual activity throughout the life span may protect against intellectual decline.

Education may be beneficial to older people for many reasons. As noted, attitude change and success identification as Aronson and Graziano (1976) found as results of elderly educational involvements, are certainly two important benefits. These and other benefits already described are anticipated in this experiment.

Capacity of the Elderly to Learn

It has now been shown that a number of noted writers do find that a connection exists between educational involvement and self-esteem. The next question, then, regards the level of possible benefits of educational exposure to the participants. Will it provide socialization only, perhaps merely leisure time "busy-work" or possibly a situation where learning takes place, i.e., can older people "still" learn?

In rhetorical response, it appears the same question has been asked often. Hence the learning ability of older students has been the focus of much research. In spite of the fact that, as Marcus (1972, pp. 21-22) notes, society tends to believe that older people cannot learn because of physical and mental decrements, a look at the literature on the subject suggests and he insists that this belief is based on myth, not fact.

Older people do learn, but their learning modalities are different than those of young people, Eisdorfer (1977, pp. 39-40) states. Addressing the subject "Alternatives for Aging" Eisdorfer writes, ". . . we found about the learning of older people, when we encouraged them to respond, that they invariably did right, they did learn,

and under certain circumstances, they learned better than young persons" (p. 41).

Havighurst's (1966, p. 133) own involvement in the study of aging from the 1940s to the present offers an example of the fact that intellectual ability and activity need not diminish with age. The notable researcher has written, "According to research, the person who is in good health suffers very little impairment in his ability to learn, to initiate actions, to be effective in the ordinary relations of life until he is 85 years old or more." A final note from the literature review here keynotes the need and incidentally provides the rationale for this experiment. Labouvie-Vief and Gonda (1976, p. 327) write, "Reduced intellectual performance in the elderly . . . conceptualized as an experimental deficit . . . can be reversed by training relevant component skills."

Special Education Conditions Required by the Elderly

As with learning conditions which are specialized for any group, good learning conditions particularly for elderly students have been recognized. It is considered here that use of some of these may act as a tool in the process of changing the self-concept through education. Proponents of special learning conditions have indicated those conditions which are known to have helped in contrast to some which have actually hindered learning by the elderly.

Arenberg (1973, p. 75) describing cognition and aging cites Welford's (1958) observation that many of the difficulties which older

students encounter in the educational setting are due not to a true incapacity to learn, but to the inability of elderly students to deal with the presentation conditions. Concerning the possibilities of learning for the specialized group of elderly students, Eisdorfer (1977) writes,

We are finding that older persons will not respond under the same conditions as younger persons. [In order for the older person to respond] the probability of success has to be much higher for the average aged individual than for the average younger individual. (p. 40)

He also advocates an environment which promotes intellectual arousal.

To Lersten (1974, pp. 1-10), teaching and learning strategies which have proven effective with aging students have included the following:

1. flexibility as to goal, rather than specific pre-planned performance goals or specific quantity of learning goals (i.e., particular responsiveness to student's abilities, interests);
2. the pacing of responses at the personal speed of the learner;
3. increased periods between stimuli, both for inspection and for anticipation;
4. attention to maintaining the arousal level (motivational stimulation), since motivation and interest may decline;
5. use of aids to learning, such as the use of mediating techniques; and
6. the treating of learning and of performance separately.

Further, in efforts to modify behavior towards a maximized "wellness," the importance of a climate of acceptance and of the use of

learning as a bridge to reality is recommended therapeutically (Barns, Sack, & Shore, 1977, pp. 500-501) and is seen as applicable educationally as well. Lewis (1973, p. 119) emphasizes the need for those who work with the elderly to "manipulate" the environment by adding elements which are consonant with older person's identity, leading to consistency between the activities and the self-concept of that person. Competitiveness in the class of older participants has been criticized by Norton (1970, abstract, pp. 18-19). Based on his research findings, he recommends eliminating this anxiety-causing factor. A school district office is usually in possession of specialized aids published for teachers of the elderly (see reference of Los Angeles Unified School District, 1978).

In conclusion, Baltes' and Willis' (1977) recommendation is considered, that the older learner be carefully regarded as having specialized requirements. The authors note:

. . . the conceptual theme of a developmental approach to gerontological intervention is to recognize the contextual and process characteristics of aging as a behavioral phenomenon and to focus correspondingly on a contextual and process orientation. (p. 146)

These they recommend particularly ". . . in the design of intervention modification programs," such as those undertaken here. The purpose in applying the special learning condition to the treatment formats is that they may provide the environments which maximize the potential for changing the self-esteem of the participants.

Examples of Studies Involving Special Learning Conditions

The following authors demonstrate some of the empirical studies which have involved special learning conditions for older students. Lair and Moon (1972, pp. 279-283) and Ross (1968, pp. 261-266) tested the value of a supportive, encouraging classroom milieu in order to enhance students' feelings, behaviors, and the learning process. Lair and Moon noted responses as they tested the effects of praise, reproof, and neutral comments on the digit symbol performance of 33 middle-aged and 33 older subjects. Elderly subjects appeared to show decrements while middle-aged ones showed increments under the censure conditions. Also, while the elderly originally showed some gains with praise, these were not significantly sustained through trials which occurred later.

Ross' investigation examined the effects of neutral, supportive, and challenging directions. These were presented on two paired-associate learning tasks which she gave to 60 older persons and 60 youths. The older subjects did least well on the acquisition phase of learning under challenging directions and performed best under the supportive treatment. It is noted here that elements of both experiments, support and encouragement, were included in some of the treatment programs.

Relaxation Training, an Agent of Change

Relief of anxiety through relaxation has been noted by Benson and Klipper (1975, pp. 162-163) and was utilized in the progressive relaxation exercises in the Memory Training program of the experiment. The use of relaxation to facilitate intellectual processes has been

endorsed by Brown (1974, p. 128) who describes the effect as "letting the mind do the mind's work." Bornstein (1971, p. 4) in his Memory Method textbook writes: "Tension interferes with recall. . . . The ability to relax is necessary . . . a relaxed mind is more receptive to . . . impression . . . Exercises in relaxation . . . aid . . . recall."

As seen in the definition of the noted specialist, Dr. Edmund Jacobson (1962, p. 16), relaxation is the opposite of the state of tension. Advocates and practitioners of various relaxation techniques range in current practice and include biofeedback practitioners, physical therapists, and Zen and Transcendental Meditation technicians as well as behaviorists.

The exercises taught in the Memory/Relaxation Training class in this program were from the Sharpe/Lewis (1976, Pt. 2) system of progressive relaxation. The quick and easy applicability of these exercises to the usual daily activities of the subjects was the special reason for selecting them. (A list of the exercises appears in Appendix A.)

Examples of research using relaxation appear extensively in the literature though not specifically in the area of self-esteem. Effectiveness of relaxation to lessen anxiety in the learning situation with the possibility that resulting achievements might effect self-esteem was an original consideration of this investigation.

The use of relaxation in hypertension, obesity, alcohol abuse, cardiac rehabilitation, migraine headaches and other symptomatology

has been studied. For example, in 1977, Pagano and Frumkin (pp. 407-410) conducted an experiment investigating relaxation, specifically the relaxation effects of transcendental meditation on right hemisphere functioning, using the Seashore Tonal Memory Test in the experiment. A nonmeditator group and an experienced meditator group were run. The design involved three periods: a pretest, a meditation or rest period, and then a posttest. The results indicated that the experienced meditators (relaxers) were significantly better in tonal memory in both pretest and posttest performance.

Parker, Gilbert, and Thoreson (1978, pp. 879-886), investigating the reduction of autonomic arousal in alcoholics, compared effectiveness of progressive relaxation and meditation techniques. They selected 30 subjects from the substance abuse program at a Veteran's Administration hospital. These people were randomly assigned to three experimental conditions:

1. the progressive relaxation training group
2. the meditation training group
3. the quiet rest control group

All groups met for three weeks during which measurements were made of anxiety, blood pressure, heart rate, and spontaneous galvanic skin response. The measures were to assess the treatment effect. Following the first learning session and at the end of the total training period, measurements were taken. Both progressive relaxation and meditation training proved useful for reducing the blood pressure of the alcoholics. Also, significant differences between the groups in the

effectiveness of the relaxation procedures were found. Meditation training induced blood pressure decreases at an earlier point in the three-week training period and affected decreases in systolic blood pressure which progressive relaxation did not. Parker, Gilbert, and Thoreson found that these results support the idea that there is considerable specificity of response to the particular relaxation techniques which are employed.

It is assumed here that progressive relaxation techniques will reduce anxiety and stress and aid in the learning of memory techniques. Progressive relaxation was used in conjunction with the memory work.

The Role of Memory and Learning in Change

The influence, though not attained scores, of learning and of memory are important to this research, therefore mention of both is included here. Lessening of memory skills is a frequent complaint of aging people. This, with other original and reactive problems already noted as impinging on the aging, is carried over by older people into the generalized effect of lowered self-esteem (Kahn, Zarit, Hilbert, & Niederehe, 1975, pp. 1569, 1572-1573; Zarit, Gallagher, Kramer, & Walsh, 1977, passim).

Craik (1977, p. 385) defines the distinction between memory and learning. Both processes, while relying on the same underlying mechanisms, are different aspects of one basic phenomenon and are conceptually distinguishable. Craik sees "learning" as referring to ". . . the acquisition of general rules and knowledge about the world"

while "memory" refers to ". . . the retention of specific events which occurred at a given time in a given place."

Memory problems, the retention abilities, are seen as crucial to aging people. The relief of these problems is anticipated in the treatment group studying memory techniques.

Studies of memory are conducted in the context of a specific problem or are concerned with a specific experimental paradigm. An example of the former follows. Talland (1968, p. 104), in his chapter on "Age and the Span of Immediate Recall," found experimental evidence that efficiency declines with age in all the processes that are involved in memory function in the recall process as well as in the initial acquisition of information in whatever mechanisms subserve the storage of information. Verifying this, Craik (1968, pp. 149-160) using four different types of common verbal material (digits 0-9, English county names, animal names and unrelated words) hypothesized that older subjects have less efficient memory retrieval systems than younger ones have. Twenty subjects in two groups (mean 22.3 years and mean 65.2 years) worked through all lists in a block. The young group performed significantly better throughout. There was little effect of order of presentation or of an interaction between age and order of presentation. Further, the age decrement increased as list length increased. Recall was more difficult as vocabulary size increased and the effect of increased list length leading to higher recall scores was reduced with larger vocabularies.

An example of a study of memory in the setting of a specific experimental paradigm occurred as Browne (1973, p. 3519-B) tested

memory deficits as a function of the encoding process in aged subjects of exceptional mental abilities. Testing to-be-remembered items on older subjects as well as on college subjects, she researched encoding by the two groups and the differences in processing. The data, "contrary to most findings of no age differences in recognition memory," indicated the older subjects performed worse, overall, on the recognition task than the college subjects did (p. 3519B).

Boyanowsky and Anders (1973, pp. 769-770) considered the frequently demonstrated evidence that efficiency in performance of short-term memory (STM) decreases with age. The researchers reviewed the possibility that the decreased performance of the older subjects was due to a problem of encoding (getting information into the memory) and were aware that earlier strategies to test this possibility directly had attempted to aid older subjects' performance by building encoding strategies into the information to be remembered. In their research, they attempted to study adult development of encoding processes without making strong assumptions about the nature of this development. Instead, they concentrated on attempting to evaluate these processes as they naturally occur. In subsequently comparing young and old adult subjects on several measures of memory encoding, the researchers found that there was no evidence of an age-related determination of this aspect of STM.

Two reports seen below are of special importance to this research. The first indicates that some sensory deficits of the aged (Gounard & Hulicka, 1977, pp. 3-5), here assumed to be cognitive efficiency in

memory processing, are potentially reversible. Finally, it is reported by Istomina, Samokhvalova, and Preobrazhenskaya (1967, p. 24) in their Polish research that ". . . in the majority of people who continue to work and exercise their memory, it can, under normal conditions, remain almost on the same level for quite a long time." Such an "exercise of memory" is seen in one treatment procedure employed in this research.

Summary

This chapter has reviewed the literature pertinent to the present study. The research problem was designed to provide specific environments and conditions in which to investigate possible changes in the self-concept of older people. The selection of three educational procedures as settings for the experiment was made.

The first part of this chapter provided a review of investigators who considered older persons' life-styles in the current American society, and who noted the problems affecting the older person's self-esteem. The combined reactions to negative societal regard and to their own subjective view of their psycho-socio-biological changes were noted as leading the elderly to believe that they are not valuable or adequate.

Self-esteem was defined and studies which provided evidence of the importance of self-esteem for the elderly were discussed. The studies cited indicated that high self-esteem contributes to successful adaptation to aging. Consideration of studies concerned with measurement of the concept of self indicated convincingly that the

concept can be measured in terms of scale scores, and can be empirically examined.

The literature review focused next on the possibility of changing the level of self-esteem in the elderly--the focus of this research. Evidence that the self-concept is changeable was noted. Enhancing self-esteem through learning was discussed as well as the capacity of elders to learn, both of which are aspects of this investigation. Studies supported the premise that some self-esteem enhancement treatment programs and learning by elders have both been successful.

The use of relaxation to relieve anxiety, here applied in the learning situation, and the association of memory to self-esteem was viewed. Coverage on the subject of education for the older student was included as was noting of special requirements for learning by older students. The review of the literature has indicated the importance, feasibility and possibility of raising the self-esteem of older participants in educational processes, the concerns of this investigation.

It is again mentioned here that experimental studies of the self-concept of elderly people are rare. Lindell's (1976) research was the only experimental comparative study seen that appeared related to the present study. It appears that there has been no other noted recorded investigation treating changes in the self-esteem of elderly people when such changes were due to educational procedures or subject to measurement by a pretest and posttest comparative basis.

It is considered that, typically, the process of aging is a contemporary stress reaction which includes a negative effect on the

concept of self. Among other subjective reactions, the aging person often notes his "loss of memory." This, along with other aging problems from society as well as from his changing persona, decreases his confidence in his ability to cope with his changing world. His self-esteem and his sense of personal worth is threatened, and his sense of adequacy to make his own decisions, to act with pride and independence, and to be admired by others erodes.

The person's self-esteem, however, is a changeable entity. The literature notes that just as the self-esteem had responded to the threats which ostensibly reduced it, so can it be returned to viability, reconstituted as it were.

This exercise is an attempt to explore the possibility of just such a return. Whether it can happen will appear on a scale score examination of a popular instrument (TSCS). Education is used uniquely as the "tool" in this exploration.

CHAPTER III

METHODOLOGY

Introduction

In this study the investigator sought to determine whether classes offered through adult education facilities would raise the level of self-esteem in those elderly people who attended them. In addition, the investigator sought to establish whether the study of certain topics would be more effective for raising self-esteem than would be the study of other particular topics.

The review of the literature indicated that one result of the internal and external stresses of modern living has been lowered self-esteem among America's elderly people. Since self-esteem has been shown to be a crucial element in successful aging, the raising of self-esteem should receive early attention from those who wish to assist the elderly. The literature review also indicated that self-esteem can be raised. Specifically, it was suggested that self-esteem can be affected by educational interventions, with subsequent gains or losses in self-esteem measurable in scale scores.

Since a large proportion of the present population is 60 years of age or older, and since the proportion of older people in the population is predicted to grow considerably in the near future, efforts to alleviate some of the problems of this elderly cohort are

needed. This investigator has held the belief that this elderly population could derive benefit from any of several methods which would raise self-esteem. More particularly, she has believed that certain members of the elderly population could benefit from educational interventions specifically designed to raise self-esteem.

Population and Sample

The target population which is represented by the 80-participant sample of this experiment consists of older people living independently (i.e., not in institutions) who meet the criteria set for the sample. These criteria are described below.

The 80-person sample of the experiment (20 members per group of 3 treatments, plus 20 control members) were drawn from the elderly population in the Greater Los Angeles Area. To be eligible for this experiment, subjects were required to be at or over 60 years of age, mentally alert, literate, ambulatory, and noninstitutionalized. The sample was heterogeneous in respect to sex, religion, race, marital status, income, health, and even in age, within that range above 60 years. This sample is considered to generalize to the population of all older people who fall within eligibility requirements.

Selection of subjects used in the experiment was limited to 20 persons in each group (of between 20 and 23 potential participants per group). The number of 20 was preestablished by the writer in order to have small and balanced groups for the analysis. This is in accordance with the findings of Norton (1970, p. 4) who has indicated the difficulties attendant upon attempting to secure a sampling or

participation of large numbers of older people, and of obtaining random sampling in particular. More than 20 potential participants were reduced to that number by the investigator after pre- and posttest completion through a lottery method.

Subjects for the three treatment groups were recruited from among those elderly people taking classes at Los Angeles Community College, Los Angeles, California; the Reseda Adult School of the Los Angeles Board of Education which met at the California Home for the Aged, Reseda, California; and the Emeritus Division, Santa Monica College, Santa Monica, California. All classes were noncredit offerings.

The subjects ranged in age from 60 to 90 and included 64 females (80%) and 16 males (20%). Nearly half of these lived alone while roughly 40% lived with spouse and 10% with family. Their education ranged from 2 years to 25 years.

Measurement Instruments

The instruments used to gather data were the Mental Status Questionnaire (MSQ), the Research Data Questionnaire (RDQ), and the Tennessee Self-Concept Scale (TSCS). TSCS was used in pre- and posttest.

Mental Status Questionnaire

The Mental Status Questionnaire, devised by Kahn, Goldfarb, Pollack, and Peck (1960, pp. 326-328), is a 10-item rapid screening device which indicates adequacy of mental function. The test developers of the MSQ (Kahn et al., 1960) record that during the development of the test, a population sample of 1,077 patients in

nursing homes, homes for the aged, and state mental hospitals was given the MSQ. Each subject was also examined by a psychiatrist within one month of the testing. The psychiatrist assessed the presence and degree of mental problems along with other factors not relevant to this study.

A comparison of a patient's results on the MSQ and the evaluation by a psychiatrist showed a "marked relationship." Ninety-four percent or by lineal progression, those having seven or more right on the MSQ were rated as having no, or mild mental function problems. Subsequent comparisons between results on the test and results of psychiatric evaluations have continued to show a high correlation between the two for assessing the presence and degree of mental function problems, Kahn et al. note. The developers of the MSQ have concluded that the test is a valid measure for determining mental status in the aged, particularly when one is screening for disorders associated with cerebral damage.

A normally functioning sample was desired for the experiment. The problem which required use of the test was the difficulty of distinguishing normal aging from disease processes which may arise in old age. References to this possible difficulty and to such necessary differentiations occur in the physical gerontological literature (Mortimer & Schumann, 1981). Actual, rather than only apparent mental status, is empirically tested

. . . for identification of cases . . . [for proposed] . . . risk-factor investigation [and specifies] the screening of each participant for cognitive disorders. [Recommended is use of] an examination easy to administer which rapidly produces an objective assessment of cognitive performance. (p. 142)

Such an examination was easily administered in the MSQ instrument which tests two factors, vocabulary (Wechsler, 1958, p. 84) and reality orientation (Kahn, Goldfarb, Pollack, & Peck, 1960, p. 326). These factors are considered to provide adequate indices for testing mental status. All volunteers in this study demonstrated adequacy of mental functioning as determined by their MSQ test scores.

Research Data Questionnaire

The eight-item Research Data Questionnaire (RDQ) was devised by the investigator and was designed to show demographics and self-attitudes. Included in the items were questions of age, sex, education, and life-style. A copy of the MSQ and the RDQ is provided in Appendix B.

Tennessee Self-Concept Scale

The Tennessee Self-Concept Scale (TSCS), the standardized self-esteem scale used in this experiment, is a self-report, paper-and-pencil instrument designed to measure varied aspects of self-concept, both general and specific. Developed by William H. Fitts in 1965, the TSCS is written in a vocabulary understandable at the sixth-grade level. It contains 100 statements which the respondent marks on a scale of five possible responses. These range from "completely true" (recorded as 5) to "completely false" (recorded as 1). Ten of the items are identical to those on the Minnesota Multiphasic Personality Inventory Lie Scale. These 10 are included to measure overt defensiveness. The remaining 90 items were, according to the developer, derived from a large pool of items which were created by combining

items from other self-concept measures and from material seen in written self-descriptions by psychiatric patients and nonpatients.

Fitts (1965, pp. 1-3) reports that seven clinical psychologists were involved in the derivation of these 90 items. Each item was classified by each psychologist, working independently, using two perspectives. First, each item was judged as either positive or negative. Second, each was placed within one of the following five categories:

1. Identity (what a person is)
2. Self-satisfaction (how the person accepts him/herself)
3. Behavior (how the person acts)
4. Family self
5. Social self

Only items which the psychologists categorized identically were included in the final scale.

In addition to scores in the five categories previously mentioned, another score can be derived. This score is the Total "P" score, which reflects the overall level of self-esteem (Fitts, 1965, p. 6). This investigation utilized only the Total P score.

The investigator considered two versions of the TSCS. The Counseling edition was examined but was rejected because it required that the respondent place the answer sheet in an awkward position in the question booklet in order to answer the questions in sequence. The Counseling and Research form of the test was used because it did not require this. Its computerized answer sheet must be scored by the publisher. The computerized answer sheet is easier for respondents to

handle, even though the print is small and the columns are narrow. None of the subjects complained of problems with this form of the inventory. (For a copy of the Tennessee Self-Concept Scale see Appendix B.)

Standardization. Fitts (1965, pp. 1, 6) reports that the TSCS can be completed by all but the psychiatrically disturbed, in about 15 minutes, although the scale is untimed. It was standardized through administration to a population of 626 individuals in various geographic locations. The subjects were of both sexes, of several races, of all socioeconomic levels, and of levels of education varying from sixth-grade through doctorate. Tested individuals ranged in age from 12 to 68. The mean Total P score was 345.57, with a standard deviation of 30.70 (p. 14).

Fitts found that TSCS scores are negligibly affected by demographic variables such as sex, race, and educational and intelligence levels. The average correlation between the demographics and the self-concept variable was .20. This indicates that only 4% of the variance scores were attributable to demographics.

Increased variability in TSCS scores is seen in the elderly population. This variability is in line with results from most of the research using older subjects. Thompson (1972), in the introductory summary in his monograph, however, reports studies showing self-esteem to increase with age, with elderly subjects reporting above average levels of self-esteem. He believes that this apparent increase may not be verifiable, since elderly subjects also showed increased levels of

defensiveness. Other explanations could include the cross-sectional design of such studies which are considered inappropriate for comparison of young and old (Schaie & Schaie, 1977, p. 693).

Reliability. Several studies of the reliability of the TSCS have been reported. Fitts (1965, pp. 14-15) reports on test-retest reliability based on a sample of 60 college students who were tested and retested within a two-week interval. The reliability coefficients on the various subscales ranged from .70 to .92. The reliability coefficient for the Total P score was .92.

Congdon (1958) administered a shortened version of the scale to psychiatric patients while the scale was being developed. The data yielded a reliability coefficient of .88. A third study of test-retest reliability with 22 subjects examined over a three-year period also reports "satisfactory" reliability levels (Stewart, 1976, p. 10). No data was available for within-test reliability to measure internal consistency.

Validity. Kerlinger (1964, p. 457) describes three types of validity which are important to measurement instruments: content validity, criterion-related validity, and construct validity. Many studies have investigated the validity of the TSCS.

1. Content validity. Content validity is based on the correlation between the representativeness of the items on the instrument and the elements of the property which the instrument is supposed to measure. Since the TSCS was developed from other self-concept measures and from self-descriptions by individuals, and since seven clinical

psychologists were required to arrive independently at unanimous assignment of each item to a particular category, the TSCS should exhibit content validity. Its frequent use as a test instrument would seem to bear this out.

2. Criterion-related validity. Criterion-related validity is determined by comparing test scores with one or more external variables or criteria known or believed to measure the attribute under study. It is often used to predict a subject's score on the measure in question. Few studies are available which involve a manipulated variable and a theoretical prediction, however, many correlations have been made to related factors as dogmatism, self-disclosure, anxiety, etc. Of anxiety, for example, Thompson (1972, pp. 54, 57-62) notes that a general finding is that there is a substantial linear relationship between self-concept and anxiety, and concludes the TSCS is valid for use in such test programs.

3. Construct validity. Research on this type of validity explores whether or not the theoretically proposed constructs are indeed those which account for variation among individuals' scores on the measurement instrument. Both convergence and the ability to discriminate are required.

Convergent validity is usually investigated by examining correlations between scores on the target instrument and scores on other instruments which measure theoretically-related constructs. Divergent validity is often investigated by attempting to discriminate between groups (which should theoretically differ in their level of that particular construct) by using their scores on the target measure.

Multitrait, multimethod studies are sometimes performed, and are quite robust, as are factor analyses, for use in attempting to achieve construct validity (Kerlinger, 1964, pp. 464-466).

Approximately 400 studies using the TSCS had been reported in 1972 (Thompson, p. 2). Some research of additional tests of the TSCS has been geared toward construct validation of the instrument and has included studies in convergent validity by Crandall (1975, p. 1824A).

An example of analysis concerning the reliability and validity of the TSCS was the work of Shreve (1973, p. 625A) who analyzed and compared four measures of self-concept: the Piers-Harris Children's Self-Concept Scale, the Tennessee Self-Concept Scale, the Thomas Self-Concept Values Test, and the Self-Esteem Inventory, relative to criteria set forth in "Standards for Educational and Psychological Tests and Manuals" (APA, 1966). Each test was judged as falling into one of four evaluations of "satisfactory," "questionable," "unsatisfactory," or "not applicable," according to each of seven essential criteria of validity and six of reliability set forth in the "Standards."

The evidence regarding construct validation (of all four tests) was generally satisfactory. It was recommended, however, that efforts be made to develop alternative theoretical formulations of the self-concept and to operationalize these constructs into reliable and valid measures that can be used "in both research endeavors and applied settings."

Other research has had positive results also. The research overwhelmingly supports the construct validity of the TSCS, especially

of a general factor of self-concept. There exists some controversy over the validity of the subfactors proposed by Fitts (Wylie, 1974, p. 232). Only the general construct (as measured by the Total P Scale) was employed in this research.

Procedure

An educational experience which contributes to increased self-esteem in an older person must provide for special needs. All the treatment classes of this experiment met the criteria for special presentation conditions. Flexibility, paced stimuli, reality orientation and other such elements, usually included to various extents in the noncredit adult educational environment, were specifically included in the treatment class formats used here.

Treatment in a variety of educational processes was selected for the older participants. These processes included a grouped class studying Current Events or Job Preparation, and a grouped class engaged in the study of Developmental and Practical Psychology. A third treatment group studied Memory/Relaxation Training. Group four was a Control group of elderly people who had not been educationally involved for at least a year.

All groups were personally contacted, invited to participate and pre- and posttested by the investigator. After selecting classes for the experiment which were not among those she herself taught (the Current Events and Job Preparation classes), the investigator phoned the respective instructors for permission to run her test program using the enrolled students at the start of the semester. Permission

granted, the investigator met with the class at its first meeting, described her program (as a school assignment in adult education, not mentioning self-esteem) and asked for volunteers.

The pretest which consisted of the MSQ, the RDQ and the TSCS was given by the investigator to those willing to take it at this time. As announced at the pretest time, the posttest was given eight weeks later. It consisted of the TSCS only.

No class group included more than 23 potential participants (i.e., students who completed both the pretest battery and the posttest). Also none offered fewer than 20. As described, the investigator had arbitrarily designed the experiment to the small-group size of 20 for simplicity of design. By private lottery after all tests were completed, the investigator restricted the number of participants to 20 for the data of the study.

The same procedure pertained in the classes which the investigator taught, with volunteers being requested from all of the classes. To the Control members, the requests for participation were different, however. Since these people were located in recreational centers or in their (motor-park) homes, the investigator introduced herself and asked for individual participation. If the person agreed to participate, the pretest was given at that time. Appointments were made at this pretest time for a future date eight weeks later to take the posttest.

Class Selection

The four experimental groups will be described here. These include three treatment groups and one control.

Group 1: Current Events and Job Preparation

The Current Events and Job Preparation classes were chosen for this study because they had the highest popularity at their respective sites, and offered a high arousal (motivational) content. These classes met for a two-hour session, once a week, for eight weeks.

The Current Events class was largely made up of members of Santa Monica's affluent retirement community. Sessions of the Current Events class consisted of lectures on an ongoing topic, followed by a discussion of events currently making headlines. During the time period of this study, the 50 members of the class, who ranged in age from 61 to 77, studied the special topic "China Today." The class was not taught by the investigator.

The Job Preparation class, funded by Comprehensive Employment Training Act (CETA), was offered to senior citizens residing in a low-income area who wanted to return to the work force after retirement or a change in family status (as following the death of spouse). Classes consisted of lectures on the world of work. As soon as class members completed the course, cooperating agencies would offer them internships which provided on-the-job training while paying a minimum wage. Although the make-up of the class was fluid (new members were continually being added as "older" members "graduated"), each of the 20 subjects of the sample completed the eight-week period of this

investigation. At any one time, the class consisted of 50 people. During the period under study, class members ranged in age from 62 to 75. Twenty-three members of this combined group completed pre- and posttests (11 from Santa Monica, 12 from the Central City district of Los Angeles). As described, of these, 20 group members were used as participants. This group was not taught by the investigator.

Group 2: Developmental Psychology

The Developmental Psychology class was chosen for this study because it offered the required high-arousal environment and an opportunity for socialization and self-awareness. Development of self-awareness was especially possible in this class. The classes met for a two-hour session, once a week, for eight weeks.

Each session of the Developmental Psychology class consisted of a lecture, followed by a counseling or "coping" session which allowed members to discuss problems which they were currently facing. The lectures introduced the major theories of human development. (The lecture subjects are described in Appendix A.)

The coping sessions, which took up the last half hour of each two-hour session, received special emphasis. Any member could address a question of his emotional concern to the group. This provided students with the opportunity to voice their concerns, to learn elements of peer counseling and to gain a sense of self-worth by giving advice to their peers. This portion of the class was under the guidance of the investigator as facilitating counselor. Class members were encouraged to socialize with each other outside of class. The

classes held at Santa Monica College and the California Home for the Aged in Reseda had a total enrollment of 60 persons who ranged in age from 60 to 90. Again participants were limited to 10 from each group. The reduction by lottery choice, however, was only required in the second group to reduce 11 test-takers to 10 actual participants. The first group numbered exactly 10 test-takers.

Group 3: Memory/Relaxation Training

The Memory/Relaxation Training program was developed by this investigator as an aid to elderly people. The elements of educational intervention which were used in this class included a high-arousal environment, opportunities for socialization and self-awareness, and a manipulated environment, which was planned to assure success. A climate of acceptance, the use of learning as a bridge to reality, and the use of association as an aid to learning were also included. The class met for a two-hour session, once a week, for eight weeks. The investigator taught this group.

Memory/Relaxation Training sessions consisted of lectures, discussions and exercises in memory and relaxation. The lectures dealt with particular problems which students faced in connection with memory and offered suggestions for solving these problems. Relaxation training was used as an aid to increased concentration in the memory exercises. (For class format see Appendix A.)

As well as building and noting personal success, class members were encouraged to socialize outside the class. During the period under study, the class was being taught to 50 class members, ranging in

age from 61 to 78. Twenty members took the tests and became participants in the experiment.

Group 4: Control

It was noted earlier that, as in the treatment groups, potential participants in the Control Group were asked individually by the investigator to "help [her] in a test program which was [her] assignment from graduate school." (See request format in Appendix A.) Those who agreed to participate were given the pretest at once. A date and time were then arranged for the administration of the posttest. The investigator used postcards and telephone calls to remind participants about the posttest appointments. Thus the pretests of the treatments and control were begun. Any changes in the self-esteem, indicated by changes in pretest compared with posttest scores, could be made in the eight weeks of treatment. Posttest data was obtained after that interval. Participants were approached and tested individually.

Hypotheses

This experiment tested the following hypotheses which when stated in the null form appears as follows:

H_0 1: Involvement in experimental classroom programs will have no significant effect on the self-esteem scores of elderly people.

H_0]: There will be no significant difference in self-esteem scores of elderly subjects in any treatment group when compared to any other group in the program after participation in the classroom experiments.

The null hypotheses were to be rejected if the analysis yielded results at a confidence level of .05 or less. This level corresponds approximately to two standard deviations from the mean of a normal probability distribution.

Summary

In this chapter the sample of the experiment was described. Eighty participants were chosen for the four groups (three treatments and one control) of the experiment. The subjects were considered representative of the larger population to which the criteria applied.

The test instruments were described and the research data concerning the standardized tests (MSQ and TSCS) was included. This was followed by descriptions of the procedures of the experimental program, and specific selection of treatment group classes. The chapter concluded with the statement of two hypotheses which appeared in the null form.

CHAPTER IV

RESULTS OF THE STUDY

The negative psycho-social impact of attitudes toward aging in contemporary America appears, according to the literature, to stem from two primary causes: from the positive emphasis on youth in the current culture, and from resulting subjective interpretation by the aging persons of the natural, individualized changes which characterize the aging process. Older persons regard these changes as decremental.

Crucial to adjustment to the aging process is the concept of self. Positive self-esteem is considered to lead to satisfactory adjustment. The literature has indicated the importance of and potential changeability of the concept of self.

This involvement was designed both to ascertain whether involvement in adult education classes was an effective treatment for raising self-esteem in the elderly and to find out whether different types of educational experiences affect self-esteem scores differentially. This chapter will discuss the statistical findings of the research.

Pretest Data

Mental Status Questionnaire Pretest Data

MSQ scores are reported in Table 2. In this test, the grand mean of all groups was 9.74 (of possible 10 points) with group means

Table 2
Pretest Mental Status Questionnaire (MSQ) Scores

Group	\bar{X}	Range	SD
1 Current Events/Job Preparation	9.6	7-10	0.73
2 Psychology	9.9	9-10	0.36
3 Memory/Relaxation Training	9.8	8-10	0.54
4 Control	9.8	7-10	0.70

Note. Grand mean = 9.74.

ranging from 9.6 (Group 1) to 9.9 (Group 2). These data indicate all subjects were functioning within normal mental limits.

Research Data Questionnaire Pretest Data

Demographic data from the RDQ are reported in Table 3. It may be noted in the table that the grand mean of ages of subjects in the three treatment groups and one control group was 70.4 years, with standard deviation ranging from 4.28 (Group 3) to 8.15 (Group 2). The total sample (n = 80) included 64 females (80%) and 16 males (20%). Of these, 5% of the men and 43.8% of the women lived alone; 15% of the men and 27.5% of the women lived with spouse. Nearly 9% (8.8%) of the women lived with family members other than a spouse.

For total years of education, scores of Group 4 were notably below the others. Grand mean for all groups was 12.58, with the Group 4 mean at 9.8 (and range from 2 to 14 years).

The Tennessee Self-Concept Scale Pretest Data

Analysis of variance (ANOVA) on pretest TSCS scores was used to determine if groups were equivalent on those scores. The analysis indicated the nonequivalence of the groups (see Table 4).

As suggested by the results of the ANOVA, there were significant differences in pretest P scores among the four groups. Three groups (1, 3, and 4) were very similar in that their standard deviations varied from each other by only about four points. There was a difference of about 15 points, however, between Group 2 and the others. Through utilization of the *à posteriori* comparisons yielded by the

Table 3
Personal Data from Research Data Questionnaire
(n = 80 subjects)

Age of Subjects									
Group	\bar{X}	Range	Standard Deviation						
1 Current Events/Job Preparation	68.8	61-76	5.02						
2 Psychology	73.1	60-90	8.15						
3 Memory/Relaxation Training	67.6	61-78	4.28						
4 Control	72.2	62-82	6.28						
Grand Mean = 70.4									
Sex of Subjects									
Group	Females	Males							
1 Current Events/Job Preparation	14	6							
2 Psychology	15	5							
3 Memory/Relaxation Training	19	1							
4 Control	16	4							
Total n	64	16							
Total % of n	80%	20%							
Living Arrangements of Subjects									
Group	Alone			W/Spouse			W/Family		
	M	F	Total	M	F	Total	M	F	Total
1 Current Events/Job Preparation	0	7	7	6	6	12	0	1	1
2 Psychology	1	9	10	4	5	9	0	1	1
3 Memory/Relaxation Training	0	11	11	1	7	8	0	1	1
4 Control	3	8	11	1	4	5	0	4	4
Total	4	35	39	12	22	34	0	7	7
% of n Alone: 5.0 M, 43.8 F, 48.75 Ttl									
% of n W/Spouse 15 M, 27.5 F, 42.5 Ttl									
% of n W/Family 0 M, 8.8 F, 8.75 Ttl									
Total Years of Education									
Group	\bar{X}	Range	Standard Deviation						
1 Current Events/Job Preparation	15.3	7-25	3.77						
2 Psychology	12.0	7-22	3.30						
3 Memory/Relaxation Training	13.3	9-21	2.32						
4 Control	9.8	2-14	3.79						
Grand Mean = 12.58									

Table 4
 Analysis of Variance to Determine if Groups
 were Equivalent on Pretest of TSCS

One Way ANOVA Using Group as Independent Variable (IV) and Pretest P Score as Dependent Variable (DV)					
Group		\bar{X}	Range	SD	
1	Current Events/Job Preparation	358.8	276-422	34.15	
2	Psychology	294.5	252-428	46.11	
3	Memory/Relaxation Training	367.7	297-412	32.19	
4	Control	361.5	297-407	30.13	
	Total	345.6	252-428	46.38	
Sources of Variation					
	Degrees of Freedom (DF)	Sum of Squares (SS)	Mean Square (MS)	F	Probability of F = p(F)
Between Groups	3	70457.5	23485.8	17.9	< .01
Within Groups	76	99489.7	1309.1		
Total	79	169947.2			

Scheffé method, it became apparent that Treatment Group 2 was significantly lower ($p < .05$) on pretest P score than the other three groups. Treatment Groups 1 and 3, and the Control Group were not significantly different from each other. Homogeneity of variance between the groups was substantiated, in spite of the somewhat larger value for Group 2.

Because the groups were not found to be comparable, both one-way ANOVAs on posttest scores and two-way pre-post ANOVAs (or ANOVAs on change scores) would have been inappropriate statistical procedures in response to the hypotheses. Information of this nature would be of questionable value. Campbell and Stanley (1963, p. 23) suggest, when using a nonequivalent control group design, that analysis of covariance is a more appropriate procedure than ANOVA and is superior to the use of change scores. Therefore, results of one-way ANOVAs on posttest P scores and two-way pre-post ANOVAs (or one-way ANOVAs on change scores) were not used to respond to the hypotheses. Analysis of covariance was utilized to account for the initial difference in the groups on pretest scores. The effects of treatment type on posttest scores on the TSCS were then examined. To determine if the experimental programs had an effect on self-esteem scores, paired-observation t-tests were calculated for each group.

Fitts (1965, pp. 13-14) provides norms from TSCS protocols of 626 subjects from a broad range of geographical areas, ages (12-68), sexes, races, socioeconomic status, and years of education. He reports a mean Total P score of 347.57 and a standard deviation of 30.70. It can be seen that the mean P score of the present sample is quite similar, although the variance is larger, as is expected in an older sample.

In an older sample there is more variety to responses due to the wide range of individual adaptations to aging (Peters, 1971, p. 69).

Design

In the statistical analysis of educational backgrounds and in the TSCS pretest scores, differences appeared among the groups. As a result, this experiment used a variation of the Nonequivalent Control Group Design (10) of Campbell and Stanley (1963, p. 47). The modification made in the design for this experiment was that three treatment groups, using varying treatments, were compared to one control group, rather than the single correlation used in the Campbell and Stanley model. Table 5 indicates the (Campbell and Stanley) theoretical model and the (investigator's) model which was used.

Comparison of pretest and posttest scores follows. For Group 2 the pretest mean was lowest (294.50), the standard deviation greatest (46.113), and the range began lowest (253-363). Posttest mean of Group 2 was lowest (354.750), standard deviation was least (29.822), but the range was normal (302-424). In this group there was greatest mean change from pretest to posttest of any group (see Table 6).

Analysis of covariance was utilized to account for the initial differences in the groups on pretest scores (see Table 7). The effects of treatment type on posttest scores on the TSCS were then examined (see Table 8).

Table 5
Campbell and Stanley and Davidson
Theoretical Design Models

Campbell and Stanley Design	Davidson Design
O_1 X O_2	O_1 X_1 O_2
O_1 O_2	O_1 X_2 O_2
	O_1 X_3 O_2
	O_1 O_2

Note. O_1 = Mental Status Questionnaire (MSQ) and Demographics and Self-Attitude Quiz (RDQ) and Tennessee Self-Concept Scale (TSCS)

O_2 = TSCS

X_s = Classroom Participation

Table 6
Comparison of Pretest and Posttest Scores on TSCS

20 Member Group	Pretest	Posttest
<u>1 Current Events/Job Preparation</u>		
Mean	358.800	363.0500
Standard Deviation	34.148	31.085
Range	276-422	284-426
<u>2 Developmental Psychology</u>		
Mean	294.500	354.7500
Standard Deviation	46.113	29.822
Range	253-363	302-424
<u>3 Memory/Relaxation Training</u>		
Mean	367.650	366.650
Standard Deviation	32.186	31.214
Range	297-412	300-408
<u>4 Control</u>		
Mean	361.450	360.600
Standard Deviation	30.132	32.550
Range	297-389	263-426

Table 7
Analysis

A: One-way ANOVA using Group as I.V., Posttest P score as D.V., and Pretest P score as Covariate

Group	Post \bar{X}	Unadjusted Deviation	Adjusted for Covariate	Post \bar{X} Adjusted for Covariate
1 (Cur-ev/Job-prep)	363.1	1.8	-6.2	355.1
2 (Psych)	354.8	-6.5	24.2	385.5
3 (M/RT)	366.7	5.4	-7.9	353.4
4 (Control)	360.6	-0.7	-10.2	351.1
Total	361.3			

B: Analysis of Covariance to Determine the Effect of Educational Treatment on Self-Esteem with Pretest P score as Covariate

	DF	SS	MS	F
Covariates	1	28078.3	28078.3	55.46*
Main Effects (class)	3	9348.8	3116.3	6.16*
Explained	4	37427.0	9356.8	18.48*
Residual	75	37974.4	506.3	
Total	79	75401.5	954.4	

Note. Multiple $R^2 = 0.50$. $\eta^2 = 0.14$.

* $p < .05$.

Table 8

Paired t-test Within Each Group Indicating
Significance in One Group

Group	Variable	(Difference) Mean	S.D. of Difference	r Correlate 2-tail Probability	Paired t Value	D.F.	2-tail Probability
1 (Cur-ev/Job-prep)	post pre	4.2500	17.562	0.859	1.08	19	0.293
2 (Psych)	post pre	60.2500	40.203	0.509	6.70*	19	0.001
3 (M/RT)	post pre	-1.0000	15.987	0.873	-0.28	19	0.783
4 (Control)	post pre	-0.8500	25.541	0.670	-0.15	19	0.883

Note. Group n = 20.

*In 2-tail test with .05 probability, value is 2.093.

In 2-tail test with .01 probability, value is 2.861 (highly significant).

Statistical Analysis

Hypothesis 1

Null Hypothesis 1 stated:

H₀1: Involvement in experimental classroom programs will have no significant effect on the self-esteem scores of elderly people.

This was examined through the use of paired t-tests within groups. The pretest and posttest scores in each of the treatment groups and the control group were analyzed to determine if self-esteem changed during the experimental period. The results of this analysis are reported in Tables 6, 7, and 8. The results of the analysis indicate that pretest and posttest TSCS scores were significantly different for Group 2, the Psychology class. No significant differences were found among pretest and posttest scores for the remaining groups. Apparently, involvement in a Psychology class can raise self-esteem scores among elderly people. Hypothesis 1 was therefore rejected, indicating that involvement in an experimental classroom program did have a significant effect on the self-esteem scores of elderly people.

Hypothesis 2

Null Hypothesis 2 stated:

H₀2: There will be no significant difference in self-esteem scores of elderly subjects in any treatment group when compared to any other group in the program after participation in the classroom experiments.

This was examined through analysis of covariance to determine the effect of educational treatment on self-esteem with pretest P score as covariate. The results of the analysis of covariance are reported in Table 7. These data indicated that there was a significant difference between groups ($f = 6.16, p < .05$). A Scheffé à posteriori analysis was performed to determine if the mean scores for each group differed significantly. This contrast indicated that there were significant differences between the mean scores of Group 2 when compared to the mean scores of the other groups. Eta coefficient was calculated to determine the magnitude of the effect of the experimental programs on the TSCS scores. The results ($\eta = 0.14$) indicated that there was a small effect on the self-esteem scores due to the treatment groups which the subjects were in. The Multiple R^2 of .50 indicated that approximately 50% of the variation in self-esteem scores was due to the treatment the subjects received. Of the three treatment groups, two did not change and one did (starting low and rising to normal), indicating that a significant change did take place in the self-esteem scores of elderly subjects in one treatment group when compared to other groups in the program after participation in the classroom experiments. Whether the change took place due to the treatment specifically is open to conjecture. Hypothesis 2 is therefore conditionally rejected.

Summary

A total of 80 elderly volunteers took part in the three treatment groups and the one control group included in this experiment. The

treatment groups studied various topics. Current Events and Job Preparation were evaluated as one type of treatment, Developmental Psychology was evaluated as the second treatment, and Memory/Relaxation Training was evaluated as the third type of treatment. Members of the control group were not enrolled in an educational program.

Sixty treatment group subjects, 20 in each group, completed the pretests and posttests measuring self-esteem levels before and after the treatments. All treatment group subjects were students who enrolled in the designated classes who volunteered to take part in the experiment. They were pretested during the initial class session, and posttested during the eighth (final) class session. The 20 subjects in the control group were pretested during the first meeting with the investigator and were posttested by her eight weeks later.

It was theorized that all subjects taking education courses would show a significant increase in self-esteem scores when compared to scores of the noneducationally involved control group. Following a one-way ANOVA, it was determined that the groups were not equivalent on the pretest assessment of self-esteem. The examination of the second hypothesis was completed using analysis of covariance. Hypothesis 1 was rejected because significant differences were accounted for by use of t-tests. Hypothesis 2 was rejected because significant differences were accounted for by analysis of covariance.

CHAPTER V

SUMMARY, CONCLUSIONS, AND RECOMMENDATIONS

Summary

This study attempted to investigate the effect of educational involvement on the self-esteem of older adults, and to compare the effectiveness of the classes where changes were expected to occur. The classes were Current Events/Job Preparation, Developmental Psychology, and Memory/Relaxation Training.

Sixty adults over the age of 60 (attending adult education classes) comprised three treatment groups of 20 each. Twenty additional older adults from recreation centers or mobile home parks (not involved in self-improvement classes or educational pursuits) formed the control group.

Educational involvement itself was the treatment. The Tennessee Self-Concept Scale (TSCS), the Mental Status Questionnaire (MSQ), and the Research Data Questionnaire (RDQ) were administered to each subject. Eight weeks later, the TSCS was again administered.

It was hypothesized in the null form that the self-esteem scores of all treatment group subjects would not be affected by the experience and that no treatment would affect self-esteem more than any other. A paired-observation t-test was used to examine Hypothesis 1. Significant differences between pretest and posttest

TSCS scores in Group 2 were found. No differences were found for pretest and posttest TSCS scores of the remaining groups. Hypothesis 1 was therefore rejected.

Using a one-way analysis of covariance with posttest scores as the dependent variable, group membership as the independent variable, and pretest scores as the covariate, Hypothesis 2 was conditionally rejected.

RDQ Pretest Analysis

The RDQ provided demographic and attitudinal information. Listing of personal data could be organized with the data obtained. Such lists were presented in Table 5.

The average age of the participants in this study was 70.4 years. The total sample included 80% females and 20% males. Of these, 48.75% lived alone, 42.5% with spouse, and 8.75% with other family members. Educational achievement averaged just above high school completion ($\bar{X} = 12.6$ years of schooling).

This level of education is higher than U.S. norms. For the age group 55 years and older, the median number of school years completed was 11.9 (Statistical Abstract of the United States, 1980, p. 149).

There are two possible reasons for the discrepancy in years of education between subjects and U.S. norms. First, it may be that those who seek adult educational experiences in later life are also those who pursued education further in early life. Secondly, it is possible that subjects used adult education experience when computing the number of years of education completed. These two possibilities

also could account for some of the difference in educational attainment between subjects of this study and reported norms. These may also account for the difference in educational levels reported for the experimental and the control groups.

MSQ Pretest Analysis

All participants were tested for mental function by a 10-item Mental Status Questionnaire. This test indicated that all were functioning adequately mentally and could thus be considered to be normal participants.

TSCS Pretest Analysis

The average TSCS pretest scores for each of the groups were shown in Table 6. The mean norms provided by the author of the TSCS are the same as for this study ($\bar{X} = 345.6$). This result is of interest for several reasons. First, it could be considered unusual that the means are the same, in that several investigators report an increase in scores with age (Thompson, 1972, introductory summary). One might expect that the results from this study would indicate a higher TSCS P score.

The possibility exists that the research showing increases in the TSCS scores with age may be merely identifying a spurious result. This may be due to the use of cross-sectional designs using age as an independent variable. Research strategies other than cross-sectional, such as the quasi-experimental methodologies as described by Campbell and Stanley (1963, p. 40), may be more appropriate for research in which age is an independent variable.

In addition to the difference in educational levels between the control and experimental groups, there were found to be larger differences between some of the TSCS pretest scores. The scores of Group 2 were lower than those of the other groups (see Table 6).

In attempting to explain the difference in TSCS pretest scores for Group 2, one factor may be considered. Data reported in Table 3 demonstrate differences between Group 2 and the others according to age. Subjects in Group 2 were somewhat older than subjects in the other groups. Group 2 also has somewhat less education than the other treatment groups, but not the control group.

This age difference does not adequately account for the large disparity in the TSCS scores. Since the groups were not selected randomly, other mediating variables may exist which could explain this result. For example, it may be that self-selection is operating. Those of Group 2 who chose the Psychology classes at the Santa Monica College's Emeritus College and those of this group who chose to attend classes at the California Home for the Aged may differ from those who chose the other classes or from those in the control group. It is possible that those who chose to attend class at a home for aged people (one-half of Group 2) had a significantly lower self-concept than those having the self-confidence to take a class at a college, thus lowering the TSCS pretest group mean (as all the other classes were held entirely on college campuses).

It is also possible that those who chose the Psychology class had greater levels of self-doubt at the start than those who did not, as

the class was advertised as including a "counseling" portion. A final consideration is that those who chose the Psychology class were more introspective and less defensive than others. Since they could expect that self-disclosure would be necessary in a group situation, they were less likely to use the defense mechanism of denial. There is a reported positive correlation between denial and TSCS scores, therefore those with lower levels of denial would also be expected to have lower TSCS scores.

The groups are seen as nonequivalent for statistical purposes, with Group 2 having lower TSCS scores. Because of this, the analysis utilized pretest scores as a covariate in the analysis to determine the effect of treatment type on TSCS scores.

Recommendations

Several implications and recommendations for the researchers and theorists have resulted from this experiment. Work needs to be done in the clarification of the concept of self-esteem: (a) what factors are involved in its composition, (b) how do these factors affect each other and interact with each other, and (c) how can the factors and the concept best be measured? Appropriate models for this line of research may include the multi-trait/multi-method model, composed of both observational and self-report measures, as well as behavioral and paper-and-pencil measures. Also appropriate may be the model described by Blalock (1961, pp. 5-26) of causal inferences in nonexperimental research which is utilized in the SPSS programs (Nie et al., 1970).

The element of denial should be separated from the other factors involved in self-esteem in order to avoid the confounding effects noted in this investigation. The measures used should be appropriate and meaningful for older subjects and, if possible, for younger subjects as well.

If measures can be made more amenable to self-esteem measurement, normal age changes and age differences relative to self-esteem might be investigated. In order to avoid the confounding effects of age, cohort, and time of measurement (which are found in longitudinal or cross-sectional studies) it may be more appropriate to use the sequential, quasi-experimental research designs as described in Campbell and Stanley (1963, p. 40). When the sequential designs are utilized, results can be generalized to a much wider population and will retain accuracy over a much greater span of time than the more traditional research designs. Also, only in this manner can age changes be differentiated from spurious age differences due to practice or history.

When the above research has been completed, the study of interventions which are effective in increasing levels of self-esteem can be more easily approached. In future investigations attempting to study the role of adult education as a factor in changing self-esteem levels, attention must be given to the potentially confounding variables identified in this study. A listing of these variables is as follows:

1. class content
2. class location
3. cost of class
4. advertised benefits of class
5. types of outreach and recruitment for the classes
6. teacher
7. number of students in each class
8. possibility of available credit
9. sex of student
10. motivation and other personality factors
11. age
12. method of student selection for each class
13. class requirements
14. level of stress (arousal) evoked by each class
15. prerequisite skills and knowledge
16. social support system and living arrangements of student
17. previous highest level of education attained by student
18. expectations and goals of student and of benefits to be derived from class
19. teacher style
20. method of evaluation
21. employment status and prior occupation of student
22. method of administration of experimental measure (group or individual)
23. health status

24. socioeconomic status
25. prior adult education classes attended by the student
26. status of mental health
27. subjective views and weighting of each factor of self-esteem by each individual student (plus their subjective views of their status with regard to each of these factors)
28. the number and severity of other concomitant stresses in the life of the student.

These independent variables should, if at all possible, either be held constant in the sample or they should be studied as additional independent variables. Although it is often easier to hold these variables constant, this procedure would significantly affect the ability to generalize the data obtained.

Study of these factors as additional independent variables (in either ANOVA or regression analysis) yields much more useful information, but usually requires a much larger N. A suggested design would be to hold some of the above variables constant and to study others as additional independent variables. For example, if only one class were used as the experimental group, with a waiting list control, many of the potential confounds would be automatically transformed into constants. In such a design, little information would likely be lost.

A second example of a useful study of educational interventions aimed at increasing self-esteem would be to use the same intervention in different classrooms. In this case, an investigator would want to find a number of classes that were very different in class attributes (e.g., content, teacher) as well as in sample subject attributes. The

intervention could be, as an example, a two-session curriculum on self-esteem, given by the same individual, who would be neither the teacher of any of the classes nor the investigator. The results of such a study would be widely generalizable.

A third possible study would be to teach a series with different short topics to each student group. One topic would discuss self-esteem, with the others focusing on topics unrelated to self-esteem (e.g., consumer safety, crime prevention). A counterbalanced design (Campbell & Stanley, 1963, p. 50) would be appropriate for this type of investigation in which all groups receive all treatments in varying order, with measurement after each treatment. In this manner, one might determine whether emphasis of self-esteem, in addition to educational experience, effected change. A measure of self-esteem offering more than one form would be important and the same instructor (different from any of the teachers or the investigator) would be needed to teach the curricula to each class.

Conclusions

Hypothesis 1 was posed in order to examine whether or not self-esteem of the elderly could be raised. Results of a paired-observation t-test indicated that participation in a Psychology class apparently improved self-esteem scores for this group.

In this experiment it was found that in all but Group 2 there were minimal differences in pretest or posttest scores. The pretest scores in Group 2 were low compared to the other groups. This factor usually operates when groups are selected because of their extreme

scores, however, and therefore may not be an important factor in this instance.

Alternatively, because it was a Psychology class which included a counseling group, it may be that self-concept was emphasized. This may indicate a form of subconscious investigator bias, since the teacher was also the investigator. Another possible factor might be that group therapy may have been significantly more effective at raising self-esteem than mere involvement in adult education experiences.

It is also possible that those choosing the Psychology class were more interested in self-improvement. This would be an example of the Campbell and Stanley (1963, p. 40) threat to external validity of an interaction of selection and X. A final alternative explanation for this result might be that through group therapy and the Psychology class, these students became significantly more defensive than the members of the other groups. TSCS P scores have been seen as positively correlated with defensiveness.

It was assumed that relaxation training would enhance learning. Eisdorfer and Wilkie (1977, p. 269) have indicated the belief that low arousal as well as high produces inefficiency and concluded that performance is best at an intermediate level of arousal. Over-arousal specifically following relaxation may have a dulling effect (Terry & Gerson, 1976).

Despite the built-in success factor, expected to make a positive difference in Group 3, the scores of this group did not show a statistically significant difference between pretest and posttest. In spite of the success factor, Group 3 members, concerned specifically

with memory problems, could also have been depressed, and may have become more depressed as the class proceeded. It is assumed that depression would lower self-esteem scores. Frequently, memory complaints are seen as indications of depression (Kahn, Zarit et al., 1975, p. 1569). Or the lack of significant change could have been a result of chance alone.

Apparently, other mediating variables existed which have not been mentioned. Also, other methodological and procedural weaknesses in the design of this investigation may have contributed to the results obtained. Though some changes occurred, others may not have for the following reasons:

1. Sampling. Sample selection which was not random may be accountable. It is possible that all the subjects represent an unknown bias within the sample.

The control group subjects were recruited from either recreation centers or mobile home parks. It is conceivable that those at the recreation centers experienced greater frequencies of socialization than those at the mobile home parks, accounting for unknown differences. Also, differing types of individuals may select different classes or locations. Those entering the Job Preparation class, for example, with the expectation of a paid internship following completion of the class, could differ considerably from those entering a Current Events class to relieve tedium. These two classes were combined to form one group for the purposes of this investigation.

2. Procedure. Testing was completed in groups for the experimental subjects, while the control group subjects completed the testing individually. This could either artificially inflate or deflate the TSCS scores. Also, limiting the groups to 20 members may have made them not typical.

3. Procedure. The content of the different classes varied considerably as well as did teacher goals and styles. These factors could possibly have added numerous mediating, confounding variables. Also, the investigator was the teacher in all classes except Current Events and Job Preparation. Experimenter bias and artificial changes in motivation of the subjects are, therefore, possibilities.

4. Measure. The TSCS may not have been an appropriate measure in this study. Self-concept is difficult to assess in any age group, due to its inherent subjectivity. The TSCS may not be appropriate for older subjects, even if it does adequately measure self-esteem for the younger subjects. The factor structure may vary with age and the older subjects may have difficulties taking the tests. In addition, the TSCS or other similar scales may not be anything which has statistical meaning when applied exclusively to older subjects (Schaie & Schaie, 1977, pp. 692-694). The results of studies using the TSCS with older populations are certainly questionable, as they show increases in self-esteem with age, but they are confounded by increased denial as well (Thompson, 1972, introductory summary). The TSCS may not be as sensitive to change as the measure required in the present investigation. Finally, some may have recalled pretest questions while answering the identical posttest form.

5. Methodology. When using the nonequivalent control group design (Campbell & Stanley, 1963, p. 40), threats to internal validity arise from the possible interactions of maturation with selection, history, and testing. External validity can be threatened by the jeopardizing factors of testing and reactive arrangements.

Assumptions in regard to expected gains as a result of the Memory-Relaxation Training program were not substantiated. Further research to examine these and other factors and their specific role in gerontological well-being should be undertaken.

Self-esteem is a concept which is very complex and difficult to quantify. Its relationship to age is even more uncertain, as is its specific accessibility to change. From the data gathered in this study, while it cannot be concluded that involvement in adult education classes significantly increases self-esteem, it can be concluded that different classes do have varying effects on self-esteem. The importance of adult education in relation to self-esteem has been neither disproved nor established.

This investigation has contributed to the identification of hazards and potential confounds which need to be held constant or investigated as independent variables in future studies. It has added information that may be of value to future researchers, and eventually, to practitioners.

Additional appropriately designed studies are conceivable. These would be useful additions to the knowledge concerning self-esteem in the elderly and of the types of educational interventions which may be effective in its change.

Because of the high level of change which did occur in Group 2, rather than conclude that this result is in some way accidental, the writer believes that the theory of the entire experiment has value and should be re-designed with the controls indicated in these last pages. Further, she hopes the products of such experiments may effect practical solutions to the problems of raising self-esteem with the concomitant effect of continuing human self-respect and independence.

The dire need for the changes described is, in the view of this writer with others, sufficient rationale for the work in that direction by all the social psychologists, physical scientists, gerontological activists and political idealists already involved. More such are needed. Noninvolvement in the problems of aging, on the other hand, whether by constructive or destructive motivation or by indifference, may continue to lead to the further isolation of our elders from the human family.

APPENDIXES

APPENDIX A

TREATMENT CLASS FORMATS OFFERED BY INVESTIGATOR

PSYCHOLOGY FORMAT

The treatment class format of the Developmental Psychology class was as follows. The class met for eight sessions, once weekly, for a period of two hours. All sessions consisted of a 1-1/2 hour lecture on human development followed by a group counseling session ("Coping") in which members discussed personal concerns. Only the first and last sessions varied from this by taking up the first 30-40 minutes with an announcement of the experimental testing program and administration of the respective pretest and posttest.

Session 1: The lecture subject was Personality and included definitions, components of personality, role choices, and adjustment. This was followed by the Coping (counseling) session.

Session 2: The lecture subject was Learning and Socialization and included examples from Piaget and Kohlberg. The Coping session followed.

Session 3: As the first lecture on the sequential stages of development, Infancy was discussed. Theories of discipline and distancing in contrast to the attitude of love and caring were briefly treated and the effects of each noted. The session ended with Coping discussion.

Session 4: The Pre-school and Middle Years development was the subject of the lecture. The Coping session concluded the class period.

Session 5: The "troubling" but important developments during Adolescence were the subject of the lecture. This was followed by the Coping session.

Session 6: The Adult Transition and the disillusionment/joys of adult realities were the subject of the lecture and Maslow's hierarchy of needs was introduced. This was followed by the session on Coping.

Session 7: Maturity and the fundamental adjustments to it was the topic. This was followed by the Coping discussion.

Session 8: Old age, the disengagement/activity theories, Erikson's alternatives, and the Kubler-Ross stages of reaction were the subjects of the lecture. The Coping session ended the lesson.

MEMORY/RELAXATION TRAINING

Memory experts (Bornstein, 1971, p. 3 and class notes; Lorayne & Lucas, 1974, pp. 1-4; Weinland, 1957, pp. 1-3; et al.) have noted the importance of two kinds of memory training; emphasis on practical factors for the general public and the building of specialized code systems, for use by experts. The training done in this research, since it was for general use and was essentially remedial in nature, was built on the former techniques. The latter, on the other hand, would be properly directed toward a different level of learner, such as one who is already highly proficient in memory work and who would wish to learn the highly specialized techniques useful to professionals (as competitive bridge players, medical technologists, etc.).

The general techniques, the elementary memory work, such as were taught to the subjects of this research, consist of updating the subjects forgotten abilities and gradually building simple additional new systems. Such was the entire focus of the eight-week Memory Training sessions taught in this research.

The introductory session began with the identification of memory difficulties as the universal concern of all members of the M/RT class. This recognition served to reassure the individual students. Then, in accordance with the memory texts, the mentor (writer) was in a position to assert (to the student or reader) that with practice, the student's difficulties with memory could be largely overcome (Bornstein, 1963; et al.).

The memory work began with emphasis on observation. From this, it led into additional factors which memory experts suggest for further training. Thus, elements of attention (concentration), observation, associative reality-testing, use of sense memory, classification, identification of practical memory problems and solutions, and simple behavior modification were covered. Active imaging, learned in the early sessions, finally led to learning by imaging (and recalling) by associated exaggerations in the final sessions of the sequential program.

Relaxation techniques are included in the Memory techniques program, as was seen earlier. The theory (of Brown, 1974; Jacobson, 1962; et al.) that relaxation training relieves stress and enhances "mind" work underlies the use of the relaxation techniques as part of the Memory program of this experiment. In the course of the program, the instructor explained the relaxation program, first teaching the exercise mnemonic "All New Exercises Must Take Longer," (see exercises which follow the M/RT format review here). She then taught "deep" relaxation, next "quick" relaxation, and finally "mobile" and "meditation" relaxation. This is followed by Benson and Klippers' (1975, pp. 162-163) meditation-type of relaxation. The relaxation exercises are taken from Sharpe and Lewis' (1976, Pt. 2) behavior modification training textbook.

The eight-week M/RT session format follows.

MEMORY/RELAXATION TRAINING FORMAT

The treatment class format of the Memory/Relaxation Training class was as follows. In view of this presentation being an unusual class offering, a detailed schedule is given below.

Session 1: Instructor introduced pretest subject and gave volunteers the pretest battery to take (other students took a break or otherwise waited quietly while this occurred). Collected pretest papers. Gave each student a xeroxed copy of a picture on which were drawn two children and many other items and details. Allowed members to study picture for about two minutes. Asked them to turn picture face down and to write from memory as many items as they remembered from it for about three minutes. Had Ss count number of items they listed and by show of hands indicated from 1 to 5 items remembered only, from 6 to 10 only, etc. Instructor reacted with Ss to their good results.

As a deliberate mental interruption from above procedure, instructor explained the first lesson of the Relaxation techniques. Then she led the class in participating in the basic exercise.

Instructor gave short lecture on attention and organization as important basic memory elements. She led discussion on practical application of these elements to meet students' own needs.

Returning to xeroxed picture, instructor called out and identified items, with students following along. Students were instructed to turn picture over again and write a fresh list of remembered items. Instructor noted rises in scores of students and congratulated them.

She told them their pride in themselves was justified and they would feel even greater as it grows. Instructor encouraged socialization (in this and all subsequent meetings).

Homework was assigned: To note one item in TV or newspaper of current interest that night; to concentrate and learn it. Students were then asked to rehearse the item mentally at night just before falling asleep. On the second day, using new material from same source, student was to heed two items, reviewing these just before sleeping and to proceed until mastering five news items in five days. Then student was instructed to continue the exercise, but to limit the count to five new items (so as not to "overload" or become frustrated).

Instructor discussed self-rewards for accomplishments. Students were encouraged to devise own self-reward lists, though this is difficult in terms of cultural lessons of humility, etc.

Session 2: Instructor gave class surprise quiz on items learned in last week's picture and compared scores with their first (unaided) scores of last week. Instructor congratulated students on increased scores.

Relaxation techniques: Instructor gave more of deep relaxation techniques. She emphasized the importance of practicing them.

The memory lecture was on the subject of typical and practical memory problems and the instructor suggested solutions to them. She discussed unrealistic expectations and consequent disappointments in contrast to the student's reality of being out of (memory) practice.

Homework assignment was given. Students were asked to write one description of their present bedroom (in terms of mood, mode, traffic

pattern, etc.) and another description of a bedroom which they had occupied when 5 or 10 years old, including feelings about premises. (This is expected to increase observation and sharpen recall.)

Session 3: Instructor collected the homework. The memory lesson at this session was on how to classify. Each student was handed a xeroxed sheet on which were 20 small cartoon drawings of familiar items (refrigerator, harp, etc.) and asked to study the page for about two minutes. Students were then asked to turn the papers over and to list the items they remembered, then to total their scores. (No items on this picture were related to any other, unlike picture used last week.) Instructor asked for a show of hands for scores. She then gave the students a new sheet with the same items grouped (or "chunked" or "classified") based on similarities. The students observed the similarities, wrote new list, counted their (high) scores (and understood the technique involved).

Homework was discussed on last week's news-item practice. For observation practice, students were now assigned as homework to write a description of where they parked their car on two occasions during the next week. They were to write on the evening of the parking experience. For walkers, the assignment was to describe in writing two interesting blocks which would be covered during the coming week. This was to be written on the evening after walking. (Practice thus included elements of observation, recall, and objectivity.)

The relaxation techniques were demonstrated by a volunteering class member. The instructor then described additional exercises in series.

Session 4: The discussion topic centered on members' typical "where's my's" and on how to solve such practical problems (keys, deadlines, shopping lists, etc.). The instructor demonstrated imagery and identified application of this factor in popular TV commercials. The inclusion of action and exaggeration in imagery was noted. To illustrate, the instructor read to the class a list of (16) words, then asked class to repeat list back. She then demonstrated a "string" of new wordlist using the imagery techniques. The class found they could use the technique and learned the words in the list in this manner.

The homework assigned was to increase mental flexibility. Each student was asked to think of a personal behavior pattern which is strongly habitual with him (as never permitting butt-ins in market checkout line, always permitting butt-ins in market checkout line, etc.). Then each was to make a modification in the identified behavior for one experimental time and for this achievement, to give himself a reward. (This increased objectivity, self-perception, and "safe" experimenting.)

Session 5: Session began with deep relaxation exercise from last four times and the introduction of "quick" relaxation. The instructor then asked the members to call out together the list of words from last week's imagery lesson which they did well.

Spotlighting technique was introduced. This consists of the finding key words or phrases in a text. Students were shown how to connect these, thus reconstructing the text (or story). The instructor

then read a story to the class, demonstrating spotlighting. Homework assignment was to reconstruct a story in detailed writing for which the students had made a "spotlight" word or phrase list in class. Students were asked to continue the five-news-item assignment (this has been an ongoing task).

Session 6: This session was a "potpourri" lesson, a collection of many things. Instructor administered an informal test of achievement and self-evaluation. She then discussed additional concerns of the students as establishing a realistic timetable for activities, overloading before exams, etc. No new written homework was assigned, but students were asked to continue news-item practice and relaxation techniques. Instructor suggested that the students review their notes for the next session.

Session 7: The instructor reviewed relaxation technique. A volunteer from the group demonstrated the new "deep" relaxation. The instructor taught the technique of mobile relaxation and described the value of it. Volunteers described all the relaxation techniques which were learned in earlier sessions. The instructor asked the members to bring short written jokes to next session (for vignette demonstration).

The instructor demonstrated the technique for remembering names and faces, emphasizing making an association between facial characteristic and name wherever possible. She noted that success in this process is learned by recalling one association from first meeting, 2 from next, up to 5 and maintain at 5 as with news-item practice. She used 12 glossy studio portraits to demonstrate this session and called the students' attention to their success in remembering all of these

in the 8-10 minutes of demonstration and practice. The instructor emphasized these points in making the associations: (a) to pay attention during introductions and really hear the person's name (or ask for it to be repeated); (b) to repeat the name, as when acknowledging the introduction; (c) to closely observe the person's face; (d) to associate the name with facial characteristics if this is possible; (e) to use the name in conversation with the person it belongs to as soon as possible after the first hearing of it; and (f) to write the name down as soon as possible.

The instructor announced that the TSCS (posttest) would be given next week.

Session 8: The instructor gave the TSCS posttest to the students who participated in the experiment. The others had a break on the patio. During this time, the instructor sorted through the (pre-collected) jokes and chose three for demonstration. After test, she reviewed all the relaxation techniques. Then, using the three jokes, she demonstrated using them with the spotlighting and association techniques. She congratulated class on their (obvious) successes, reminded them of continuing self-rewards, and suggested continuing to practice.

Sharpe and Lewis' Relaxation FormatDEEP RELAXATION

Mnemonic Device: "All New Exercises Must Take Longer" refers to beginning of word of each part of system: 1 - arms and hands, 2 - neck and shoulders, 3 - eyes, eyebrows, and forehead, 4 - mouth and throat, 5 - trunk and chest, and 6 - legs and hips.

Group 1: FISTS - clench both tightly 5 seconds and feel the tension, then relax for same count and feel difference between tension and relaxation and continue the feeling of relaxation for about a minute.
FRONT UPPER ARMS - bend arms at elbows and tighten muscles at front of upper arm. Hold 5 seconds, relax and let arms straighten at sides and continue the feeling of relaxation for about a minute.
BACK UPPER ARMS - straighten arms rigidly. Feel tension in back of upper arms 5 seconds, then relax and let arms straighten by your sides and continue the feeling of relaxation for about a minute. Take an extra minute and concentrate on all the muscles in hands and arms, letting them feel more and more deeply relaxed.

Group 2: NECK - press your head back into armchair or (imaginary) headrest hard for about 5 seconds. Feel the tension and then relax neck, let head rest gently and continue the feeling of relaxation for about a minute.
SHOULDERS - shrug shoulders, drawing up as tightly into neck as you can. Hold, 5 seconds then relax. Let shoulders flop and unwind and continue the feeling of relaxation for about a minute. Then continue letting muscles of neck, shoulders and arms relax, 1 minute.

Group 3: EYEBROWS & EYES - frown hard and squeeze eyes tightly shut, 5 seconds then relax. Continue to smooth out your brow and continue the feeling of relaxation for about a minute.
FOREHEAD & SCALP - raise eyebrows as tho asking a question. High! Hold 5 seconds, keeping eyes still and looking straight ahead. Relax and continue the feeling of relaxation for about a minute. For another minute let muscles around eyes, forehead, neck, shoulders, and arms relax completely.

Group 4: MOUTH - press lips together, 5 seconds, then relax 5 seconds and continue the feeling of relaxation for about a minute.
JAW - bite teeth together 5 seconds. Relax. Part teeth slightly so there is no tension while relaxing and continue the feeling of relaxation for about a minute.

Group 5: CHEST - breathe deep and hold 5 seconds. Feel tension in chest. Let go 5 seconds. Repeat. Keep breathing shallow and relaxed as before.
STOMACH - tighten stomach area muscles as tho preparing to receive a blow. Taut and rigid 5 seconds. Relax and continue the feeling of

relaxation for about a minute. For a further minute concentrate on letting go all the muscles of trunk, neck, face and arms.

Group 6: LEGS - Tense by squeezing upper legs and thighs together, straightening legs and pointing toes downward. Hold 5 seconds. Relax. Feel the tension ease away from your legs and hips and continue the feeling of relaxation for about a minute.

WHOLE BODY - for 2 or 3 minutes, concentrate on relaxing all major muscles. More. Close eyes and conjure up a pleasant image. Hold this vividly. In a few minutes slowly open eyes and slowly move body around. Then slowly return to normal routine.

QUICK RELAXATION

Sit in quiet room. Tense all muscles: clench fists, bend arms at elbows, shrug shoulders, press head back against chair and tense neck, squeeze eyes tightly shut, clench teeth and press lips together, straighten legs and lift heels off floor to tense stomach muscles. Take deep breath. Hold 5 seconds, then literally flop out, relaxing quickly and deeply as you can. Stay like this, concentrating on relaxing image 10 minutes. Do this twice daily.

MOBILE RELAXATION

is different from the other techniques discussed in that it can be used while moving around. It starts from the other technique and, at first, especially, is a continuation of it. It's great when you need to stay composed while involved in physical or mental effort.

After quick relaxation, open your eyes, but keep the rest of your body relaxed and motionless. Observe your surroundings but move only your eyes. Now start TALKING TO YOURSELF, slowly. Say anything, but get used to the feeling of speaking while REMAINING COMPLETELY RELAXED. In a few moments, begin to move your arms but be aware of the relaxation in the rest of your body. Slowly stand. Start to walk around the room, keeping the muscles not being used in a relaxed state. After a few minutes, go back to your chair (couch) and relax all your muscles again for a few minutes.

As you become adept at relaxing, you can suddenly relax as you are and CONSCIOUSLY move into mobile relaxation having recognized and switched away from previous states of tension.

Benson and Klipper's (1965, pp. 162-163)
Relaxation Format

MEDITATION-TYPE RELAXATION

requires a quiet environment, a mental device, passive attitude and a comfortable position and proceeds as follows: 1 - Sit quietly in a comfortable position. 2 - Close your eyes. 3 - Deeply relax all your muscles, beginning at your feet and progressing up to your face. (Really, the direction is arbitrary.) 4 - Breathe thru your nose, and become aware of your breathing. As you breathe out, say the word, "One," silently to yourself as breathe in, out, "One," etc. Breathe easily and naturally. 5 - Continue for 10 to 20 minutes. If curious, open eyes to check time but do not use an alarm. When finished, sit quietly several minutes, at first with eyes closed, then with eyes opened. Don't stand up for a few minutes. 6 - Maintain a passive attitude and don't worry about the depth of relaxation. When distracting thoughts occur, try to ignore them by not dwelling on them and return to the repeating of "one," etc. Practice 2 times daily, but not within two hours after a meal.

APPENDIX B
RESEARCH DATA QUESTIONNAIRE (INCLUDING
MENTAL STATUS QUESTIONNAIRE) AND
TENNESSEE SELF-CONCEPT SCALE

The Research Data Questionnaire, including as the first ten items the Mental Status Questionnaire, follows:

<u>NAME</u>	<u>AGE</u>	<u>CLASS (or Group)</u>	<u>ADDRESS</u>	<u>DATE</u>
-------------	------------	-------------------------	----------------	-------------

1. What is the name of this place?
2. Where is it located (address)?
3. What is today's date?
4. What is the month now?
5. What is the year?
6. How old are you?
7. When were you born (month)?
8. When were you born (year)?
9. Who is the president of the United States?
10. Who was the president before him?
- - -
11. How many years of education have you had or what was the highest grade or degree you reached?
12. Please list five words that describe you as the kind of person you are rather than appearance.
13. If you could change your personality, how would you like to be?
14. What is there about yourself that you especially like (are proud of)?
15. How have you been employed, or in what have you been involved, for most of your adult life (engineer, librarian, wife/mother, etc.)?

16. Please underline correct response: you now live

alone

with friend

with spouse

with family

17. Your goal in life would be to

18. On a scale of 1 to 5 (1 = very poor, 5 = excellent) what number

rating would you give your memory now: 1 2 3 4 5

(underline one number).

TENNESSEE
SELF CONCEPT SCALE

COMPUTER SCORED EDITION

by

William H. Fitts, PhD

Published by

Counselor Recordings and Tests

Box 6184 - Acklen Station

Nashville, Tennessee 37212

DIRECTIONS: Fill in your name and other information on the separate answer sheet.

The statements in this inventory are to help you describe yourself as you see yourself. Please answer them as if you were describing yourself to yourself. Read each item carefully; then select one of the five responses below and fill in the answer space on the separate answer sheet.

Don't skip any items. Answer each one. Use a soft lead pencil. Pens won't work. If you change an answer, you must erase the old answer completely and enter the new one.

RESPONSES	Completely False	Mostly False	Partly False and Partly True	Mostly True	Completely True
	C	M		M	C
	F	F	PF-PT	T	T
	1	2	3	4	5

TENNESSEE SELF CONCEPT SCALE

1. I have a healthy body 1
2. I am an attractive person 2
3. I consider myself a sloppy person 3
4. I am a decent sort of person 4
5. I am an honest person 5
6. I am a bad person 6
7. I am a cheerful person 7
8. I am a calm and easy going person 8
9. I am a nobody 9
10. I have a family that would always help me in any kind of trouble 10
11. I am a member of a happy family 11
12. My friends have no confidence in me 12
13. I am a friendly person 13
14. I am popular with men 14
15. I am not interested in what other people do 15
16. I do not always tell the truth 16
17. I get angry sometimes 17
18. I like to look nice and neat all the time 18
19. I am full of aches and pains 19
20. I am a sick person 20
21. I am a religious person 21
22. I am a moral failure 22
23. I am a morally weak person 23
24. I have a lot of self-control 24
25. I am a hateful person 25
26. I am losing my mind 26
27. I am an important person to my friends and family 27
28. I am not loved by my family 28
29. I feel that my family doesn't trust me 29
30. I am popular with women 30
31. I am mad at the whole world 31
32. I am hard to be friendly with 32
33. Once in a while I think of things too bad to talk about 33
34. Sometimes when I am not feeling well, I am cross 34
35. I am neither too fat nor too thin 35
36. I like my looks just the way they are 36
37. I would like to change some parts of my body 37
38. I am satisfied with my moral behavior 38
39. I am satisfied with my relationship to God 39
40. I ought to go to church more 40

41. I am satisfied to be just what I am	41
42. I am just as nice as I should be	42
43. I despise myself	43
44. I am satisfied with my family relationships	44
45. I understand my family as well as I should	45
46. I should trust my family more	46
47. I am as sociable as I want to be	47
48. I try to please others, but I don't overdo it	48
49. I am no good at all from a social standpoint	49
50. I do not like everyone I know	50
51. Once in a while, I laugh at a dirty joke	51
52. I am neither too tall nor too short	52
53. I don't feel as well as I should	53
54. I should have more sex appeal	54
55. I am as religious as I want to be	55
56. I wish I could be more trustworthy	56
57. I shouldn't tell so many lies	57
58. I am as smart as I want to be	58
59. I am not the person I would like to be	59
60. I wish I didn't give up as easily as I do	60
61. I treat my parents as well as I should (Use past tense if parents are not living)	61
62. I am too sensitive to things my family say	62
63. I should love my family more	63
64. I am satisfied with the way I treat other people	64
65. I should be more polite to others	65
66. I ought to get along better with other people	66
67. I gossip a little at times	67
68. At times I feel like swearing	68
69. I take good care of myself physically	69
70. I try to be careful about my appearance	70
71. I often act like I am "all thumbs"	71
72. I am true to my religion in my everyday life	72
73. I try to change when I know I'm doing things that are wrong	73
74. I sometimes do very bad things	74
75. I can always take care of myself in any situation	75
76. I take the blame for things without getting mad	76
77. I do things without thinking about them first	77
78. I try to play fair with my friends and family	78
79. I take a real interest in my family	79
80. I give in to my parents. (Use past tense if parents are not living)	80
81. I try to understand the other fellow's point of view	81
82. I get along well with other people	82
83. I do not forgive others easily	83
84. I would rather win than lose in a game	84
85. I feel good most of the time	85
86. I do poorly in sports and games	86
87. I am a poor sleeper	87
88. I do what is right most of the time	88
89. I sometimes use unfair means to get ahead	89
90. I have trouble doing the things that are right	90
91. I solve my problems quite easily	91
92. I change my mind a lot	92
93. I try to run away from my problems	93
94. I do my share of work at home	94
95. I quarrel with my family	95
96. I do not act like my family thinks I should	96
97. I see good points in all the people I meet	97
98. I do not feel at ease with other people	98
99. I find it hard to talk with strangers	99
100. Once in a while I put off until tomorrow what I ought to do today	100

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