1990

A Study of the Relationship Between Improvement in Physical Status and Self-esteem in Geriatric Patients

Kate A. Hayner
Eastern Illinois University

THESIS REPRODUCTION CERTIFICATE

TO: Graduate Degree Candidates who have written formal theses.

SUBJECT: Permission to reproduce theses.

The University Library is receiving a number of requests from other institutions asking permission to reproduce dissertations for inclusion in their library holdings. Although no copyright laws are involved, we feel that professional courtesy demands that permission be obtained from the author before we allow theses to be copied.

Please sign one of the following statements:

Booth Library of Eastern Illinois University has my permission to lend my thesis to a reputable college or university for the purpose of copying it for inclusion in that institution's library or research holdings.

7/17/90

Date

I respectfully request Booth Library of Eastern Illinois University not allow my thesis be reproduced because _____

_____

_____

_____ _____

Date Author

m

A Study of the Relationship Between Improvement in Physical Status and Self-esteem in the Geriatric Patients

(TITLE)

BY

Kate A. Hayner

THESIS

SUBMITTED IN PARTIAL FULFILLMENT OF THE REQUIREMENTS
FOR THE DEGREE OF

Masters of Arts

IN THE GRADUATE SCHOOL, EASTERN ILLINOIS UNIVERSITY
CHARLESTON, ILLINOIS

1990
YEAR

I HEREBY RECOMMEND THIS THESIS BE ACCEPTED AS FULFILLING
THIS PART OF THE GRADUATE DEGREE CITED ABOVE

July 17, 1990
DATE

7/17/90
DATE

A Study of the Relationship Between Improvement in Physical Status and Self-esteem in Geriatric Patients

Kate A. Hayner

Eastern Illinois University

Running head: SELF-ESTEEM

Abstract

The improvement in physical abilities in the geriatric population after occupational therapy was investigated to determine whether self-esteem would also improve. Fifteen subjects from three different nursing homes were measured. All of the subjects were referred to occupational therapy by their physician.

Treatment was implemented by trained rehabilitation aides after an occupational therapist assessed each subject and determined the need for therapy. Measurable goals were set for each subject to improve dysfunctional areas and reviewed with each resident and rehabilitation aide responsible for implementing the treatment program.

Types of treatment consisted of active and passive range of motion, strengthening, retrograde massage, applying splints, fine and gross motor tasks, and increasing independence in activites of daily living.

Data were collected on each subject twice, at four week intervals. Physical status was measured using standard rehabilitation tools. Self-esteem was assessed on a revised scale of the Tennessee Self Concept Scale.

The investigation found neither a significant improvement in motor functioning nor a significant

improvement in self-esteem. Furthermore, the subjects significantly deteriorated in physical status. The hypothesis that self-esteem will improve among the geriatric population remains untested due to the lack significant improvement in the subjects physical status. Implications and limitations of the study are discussed.

TABLE OF CONTENTS

CHAPTER I

THE PROBLEM

Introduction and Statement of the Problem

As our population has grown older at a steady rate, the geriatric population has risen drastically. It has become apparent that research on the infirmed has not kept up with the rate of increase in this portion of the population. The need for more research on the geriatric population has been noted, however the number of actual studies of the elderly is disproportionately lower than the number of studies conducted on all other age groups (Butler & Lewis, 1977). Although there is still a dearth of studies on the elderly, a new trend is emerging. During the last 23 years there has been a large increase in the number of scientific and professional publications on aging; possibly even a doubling of the total volume of literature (Birren & Renner, 1977). Self-esteem is an area which, although noted in much of the literature to be an important part of the geriatric individual, has not been throughly studied in regard to the elderly population (Garber, 1984).

As individuals reach their geriatric years the probability increases that they will experience some type of physical disability or lower level of motor

functioning. The personality of the patient is a crucial factor in the efficacy of various rehabilitation processes, yet few satisfactory models exist for measuring personality. To date, very little attention has been paid to old age and only recently have attempts been made to understand the personality of the elderly (Savage, Gaber, Britton, Bolton, & Cooper, 1977).

There is disagreement in the literature as to whether self-esteem, a part of one's personality, remains constant in individuals (Baltes, & Ulrich, 1987) or has the possibility of improving when rehabilitation is implemented (Versluys, 1977). Thus, the need for exploring self-esteem in the geriatric population is necessary. No directly related studies between self-esteem and rehabilitation in the geriatric population were found when the literature was reviewed.

Purpose of the Study

The purpose of the study was designed to investigate the improvement in physical abilities of the elderly on self-esteem.

Hypothesis

As geriatric individuals improve their physical status, through meeting their goals in occupational therapy, self-esteem will also improve.

Delimitations

1. Subjects will be over 65 years.

2. Subjects will be residents of a nursing home.

3. All participants will be referred by a physician for occupational therapy services.

4. All subjects will be deemed by the occupational therapist to benefit from occupational therapy services.

Definitions of Terms

Active range of motion. The action of a person moving a joint through the full range of that joint.

Compromise body image. A personal image of one's body that is different from a previous body image, yet acceptable.

Depression. A state of feeling emotionally melancholy, marked by inactivity, difficulty in thinking and concentration, and feelings of despair.

Dysfunction. Not functioning at an appropriate level, either determined by a previous higher level of functioning, or as compared to the norm.

Finger goniometer. A tool used to measure the range of motion in the different joints of the fingers.

Functional ability. The level an individual is able to perform a task.

Geriatric. An aged individual sixty-five years or

older.

Goniometer. A tool used for measuring a person's range of motion at the joints.

Gripper. A tool used to measure a persons grasp strength.

Locus of control. The amount of command an individual feels they have over their life or a situation.

Measureable goals. A desired end result, written or stated in terms using units, dimensions or qualities of anything ascertained by measuring.

Passive range of motion. The act of moving another persons joints through the full range of motion possible for that joint.

Perceived health status. One's view of one's own health whether good or bad.

Rehabilitation. To restore to a condition of good health or ability to perform tasks.

Retrograde massage. To rub or knead the body backward to aid in circulation, usually used to decrease edema.

Self-concept. The self perception of ones' own characteristics and abilities, as well as relationships with others and the environment, life experiences, and personal goals.

Self-esteem. The liking and respect of oneself. For the purpose of this study a score from the revision of the Tennessee Self Concept Scale was used.

Occupational therapy. A branch of therapy which attempts to assist the patient in restoring impaired function to the highest reasonable level. This may include the use of equipment, rehabilitation modalities and/or teaching the patient new skills.

Summary

Although self-esteem among the elderly population is recognized as an important aspect of personality, little research has been conducted in this area. Two different theories maintain that either self-esteem remains stable or that it can change as other factors influence the individual. This study looks at the possibility of self-esteem improving with rehabilitation.

CHAPTER II

REVIEW OF RELATED RESEARCH

This chapter presents a review of the history and importance of the psychological aspects of a geriatric individual in relation to the person's biological functioning. The report on self-esteem is followed by a review of various research related to self-esteem in the elderly; specifically, locus of control, depression, and dysfunction. This chapter concludes with a review of research relating self-esteem to rehabilitation.

History

We are currently living in the era of the aging, with 12.5% of the population in industrialized countries expected to be older than 65 years by the year 2000 (Fisk, 1983; Hunter, Linn, & Harris, 1982; Lipzin, 1987). Furthermore, the older population, the "old-old," people 85 years and older, are the fastest growing group (Liptzin, 1987) and the least studied (Butler, & Lewis, 1977). Although families provide a majority of the care that is needed for our elderly, care for five percent of those individuals over sixty-five is left to the nursing homes (Newman, 1987). Currently seventy-five percent of the patients in nursing homes are women (with an average age of 84) who

have at least six chronic conditions and two acute conditions (Newman, 1987) which can sometimes improve with rehabilitative treatment.

Our population is getting older, and hence using more health care services. It is recognized that the geriatric population is among the heaviest users of health care services (Kane, Solomon, & Keelder, 1981). Among these, rehabilitation services are used frequently, especially in the nursing home facilities where public aide and medicare usually reimburses services in the form of occupational therapy, physical therapy, and speech therapy (Hickley et al., 1986).

Although most people in the field of aging now recognize the importance of the interactions between the biological and psychological processes, few attempts have been made to study these interactions (Linn, 1976). Therefore, relatively little information is available about the older population's physical or mental health (Kane et al., 1981) let alone the interaction of the two. Furthermore, any measurement of function has usually relied on scales not constructed for elderly adults (Wiess, Nagel, & Aronson, 1986; Linn & Linn, 1984; Foelker, Shewchuk, Neiderehe, 1987).

Self-concept and self-esteem have recently been

recognized to play a crucial role in determining the adjustment and in many cases, the survival of elderly persons (Hayslip, 1985; Suls, & Mullen, 1984). Although this is recognized, there have been few attempts to facilitate an examination and manipulation of constructs comprising self-concept or self-esteem in the aged community (Garber, 1984).

Self esteem

There is no standard theoretical or operational definition for self-esteem; this concept is usually defined as the liking and respect of oneself (Crandall, 1973). As such, self-esteem is commonly measured by asking persons to respond, either directly or indirectly, to questions concerning various aspects of the self, i.e., physical, mental, social, moral, and professional (Hunter, Linn, & Harris, 1982). One's self-esteem differs from self-concept in that self-esteem refers to the positiveness or negativeness of one's self-evaluation (Hunter et al., 1982; McCrae, & Costa, 1988). Whereas self-concept is a broader term encompassing self-perceptions of characteristics and abilities, as well as relationships with others and the environment, life experiences, and personal goals (Puglisi, 1983; Baltes et al., 1987). However, these two phrases are often used synonymously to refer to how

individuals feel about themselves.

There have been many studies which have sought to clarify and further understand the concecept of older people's well-being. These studies have focused on particular areas of well-being, such as morale (Rubenstein, 1971), personal adjustment (Caven, & Burgess, 1949), psychological well-being (Havens, 1968; Neugarten, 1972), life satisfaction (Bell, 1974; Spreitzer & Snyder, 1974; Tobin & Neugarten, 1961), locus of control (Reid, Hass, & Hawkings, 1977; Weiss et al., 1986), role status (Tibbitts, 1963), and social activity (Erdman, & Kivett, 1977). In current usage none of these concepts is synonymous with self esteem, but each criterion includes self esteem as a significant part of its conceptual definition.

Even though self-esteem and life satisfaction are highly correlated, most studies of the elderly have focused on generalized well being or life satisfaction, measuring each factor independent of each other (Morganti, Nehrke, Hulica, & Cataldo, 1988). Yet, self-esteem is fundamental to a person's experience of life. It is an underlying component of personality (McCrae et al., 1988) which affects interpersonal relationship as well as everyday mood and ability to function (Hunter et al., 1982). And since dysfunction

is often measured in part by one's functional ability, it can be stated that self-esteem affects one's disability level.

Most gerontologists have begun with the assumption that the self should experience "continuous life-long transformations because of constantly changing demands, concerns, and needs... particularly old age... with a potential change in self-identity" (Baltes et al., 1987, p. 103). They conclude, however, that the evidence points in the direction of predominant stability of the self-concept (Baltes et al., 1987; Morganti et al., 1988; Erdman et al., 1977). Neugarten (1964) found some self-evaluations made earlier in life are not stable; they change as the person makes passages through life. These changes were attributed to health and physical independence as well as aging itself (McCrae et al., 1988).

The literature available is mostly consistent with the premise that personality is quite stable after age thirty (Costa, & McCrae, 1974), showing little change. However, Bullena and Powers (1978) reported that some aspects of the self concept change, such as age identification (identifying themselves as old).

Two variables which have consistently been found to be related to self-esteem in the elderly are work

roles (Maddox, 1970) and institutionalization (Pollack, Karp, Kahn, & Goldfarb, 1962). An important aspect of self-esteem which seems to be associated with work and institutional care is the degree to which persons feel in control of their lives (Brissett, 1972). This is especially important with respect to institutions where life often becomes highly structured and preplanned. It has been shown (Lieberman, & Lakin, 1963) that loss of self-esteem often precedes institutionalization. However, in institutions where one can maintain and feel some type of status, self-esteem tends to be higher (Anderson, 1967; Kahana & Coe, 1969).

In general, self-esteem in the elderly seems to be related to one's perceptions of productivity, personal control, role status, and performance. (Hunter et al., 1982). As Mason (1954) points out, the way in which onr sees oneself is a primary directorial factor in the individual's personality and is instrumental in determining the individual's level of adjustment.

Locus of control / depression

The concept of locus of control refers to the extent to which one sees one's outcomes (events one experiences and reinforcements one receives) as being contingent upon one's own effort and abilities (internal) or as being determined by chance, fate, and

powerful others (external). This concept has been noted to be very important in trying to gain an understanding of the psychological impact of adjustment to old age (Reid et al., 1977).

The relationship of locus of control to adjustment on the part of the elderly has been examined in only a few studies (Kuypers, 1971). Most of the studies of locus of control have found that externality is positively related to depression and negatively related to self-esteem (Foelker et al., 1987; Weiss et al., 1986).

Lefcourt (1973, 1976) Seligman (1975), and Hunter et al (1982) found that losing personal control or productivity can lead to dysfunctional behavior, emotional upset, or negative feelings toward the self. It is the control elderly people feel over their lives or environment which impacts on function (Reid et al., 1977; Linn et al., 1984). Reid, Haas, and Hawkins, (1977) found that a geriatric individual's belief that he or she has control over desired outcomes, is highly associated with a positive self-concept. On the other hand, low self-esteem persons are more apt to see their lives at the mercy of external forces rather than being in control of their fate (Hunter et al., 1982).

In sum, most of the studies report a consistent

association between depressive symptoms and one's belief that outcomes are externally controlled (Phillips, 1980; Evans, 1981; Costello, 1982; Seligman, 1975; Hammilton, 1967). Whereas, internal locus of control is generally associated with a higher life satisfaction and high self-esteem (Mancini, 1980-1; Hunter et al., 1981). However, if older persons can increase their self-confidence and sense of mastery over their environment they can ultimately improve self-esteem (Perri & Templer, 1985) and hence their functional ability (Reid et al., 1977).

Depression that relates to self-esteem is relatively independent of poor health, yet it is doubtful that it is independent of aging, since symptoms of depression tend to increase with age as older individuals are less able to control their own environment (Hunter et al., 1982). The elderly often will also feel less productive since retiring from their jobs or previous roles.

Any loss of self-esteem is reported to be a major contributor to depressive symptoms in the elderly (McCrae et al., 1988; Zung 1967; Hunter et al., 1981; Busse, 1954). It may be that affected individuals have incorporated ageism into their own belief systems, resulting in self-hatred represented as depression

(Butler & Lewis, 1982). Others believe that the depressed elderly may have always felt this way (Hunter et al., 1981; Dibner, 1975).

Usually the specific symptoms of depression reported most commonly in the elderly include a loss of self-esteem, feelings of helplessness, complaints of cognitive deficit, blaming oneself for things that happen, and a tendency to have a decreased self care capacity even when their health is not substantially impaired (Hunter et al., 1982; Weiss et al., 1986). However, most depression scales currently used to measure the older population rely heavily on physical symptoms, such as disturbed sleep pattern, loss of sexual interest or appetite. These conditions may reflect disease rather than depression. The Diagnostic and Statistical Manual of Mental Disorders-III, Revised relies on both physical and mood criteria and, therefore, has increased potential for false positives when used with older persons (Linn et al., 1984). Consequently, dysphoric mood alone may be a better indicator of depression in later life (Linn et al., 1984).

Among other suggestions, Sherman (1985) feels that by helping the person to build up and maintain adaptive coping and problem-solving skills there should be a

changed perception toward a more internal locus of control. With a positive change in that perception, it is more likely that the person will incorporate a view of self as effective and competent. The consequence of this more positive self-concept should be to reduce the psychological conditions associated with continued breakdown or demoralization, and to enhance morale in general.

Social attitudes

Butler and Lewis (1977) attributed most of the elderly's negative feelings toward the self to social attitudes. Tibbitts (1963) and McCrae et al., (1988) went so far as to suggest that society was responsible for much of the negative self-concept among the elderly.

Zusman (1966) originally described this impact of social attitude as a process of psychological breakdown brought about by a negative interaction of the social environment with the person's self-concept in a downward cycle of increasing incompetence. The cycle begins with a precondition or susceptibility to psychological breakdown, which is exacerbated by society's tendency to label the elderly, due to their physical decrements, as deficient or incompetent. The labeling tends to induct the older person into a sick

or dependent role, with a resultant atrophy of previous skills. This loss of prior skills in turn leads to self-identification by the elderly person as sick or inadequate. This latter step feeds back into the initial precondition, thereby amplifying the breakdown process in its downward cycle (Sherman, 1985).

This breakdown, which is all too familiar, represents increasing incompetence and dependency, and ultimately demoralization (Frank, 1974). It is clear that enhanced morale would be one of the desired outcomes in trying to reverse this cycle (Sherman, 1985). Since self-esteem has been identified in the gerontological literature as an indicator of morale (Lawton, 1977), there is little doubt that self-esteem is a factor implicit in the self-labeling and self-evaluating aspects of determining one's worth (Sherman, 1985). Dibner, on the other hand, thought that elderly with low self-esteem, or the so-called "self-haters," were persons who blamed themselves for a disappointing past and thus, may have always had personality problems in regard to self-esteem (Dibner, 1975).

Although there is disagreement regarding the etiology of low self-esteem in the elderly, the fact remains that a number of elderly persons exhibit negative self attitudes, and this problem seems to be

an important one for investigation (Hunter et al., 1982).

Poor health / dysfunction

Physical aging includes anatomical changes, impairments, and disabilities. A framework for consolidating these has been the concept of biological age. The quest for a single measure of biological age continues since chronological age is not always the best criterion of function or longevity (Linn, 1976). It is often said that some people are "old" at 50 and others are remarkably "young" at 80.

As we discuss the elderly population we are inclined to think of dysfunction. Individuals with dysfunctions are often concerned with such matters as the meaning of life, style of life, situational factors that pose environmental stresses, and personal characteristics that lead to maladaptive coping with the personal, interpersonal, or geographic environment (Linn, 1976). Our geriatric population will likely encounter one of the above at some point in their older years.

Frail elderly patients often present themselves to the medical field with no specific complaints but with failure to perform one or more important functions of daily living (Goodenough & Lutz, 1987; Beadine, 1983;

Linn, 1976). These functions are often necessary for independent living (Beadine, 1983; Linn, 1976). The five critical functional losses are failure to ambulate or transfer, falling, failure to eat or drink adequately, incontinence, and intellectual impairment (Goodenough et al., 1987).

In trying to measure dysfunction, it is useful to try to separate those changes that occur because of the natural process from those that are associated with an individual's past and present chronic illness. It also may be helpful to view dysfunction in overall health as representing a relationship between the person's perception of one's health and one's objective health status (Linn, 1976).

It has been noted that factors such as the concept of self, life satisfaction, activity levels, and feeling about retirement are interrelated with actual and perceived health status. Furthermore, there is considerable evidence that self-assessment of health plays a vital role in the overall functional state of an elderly person (Linn, 1976). Palmore and Luikart (cited in Linn, 1976) have also found that self-estimates of health were highly related to both functional status and the physician's estimate of the patient's health. Understandably, lower self-esteem

was associated with poorer self-assessed health and spending more days in bed (Linn et al., 1984).

It is not surprising that poor health, measured by self-perception, pain, and ability to perform everyday and instrumental activities of daily living, are associated with lower self-esteem (Hunter et al., 1982). Even disability levels have been statistically different between high and low self-esteem groups, indicating that those with high self-esteem were more capable of carrying out basic activities of living, such as eating, walking, dressing, and bathing, as well as instrumental activities such as shopping, handling their own finances, and doing household chores (Hunter et al., 1982; Weiss et al., 1986). In addition, when the effects of disability, pain, and perceived health were removed, the low self-esteem group still had significantly more depression, anxiety, somatization, and external locus of control (Hunter et al., 1982).

Rehabilitation

A central task in rehabilitation is in helping individuals who are chronically maimed or stunted to use their assets more effectively and minimize their liabilities (Frank, 1958). Specifically, the occupational therapist attempts to enable the client to grow, adapt, change, and move toward self-directed

behavior and independence with the goal of restoring the impaired function to whatever is feasable or realistic (Goodenough et al., 1987). This also includes objectives and methods designed to facilitate psychosocial adjustment (Pedretti, 1981).

Unfortunately, at times the dysfunction may be seen as the final confirmation of lack of self-worth (Simon, 1971; Safilios-Rothschild, 1970). Furthermore, Trombley (1983) reports that physical trauma or the onset of chronic illness may reduce self-esteem. Therefore, the rehabilitation worker's aim is to help the disabled person feel that he, as a person, still continues (Pedretti, 1981). Thus, the self-worth of the disabled person is confirmed. Versluys (1977) has speculated that as therapy progresses there is a concomitant and gradual increase in self-esteem and progress toward healthy adjustment and accomodation to the physical dysfunction.

According to Simon (1971), the ultimate adjustment to physical dysfunction is intimately related to the process of developing a new "compromise body image" so that one can develop a sense of self-worth and self-respect. The body image consists of multiple perceptions about the body based on past experience, current sensations, and one's personal investment in

the body. The development of the body image is influenced by the attitudes and values of the culture and the views, values, and fantasies of the significant others in one's life (Pedretti, 1981).

The experience of loss of any physical part or function involves not only the painful distortion of body image and the image of oneself as a physical being but also the image of self as a social being (Pedretti, 1981). The acknowledgemant of a flawed body image and reaction to the loss of function or organ loss through surgery causes emotional reactions with readjustment which can take as long as two years (Elberlik, 1980; Siller, 1969).

Individual reactions to disability and possible successes of integration of a compromise body image depend, in part, on the type, nature, location of the injury, premorbid concept of the body, and psychological defenses chosen to maintain self-esteem (Simon, 1971). There is no evidence to support the notion that the severity or type of disability is correlated with the degree of psychological adjustment (Shontz, 1977). Yet, treatment success is more certain when the dysfunction does not interfere with the patient's ability to sustain a valued self-image and life-style (Feldman, 1974). When independence, self-

sufficiency, and autonomy may have to be given up partially or totally, temporarily or permanently, life-style can be affected (Kutner, 1977; Garner, 1977).

Following a dysability, depression is a common response. It can also follow the loss of self-esteem and perceived helplessness. Depression is normal at the beginning of the adjustment process and then periodically as the patient becomes discouraged, overwhelmed, is isolated, fails to progress in treatment, or remembers the losses in the form of an anniversary reaction (Feldman, 1974; Quigley, 1976). Sadness and depression are to be expected for periods as long as one year (Pedretti, 1981).

Summary

The literature has not kept pace with the growing population of geriatric individuals within our society. Although the psychological and biological aspects of each person are recognized to be interrelated, very little research on this population is available, especially related to self-esteem. Many theorists have divided self-esteem into related areas, these areas are locus of control, depression, social attitudes, and poor health or dysfunction.

Self-esteem is recognized as playing a crucial role in the adjustment of elderly individuals and in

some cases the survival of the person. This adjustment is related to the extent to which the person feels in control of his or her own outcome or locus of control.

As an individual feels less internal control, and more external control, depression is possible, which in turn can affect one's level of self-esteem. However, if one can improve a sense of mastery over one's environment, one can ultimately improve self-esteem.

Social attitudes was also noted as a possible factor in an individual experiencing negative feelings toward the self. Though some experts feel that low self-esteem is a relatively fixed trait of personality and can not be molded by rehabilitation.

As individuals get older, dysfunction is probable. As one's functional status decreases, the ability to perform everyday activities is limited which may cause lower self-esteem.

CHAPTER III

METHOD

Subjects

Participants in the study included 15 geriatric individuals living in one of three nursing homes located in Paris, Casey, and Mattoon Illinois. Ages of the participants ranged from 65 to 90 with the mean age of 80 and a standard deviation of 6.928. Ten of the subjects were female, while five were male. All participants were Caucasian and were being seen for occupational therapy services as requested by their physician.

Procedure

Participants were given an occupational therapy evaluation to determine the need for occupational therapy services or, if they were already being seen by an occupational therapist, measures were taken of their current status. Based upon need, each participant was put on a rehabilitation program to address areas of dysfunction. Therefore, each subject's goals and plans of treatment were individualized. Trained rehabilitation aides provided treatment three to five times weekly.

During the evaluation of each person's functional status, measurements were taken of those areas being

treated such as range of motion, strength, complaints of pain, amount of edema, ability to perform self ranging, endurance, and fine or gross motor abilities.

Goals were set to improve dysfunctional areas and reviewed with each patient and the rehabilitation aide responsible for implementing the treatment program. When goals were remeasured to determine current status, i.e. gains, losses, or no change, the results were discussed with the participants.

Types of treatments consisted of active range of motion, passive range of motion, strengthening of the upper extremities, strengthening grasp, retrograde massage, applying splints, fine motor tasks, gross motor tasks, and working on increasing independence in activities of daily living. The goals set for each subject were stated in measureable terms.

Each participant was given a self-esteem scale, revised from the Tennessee Self Concept Scale. Questions were selected from the Tennessee Self Concept Scale which could pertain to the older population and could be answered in a true or false manner. All questions selected related to the individual's self in positive or negative terms. Subjects were asked if they would answer 26 true or false questions about themselves as honestly as possible. If the subject

asked what the reader felt was the best answer, the participant was told to give his or her own best answer. Questions were read to each participant and repeated as requested. Each evaluation was administered twice, with four weeks between the pre and post measurements. Instruments

Self-Esteem Scale

The self-esteem scale consisted of 26 questions taken from the Tennessee Self Concept Scale which could be answered with a true or false statement. An affirmative answer to sixteen of the questions indicated a positive self-esteem while a negative answer to the other 10 questions also reflected a positive self-esteem. The scale could be completed in less than 8 minutes. The scale with the scoring key is presented in the appendix.

Occupational Therapy Measures

The following tools were used to measure each subject's status as necessary: goniometer, finger goniometer, gripper, weights, a timer, and self report.

Hypothesis

As geriatric individuals improve their physical status, through meeting their goals in occupational therapy, self-esteem will also improve.

Data Collection and Analysis

Data were collected on each subject twice, at four week intervals. All of the subjects were evaluated in regard to their status for which treatment was being given. Each subject willingly participated in all of the measures.

The self-esteem scale was scored by giving one point to each answer that indicated high self-esteem. This could be either a true or false answer depending on the question.

The goals were rated on a five point scale in the following manner:

5: Much improvement. More than 5 degrees increase in range of motion, able to tolerate the same number of repetitions with a weight of a 1/2 pound or more, grip strength improved by more than 2 kilograms, edema eliminated, pain eliminated or decreased greatly, improved functional status e.g. able to dress independently, rate of manipulation for fine motor objects increased by 10 seconds or more, propreoceptive skills improved by correctly touching target either 1/2 inch closer, or 50% increase in correct attempts from previous measurement.

4: Moderate improvement. 1 to 5 degrees improved range of motion, tolerating 1 to 2 more repetitions in current weight exercises, reported less pain at times,

grip strength improved up to 2 kilograms, increased rate of manipulation of fine motor objects from 1 to 9 seconds, propreoceptive skills improved by up to 1/2 inch or up to 49% increase in correct attempts.

3: No change.

2: Moderate decrease: 1 to 5 degrees loss in range of motion, able to tolerate current weight but 1 to 2 less repetitions, reported increase in pain, grip strength weaker by 2 or less kilograms, decrease in rate of manipulation of fine motor objects from 1 to 9 seconds, propreoceptive skills decreased by missing target by up to 1/2 an inch more or missing target by up to 49% more.

1: Much decrease. More than 5 degrees loss in range of motion, not able to tolerate any repetitions with previous weight tolerance, grip strength weaker by more than 2 kilograms, edema increased, pain increased greatly, decrease in functional status e.g. not able to wash face when previously able, decreased rate of manipulation for fine motor objects by 10 seconds or more, propreoceptive skills off more than 1/2 inch or missing target by 50% or more than previously measured.

Scores for each participant's goals were averaged by summing the scores described above and divided by the number of goals that the subject had been given.

Limitations

The number of subjects in this study is small. The number of residents requiring occupational therapy limited the size of the available subject pool.

The researcher had relatively little control over the activities of each subject while not participating in the rehabilitation program. Therefore, a subject could have been doing things which could either benefit or prove detrimental to the rehabilitation program.

The rehabilitation aides at each nursing home were responsible for implementing the treatments set up by the occupational therapist. Each varied in his or her abilities, knowledge of rehabilitation skills, and dedication to following the treatment regimen set up to meet the predetermined goals.

The self-esteem scale, although revised from the Tennessee Self Concept Scale, has not been standardized on this or any population and therefore may not be a valid measure of self-esteem.

The length of treatment time for the study may have been insufficient for subjects to show enough change in status to allow them to recognize improvement in functional ability and hence feel better about themselves. Most patients measure improvement in functional terms, such as regaining the ability to hold

a spoon or make a sandwich, and not so much by a few degrees improvement in range of motion.

CHAPTER IV

RESULTS

The findings of the study

This investigation found neither a significant improvement in self-esteem nor a significant improvement in motor functioning. When patients were grouped into high and low rehabilitation achievement and gender, there were no significant differences in self-esteem.

The assessment performance following the four week rehabilitation program was based on the achievement of pre-treatment goals set by the occupational therapist. The scale went from the value of 1 which indicated substantial loss of function through 3 indicating a lack of progress to a value of 5 which indicated substantial improvement. When the obtained mean score of 1.533 was compared to the value of 3, which represented a lack of progress, there was a highly significant lack of progress, t (14) = -11.7, p .001. That is, this investigation not only failed to find progress but actually found a significant deterioration in the subjects physical status.

The expected improvement in self-esteem was not found for the geriatic patients from pre to post treatment t(14) = .53, p = .604. Though the measures

of self-esteem appear to be consistant over the pre and post rehabilitation testing, $r(N=15) = .7912$, p .001. The overall mean score for all the subjects on the self-esteem scales was 20.467 out of a possible 26.

To determine if patients who made the most progress in therapy may have improved self-esteem, a comparison was made by splitting the patients at the median amount of improvement toward therapeutic goals. A separate groups comparison on the pre-treatment self-esteem failed to find any pre-rehabilitation difference in self-esteem, $t(13) = .96$, $p = .353$. Furthermore, the post-test comparison also failed to show a difference in self-esteem, $t(13) = 1.24$, $p = .238$. This lack of difference in self-esteem between high and low levels of achievement is supported by the nonsignificant, and suprisingly negative correlation, between achievement and self-esteem measures; pre self-esteem measures, $r(15) = -.2581$, $p = .176$, post self-esteem measures, $r(15) = -.3247$, $p = .118$.

When the male patients were compared to the female patients there were no differences in achievement of goals $t(13) = -.69$, $p = .500$, pre-rehabilitation self-esteem, $t(13) = -.05$, $p = .959$, nor post-rehabilitation, $t(13) = -.49$, $p = .635$. However, female patients were significantly more homogeneous

than male patients on the pre-rehabilitation self-esteem measures, F Max$(1,13) = 6.37$, $p = .021$, but not after treatment, F Max$(1,13) = 2.45$, $p = .24$.

CHAPTER V

SUMMARY, CONCLUSIONS, AND RECOMMENDATIONS

Discussion and conclusion

As a result of this study, the hypothesis that as goals are met in occupational therapy, among the geriatric population, self-esteem will improve, remains untested because subjects significantly deteriorated in physical status. There was actually a negative, though nonsignificant, correlation between meeting rehabilitation goals and self-esteem.

The moderately high test-retest reliability coefficient for self-esteem is consistent with the contention that self-esteem is stable after the age thirty (Costa et al., 1986). On the other hand, there is little to support the view held by Brissett (1972), Hunter et al., (1982), and Trombley (1983) that certain factors such as perceptions of productivity and rehabilitation can assist an individual in improving self-esteem. The proposition that improvements in physical status lead to gain in self-esteem waits further research since improvement must be demonstrated prior to assessment of gain in self-esteem.

Limitations

Only a small number of subjects were available to the researcher at the time of this study. The study

was restricted to a four week time period which limited the amount of progress one could achieve in rehabilitation. This short amount of time and lack of improvement, made it difficult for the subjects to detect any change during rehabilitation.

Approximately six of the patients were excluded from the study because of an apparent inability to answer the self-esteem question. Maybe more stringent screening for understanding verbal instructions should be applied.

Implications

Although the hypothesis was not tested, the author still believes that self-esteem can improve among the geriatric population as goals are met in rehabilitation. Therapists have routinely noted that patients of all ages who show improvement in motor function, such as being able to pick up a cup of water, report a feeling of self-confidence. However, this study assessed measureable goals, not each subject's perception of improvement.

Suggested further research

It is suggested that further studies test all subjects self-esteem prior to receiving any occupational therapy, and then conduct the study until there are measureable gains. This will increase the

probability that gains will be detected by the patient, thus supporting the hypothesis that improvement in physical status will increase self-esteem.

A control group would strengthen future research because the effect of time passage on the subjects level of motor functioning could then be compared to the subjects receiving rehabilitation.

It would benefit the study to have registered and licensed occupational therapists who could implement the treatments. This would insure a higher quality of treatment and possibly better results. A record of the treatment time the occupational therapist spent with each subject could be further analyzed to adjust for the amount of treatment each subject received.

Screening for each subject's comprehension of verbal instructions could be used to eliminate subjects who are confused. Another design procedure could be to block subjects according to their level of comprehension, therefore the analysis of improvement could consider this grouping factor.

Research that considers personality factors in addition to physical rehabilitation of the elderly will assume greater importance as the proportion of geriatric individuals increases in coming years. With continued research regarding this age group, we may

better understand and treat this population effectively.

Anderson, N. E. (1967). Effects of institutionalization on self-esteem. Journal of Gerontology, 22, 313-317.

Baltes, M. M., & Schmid, U. (1987). Psychological gerontology. German Journal of Psychology, 11, 87-123.

Beadine, R. W. (1983). The educational utility of comprehensive functional assessment in the elderly. Journal of the American Gereatric Society, 11, 651-656.

Bell, B. D. (1974). Cognitive dissonance and the life satisfaction of older adults. Journal of Gerontology, 29, 564-571.

Birren, J. E., & Renner, V. J. (1977). Research on the psychology of aging: principles and experimentation. In J. E. Birren & K. W. Schaie (eds.). Handbook of the psychology of aging (3-38). New York: Van Nostrand Reinhold Company.

Brissett, D. (1972). Toward a clarification of self-esteem. Psychiatry, 35, 255-263.

Bullena, G. L. & Powers, E. A. (1978). Denial of aging: Age identification and reference group orientations. Journal of Gerontology, 33, 748-754.

Busse, E. W. (1954). The treatment of hypochondriasis. Tri-State Medical Journal, 2, 7.

Butler, R. N. & Lewis, M. I. (1982). Aging and Mental Health: Positive Psychosocial and Biomedical Approaches. St. Louis: C. V. Mosby

Butler, R. N., & Lewis, M. I. (1977). Aging and mental health (2nd ed.). St. Louis: The C. V. Mosby Company.

Cavan, R. S., Burgess, E., Havighurst, R. J., & Goldhamer, H. (1949). Personal adjustment in old age. Chicago: Science Research Associates.

Costa, P. T. & McCrae, R. R. (1974). Personality stability and its implications for clinical psychology. Clinical Psychology Review, 6, 407-423.

Costello, E. J. (1982). Locus of control and depression in students and psychiatric out-patients. Journal of Clinical Psychology, 38, 340.

Crandall, R. (1973). The measurement of self-esteem and related constructs. Measures of Psychological Attitudes.

Dibner, A. S. (1975). The psychology of normal aging. In M. G. Spencer & C. J. Dorr (eds). Understanding aging: A multidisciplinary approach. New York: Appleton-Century-Crofts.

Elberlik, K. (1980). Organ loss, grieving and itching. American Journal of Psychotherapy, 24(4), 523-533.

Erdman, P., & Kivett, V. (1977). Changes in life satisfaction: A longitudinal study of persons aged 46-70. Journal of Gerontology, 32, 311-316.

Evans, R. G. (1981). The relationship of two measures of perceived control to depression. Journal of Personality Assessment, 45, 66-70.

Feldman, D. J. (1974). Chronic disabling illness: A holistic view. Journal of Chronic Disease, 27, 287-291.

Fisk, A. A. (1983). Comprehensive health care for the elderly. Jouranl of the American Medical Association, 249, 230-236.

Foelker, G. A., Shewchuk, R. M., & Niederehe, G. (1987). Confirmatory factor analysis of the short form Beck Depression Inventory in elderly community samples. Journal of Clinical Psychology, 43, 111-118.

Frank, J. D. (1958). The therapeutic use of self. American Journal of Occupational Therapy, 4, 215-230.

Frank, J. (1974). Persuasion and healing: A comparative study of psychotherapy. New York: Stockton Books.

Garber, L. B. (1984). Structural dimensions in aged self-concept: A Tennessee Self-Concept study.

British Journal of Psychology, 75, 207-212.

Garner, H. H. (1977). Somatopsychic concepts. In Marinelli, R. P., & Dell Orto, A. E., (eds.). The psychological and social impact of physical disability, New York: Springer Publishing Co., Inc.

Goodenough, G. K., & Lutz, L. J. (1987). Loss of function in the frail elderly. Geriatrics Assessment, 82, 75-85.

Hamilton, M. (1967). Development of a rating scale for primary depressive illness. British Journal of Social and Clinical Psychiatry, 6, 278.

Havens, B. J. (1968). An investigation of activity patterns and adjustment in an aging population. Gerontologist, 8, 201-206.

Hayslip, B. (1984-85). Idiographic assessment of the self in the aged: A case for the use of the Q-sort. International Journal of Aging and Human Development, 14, 9-12.

Hickley, T., Dean, K., & Holstein, B. E. (1986). Emerging trends in gerontology and geriatric implications for the self-care of the elderly. Social Science Medicine, 23, 1363-1369.

Hunter, K. I., Linn, M. W., & Harris, R. (1982). Characteristics of high and low self-esteem in the elderly. International Journal of Aging and Human

Development, 14, 117.

Kahana, E., & Coe, R. M. (1969). Dimensions of conformity: a multidisciplinary view. Journal of Gerontology, 24, 76-81.

Kane, R. L., Solomon, D. H., & Keelder, E. (1981). Geriatrics in the U.S.: Manpower projections and training considerations. Lexington, MA.: Lexington Books.

Kutner, B. (1977). Milieu therapy. In Marinelli, R. P., & Dell Orto, A. E. (eds.). The psychological and social impact of physical disability, New York: Springer Publishing Co., Inc.

Kuypers, J. A. (1971). Internal-external locus of control and ego functioning correlates in the elderly. Gerontologist, 12, 168-173.

Lawton, M. P. (1977). What are we measuring? in measuring morale: A guide to effective assessment. Washington, D. C.: Gerontological Society.

Lefcourt, H. M. (1973). The function of the illusions of control and freedom. American Psychologist, 28, 417-425.

Lefcourt, H. M. (1976). Locus of control: Current trends in theory and research. Hillsdale, NJ: Lawrence Erlbaum.

Lieberman, M. A. & Lakin, M. (1963). On becoming an

institutionalized aged person. In R. H. Williams, C. Tibbitts & W. Donahue (eds.). Process of aging: social and psychological perspectives, New York: Atherton Press.

Linn, M. W. (1976). Studies in rating the physical, mental, and social dysfunction of the chronically ill aged. Medical Care, xiv, 119-125.

Linn, M. W., & Linn, B. S. (1984). Self-evaluation of life function (self) scale: A short, comprehensive self-report of health for elderly adults. Journal of Gerontology, 39, 603-612.

Lipzin, B. (1987). Mental health and older women. Public Health Reports, 102(4), 34-38.

Maddox, G. (1970). Adaption to retiremant. Gerontologist, 10, 14-18.

Mancini, J. A. (1980-1). Effects of health and income on control orientation and life satisfaction among aged public housing residents. International Journal of Aging and Human Development, 12, 215.

Mason, E. P. (1954). Some correlates of self-adjustments of the aged. Unpublished PhD Thesis, Washington University, St. Lewis.

McCrae, R. R., & Costa, P. T. (1988). Age, personality, and the spontaneous self-concept. The Journal of Gerontology: Social Sciences, 43, 177-

185.

Morganti, J. B., Nehrke, M. F., Hulicka, I. M., & Cataldo, J. F. (1988). Life-span differences in life satisfaction, self-concept, and locus of control. International Journal of Aging and Human Development, 26, 45-56.

Neugarten, B. L. (1964). Personality in middle and late life: Empirical studies. New York: Atherton.

Neugarten, B. L. (1972). Personality and the aging process. Gerontologist, 12, 9-15.

Newman, D. M. (1987). Taking charge: A personal responsibility. Public Health Reports, 102(4), 74-76.

Pedretti, L. W. (1981). Occupational Therapy: Practice skills for physical dysfunction. St. Louis: The C. V. Mosby Company.

Perri, S., & Templer, D. I. (1985). The effects of an aerobic exercise program on psychological variables in older adults. International Journal of Aging and Human Development, 20, 167-172.

Phillips, W. M. (1980). Purpose in life, depression, and locus of control. Journal of Clinical Psychology, 36, 661.

Pollack, M., Karp, E., Kahn, R. L., & Goldfarb, A. I. (1962). Perceptions of self in institutionalized

aged. Journal of Gerontology, 17, 405-408.

Puglisi, J. T. (1983). Self-perceived age changes in sex role self concept. International Journal of Aging and Human Development, 16, 183-191.

Quigley, J. L. (1976). Understanding depression-helping with grief. Rehabilitation Gazette, 30(10), 290-296.

Reid, D. W., Haas, G., & Hawkings, D. (1977). Locus of desired control and positive self-concept of the elderly. Journal of Gerontology, 32, 441-450.

Rubenstein, D. I. (1971). An examination of social participation found among a national sample of black and white elderly. International Journal of Aging and Human Development, 2, 172-188.

Safilios-Rothschild, C. (1970). The sociology and social psychology of disability and rehabilitation. New York: Random House.

Savage, R. D., Gaber, L. B., Britton, P. G., Bolton, N., & Cooper, A. (1977). Personality and adjustment in the aged. New York: Academic Press.

Seligman, M. E. P. (1975). Helplessness. San Francisco: Freeman.

Seligman, M. E. P. (1978). Comment and integration. Journal of Abnormal Psychology, 87, 165-179.

Sherman, E. (1985). Social reconstruction variables

and the morale of the aged. International Journal of Aging and Human Development, 20, 133-144.

Shontz, F. (1977). Physical disability and personality. In Marinelli, R. P., & Dell Orto, A. E. (eds.). The psychological and social impact of physical disability. New York: Springer Publishing Co., Inc.

Siller, J. (1969). Psychological situation of the disabiled with spinal cord injuries. Rehabilitation Literature, 30, 290-296.

Simon, J. I. (1971). Emotional aspects of physical disability. American Journal of Occupational Therapy, 15, 408-410.

Spreitzer, E., & Synder, E. E. (1974). Correlates of life satisfaction among the aged. Journal of Gerontology, 29, 454-458.

Tibbitts, C. (1963). Economics, Health, and Retirement. In R. H. Williams, C. Tibbits & W. Donahue (eds.). Process of Aging: Social and Psychological Perspectives. New York: Atherton Press.

Tobin, S. S., & Neugarten, B. L. (1961). Life satisfaction and social interaction in aging. Journal of Gerontology, 16, 344-346.

Trombly, C. A. (1983). Occupational therapy in

physical dysfunction (2nd ed.). Baltimore: Williams & Wilkins.

Versluys, H. (1977). Psychological adjustment to physical disability. In Trombly, C. A., & Scott, A. D., Occupational theapy for physical dysfunction. Baltimore: The Williams & Walkins Co.

Weiss, I. K., Nagel, C. L., & Aronson, M. K. (1986). Applicability of depression scale to the old person. Journal of the American Gereatric Society, 34, 215-218.

Zung, W. W. K. (1967). Depression in the normal aged. Psychosomatics, 8, 287-292.

Zusman, J. (1966). Some explainations of the changing appearance of psychotic patients: antecedents of the social breakdown syndrome concept. The Millbank Memorial Fund Quarterly, 64, 366-394.

APPENDIX

KEYED SELF-ESTEEM ASSESSMENT

	ITEM	KEY
1.	I am an attractive person	(T)
2.	I am a cheerful person	(T)
3.	I am a nobody	(F)
4.	I am a hateful person	(F)
5.	I am mad at the whole world	(F)
6.	I am hard to be friendly with	(F)
7.	I would like to change some parts of my body	(F)
8.	I am satisfied with my moral behavior	(T)
9.	I am satisfied to be just what I am	(T)
10.	I am as nice as I should be	(T)
11.	I despise myself	(F)
12.	I try to please others but I don't overdo it	(T)
13.	I am no good at all from a social standpoint	(F)
14.	I am not the person I would like to be	(F)
15.	I wish I didn't give up as easily as I do	(F)
16.	I am satisfied with the way I treat other people	(T)
17.	I take good care of myself physically	(T)
18.	I try to be careful about my appearance	(T)
19.	I try to change when I know I'm doing things that are wrong	(T)
20.	I try to understand the other fellow's point of view	(T)
21.	I get along well with other people	(T)

22. I do not forgive others easily.....(F)

23. I feel good most of the time.....(T)

24. I do what is right most of the time.....(T)

25. I solve my problems quite easily.....(T)

26. I see good points in all the people I meet.....(T)