LOCUS OF CONTROL AND DEPRESSION AMONG OLDER PERSONS

A THESIS

SUBMITTED IN PARTIAL FULFILLMENT OF THE REQUIREMENTS

FOR THE DEGREE OF MASTER OF SCIENCE

IN THE GRADUATE SCHOOL OF THE

TEXAS WOMAN'S UNIVERSITY

COLLEGE OF NURSING

BY

KAREN GRANTHAM SCOGGINS, B.S.N.

DENTON, TEXAS

DECEMBER 1981

The Graduate School

Texas Woman's University

Denton, Texas

September 24, 1981

We hereby recommend that the THESIS prepared under our supervision by KAREN GRANTHAM SCOGGINS entitled LOCUS OF CONTROL AND DEPRESSION AMONG OLDER PERSONS

be accepted as fulfilling this part of the requirements for the Degree of MASTER OF SCIENCE.

Dissertation/Theses signature page is here.

To protect individuals we have covered their signatures.

ACKNOWLEDGEMENTS

The author expresses her appreciation to the members of the thesis committee: Shirley Ziegler, Ph.D., chairperson, for her guidance and encouragement; Beth Vaughan-Wrobel, Ed.D., and Jane Dawson, M.S., for their interest and assistance.

It is with love that I acknowledge my husband, Bill; sons, Robert and Michael; and my parents, Mr. and Mrs. Roy Grantham, for their encouragement and understanding throughout this time of personal and professional growth.

TABLE OF CONTENTS

LIST OF TABLES

LIST OF FIGURES

CHAPTER 1

INTRODUCTION

Depression is believed to be a common health problem of society and may be an even greater problem for the older population than is currently realized. As a part of aging, the older person may experience many life events which appear to be controlled by sources other than the individual. Forced retirement, fixed incomes, illness, and death are only a few of the life events that tend to be associated with the older population group. These and other life situations are thought to contribute to the incidence of depression in the older population.

Although the life span of individuals has been increasing, the adaptation to life changes of older persons during the later years has been largely ignored. Nursing, for example, has provided little support for the older person in his efforts to adapt to life changes in health and social relationships. Knowledgeable nursing intervention to support and encourage the older person in adapting to his/her life situation may

contribute to the prevention of depression and improve the quality of life for the aged.

In caring for the aged, nurses are concerned with helping the older person to adapt to changes in his environment. The lack of personal control over life situations is believed to add to the despair and frustration of older persons trying to adapt to life change. Failure to maintain a belief in personal control of life situations may be associated with depression in the aged.

As the older population continues to increase, the incidence of depression may be expected to become greater. Nurses should be concerned with the prevention as well as the treatment of depression. If the level of personal control regarding the individual's life situation can be associated with the level of depression in the older person; then, nursing intervention to support the older person's efforts to adapt to life change may be beneficial in the prevention as well as the treatment of depression in the aged.

Statement of Problem

The problem for this study was to determine the relationship between the level of self-reported depression

and the level of perceived locus of control of life situations among noninstitutionalized persons 60 years of age and older.

Justification of Problem

With people living longer, the birthrate decreasing, and a zero population growth a near reality, the United States is becoming more and more a society of older people (Fassler & Gaviria, 1978). Depression, in all forms was purported to be the most common mental disorder affecting persons between 65 and 75 years of age (Charatan, 1976). Busse and Pfeiffer (1973) cited that 10% to 65% of the population above 65 years of age suffer from symptoms of depression. As presented in the proceedings of the United States Congress (1976), data have indicated that there is a need for specially qualified health care persons and more mental health services to meet the needs of the increasing older population. Nurses having specific knowledge of depression of older persons can more effectively meet their health needs.

Early diagnosis and treatment of depression in the aged has been urged because this condition has been associated with suicide (Litman & Wold, 1974). In those

patients receiving a diagnosis of depression, the rate of suicide was found to be twice as high for the 55 or older age group than for younger age groups (Gardner, Bahn, & Mack, 1965). The seriousness of depression in the older population has been shown by statistics which have indicated that 25% of all suicides in the United States occur in persons over age 65 years (Fassler & Gaviria, 1978). In a study of suicide, Rachlis (1970), in a sample of white males aged 63 to 69, found the proportion of accomplished suicides to that of attempted suicides over 3 times that for the entire population. By understanding the factors associated with depression in the elderly, nurses can be more effective in the diagnosis and treatment of depression.

Depression has been associated with control orientation by Seligman (1975) in the learned helplessness theory of depression. The learned helplessness theory of depression suggested that the inability to control events in life such as loss of a loved one and physical disease, and failure to act either to relieve suffering or to gain gratification leads to depression. The relationship between belief in external and internal control orientation and depression is not clearly understood

and has not been researched adequately in the older population. By understanding the relationship between perceived locus of control of life situations and depression, nurses may be able to identify specific directions or activities for preventive treatment.

Theoretical Framework

The theoretical framework for this study was Rotter's (1966) social learning theory and Seligman's (1975) learned helplessness theory of depression. These two theories were selected as a basis for this study because of their similar emphasis on the construct of control as an important personality variable. The learned helplessness theory of depression postulated that the affective, cognitive, and behavioral components of depression are consequences of the depressive learning that outcomes (i.e., rewards and punishments) are uncontrollable (Seligman, 1975). Seligman (1975) claimed that when individuals learn that there is no contingency between responses and outcomes, they not only refrain from emitting adaptive responses, but also evidence salient cognitive affective features of depression.

The term learned helplessness has been used to describe several behaviors. In laboratory studies involving exposure to uncontrollable situations, learned helplessness was used to refer to interferences in subsequent learning, motivational and cognitive deficits, and expectations that events are noncontingent on responses (Buchwald, Coyne, & Cole, 1978).

In a reformulation of Seligman's (1975) learned helplessness theory of depression, the following flow of events leading to symptoms of helplessness and depression were described:

> First the person perceives that all of his acts are noncontingently related to the desired outcome. The person then makes an attribution of control for the perceived noncontingency between his acts and the outcome. The attribution of control which had been made leads to an expectancy of noncontingency between future acts of the individual and the outcome. Finally, the symptoms of helplessness are a consequence of the person's expectancy that his future responses will be futile in obtaining the desired outcome. (Abramson, Seligman, & Teasdale, 1978, p. 52)

Abramson, Seligman, and Teasdale (1978) explained the phenomena of depression in the following statements:

> 1. Depression consists of four classes of deficits: motivational, cognitive, self-esteem, and effective.

> 2. When highly desired outcomes are believed improbable or highly aversive outcomes are believed probable, and the individual expects that no response in his repertoire will change their likelihood, (helplessness) depression results.
> 3. The generality of the depressive deficits will depend on the globality of the attribution for helplessness, the chronicity of the depression deficits will depend on the stability of the attribution for helplessness, and whether self-esteem is lowered will depend on the internality of the attribution for helplessness.
> 4. The intensity of the deficits depends on the strength, or certainty, of the expectation of uncontrollability and, in the case of the effective and self-esteem deficits, on the importance of the outcome. (p. 68)

The attribution of control by the individual in life situations has been described using a "self-other" dichotomy as the criterion of internality which allows four possible belief states.

> 1. The person expects the outcome is contingent on a response in the repertoire of a relevant other.
> 2. The person expects the outcome is not contingent on a response in the repertoire of any relevant other.
> 3. The person expects the outcome is contingent on a response in his repertoire.
> 4. The person expects the outcome is not contingent on any response in his repertoire. (Abramson, Seligman, & Teasdale, 1978, pp. 52-53)

The learned helplessness hypothesis that a depressed person has a generalized expectancy that events are independent of his responses is thought to be similar to

the social learning theories of control of reinforcement formulated by Heider (1958) and Rotter (1966). Heider (1958) made a basic distinction between factors within the person and factors within the environment as perceived determinants of outcomes. Rotter (1966) described internal-external locus of control of reinforcement as:

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

In a review of the construct locus of control, Lefcourt (1966) cited that generally,

> internal control refers to the perception of positive and/or negative events as being a consequence of one's own actions and thereby under personal control; external control refers to the perception of positive and/or negative events as being unrelated to one's own behaviors in certain situations and therefore beyond personal control. (p. 207)

Assumptions

For the purposes of this study, the following assumption was identified: Self-reported depression and perceived locus of control of life situations of older persons can be measured by a paper and pencil test.

Hypothesis

The null hypothesis of this study was as follows:

There is no significant relationship between the level of self-reported depression and the level of perceived locus of control of life situations among noninstitutionalized persons 60 years of age and older.

Definition of Terms

For the purposes of this study, the following terms were defined:

1. Level of self-reported depression--the score obtained on the Zung Self-rating Depression Scale (ZSDS) (Zung, 1965).

2. Level of perceived locus of control--the score obtained on the Geriatric Adult Nowicki-Strickland

Internal-External Locus of Control Scale (GANSIE) (Duke, Shaheen, & Nowicki, 1974).

3. Noninstitutionalized persons--those male or female persons living in their own homes, not requiring institutionalization to provide for their physical, social, and emotional needs.

Limitations

This study had the following limitations:

1. The sample was small in number.

2. Subjects were not randomly selected.

3. Reliability and validity of the Geriatric Adult Nowicki-Strickland Internal-External Locus of Control Scale have not been established.

Summary

Seligman (1975) described depression as being caused by a belief that one's actions are futile and have little influence over the outcome of life situations. Similarly, Rotter (1966) described two dimensions of control, internal and external, which reflect the individual's perception of the extent to which reinforcement is contingent upon one's behavior. This study was conducted to determine the relationship between

the level of self-reported depression and the level of perceived locus of control of life situations among noninstitutionalized persons 60 years of age and older. By assessing the level of perceived locus of control of life situations, and the level of depression in the aged, nurses and other health care providers may be able to more effectively prevent as well as treat depression.

CHAPTER 2

REVIEW OF LITERATURE

There is a constant interaction between every human being and the environment (Flach, 1974). The majority of individuals are learning to cope with their life situations, adapting to changes and surviving more or less emotionally intact to crisis and unpleasant situations (Serban, 1975). Unfortunately, there are some individuals who are not able to adapt to life situations (Serban, 1975). Seligman (1974) suggested that the interference in adaptive responses of individuals to life situations is related to their belief that they do not have control over their situation.

The review of literature discusses the clinical characteristics of depression as defined for this study, and the research concerning the relationship between locus of control and depression. The clinical characteristics of depression included those symptoms common to learned helplessness and depression, and those symptoms used to evaluate the affective, physiological, psychomotor, and psychological disturbances of depression used

in this study. The research concerning locus of control and depression has been limited to studies which specifically relate to locus of control to depression.

Clinical Characteristics of Depression

Depue and Monroe (1978) described learned helplessness as a model of naturally occurring (reactive) depression in man. Woodruff (1975) described the older person as being particularly predisposed toward depression due to changes in environmental factors of significant losses in income, physical health, loved ones, and employment. More recently, Blumenthal (1971) described depressive states as being best visualized as common final pathways reached through an overlapping chain of sequences starting from the psychic event. Rumbaut (1975) referred to clinical depression as the emotional reaction of the individual to an accumulation of negative and rather precipitous life events. The occurrence of depression may be associated with the life situation of the person.

Seligman (1975) postulated the existence of a subclass of helplessness depression and argued that the major symptoms of learned helplessness all have parallels in the symptoms of depression. Seligman (1975) cited the

following common characteristics of learned helplessness and depression.

1. Passivity
2. Difficulty learning that responses produce relief from stressful situations
3. Dissipates with time
4. Anorexia, weight loss
5. Social and sexual deficits. (p. 106)

In an analysis of depression, Zung (1967a) found that the term depression had been used to describe an affect, symptom, and a psychiatric disorder. Based on a number of factor analytic studies of depression and matching for commonly found characteristics, Zung (1967a) described the symptoms of depression in older persons in the categories of pervasive affect, physiological disturbances. The pervasive affective symptoms included depressed, sad and blue, and crying spells (Zung, 1967a). Symptoms of physiological disturbances includes diurnal variation, decreased sleep with early or frequent waking, decreased appetite, weight loss, decreased libido, constipation, tachycardia, and fatigue (Zung, 1967a). The symptoms of psychomotor activities included agitation and retardation (Zung, 1967a). The symptoms of psychological disturbances included confusion, emptiness, hopelessness, indecisiveness, irritability, dissatisfaction, personal devaluation, and suicidal rumination (Zung, 1967a).

The symptoms of depression cited by Zung (1967a) were used as a basis for the Zung Self-rating Depression Scale (ZSDS) used to measure depression in this study. The amount of depressive symptomatology present in normal subjects (n = 169) 65 years of age and older was evaluated by Zung (1967a) using the ZSDS. The study contained two populations. The first group was members of a Methodist Retirement Home (n = 100) with a reasonable ability to care for oneself. The second group (n = 69) was members of a Golden Age Club which was sponsored by a city recreation department. These subjects lived independently in the community. The findings on the Methodist Retirement Home group indicated a range from 20 to 64 with a ZSDS mean raw score* of 39.2 with a standard deviation of 9.36. The Golden Age Club group ZSDS raw scores ranged from 24 to 53.2 with a mean of 37.8 and a standard deviation of 6.6. Although a t-test showed no significant difference between the groups, the Methodist Retirement Home ZSDS mean

---

Note. Other authors have utilized the ZSDS index to normalize the results between 25 and 100. When such authors are referenced in this study, their ZSDS index scores have been converted back to the raw score value so the data can be easily compared with the findings of the present study.

raw score was higher than the Golden Age Club ZSDS mean raw score. The combined ZSDS mean raw score (n = 169) was 38.6 with a standard deviation equaling 8.4. Rank order of the mean responses showed that the subjects rated themselves as worst on predominantly physiological disturbances such as decreased libido, decreased appetite, and the presence of diurnal variation, and least on those items which measured mood disturbances. Factor analysis of the results indicated a primary factor which represented loss of self-esteem. The important factor saturations in descending order were: personal devaluation, emptiness, indecisiveness, dissatisfaction, hopelessness, psychomotor retardation, suicidal rumination, and confusion.

Flach (1974) described the characteristic signs of depression to include a lowering in spirits, difficulty in sleeping, a loss of self-esteem, and a loss of perspective. Other changes associated with depression included fatigue, a loss of energy, a desire to avoid being with people, lowered sexual desire and ability, poor appetite and weight loss, hypersensitivity, fearfulness and irritability, and physical complaints without any diagnosable basis.

Goldfarb (1967) described the phenomena of masked depression in the old to include common misconceptions, common personal patterns, illnesses or impairments, and feelings of sadness. Common misconceptions which mask depression from the sufferer and those around him/her include beliefs that decline in energy, listlessness, and easy fatigability are the rule with chronologic aging, and that anorexia, constipation, and insomnia (including early waking) are normal for old age. Common personal patterns which mask depression in the elderly are tendencies to complain about, find fault with, or provoke a spouse, sibling, or child. Illness or impairments which commonly mask depression are pre-existing mental disorder such as schizophrenia or compulsive neurosis, arthritis or neuromuscular disease, endocrine disorder, malignancy, nephritis, and any debilitating disorder which leads to repeated hospitalization and is threatening to life. Feelings of sadness or depression may be expressed only as feelings of emptiness, as an envy of others, or as preoccupation with not feeling well.

In the older age groups the depressed subject may not admit to the symptom of depression itself, but rather to the accompanying anxiety, somatic or hypochondriacal symptoms, or to loss of concentration and difficulty with memory (Gurland, 1976). Salzman and Schader (1978) described depression in the elderly as being accompanied by decreased ability to sleep. Probably the largest proportion of depressed older persons will present with multiple somatic symptoms which often include insomnia, generalized weakness and fatigue, and gastrointestinal symptoms of anorexia, constipation, and weight loss (Rosenthal, 1968). Birren and Warner (1977) described a variant of the basic depression reaction called a "depressive equivalent."

The typical patient manifesting a "depressive equivalent" is a man or woman in late life who complains of severe pain, most commonly a backache, a headache, or a neckache which has been present for weeks or months and appears to be depressed. Such patients generally deny adverse circumstances, losses, and feelings of sadness or depression although they may share with other depressed patients the basic physical signs of depression.

Research Relating Locus of Control to Depression

The research relating locus of control to depression has been organized using the sequence of events which has been described as leading to a belief in external control (learned helplessness) and depression. The sequence of events leading to a belief in external control is that the individual: (a) perceives that his acts are noncontingently related to the desired outcomes, (b) makes an attribution of control (internal or external), and then (c) makes an expectancy of noncontingency between future acts and outcomes (Abramson, Seligman, & Teasdale, 1978). The consequences of learned helplessness (an expectancy that future responses will be futile in obtaining valued and desirable outcomes) include four classes of deficits: cognitive, motivational, affective, and self-esteem (Abramson, Seligman, & Teasdale, 1978).

The review of research relating locus of control to depression will address the areas of: (a) perception of noncontingency and attribution of control, (b) expectancy of future acts and outcomes, and (c) deficits of learned helplessness and depression. Each area will be presented separately.

Perception of Noncontingency and Attribution of Control

Perception of noncontingency and attribution of control has been described in the two dimensions of internal and external, which reflect the individual's perception of the extent to which reinforcement (outcome) is contingent upon one's behavior (Rotter, 1966; Seligman, 1975). Internally-controlled individuals believe that outcomes result from their behavior or attributes, while externally-controlled individuals believe that outcomes are controlled by forces other than themselves (Rotter, 1966; Seligman, 1975).

Depression has been found to be related to an attribution of external control (Abramowitz, 1969; Calhoun, Cheney, & Dawes, 1974; Lefcourt, 1976). A study to test the relationship between locus of control and depression among older persons was undertaken by Haines and Wild (1977). Using a sample of 48 non-institutionalized persons, 60 to 80 years of age, these authors hypothesized that the depressed elderly subjects would obtain significantly higher locus of control scores (indicating externality) than the nondepressed comparison group. Rotter's (1966) Internal-External

Locus of Control Scale and the ZSDS (Zung, 1965) were administered to each participant. These respondents were classified as depressed (n = 23) or nondepressed (n = 25) on the basis of agency nominations and index scores on the ZSDS. Those elderly persons who were singled out by agency representatives as displaying depressive symptoms and who scored .40 and above on the ZSDS were considered depressed. Mean internal-external scores were 9.28 (SD = 4.95) for the nondepressed elderly subjects and 11.26 (SD = 3.22) for the depressed subjects. The one-tailed t-test yielded a significant difference in the predicted direction between the two groups (t = 1.75, df = 46, $p < .05$). Similarly, Pearson's product-moment correlation of .28 ($p < .05$) indicated a low but significant positive association between external locus of control orientation and depression. The mean locus of control scores of 9.28 (SD = 4.9) are similar to the locus of control mean score for another geriatric group of 9.06 (SD = 3.89) reported by Duke et al. (1974).

Abramowitz (1969), in a sample of 69 university undergraduate students, tested the hypothesis that external control varies positively with depression.

The Spearman rank order correlation coefficient was in the predicted direction with external control varying positively with depression (r = .282, t = 1.79, df = 37, $p < .05$, one-tailed).

Calhoun et al. (1974) in a sample of 81 university undergraduates (37 males and 44 females) studied the relationship between locus of control and depression. The findings indicated that the ZSDS score was significantly related to the Rotter (1966) Internal-External Control Scale score for both males (r = .58, $p < .001$) and females (r = .38, $p < .05$) (Calhoun et al., 1974).

Locus of control of significant life events has been associated with depression. In a study of perceived control and depression, Evans and Dinning (1978) hypothesized that reactive depressives would report greater reductions in perceived control than would chronic schizophrenics, paranoid schizophrenics, and personality disorder patients. The sample consisted of 104 patients admitted to the hospital including 51 males and 53 females. Based on the Rotter (1966) Internal-External Scale and the Beck (1967) Depression Inventory scores, the findings indicated that individuals

who reported a reduction in control over significant life events reported more depression than those who perceived no such loss ($p < .05$).

A number of studies have tested Seligman's (1975) Learned Helplessness Theory of Depression by examining predictions that the symptoms of naturally occurring depression and laboratory induced helplessness (behavior noncontingently related to outcome) are similar. Research conducted by Miller and Seligman (1973), Miller, Seligman, and Kurlander (1975), Klein, Fencil-Morse, and Seligman (1976), and Miller and Seligman (1976) provided support for the similar relationship of symptoms of learned helplessness and depression. In summary, these studies indicated:

1. On skill tasks where outcomes of success or failure were independent of the subjects' responses and controlled by the experimenter, nondepressed subjects showed a greater expectancy change toward controllability of future tasks than depressed subjects. These data support the prediction that in an uncontrollable situation (behavior noncontingently related to outcome) nondepressed subjects will show a greater expectancy change toward controllability than depressed subjects because of their internal control orientation.

2. Depressed subjects perceived reinforcement on skill tasks (perceived internal control situation) as more response independent than nondepressed subjects. These data support the prediction that in an internal control situation, depressed subjects will perceive the situation as more externally controlled than nondepressed subjects because of their external control orientation.

Studies by Abramson, Garber, Edwards, and Seligman (1978), O'Leary, Donovan, Krueger, and Cysewski (1978), Price, Tyron, and Raps (1978), Smolen (1978) and Willis and Blaney (1978) provided little support for the prediction that laboratory induced helplessness and depression are similar. In summary, these investigators indicated:

1. That compared with nondepressed patients, depressed patients will demonstrate psychomotor deficits, provide lower subjective evaluations of their performance, and perceive reinforcement in skill tasks as more response independent.

2. That there was no association between depression and the perception of noncontingency.

3. The perception of noncontingency was not influenced by a helplessness manipulation.

Hiroto (1974) investigated learned helplessness in internally-controlled and externally-controlled subjects. The sample consisted of 96 college students. Under conditions of inescapable noise and escape-avoidance trials, Hiroto found that externally-controlled subjects, regardless of their pretreatments, were slower to escape or avoid than internally-controlled subjects. These results suggested that learned helplessness may develop when an individual does not perceive control over events--even when those events could actually be affected by their behavior.

The relationship between locus of control and adjustment in institutionalized elderly was studied by Felton and Kahama (1974). The sample consisted of 124 residents of 3 homes for the aged. Subjects ranged in age from 55 to 97 with a mean age of 79 years. The respondents were all white and were predominantly female (74.2%). Felton and Kahama hypothesized that locus of control would relate positively to adjustment. The subjects and staff were interviewed regarding nine hypothetical problems of institutionalized living. In four of the eight problems, perceived external locus of control was significantly related to adjsutment. In only

one instance did perception of self as the locus of control relate significantly to better adjustment. Felton and Kahama (1974) concluded that since many aspects of the individuals' lives were controlled externally, the congruence between perception of control and actual control led to better adjustment of externally-oriented individuals.

In a study of depression and distortion in the attribution of causality, Rizley (1978) used the four causal elements of ability, effort, task difficulty, and luck as indicators of internal-external control. Ability and effort were considered indicators of internal control while task difficulty and luck were considered indicators of external control. Depressed subjects rated internal factors (ability and effort) to be more important determinants of failure but less important determinants of success than did nondepressed subjects. Depressed subjects did not view their behavior and consequent events as causally unrelated, nor did they self-attribute any less control over, or causal responsibility for, reinforcement than did nondepressed subjects. These results were interpreted by Rizley as inconsistent with Seligman's (1975) learned helplessness theory of depression.

The status of the perception and attribution of control in depression has not been clearly defined. Some investigations have indicated that there is a relationship between locus of control and depression while others have not supported control orientation as a significant factor in depression.

Expectancy of Future Acts and Outcomes

The strength of certainty of the expectation of uncontrollability between future acts and outcomes and the importance of the outcome are important variables of Seligman's (1975) learned helplessness theory of depression. The expectancy or the hypothesis is defined by the entire pattern of stimulus-information the individual receives and by the individual's response concerning what is experienced (Allport, 1955). Brunner (1951) cited the following covariation formulas of expectancy strength:

> 1. The stronger a hypothesis, the greater its likelihood of arousal in a given situation.
> 2. The greater the strength of a hypothesis, the less the amount of appropriate information nedessary to confirm it.
> 3. The greater the strength of a hypothesis, the more the amount of inappropriate or contradictory information necessary to infirm it. (p. 126)

The strength of an expectancy is related to the stimulus information received by the individual (Allport, 1955). Corah and Boffa (1970) tested the prediction that aversive stimuli would be less arousing under choice instructions than under no-choice instructions. The subjects were given 10 escape and 10 no-escape trials from aversive white noise. One-half of the subjects were given instructions which gave them the choice of escape or no escape, while the other half of the subjects were given no such choice. The findings supported the prediction. Corah and Boffa suggested that a sense of control is a determinant of the cognitive appraisal of threat and a procedure which gives the subject the choice of avoiding or not avoiding the aversive consequences of a stimulus is equivalent to giving him perceived control over the potential threat.

In a study of life stress, depression and anxiety as a function of subject's locus of control orientation, Johnson and Sarason (1978) examined the relationship between indices of life change (aversive stimulation) and measures of depression and anxiety. Based on the assumption that life changes may have

their most adverse effect on individuals who perceive themselves as having little control over environmental events, Johnson and Sarason (1978) predicted that significant correlations between life change and depression and anxiety would be found only with subjects external in their locus of control orientation. The sample consisted of 34 male and 90 female college students. Each subject completed the Life Experiences Survey, the Locus of Control Scale (Rotter, 1966), the State-Trait Anxiety Inventory, and the Beck Depression Scale (Beck, 1967). The findings indicated:

1. Negative change was found to be significantly correlated with measures of both depression and trait anxiety, although these relationships, as predicted, were found only for subjects who were external in their locus of control orientation.

2. No significant relationships between life change scores (positive or negative) and measures of state anxiety were found for either internal or external subjects. Johnson and Sarason (1978) concluded that these results strongly support the hypothesis that locus of control orientation may be a moderator variable in the relationship between negative life change and depression

and anxiety. It was also concluded that the results provided support for the notion that the effects of life stress may be mediated by the degree to which individuals perceive themselves as having personal control over events.

Houston (1972) studied control over stress, locus of control, and response to stress. The sample consisted of 66 college male students. Houston predicted that external-control subjects would be more anxious in both threat-of-shock conditions than internal-control subjects. Contrary to the prediction, findings indicated that internal-control subjects evidenced significantly greater physiological response in stressful situations than did external-control subjects. Houston (1972) offered the following possible explanation for the difference between external-control and internal-control subjects' responses to stress.

> External-control subjects view forces outside themselves as being responsible for their fate and do not become very aroused when faced with threat because they resign themselves to the situation. Internal-control subjects become highly aroused when threatened, but they are reluctant to report anxiety; hence, a significant difference in heart rate change scores. (p. 251)

Smith (1970) examined Rotter's (1966) Internal-External Scale in relation to life crisis (aversive

stimulation) and crisis resolution. The sample consisted of 10 male and 20 female patients who came to a neuropsychiatric emergency room because of acute life crises. Smith (1970) hypothesized that (a) crisis patients overwhelmed by external forces in their lives would initially be more externally oriented on the Internal-External Scale than a similar group of noncrisis outpatients, (b) crisis patients would show a significant shift toward the internal end of the dimension following a 6 week crisis resolution period, and (c) noncrisis patients would show no significant internal-external shift. The results were consistent with the hypothesis.

Expectancy of future acts has been associated with anxiety (Miller et al., 1975; Ray & Katahn, 1968; Watson, 1967). Miller et al. (1975) tested the hypothesis that depressed-anxious subjects should show less change in expectancy following reinforcement in skill than the noncepressed-anxious group. The sample consisted of 68 college students. As predicted, depressed-anxious subjects showed less expectancy change in skill than nondepressed-anxious subjects, while these two groups exhibited similar expectancy change in chance.

Ray and Katahn (1968) studied the relationship of anxiety to locus of control. In order to determine

whether there exists an anxiety factor within the Locus of Control Scale, the Manifest Anxiety Scale, and the Test Anxiety Scale, the scales were administered to two samples of college students (Group 1, $\underline{n}$ = 323; Group 2, $\underline{n}$ = 303). The findings supported the proposition that the anxiety scales and the Locus of Control Scale measure conceptually separate variables which correlate with each other and that this correlation is not due to a hidden anxiety factor within the Locus of Control Scale. Ray and Katahn (1968) concluded that a feeling of lack of control over the environment and the outcome of one's actions are associated with anxiety. These findings were congruent with the previous data reported by Watson (1967) regarding the relationship between locus of control and anxiety.

McNitt and Thornton (1978) cited the perception of reinforcement as an important factor in the individual's formulation of future expectancies. In a study of 40 college-age students, McNitt and Thornton predicted that depressed subjects would misperceive skill task rewards under low-reinforcement but not under high-reinforcement conditions. Changes in verbalized expectancies of success on skill and chance

tasks at either 50% or 75% reinforcement rate were compared for 20 depressed and 20 nondepressed students. Contrary to the prediction, the depressed subjects in no way differed from the nondepressed subjects on the skill task at 50% reinforcement, and they produced larger expectancy changes on the chance task than did nondepressed subjects at 75% reinforcement. McNitt and Thornton (1978) suggested that these results indicated that the depressed person overgeneralizes from any experience of success or failure in forming expectations for future behavior.

Nelson and Craighead (1977) conducted a study of selective recall of positive and negative feedback, self-control behaviors, and depression. The sample consisted of 70 college students. Two sets of hypotheses were tested. The first hypothesis predicted that compared to a sample of nondepressed controls, depressed subjects would underestimate the frequency of reinforcement and overestimate the frequency of punishment received during an ambiguous laboratory task. The second hypothesis predicted that when given the opportunity to self-reinforce or self-punish, the depressed subjects would self-reinforce less often and self-punish

more often than the controls. Three of these predictions were supported. The depressed subjects recalled less positive and more negative feedback than the controls. As expected, these differences were significant only at a high rate of reinforcement and at a low rate of punishment. In the low rate of punishment condition, the depressed subjects were accurate in their recall while nondepressed subjects underestimated the frequency of negative feedback. The depressed subjects self-reinforced less often than the controls, but there were no differences in rates of self-punishment.

The expectancy of success or failure has been evaluated in depressed and nondepressed persons (Abramson, Garber, Edwards, & Seligman, 1978; O'Leary et al., 1978; Sacco & Hokanson, 1978). Sacco and Hokanson (1978) studied the expectancy of success of 48 depressed and nondepressed college students on trials of a perceptual task. The research was carried out in both a public (experimenter present) and a private (experimenter absent) condition. The expectancy of success results revealed that depressed subjects perceived the response-outcome relation of noncontingency

more reliably in the private measurement condition than did nondepressed subjects. These data were in direct conflict with Seligman's (1975) learned helplessness theory of depression. Sacco and Hokanson (1978) concluded that interpersonal mechanisms between subject and experimenter rather than learned helplessness conceptualization accounted for these contradictory data.

Changes in expectancy following reinforcement of success or failure in skill or chance tasks were assessed for depressed nonschizophrenics (unipolar depressives), depressed schizophrenics, nondepressed schizophrenics, and normal controls in a study conducted by Abramson, Garber, Edwards, and Seligman (1978). The sample consisted of 32 hospitalized patients. Findings indicated that (a) the unipolar depressives showed smaller changes in expectancy of future success after failure in the skill task than did the normal controls and both schizophrenic groups, and (b) depressed schizophrenics did not show smaller expectancy changed than nondepressed schizophrenics. Abramson, Garber, Edwards, and Seligman (1978) suggested that these results provided partial support for learned helplessness as a model of one type of severe clinical depression.

O'Leary et al. (1978) evaluated expectancy statements for future success of 62 alcoholic inpatients. Three groups differing in level of depression (low, medium, and high) were composed. These data indicated: (a) a significant main effect for depression ($p < .025$) was found with the high-depression group having a significantly lower overall end expectancy than the low-depression group, (b) correlational analysis indicated no significant relation ($p < .05$) between depression scores and measures derived from the chance task, and (c) a significant relation ($p < .05$) was obtained between level of depression and the initial ($r = -.28$) and end expectancy statements ($r = -.25$) derived from the skill task. O'Leary et al. concluded that the present findings did not support the direct applicability of Seligman's (1975) learned helplessness theory of depression to a population of depressed subjects with other forms of psychopathology.

The symptoms of helplessness are a consequence of the person's expectancy that his future responses will be futile in obtaining valued and desired outcomes (Abramson, Garber, Edwards, & Seligman, 1978). The relationship between locus of control and valued goal

expectations was studied by Strasberg in 1973 (cited in Abramson, Garber, Edwards, & Seligman, 1978). The sample consisted of 55 male and 86 female college students. Each subject completed Rotter's (1966) Internal-External Sclae and a questionnaire designed to measure the subject's expectations of achieving valued goals. The findings indicated that a lower expectation of achievement of valued goals was associated with greater externality.

Rotter and Mulry (1965) tested the hypothesis that internals and externals differed in the value placed on the same reward, depending upon whether it was perceived as contingent upon chance or skill. The sample consisted of 61 female and 59 male college students. The hypothesis was measured using decision time of a difficult matching task. The task was described to one-half of the subjects as skill and to the other half as chance determined. As hypothesized, internals took longer with skill instructions and externals took longer with chance instructions.

In a study of internal versus external control of reinforcement and reaction to frustration, Brissett and Nowicki (1973) predicted and found that internally

controlled individuals report more constructive reaction to frustration in obtaining goals than do externally controlled individuals. Also, Brissett and Nowicki (1973) concluded that externally controlled individuals report more negative outcomes in stories to thematic material than do internally controlled individuals.

Naditch, Gargan, and Michael (1975) studied locus of control, discrepancy between aspirations, and achievements as components of depression. The sample consisted of 547 men in Army basic training. Although the correlations were low, the findings indicated that (a) depression was significantly correlated with locus of control (r = .19, $p < .001$), (b) depression was significantly correlated with discontent (r = .10, $p < .05$), (c) locus of control was significantly correlated with discontent (r = .18, $p < .001$), and (d) regression equations of locus of control and discontent on depression indicated interactive effects between locus of control and discontent.

Deficits on Learned Helplessness and Depression

Abramson, Seligman, and Teasdale (1978) associated cognitive, affective, and self-esteem deficits with learned helplessness and depression. The hypothesis of the learned helplessness theory of depression explained these deficits by stating that:

> subjects expect that outcomes and responses are independent in the test situation. This expectation produces the motivational deficit (failure to escape and failure to solve anagrams) and the cognitive deficit (failure to see patterns) (Abramson, Seligman, & Teasdale, 1978, p. 60)

Abramson, Seligman, and Teasdale (1978) further stated:

> The intensity of the deficits depends on the strength or certainty of the expectation of uncontrollability and, in the case of affective and self-esteem deficits, on the importance of the outcome. (p. 68)

A number of studies on human helplessness and depression has provided evidence of cognitive, affective, motivational, and self-esteem deficits. Klein et al. (1976), in a study of 40 depressed and 40 non-depressed college students indicated there were several deficits produced by learned helplessness and depression. Subjects received experience with solvable, unsolvable, or no discrimination problems. When later tested on a series of patterned anagrams, depressed

groups performed worse than nondepressed groups, and unsolvable groups performed worse than solvable and control groups. As predicted by the learned helplessness theory of depression, nondepressed subjects given unsolvable problems showed anagram deficits parallel to those found in naturally occurring depression. When depressed subjects attributed their failure to the difficulty of the problems rather than their own incompetence (lowered self-esteem), performance improved strikingly. Klein et al. (1976) concluded that failure in itself was apparently not sufficient to produce helplessness deficits, but failure that leads to a decreased belief in personal competence is sufficient.

Similar results were obtained by Willis and Blaney (1978) who studied the problem solving abilities of 28 nondepressed and 19 depressed college students. The findings indicated that depressed subjects manifested poorer ability to solve anagrams than nondepressed subjects.

Miller and Lewis (1977) studied recognition memory in elderly patients with depression and dementia. The sample consisted of three groups (depressives, demented, and normal), each comprised of 20 elderly subjects (over

65 years of age), matched for age and sex, and without appreciable sensory handicaps. Miller and Lewis (1977) hypothesized that elderly depressives sometimes perform as badly as patients with dementia on tests of memory because depressives adopt a very conservative response strategy rather than because their memory is really impaired. As predicted, the results indicated that the elderly depressives used the most conservative response strategy of the three groups.

The effects of exposure to escapable or inescapable noise of 80 college students on anagram performance were studied by Cole and Coyne (1977). The findings indicated that subjects receiving inescapable noise, displayed more anagram debilitation than did subjects receiving escapable noise.

Price, Tryon, and Raps (1978) studied learned helplessness and depression of 96 male hospitalized psychiatric and medical patients. The subjects were divided into three levels of depression according to their scores on the short form of the Beck Depression Inventory (Beck, 1967). Subjects were randomly assigned to one of four experimental conditions: (a) one group was treated with an 80-db tone, which

could be terminated by making an active response, (b) a second group was treated with the tone with a passive escape contingency, (c) a third group was treated with an inescapable tone, and (d) a no-noise group served as a control. After treatment, subjects were tested on an anagram solving task. Inescapable noise produced as much deficit in the low-depressed subjects as was present in the depressed no-noise control subjects. Price et al. (1978) concluded that the results replicated the learned helplessness phenomenon in a group of clinical depressives in support of Seligman's (1975) theory of depression.

Calhoun et al. (1974) as a part of a study of locus of control and depression, evaluated the transitory mood (affective) aspect of depression. The sample consisted of 37 male and 44 female college students. The subjects completed the Lubin depression adjective checklist. Findings indicated that the scores correlated with general externality for males ($r = .50$, $p < .01$) but not for females ($r = .09$, $p < .10$). Calhoun et al. concluded that these results suggested that the tendency for adolescent females to hold themselves more responsible than males for unsatisfactory personal situations

extends to the attribution of causes for unhappy mood.

The effects of recalling past successes on the deficits produced by learned helplessness and depression were examined by Teasdale (1978). The sample consisted of 96 female college students. Depressed subjects and nondepressed subjects receiving unsolvable problems showed deficits in anagram performance and some evidence of lowered mood compared with nondepressed subjects receiving no unsolvable problems. Experience with solvable letter substitution problems reversed anagram deficits and low mood associated with learned helplessness. Recalling successes on letter substitution problems had no effect on the anagram deficits in learned helplessness and depression, and had an effect on improving mood only in learned helplessness.

Smolen (1978) tested the learned helplessness prediction that compared with nondepressed patients, depressed patients would provide lower subjective evaluations of their performance (lowered self-esteem). The prediction was tested using a sample of 32 depressed and 32 nondepressed psychiatric inpatients. Subjects performed card sorting and peg-sorting tasks in which

measures of performance and subjective evaluations of performance were obtained under chance and skill reinforcement conditions. The findings indicated that depressives provided lower evaluations of their performance than nondepressives.

Golin, Terrell, and Johnson (1977) tested the hypothesis that depressed students, unlike nondepressed students, would show less optimism for success when a chance-determined task was given under high illusion-of-control conditions than under low-illusion-of-control conditions. Subjects placed bets on a dice game. The throwing of the dice was either under player-control (high illusion) or croupier-control (low illusion) conditons. As predicted, depressed subjects were more confident of success in the croupier-control condition, and nondepressed subjects were more confident of success in the player-control condition. The results supported the view that depressed subjects are characterized by a sense of personal incompetence and lowered self-esteem.

Prociuk, Breen, and Lussier (1976) studied hopelessness, internal-external locus of control, and depression. Hopelessness was defined as a system of

negative expectancies about oneself and one's future which relates to individual self-esteem. The sample consisted of 44 students. The subjects were administered Rotter's (1966) Internal-External Scale and Beck's (1967) Depression Inventory. A correlation analysis of the sample indicated that hopelessness was significantly related to perceived external control and to depression.

A study of low and high self-esteem individuals was conducted by Fitch (1970). The high self-esteem individual was seen as liking or valuing himself, as well as seeing himself competent in dealing with the world he perceives. The low self-esteem individual was seen as disliking, devaluing self in general, and perceiving self as not competent to deal effectively with his environment. The results of the study showed that individuals attributed significantly more causality to internal sources for success outcomes than for failure outcomes, supporting a self-esteem enhancement prediction. Low self-esteem subjects who received failure feedback attributed significantly more causality to internal causal sources than did high self-esteem subjects who received failure feedback.

Huesman (1978) in a review of cognitive processes and models of depression cited cognitive mediating processes as important aspects of behavioral deficits found in depression. Weiner, Heckhausen, Meyer, and Cook (1972) presented an attributional model of achievement motivation. In the model, Weiner et al. (1972) contended that:

1. Locus of control influences the affective reactions to an event, with internal ascriptions magnifying emotional responses.

2. Attributions of achievement outcomes to internal causes also result in greater affect (pride and shame) than attributions to environmental factors.

3. In achievement-related contexts, affect is determined primarily by the control rather than the stability, dimension of causality.

4. Attributions to the stability of the causal factors primarily influence the changes in expectancy of success following success or failure.

5. Expectancy changes are determined primarily by the stability, rather than control, dimension of causality.

Weiner et al. (1972) conducted three investigations to examine some of the suppositions of the attributional model of achievement motivation. The investigations focused on the relationships between causal ascriptions, affective reactions, expectancy changes, and performance intensity. Also, the proposed linkage between antecedent stimuli and mediating cognitions was examined by relating the perceived difficulty of a task to inferences regarding causal significance of effort. Based on these experimental data, Weiner et al. (1972) concluded that:

1. The approach to achievement activities is mediated by attributions of success to internal factors (effort), which heighten positive affect and increase the likelihood of undertaking subsequent achievement tasks.

2. Persistence in the face of failure is mediated by attributions of outcome to unstable factors (lack of effort and bad luck), which result in the maintenance of the subjective probability of success, continued commerce with the task, and performance facilitation.

3. Tasks of intermediate difficulty are most likely to elicit effort attributions which increase motivation. Individual differences in the sensitivity

to effort cues, and personal preferences for effort or internal attributions, could be responsible for the observed interaction between achievement needs and task difficulty.

DuCette and Wolk (1972) studied cognitive and motivational correlates of generalized expectancies for control. The sample consisted of 94 female and 44 male high school students. The hypothesis was tested that

> internal subjects, in situations where information can be obtained that will lead to problem solution, demonstrate a greater ability to extract information from their environment and then use this information to solve a problem. (DuCette & Wolk, 1972, p. 421)

The subjects engaged in several tasks (estimating test performance, extrasensory perception task, and skill versus chance task) where the opportunity for the extraction and use of information necessary for successful completion of the task varied. The findings indicated that (a) internal subjects demonstrated significantly improved performance on the estimated and real test scores from the midterm to the final, while the external subjects demonstrated no change (motivational measure); (b) externals were significantly poorer in estimating the number correct on the skill tasks than

on the extrasensory perception task while internals were equally good on both tasks; and (c) internal subjects preferred the skill task to the extrasensory perception task while external subjects preferred the extrasensory perception task to the skill task. DuCette and Wolk (1972) concluded that the results of the study seemed to imply that the internal subject differed from the external subject motivationally as well as cognitively.

Julian, Lichtman, and Ryckman (1968) conducted two studies of the motivation of control. The following hypotheses were tested:

1. Internals prefer circumstances under which they can exert greater control over their outcomes.

2. Internals have a higher need to control, which results in greater frustration when that control is blocked.

The sample for the first hypothesis consisted of 28 female college students and the sample for the second hypothesis consisted of 46 female college students (24 internals and 22 externals). The results indicated that (a) the first hypothesis was supported when internals showed a relatively stronger preference for

throwing darts from a closer distance, even though this distance had been enuated for the probability of overall success, and (b) the second hypothesis concerned with blocking the presumed need for control was not supported. Counter to the second hypothesis, it was the external individual who reacted more strongly to the blindfolded, dart throwing condition than did the internal individual. The latter finding was explained by Julian et al. (1968) as resulting from the perception of the blindfolded task as a "chance" condition in which externals were generally more concerned with their performance than were the internals.

Summary

Chapter 2 has presented a review of literature on the clinical characteristics of depression as defined for this study, and research relating to locus of control and depression. Helplessness symptomatology was evaluated in relation to symptoms of depression. Seligman (1975) postulated that the affective, cognitive, and behavioral components of depression are consequences of the depressive learning that outcomes are uncontrollable and noncontingently related to their behavior. When

individuals learn that there is no contingency between responses and outcomes, they not only refrain from emitting adaptive responses, but also evidence salient cognitive, affective features of helplessness, and hopelessness (Seligman, 1975).

Locus of control has been defined as the extent of perceived control of outcomes (Rotter, 1966). Perceptions of control were described in terms of internal and external attributions of control (Rotter, 1966; Seligman, 1975). An attribution of external control was associated with depression (Abramowitz, 1969; Calhoun et al., 1974; Haines & Wild, 1977). Symptoms of learned helplessness and depression were described as occurring when the individual (a) perceives that his acts are noncontingently related to the desired outcomes, (b) makes an attribution of control (internal or external), and then (c) makes an expectancy of noncontingency between future acts and outcomes (Abramson, Seligman, & Teasdale, 1978). Finally, consequences of learned helplessness including cognitive, motivational, affective, and self-esteem deficits were discussed.

CHAPTER 3

PROCEDURE FOR COLLECTION AND TREATMENT OF DATA

A descriptive and correlational study was conducted using a questionnaire as the method of obtaining data. The primary problem of this study was to determine the relationship between the level of self-reported depression and the level of perceived locus of control of life situations among noninstitutionalized persons 60 years of age and older.

Setting

This study was conducted in a senior citizen center and a church of a large metropolitan area which is located in the Southern part of the United States. There are approximately 1,586,429 residents in the area which is regarded as an industrial and financial center. Many programs and services are available to persons 60 years of age and older. These persons comprise approximately 11% of the area's population.

Population and Sample

The population of this study was comprised of persons 60 years of age and older who attended senior citizen meetings held at churches and community centers. The sample for this study was 32 noninstitutionalized persons, 60 years of age and older, and living in the community described in the setting. The sample was selected from the population by means of convenience sampling in a senior citizen center and a church with only voluntary participation.

Protection of Human Subjects

Written permission to conduct the study was obtained from the Texas Woman's University Research Review Committee (Appendix A), the graduate school (Appendix B), and from the participating agency (Appendix C). Subjects were informed of the purpose of the study by means of an oral explanation (Appendix D) provided by the researcher. All subjects consenting to participate in the study signed a consent to act as a subject for research and investigation form (Appendix E) stating that they had received a description of the study, including a fair explanation of the procedures and purposes. Signed consent forms were collected

before the study began. To insure anonymity, subjects were asked not to place their names on the answer sheets. The subjects were protected from any possible embarrassment by maintaining the confidentiality of the responses.

Instruments

Three instruments were used to determine the level of self-reported depression and the level of perceived locus of control. The three instruments were: the demographic data sheet, the Zung Self-report Depression Scale (ZSDS) (Zung, 1967a), and the Geriatric Adult Nowicki-Strickland Internal-External Locus of Control Scale (GANSIE) (Duke et al., 1974). In the presentation of the instruments to the subjects of this study, the instruments were referred to as a Personal Feelings and Beliefs Questionnaire (Appendix F).

The first instrument was the demographic data sheet which included the information concerning the subject's age, sex, marital status, race-ethnic group, and educational level. This information was collected to facilitate a description of the sample.

The second instrument was the Zung Self-report Depression Scale which measures affective, physiological,

psychomotor, and psychological symptoms of depressive disorders (Carroll, Fielding, & Blashki, 1973). The ZSDS contains 20 items that reflect 4 clusters of disturbances associated with depression (Zung, 1965). These four clusters are based on factor analytic studies of depression and matching for commonly found characteristics of depression (Giambra, 1977). Each item consisted of a positively or negatively worded statement of depressive disturbance on which people rate themselves on a 4-point Likert-type scale that indicates frequency of occurrence (Giambra, 1977). Ten items are worded negatively and 10 items are worded positively (Zung, 1965). A response to a negative item of "a little or none of the time," "some of the time," "good part of the time," or "most or all of the time" would be scored 1, 2, 3, or 4 respectively, and a response to a positive item would be scored 4, 3, 2, 1, respectively (Zung, 1965). The higher the score the greater the level of depression (Zung, 1965). The ZSDS raw score ranges from 20 to 80 (Zung, 1965).

The reliability and validity of the ZSDS was not conclusive. Reliability data were gathered from two groups (n = 169), aged 65 to 95 (Zung, 1967a). When

data were subjected to a two-tailed t-test, no significant differences between the two ZSDS group means were noted with p = .05 (Zung, 1967a). Data were gathered (n = 311) and the Pearson product moment correlation coefficient (r) value between ZSDS indices and the Minnesota Multiphasic Personality Inventory (MMPI) depression scale t-scores were calculated with an r value of .65 (Zung, 1967b). In a cross-cultural study of 343 subjects, the ZSDS scores were compared with physician rated global severity of depression scores and the correlatin coefficient was .53 (Zung, 1969). The validity coefficient correlation between the Hamilton Rating Scale for Depression (HRS) and the ZSDS ranged between .33 to .99, n = 199 (Biggs, Wylie, & Ziegler, 1978; Brown & Zung, 1972; Carrell et al., 1973).

The third instrument was the Geriatric Adult Nowicki-Strickland Internal-External Locus of Control (GANSIE) scale which measures the extent or belief in external versus internal conrol of reinforcement as perceived by the older person (Nowicki & Duke, 1974). The GANSIE scale is a modification of the Adult Nowicki-Strickland Locus of Control Scale (ANSIE)

form for noncollege adults (Nowicki & Duke, 1974). The GANSIE scale contains 37 items which are to be answered either "yes" or "no." Alterations from the ANSIE form for noncollege adults consisted chiefly of changing verb tenses into past tense and interchanging the words children and parents (Duke et al., 1974). Three questions dealing with situations at home were found to be inappropriate for a geriatric population and were deleted from the original 40 items (Duke et al., 1974). The GANSIE scale is keyed externally such that the higher the score, the more external the locus of control orientation and the lower the score, the more internal the locus of control orientation (Nowicki & Duke, 1974). The score is the total number of external choices made by the subject and only designated responses are scored. The scores range from 0 to 37.

Due to the lack of use of the GANSIE scale, reliability and validity have not been established. However, in a study of 66 persons aged 65 to 90, the mean locus of control scores on the GANSIE were not different from the mean scores of other age groups using the ANSIE scale (Duke et al., 1974). Data to determine

reliability of the ANSIE scale were gathered from three samples of college students and middle-aged adults. Internal consistency ranged from .65 to .81 and test-retest reliability for 58 college students tested 4 weeks apart was .86 (Duke et al., 1974). The discriminative validity of the ANSIE scale was supported in that scores were not related to social desirability or intelligence test scores (Nowicki & Duke, 1974). Construct validity between the ANSIE scale and the Rotter (1966) Internal-External Locus of Control Scale ranged between .44 and .68 (Nowicki & Duke, 1974).

Data Collection

The researcher approached older persons in a senior citizen center and a church in the community, who met the established criteria for the study, and asked for their voluntary participation. After verbal consent was obtained, during a meeting with the volunteer participants, the researcher read the oral description of the study to the group. Then the researcher requested written consent from those individuals who were willing to participate. After the

participants signed the consent forms, the forms were collected and filed separately from the questionnaires. In a meeting room with an appropriate number of chairs and tables to allow for adequate spacing for individual privacy, the Personal Feelings and Beliefs Questionnaire was distributed to the participants. Data were collected utilizing a paper-and-pencil test. Individuals were requested not to place their names on the questionnaires. Following the completion of the questionnaire, the participants were asked to place their paper face down in a collection box. The researcher awaited completion of the subjects' responses to the tool. Subjects required 15 to 30 minutes to complete the tool.

Treatment of the Data

The description of the sample in terms of age, sex, marital status, and educational level was presented. The Pearson product-moment correlational method was applied to test the null hypothesis that there is no relationship between the level of self-reported depression and the level of perceived locus of control of life situations among noninstitutionalized

persons 60 years of age and older. A level of significance of .05 was used for all statistical tests.

CHAPTER 4

ANALYSIS OF DATA

A descriptive, correlational study was conducted to determine the relationship between the level of self-reported depression and the level of perceived locus of control. This chapter is concerned with an analysis of data. A description of the sample is presented, followed by the test of the hypothesis, additional findings, and a summary of the findings. Findings are presented in terms of the subjects' responses on the questionnaire.

Description of Sample

The sample consisted of 32 noninstitutionalized persons 60 years of age and older. The demographic data collected consisted of age, sex, marital status, race-ethnic group, and educational level which is summarized in Table 1. Subjects ranged in age from 60 to 80 years and older. The distribution of the subjects was: 31% were 70 to 74 years of age, 28% were 65 to 69 years of age, 19% were 60 to 64 years of age, 13% were 75 to 79 years of age, and 9%

Table 1

Description of the Sample's Age, Sex, Marital Status, Race-Ethnic Group, and Educational Level by Percentage

Demographic Data	Category	Percentage
Age	60-64	19
	65-69	28
	70-74	31
	75-79	13
	over 80	9
Sex	Male	16
	Female	84
Marital Status	Single	9
	Married	47
	Widowed	41
	Divorced	3
Race-Ethnic Group	White	100
Educational Level (years in school)	5-8	0
	9-12	59
	13-16	19
	over 16	13

n = 32.

were 80 years of age and older. Female subjects comprised 84% of the sample and 16% were male.

In relation to marital status, 47% of the sample was married, 41% widowed, 9% single, and 3% divorced. All subjects were white. Subjects completing 9 to 12 years of school comprised 59% of the sample, with 19% completing 13 to 16 years of school. Thirteen percent of the sample completed more than 16 years of school and 9% completed 5 to 8 years of school.

Findings

It was hypothesized that there is no significant relationship between the level of self-reported depression and the level of perceived locus of control of life situations among noninstitutionalized persons 60 years of age and older. The Pearson product-moment correlation was used to test the hypothesis at the .05 level of significance.

A positive and statistically significant relationship was observed between self-reported depression and perceived locus of control. The correlation coefficient (r) was calculated 0.44 and was statistically significant ($p < .05$). Figure 1 shows a plot of the sample raw

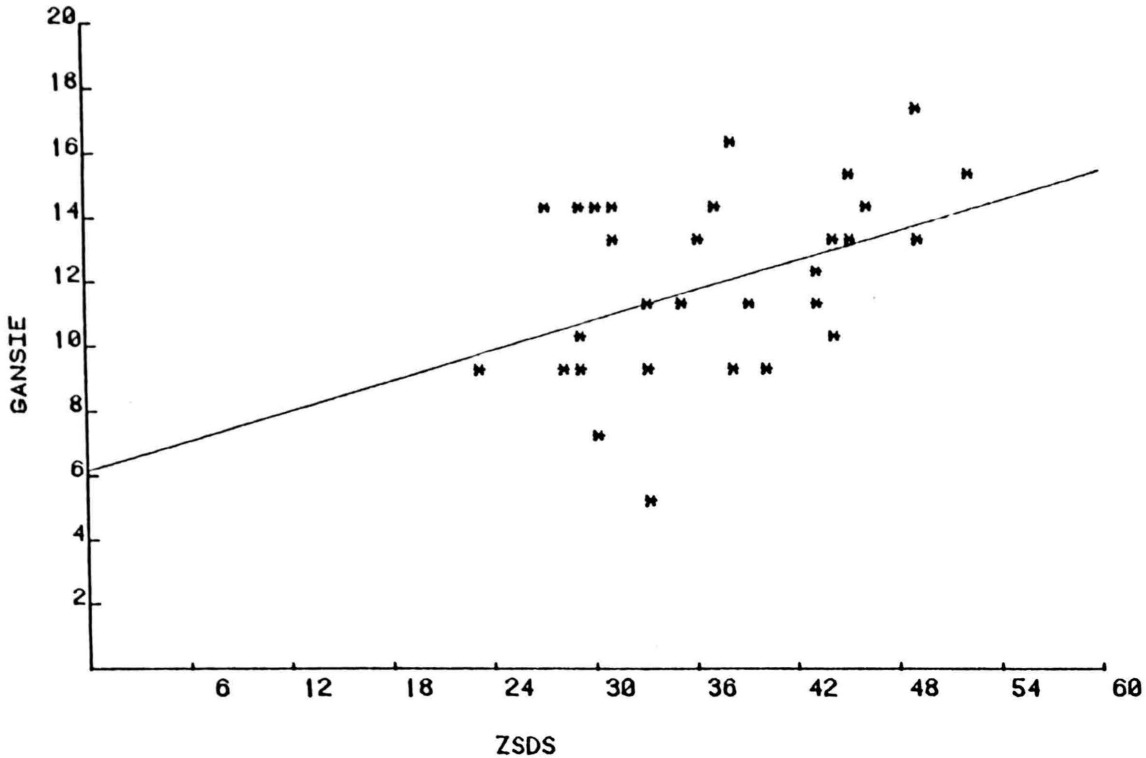

Figure 1. Correlation of sample GANSIE and ZSDS raw scores.

scores on the GANSIE and ZSDS scales indicating a positive correlation. Squaring the (r) yields .197 indicating that 19.7% of the variance in the depression scores can be accounted for by the locus of control scores.

The null hypothesis that there is no significant relationship between the level of self-reported depression and the level of perceived locus of control of life situations was not supported. The inference for the sample in this study was that there was a positive relationship between depression and perceived locus of control. As depression scores increased, locus of control scores increased. The more depressed a person was, the more the person believed his life was controlled by external forces and vice versa.

Additional Findings

The sample scores on the Zung Self-rating Depression Scale (ZSDS) and the Geriatric Adult Nowicki-Strickland Internal-External Scale (GANSIE) were analyzed in relationship to the demographic data. Any significant variances in the sample scores in relationship to the demographic data were discussed.

The ZSDS raw scores of 32 subjects ranged between 23 and 52 with a mean score of 37.6 (SD = 7.8). The distribution of ZSDS raw scores was multimodal (i.e., 29, 33, 44, 49), but not particularly skewed. A one-way analysis of variance (ANOVA) was conducted on the ZSDS raw scores for age, sex, marital status, and educational level. The results, which are summarized in Table 2, indicated no significant variations in the mean ZSDS responses for the demographic groups.

The GANSIE scores ranged between 5 and 17 with a mean score of 11.8 (SD = 2.8). As was done for the ZSDS responses, a one-way ANOVA test was applied to the GANSIE scores for the demographic data. As shown in Table 3, only the results for sex analysis indicated a statistically significant variation. Further examination of the GANSIE data indicated that one of the five male subjects scored much lower than the other males, and submitted the lowest score of all 32 subjects. An ANOVA calculation without the extreme response male subject, showed a nonsignificant variance between the GANSIE responses of the four male subjects and 27 female subjects (F_1, 29 = 2.55, $p < .05$). In view of the extreme response on the GANSIE scale of

Table 2

Analysis of Variance Table for ZSDS Scores by Age, Sex, Marital Status, and Educational Level

Extraneous Variables	Source of Variation	Degrees of Freedom (df)	Sum of Squares	Mean Squares	F Ratio	Probability (p)
Age	Between Groups	4	291.7	72.9	1.24	<.05
	Within Groups	27	1590.2	58.9		
Sex	Between Groups	1	2.4	2.4	.04	<.05
	Within Groups	30	1879.5	62.7		
Marital Status	Between Groups	3	302.1	100.7	1.79	>.05
	Within Groups	28	1579.8	56.4		
Educational Level	Between Groups	3	205.1	68.37	1.14	>.05
	Within Groups	28	1676.8	59.9		

n = 32.

Mean Score = 37.6.

SD = 7.8.

Table 3

Analysis of Variance Table for GANSIE Scores by Age, Sex, Marital Status, and Educational Level

Extraneous Variables	Source of Variation	Degrees of Freedom (df)	Sum of Squares	Mean Squares	F Ratio	Probability (p)
Age	Between Groups	4	20.9	5.2	0.66	<.05
	Within Groups	27	215.3	8.0		
Sex[a]	Between Groups	1	41.4	41.4	6.38	<.05
	Within Groups	30	194.8	6.49		
Sex[b]	Between Groups	1	15.2	15.2	2.55	>.05
	Within Groups	29	172.7	5.96		
Marital Status	Between Groups	3	36.6	12.2	1.71	>.05
	Within Groups	28	199.6	7.13		
Educational Level	Between Groups	3	42.1	14.0	2.02	>.05
	Within Groups	28	194.1	6.9		

n = 32.

Mean Score = 11.8.

SD = 2.8.

[a]Includes all subjects.

[b]Without the extreme response male subject.

one of the male subjects and the small male sample size, no specific conclusion can be made regarding the significance of any sex effect on the GANSIE responses.

To determine any male/female differences in the correlation of depression and locus of control scores, the ZSDS and GANSIE correlations were calculated for each sex separately. These data are shown in Table 4 and indicate similar correlation coefficients for both sexes (i.e., male r of .49 and female r of .51). However, only the positive correlation of the ZSDS and GANSIE scores for females was statistically significant. Also, the difference between the male correlation and female correlation was found not to be statistically significant ($Z = .0345$, $p < .05$).

In order to determine if there was a difference between the depressed and nondepressed subjects of this study, each subject was classified as depressed or nondepressed. The criteria used to classify the subjects as depressed or nondepressed was based on a similar ZSDS score criteria reported by Haines and Wild (1977) in a study of 48 noninstitutionalized persons 60 to 80 years of age. Those persons who

Table 4

Correlation of ZSDS and GANSIE Scores
for Males and Females

Subject	Scales	Mean	Standard Deviation	Correlation r	Probability (p)
Male (n = 5)	ZSDS	38.2	5.3	.492	>.05
	GANSIE	9.2	2.5		
Female (n = 27)	ZSDS	37.4	8.25	.511	<.05
	GANSIE	12.3	2.56		

scored above 40 were placed in the depressed group while those scoring 40 and below were placed in the nondepressed group. Table 5 compares the depressed and nondepressed group scores on the ZSDS and GANSIE scales. The correlation between the ZSDS and GANSIE mean scores of the nondepressed group was not significant (r = .194, p < .05) while the correlation between the ZSDS and GANSIE mean scores of the depressed group was highly significant (r = .720, p < .05). Also, the difference between the depressed group and nondepressed group coefficients was significant (Z = 1.7546, p < .05).

Summary of Findings

The following finding of the null hypothesis from this study is summarized: A positive relationship was observed between self-reported depression and perceived locus of control of life situations among the subjects.

The following additional findings from this are summarized:

1. The sample consisted of 32 noninsitutionalized persons 60 years of age and older. Twenty-seven were female and five were male.

Table 5

Correlation of Depressed and Nondepressed Group Scores
On the ZSDS and GANSIE Scales

Group	Scale	Mean	Standard Deviation	Correlation r	Probability (p)
Nondepressed (n = 19)	ZSDS	32.1	4.3	.197	>.05
	GANSIE	11.1	2.9		
Depressed (n = 13)	ZSDS	45.6	3.3	.720	<.05
	GANSIE	12.9	2.1		

2. The sample ZSDS raw scores ranged between 23 and 52 with a mean score of 37.6 and SD of 7.8.

3. The sample GANSIE scores ranged between 5 and 17 with a mean score of 11.8 and SD of 2.8.

4. An analysis of variance of the ZSDS responses indicated no significant variances with respect to the demographic variables of age, sex, marital status, and educational level.

5. An analysis of variance of the GANSIE responses indicated no significant variances with respect to the demographic variables of age, marital status, and educational level. Because of the extreme response of one of the male subjects on the GANSIE and the small sample size, no specific finding was made regarding any sex effect on the GANSIE responses.

6. The correlation coefficient between the ZSDS mean raw score and the GANSIE mean score was higher for females (r = .51) than for males (r = .49), but the difference was not found to be statistically significant (Z = .0345, $p < .05$).

7. The positive correlation between the ZSDS mean raw score and the GANSIE mean score was statistically significant for females, but not significant for males.

8. The correlation coefficient between the ZSDS and GANSIE mean scores was significant for the depressed group but not significant for the nondepressed group.

9. The depressed and nondepressed group correlation coefficients for the ZSDS and GANSIE correlation were significantly different ($Z = 1.7564$, $p < .05$).

CHAPTER 5

SUMMARY OF THE STUDY

This study was conducted to determine the relationship between the level of self-reported depression and the level of perceived locus of control of life situations among noninstitutionalized persons 60 years of age and older. The theoretical framework for the study was Rotter's (1966) social learning theory of locus of control and Seligman's (1975) learned helplessness theory of depression.

Summary

The following null hypothesis was formulated for investigation: There is no relationship between the level of self-reported depression and the level of perceived locus of control of life situations among noninstitutionalized persons 60 years of age and older.

The study was conducted in a senior citizen center and a church group of a large metropolitan area which is located in the Southern part of the United States. The subjects in the investigation were selected by

means of convenience sampling. The sample was comprised of 32 subjects who volunteered to participate in the study. Data were collected using three questionnaire type instruments.

The instruments consisted of a demographic data sheet, the Zung Self-rating Depression Scale (ZSDS), and the Geriatric Adult Nowicki-Strickland Internal-External Control Scale (GANSIE). The demographic data included information concerning the subject's age, sex, marital status, race-ethnic group, and educational level. The ZSDS contains 20 items that reflect 4 clusters of disturbances associated with depression (Zung, 1965). Each item consisted of a positively or negatively worded statement of depressive disturbance on which people rate themselves on a 4-point Likert-type scale that indicates frequency of occurrence (Giambra, 1977). The higher the score, the greater the level of depression. The GANSIE scale measures the extent of belief in external versus internal control of reinforcement as perceived by the subject (Nowicki & Duke, 1974). The GANSIE scale contains 37 items which are answered either "yes" or "no" and is scored externally.

The sample was described in relation to the demographic data. One-way analysis of variances were performed to determine if age, sex, marital status, or educational level were significantly related to the ZSDS and GANSIE scores. The Pearson product-moment correlation method was used to test the hypothesis. A level of significance of .05 was used for all statistical tests. The ZSDS scale was scored using the raw score.

The following finding of the null hypothesis from this study is summarized: A positive relationship was observed between self-reported depression and perceived locus of control of life situations among the subjects.

The following additional findings from this study are summarized:

1. The sample consisted of 32 noninstitutionalized persons 60 years and older. Twenty-seven were female and 5 were male.

2. The sample ZSDS raw scores ranged between 25 and 52 with a mean score of 37.6 and SD of 7.8.

3. The sample GANSIE scores ranged between 5 and 17 with a mean score of 11.8 and SD of 2.8.

4. An analysis of variance of the ZSDS responses indicated no significant variances with respect to the demographic variables of age, sex, marital status, and educational level.

5. An analysis of variance of the GANSIE responses indicated no significant variances with respect to the demographic variables of age, marital status, and educational level. Because of the extreme response of one of the male subjects on the GANSIE and the small sample size, no specific finding was made regarding any sex effect on the GANSIE responses.

6. The correlation coefficient between the ZSDS mean raw score and the GANSIE mean score was higher for females ($\underline{r}$ = .51) than for males ($\underline{r}$ = .49), but the difference was found not to be statistically significant ($\underline{Z}$ = .0345, $\underline{p} < .05$).

7. The positive correlation between the ZSDS mean raw score and the GANSIE mean score was statistically significant for females, but not significant for males.

8. The correlation coefficient between the ZSDS and GANSIE mean scores was significant for the depressed group but not significant for the nondepressed group.

9. The depressed and nondepressed group correlation coefficients for the ZSDS and GANSIE correlation were significantly different ($Z = 1.7564$, $p < .05$).

Discussion of Findings

The results of this study are supportive of Seligman's (1975) learned helplessness hypothesis that depressed persons perceive themselves to lack personal control of their life situations. Although a positive relationship between depression and belief in external control was indicated by the present study, more research is needed to establish other variables which may affect this relationship.

The positive correlation between the ZSDS and GANSIE scores of this study ($r = .44$) was supportive of other research associating locus of control to depression. Haines and Wild (1977) in a study of 48 noninstitutionalized elderly persons reported an r of .28 ($p < .05$) indicating a low but significant positive association between external locus of control orientation and depression. Similarly, Abramowitz (1969) in a sample of 69 university students reported that a belief in external control varied positively

with depression. Evans and Dinning (1978) in a study of reductions in experienced control and depression of 104 patients of a clinical population found that individuals who reported reduced control over life events evidenced more depression than those who perceived no such loss.

The sample ZSDS mean raw score of 37.6 was not different from the ZSDS mean raw score of 37.8 reported by Zung (1967a) in a study of 69 persons 65 years of age and older and living in the community. These data provide some support of Zung's (1967a) analysis of ZSDS scores taken from a normal control group under the age of 65 years (ZSDS mean raw score of 26.4) and a geriatric population 65 years of age and over (ZSDS mean raw score of 38.4). The geriatric ZSDS mean raw score was significantly higher than the under 65 year old group ($p < .01$).

An analysis of variance on the ZSDS mean raw score by age, sex, marital status, and educational level indicated no significant variations. These findings are not different from a study of 159 elderly subjects conducted by Zung (1967a), where the outcome of the ZSDS was found not to be related to the subjects' age, sex,

marital status, education, financial status, or intelligence level.

The sample GANSIE mean of 11.8 was different from the mean GANSIE score of 8.74 reported by Duke et al. (1974) for a geriatric group (n = 82) living in a complex for the elderly. A possible explanation for the difference in the GANSIE scores may be due to the small sample size of this study. Another consideration may have been the difference between living in a complex for the elderly and handicapped, and living in the community. Also, a difference in locus of control scores has been noted between depressed and nondepressed groups. Haines and Wild (1977), in a study of 48 older persons, found the mean locus of control scores of 9.28 (SD = 4.95) for the nondepressed group, lower than the mean locus of control scores of 11.26 (SD = 3.22) of the depressed group. These data suggest that depressed persons score higher on the GANSIE scale than nondepressed persons.

The correlation between the ZSDS raw mean score and the GANSIE mean score was higher for females (r = .51) than for males (r = .49) in the present study. The difference between the male correlation and the

female correlation of this study was not significant (Z = .0345, p <.05). Haines and Wild (1977) found sex differences in the correlation between externality and depression of older persons (males, r = .46; females, r = .22) although a small sample resulted in no significant difference between correlation (Z = .77, p < .05). Calhoun et al. (1974) noted sex differences between depression and control correlations (males, r = .58, p < .001; females, r = .38, p < .05). The findings of Haines and Wild (1977) and Calhoun et al. (1974) suggested that the correlation between locus of control and depression is higher for males than females. In contrast, the findings of the present study suggested that the correlation between locus of control and depression is higher for females than males. Traditional sex roles of the male and female may be a possible explanation for the difference between the sexes. Also, the samples of males in this study and the existing research has been small.

The sample of the present study was found to fall into depressed and nondepressed groups. Thirteen subjects had a ZSDS score above 40 and were placed in the depressed group. Nineteen subjects had a ZSDS score of

40 or below and were placed in the nondepressed group. The number of depressed persons of this study support the findings of Busse and Pfeiffer (1973) that 10% to 65% of the population above 65 years of age suffer from symptoms of depression.

In correlating the ZSDS and GANSIE scores of this study, a difference was found in the sample between those subjects scoring above 40 and those subjects scoring below 40 on the ZSDS. These scales may be of some diagnostic value in identifying older persons or groups who could benefit from community outreach or treatment programs for the elderly. They may also give some direction for treatment and research as well as provide a measure of progress of therapy for depressed persons. More research is needed to understand the effectiveness of control therapy in the treatment of depression in the elderly.

Conclusions and Implications

The following conclusion was identified: Older persons who are depressed may perceive the locus of control of life situations as being more external while nondepressed older persons may perceive the locus of control of life situations as being more internal.

The following implication for nursing was identified: Nurses need to be aware of the high incidence of depression in older persons. The pervasiveness of depression in the elderly indicates that nursing research needs to be directed toward identifying and whenever possible to alleviate the physiological, psychological, social, and environmental factors associated with depression. In the diagnosis and treatment of depression, the nurse should consider that as the level of depression increases, so may the belief in external control of life situations and vice versa.

Recommendations for Further Study

The following recommendations for further study are suggested:

1. A similar study should be conducted using a larger sample with more male participants to note any possible sex differences.

2. Research should be conducted to study the relationships between perceived locus of control and depression to nursing interventions as a treatment for depression.

3. Research should be conducted to study levels of depression in relation to physical, social, emotional, and environmental stress factors associated with older persons.

APPENDIX A

TEXAS WOMAN'S UNIVERSITY

Human Research Committee

Name of Investigator: Karen Scoggins Center: Dallas

Address: 219 Greenstone Circle Date: June 29, 1979

Ducanville, Texas 75116

Dear Ms. Scoggins:

Your study entitled Locus of Control and Depression Among Older Persons has been reviewed by a committee of the Human Research Review Committee and it appears to meet our requirements in regard to protection of the individual's rights.

Please be reminded that both the University and the Department of Health, Education and Welfare regulations require that written consents must be obtained from all human subjects in your studies. These forms must be kept on file by you.

Furthermore, should your project change, another review by the Committee is required, according to DHEW regulations.

Sincerely,

Estelle R. Lasky

Chairman, Human Research
Review Committee

at Dallas.

APPENDIX B

TEXAS WOMAN'S UNIVERSITY

DENTON, TEXAS 76204

THE GRADUATE SCHOOL

August 21, 1979

Mrs. Karen Elaine Scoggins
219 Greenstone Circle
Duncanville, Texas 75116

Dear Mrs. Scoggins:

I have received and approved the Prospectus for your research project. Best wishes to you in the research and writing of your project.

Sincerely yours,

Margaret J. Ferrell

Margaret J. Ferrell
Acting Dean of the Graduate School

MF:dd

cc Dr. Jean Stair
Dr. Anne Gudmundsen
Graduate Office

APPENDIX C

TEXAS WOMAN'S UNIVERSITY
COLLEGE OF NURSING
DENTON, TEXAS

DALLAS CENTER
1810 Inwood Road
Dallas, Texas 75235

HOUSTON CENTER
1130 M.D. Anderson Blvd.
Houston, Texas 77025

AGENCY PERMISSION FOR CONDUCTING STUDY*

THE First United Methodist Church of Duncanville

GRANTS TO Karen Grantham Scoggins

a student enrolled in a program of nursing leading to a Master's Degree at Texas Woman's University, the privilege of its facilities in order to study the following problem:

Locus of Control and Depression Among Older Persons. To determine the relationship between the amount of self-reported depression and the amount of perceived locus of control of life situations among noninstitutionalized persons 60 years of age and older.

The conditions mutually agreed upon are as follows:

1. The agency (may) (~~may not~~) be identified in the final report.
2. The names of consultative or administrative personnel in the agency (may) (~~may not~~) be identified in the final report.
3. The agency (~~does~~) (does not want) a conference with the student when the report is completed.
4. The agency is (willing) (~~unwilling~~) to allow the completed report to be circulated through interlibrary loan.
5. Other: _____

Date July 12, 1979 Dr. Thomas R. Peel, Pastor
Signature of Agency Personnel

Karen Grantham Scoggins Shirley M. Ziegler
Signature of student Signature of Faculty Advisor

*Fill out and sign three copies to be distributed as follows: Original - Student; first copy - Agency; second copy - T.W.U. College of Nursing.

TEXAS WOMAN'S UNIVERSITY
COLLEGE OF NURSING
DENTON, TEXAS

DALLAS CENTER
1810 Inwood Road
Dallas, Texas 75235

HOUSTON CENTER
1130 M.D. Anderson Blvd.
Houston, Texas 77025

AGENCY PERMISSION FOR CONDUCTING STUDY*

THE Senior Citizen Program of Duncanville

GRANTS TO Karen Grantham Scoggins

a student enrolled in a program of nursing leading to a Master's Degree at Texas Woman's University, the privilege of its facilities in order to study the following problem:

Locus of Control and Depression Among Older Persons. To determine the relationship between the amount of self-reported depression and the amount of perceived locus of control of life situations among noninstitutionalized persons 60 years of age and older.

The conditions mutually agreed upon are as follows:

1. The agency (may) ([redacted]) be identified in the final report.
2. The names of consultative or administrative personnel in the agency (may) ([redacted]) be identified in the final report.
3. The agency ([redacted]) (does not want) a conference with the student when the report is completed.
4. The agency is (willing) ([redacted]) to allow the completed report to be circulated through interlibrary loan.
5. Other: _____

Date July 13, 1979

Christie Smith - Senior Citizen Program Coordinator
Signature of Agency Personnel

Karen Scoggins
Signature of Student

Shirley M. Ziegler
Signature of Faculty Advisor

*Fill out and sign three copies to be distributed as follows: Original - Student; first copy - agency; second copy - T.W.U. College of Nursing.

APPENDIX D

Oral Description of the Study to be Read to the Participants

My name is Karen Scoggins. I am a registered nurse in the community and am currently working toward a Master's degree in nursing at Texas Woman's University. My special interest area is community health nursing.

I am doing a study about people in the community who have become older. People have different feelings and beliefs about life. I would like to know how you feel about your life and some life situations.

Possible risks or discomforts of participating in this study may include: loss of time, personal inconvenience, improper release of data, loss of anonymity and privacy, and emotional trauma associated with the questionnaire items.

This study may not benefit you directly, but it may be useful to nurses and others in planning programs needed by older people in the community. Your participation will be very helpful.

Your decision as to whether or not to take part in this study is entirely voluntary. If you agree to

participate, you will be asked to read and respond to a three-part Personal Feelings and Beliefs Questionnaire. The first part of the questionnaire requires you to check the response which applies to you regarding your age range, sex, marital status, race-ethnic group, and education. The second part of the questionnaire contains 20 items regarding symptoms and feelings which requires you to check the frequency with which you experience the symptom or feeling. The third part of the questionnaire contains 37 questions regarding some life situations and requires you to check "yes" or "no" for each item, depending on the answer that most closely describes your belief. Your answers to the questions will be confidential. You are requested not to place your name on the questionnaire. A summary of the answers will appear in a report of the study. No names will appear in the written report.

If you agree to take part in this study, you also will be asked to sign a consent form which indicates you have agreed to participate and that I may use the information in a summary presentation. The consent form will be kept separately from the questionnaire

so that your name will not be identified with your responses. At any time during the study, if you decide you do not wish to participate, you may withdraw your participation. The responses you have made will then be omitted from the report of the study. Following the completion of the questionnaire, I will be available to discuss any questions or concerns you may have regarding this study.

Will you participate in this study?

Karen Scoggins

APPENDIX E

TEXAS WOMAN'S UNIVERSITY

(Form B--Oral presentation to Subject)

Consent to Act as a Subject for Research and Investigation:

I have received an oral description of this study, including a fair explanation of the procedures and their purpose, any associated discomforts or risks, and a description of the possible benefits. An offer has been made to me to answer all questions about the study. I understand that my name will not be used in any release of the data and that I am free to withdraw at any time.

_____ _____

Signature Date

_____ _____

Witness Date

Certification by Person Explaining the Study:

This is to certify that I have fully informed and explained to the above named person a description of the listed elements of informed consent.

_____ _____

Signature Date

_____

Position

_____ _____

Witness Date

APPENDIX F

PERSONAL FEELINGS AND BELIEFS QUESTIONNAIRE

Part 1

Please check the following:

Age: (in years)

_____ 60-64
_____ 65-69
_____ 70-74
_____ 75-79
_____ 80 and older

Sex:

_____ Male
_____ Female

Marital Status:

_____ Single
_____ Married
_____ Separated
_____ Widowed
_____ Divorced

Race-Ethnic Group:

_____ White
_____ Black
_____ Other

Education: (highest grade completed in school)

_____ 1-4
_____ 5-8
_____ 9-12 (high school)
_____ 13-16 (college)
_____ More

Part 2

Please rate each of the items by circling the one response that most closely applies to you today.

Please answer according to the following key:

A--A little or none of the time
B--Some of the time
C--Good part of the time
D--Most of or all of the time

1.	I feel down-hearted and blue.	A	B	C	D
2.	Morning is when I feel best.	A	B	C	D
3.	I have crying spells or feel like it.	A	B	C	D
4.	I have trouble sleeping at night.	A	B	C	D
5.	I eat as much as I used to.	A	B	C	D
6.	I still enjoy sex.	A	B	C	D
7.	I notice that I am losing weight.	A	B	C	D
8.	I have trouble with constipation.	A	B	C	D
9.	My heart beats faster than usual.	A	B	C	D
10.	I get tired for no reason.	A	B	C	D
11.	My mind is as clear as it used to be.	A	B	C	D
12.	I find it easy to do the things I used to.	A	B	C	D
13.	I am restless and can't sleep still.	A	B	C	D
14.	I feel hopeful about the future.	A	B	C	D
15.	I am more irritable than usual.	A	B	C	D

Please answer according to the following key:

A--A little or none of the time
B--Some of the time
C--Good part of the time
D--Most of or all of the time

16.	I find it easy to make decisions.	A	B	C	D
17.	I feel that I am useful and needed.	A	B	C	D
18.	My life is pretty full.	A	B	C	D
19.	I feel that others would be better off if I were dead.	A	B	C	D
20.	I still enjoy the things I used to do.	A	B	C	D

Source. Zung, W. W. Depression in the normal aged. Psychosomatics, 1967a, 8, 289.

Part 3

There are no right or wrong answers to the questions. Please check "yes" or "no" for each item, depending on the answer that most closely describes your belief.

YES	NO		
___	___	1.	Do you believe that most problems will solve themselves if you just don't fool with them?
___	___	2.	Do you believe that you can stop yourself from catching a cold?
___	___	3.	Are some people just born lucky?
___	___	4.	Most of the time did you feel that getting good grades meant a great deal to you?
___	___	5.	Are you often blamed for things that just aren't your fault?
___	___	6.	Do you believe that if somebody studies hard enough, he or she can pass any subject?
___	___	7.	Do you feel that most of the time it doesn't pay to try hard because things never turn out right anyway?
___	___	8.	Do you feel that if things start out well in the morning that it's going to be a good day no matter what you do?
___	___	9.	Do you believe that wishing can make good things happen?
___	___	10.	Do you feel that most of the time children listen to what their parents have to say?

YES	NO		
___	___	11.	Most of the time do you find it hard to change a friend's (mind) opinion?
___	___	12.	Do you think that cheering more than luck helps a team to win?
___	___	13.	Did you feel that it was nearly impossible to change your parent's mind about anything?
___	___	14.	Do you believe that parents should allow children to make most of their own decisions?
___	___	15.	Do you feel that when you do something wrong there's very little you can do to make it right?
___	___	16.	Do you believe that most people are just born good at sports?
___	___	17.	Are most of the other people your age and sex stronger than you are?
___	___	18.	Do you feel that one of the best ways to handle most problems is just not to think about them?
___	___	19.	Do you feel that you have a lot of choice in deciding whom your friends are?
___	___	20.	If you find a four-leaf clover, do you believe that it might bring you good luck?
___	___	21.	Did you often feel that whether or not you did your homework had much to do with what kind of grades you got?

YES	NO		
___	___	22.	Do you feel that when a person your age is angry at you, there's little you can do to stop him or her?
___	___	23.	Have you ever had a good luck charm?
___	___	24.	Do you believe that whether or not people like you depends on how you act?
___	___	25.	Do your children usually help you if you ask them to?
___	___	26.	Have you felt that when people were angry with you it was usually for no reason at all?
___	___	27.	Most of the time, do you feel that you can change what might happen tomorrow by what you do today?
___	___	28.	Do you believe that when bad things are going to happen, they just are going to happen no matter what you try to do to stop them?
___	___	29.	Do you think that people can get their own way if they just keep trying?
___	___	30.	Do you feel that when good things happen they happen because of hard work?
___	___	31.	Do you feel that when somebody your age wants to be your enemy there's little you can do to change matters?
___	___	32.	Do you feel that it's easy to get friends to do what you want them to do?

YES	NO		
___	___	33.	Do you feel that when someone doesn't like you there's little you can do about it?
___	___	34.	Did you usually feel that it was almost useless to try in school because most other children were just plain smarter than you were?
___	___	35.	Are you the kind of person who believes that planning ahead makes things turn out better?
___	___	36.	Most of the time, do you feel that you have little to say about what your family decides to do?
___	___	37.	Do you think it's better to be smart than to be lucky?

Source. Duke, M. P., Shaheen, J., & Nowicki, S., Jr. The determination of locus of control in a geriatric population and a subsequent test of the social learning model for interpersonal distances. The Journal of Psychology, 1974, 86, 277-285.

REFERENCES

Abramowitz, S. I. Locus of control and self-reported depression among college students. Psychological Reports, 1969, 25, 149-150.

Abramson, L. Y., Garber, J. Edwards, N. B., & Seligman, E. P. Expectancy changes in depression and schizophrenia. Journal of Abnormal Psychology, 1978, 87, 102-109.

Abramson, L. Y., Seligman, E. P., & Teasdale, J. D. Learned helplessness in humans: Critique and reformulation. Journal of Abnormal Psychology, 1978, 87, 49-74.

Allport, F. D. Theories of perception and the concept of structure. New York: John Wiley & Sons, Inc., 1955.

Beck, A. T. Depression causes and treatment. Philadelphia: University of Pennsylvania Press, 1967.

Biggs, J. T., Wylie, L. T., & Ziegler, U. E. Validity of the Zung self-rating depression scale. British Journal of Psychiatry, 1978, 132, 381-385.

Bireen, J. E., & Warner, S. K. Handbook of the psychology of aging. New York: Van Nostrand Reinhold Co., 1977.

Blumenthal, M. D. Heterogeneity and research on depressive disorders. Archives of General Psychiatry, 1971, 24, 524-531.

Brissett, M., & Nowicki, S. Internal versus external control of reinforcement and reaction to frustration. Journal of Personality and Social Psychology, 1973, 25, 35-44.

Brown, G. L., & Zung, W. K. Depression scales. Comprehensive Psychiatry, 1972, 13, 361-367.

Brunner, J. S. Personality dynamics and the process of perceiving. In R. Black & G. Ramsey (Eds.), Perception--an approach to personality. New York: Ronald Press Co., 1951.

Buchwald, A. M., Coyne, J. C., & Cole, C. S. A critical evaluation of the learned helplessness model of depression. Journal of Abnormal Psychology, 1978, 87, 130-193.

Busse, E. W., & Pfeiffer, E. Mental illness in later life. Washington, D.C.: American Psychiatric Association, 1973.

Calhoun, L. G., Cheney, T., & Dawes, A. S. Locus of control, self-reported depression, and perceived causes of depression. Journal of Consulting and Clinical Psychology, 1974, 42, 736.

Carrell, B. J., Fielding, J. M., & Blashki, T. G. Depression rating scales: A critical review. Archives of General Psychiatry, 1973, 28, 361-366.

Charatan, F. B. Depression in old age. British Medical Journal, 1976, 1, 1031.

Cole, C. S., & Coyne, J. C. Situational specificity of laboratory-induced learned helplessness. Journal of Abnormal Psychology, 1977, 86, 615-623.

Corah, N. L., & Boffa, J. Perceived control, self-observation, and response to aversive stimuli. Journal of Personality and Social Psychology, 1970, 16, 1-4.

Depue, R. A., & Monroe, S. M. Learned helplessness in the perspective of the depressive disorders: Conceptual and definitional issues. Journal of Abnormal Psychology, 1978, 87, 3-20.

DuCette, J., & Wolk, S. Cognitive and motivational correlates of generalized expectancies for control. Journal of Personality and Social Psychology, 1972, 26, 420-426.

Duke, M. P., Shaheen, J., & Nowicki, S., Jr. The determination of locus of control in a geriatric population and a subsequent test of the social learning model for interpersonal distances. The Journal of Psychology, 1974, 86, 277-285.

Evans, R. G., & Dinning, D. Reductions in experienced control and depression in psychiatric inpatients: A test of the learned helplessness model. Journal of Clinical Psychology, 1978, 34, 609-613.

Fassler, L. B., & Gaviria, M. Depression in old age. Journal of the American Geriatric Society, 1978, 26, 471-475.

Felton, B., & Kahama, J. Adjustment and situationally-bound locus of control among institutionalized aged. Journal of Gerontology, 1974, 29, 295-301.

Fitch, G. Effects of self-esteem, perceived prformance, and choice on causal attributions. Journal of Personality and Social Psychology, 1970, 16, 311-315.

Flach, F. F. The secret strength of depression. New York: J. B. Lippincott Co., 1974.

Gardner, E. A., Bahn, A. K., & Mack, M. Suicide and psychiatric care in the aging. Archives of General Psychiatry, 1965, 10, 547-550.

Giambra, L. M. Independent dimensions of depression: A factor analysis of three self-report depression measures. Journal of Clinical Psychology, 1977, 33, 928-935.

Goldfarb, A. I. Masked depression in the old. American Journal of Psychotherapy, 1967, 21, 791-796.

Golin, S., Terrell, F., & Johnson, B. Depression and the illusion of control. Journal of Abnormal Psychology, 1977, 86, 440-442.

Gurland, B. J. The comparative frequency of depression in various adult age groups. Journal of Gerontology, 1976, 31, 283-292.

Haines, C. R., & Wild, B. Locus of control and depression among noninstitutionalized elderly persons. Psychological Reports, 1977, 41, 581-582.

Heider, F. The psychology of interpersonal relations. New York: John Wiley and Sons, 1958.

Hiroto, D. S. The relationship between learned helplessness and locus of control. Journal of Experimental Psychology, 1974, 102, 187-193.

Houston, B. K. Control over stress, locus of control, and response to stress. Journal of Personality and Social Psychology, 1972, 21, 249-255.

Huesman, L. R. Cognitive processes and models of depression. Journal of Abnormal Psychology, 1978, 87, 194-198.

Johnson, J. H., & Sarason, I. G. Life stress, depression, and anxiety: Internal-external control as a moderator variable. Journal of Psychosomatic Research, 1978, 22, 205-208.

Julian, J. W., Lichtman, C. M., & Ryckman, R. M. Internal-external control and need to control. The Journal of Social Psychology, 1968, 76, 43-48.

Klein, D. C., Fencil-Morse, E., & Seligman, E. P. Learned helplessness, depression, and the attribution of failure. Journal of Personality and Social Psychology, 1976, 33, 508-516.

Klein, D. C., & Seligman, E. P. Reversal of performance deficits and perceptual deficits in learned helplessness and depression. Journal of Abnormal Psychology, 1976, 85, 11-26.

Lefcourt, H. M. Internal versus external control of reinforcement: A review. Psychological Bulletin, 1966, 65, 206-220.

Lefcourt, H. M. Locus of control: Current trends in theory and research. New York: John Wiley & Sons, 1976.

Litman, R. E., & Wold, C. I. Masked depression and suicide. In S. Lesse (Ed.), Masked depression. New York: Jason Aronson Co., 1974.

McNitt, P. C., & Thornton, D. W. Depression and perceived reinforcement: A reconsideration. Journal of Abnormal Psychology, 1978, 87, 137-140.

Miller, W., & Lewis, P. Recognition memory in elderly patients with depression and dementia: A signal detection analysis. Journal of Abnormal Psychology, 1977, 86, 84-86.

Miller, W., & Seligman, E. P. Depression and the perception of reinforcement. Journal of Abnormal Psychology, 1973, 82, 62-73.

Miller, W., & Seligman, E. P. Learned helplessness, depression, and the perception of reinforcement. Behavior Research and Therapy, 1976, 14, 7-17.

Miller, W., Seligman, E. P., & Kurlander, H. M. Learned helplessness, depression, and anxiety. Journal of Nervous and Mental Diseases, 1975, 161, 347-357.

Naditch, M., Gargan, M., & Michael, L. B. Denial, anxiety, locus of control, and the discrepancy between aspirations and achievements as components of depression. Journal of Abnormal Psychology, 1975, 84, 1-9.

Nelson, R. E., & Craighead, W. E. Selective recall of positive and negative feedback, self-control behavior, and depression. Journal of Abnormal Psychology, 1977, 86, 379-388.

Nowicki, S., Jr., & Duke, M. P. A locus of control scale for non-college as well as college adults. Journal of Personality Assessment, 1974, 38, 136-137.

O'Leary, M. R., Donovan, D. M., Krueger, K. J., & Cysewski, B. Depression and perception of reinforcement: Lack of differences in expectancy change among alcoholics. Journal of Abnormal Psychology, 1978, 87, 110-112.

Price, K. P., Tryon, W. W., & Raps, C. S. Learned helplessness and depression in a clinical population: A test of two behavioral hypotheses. Journal of Abnormal Psychology, 1978, 87, 113-121.

Prociuk, T. J., Breen, L. J., & Lussier, R. J. Hopelessness, internal-external locus of control, and depression. Journal of Clinical Psychology, 1976, 32, 299-300.

Rachlis, D. Suicide and loss adjustment in the aging. Bulletin of Suicidology, 1970, 7, 23-26.

Ray, W. J., & Katahn, M. Relation of anxiety to locus of control. Psychological Reports, 1968, 23, 1196.

Rizley, R. Depression and distortion in the attribution of causality. Journal of Abnormal Psychology, 1978, 87, 32-48.

Rosenthal, S. H. Recognition of depression. Geriatrics, 1968, 23, 111-115.

Rotter, J. B. Generalized, expectancies of internal versus external control of reinforcement. Psychological Monographs, 1966, 80, 1.

Rotter, J. B., & Mulry, R. C. Internal versus external control of reinforcement and decision time. Journal of Personality and Social Psychology, 1965, 2, 598-604.

Rumbaut, R. D. Life events, change, migration, and depression. In W. E. Fann, K. Ismet, A. D. Pokorny, & R. L. Williams (Eds.), Phenomenology and treatment of depression. New York: Spectrum Publications, Inc., 1975.

Sacco, W. P., & Hokanson, J. E. Expectations of success and anagram performance of depressives in a public and private setting. Journal of Abnormal Psychology, 1978, 87, 122-130.

Salzman, C., & Shader, R. I. Depression in the Part II. Possible drug etiologies: Differential diagnostic criteria. Journal of the American Geriatrics Society, 1978, 26, 303-308.

Seligman, E. P. Depression and learned helplessness. In R. J. Friedman & M. M. Katz (Eds.), The psychology of depression: Contemporary theory and research. Washington, D.C.: V. H. Winston and Sons, 1974.

Seligman, E. P. Helplessness: On depression, development, and death. San Francisco: W. H. Freeman and Co., 1975.

Serban, G. The phenomenology of depression. American Journal of Psychotherapy, 1975, 29, 355-362.

Smith, R. E. Changes in locus of control as a function of life crisis resolution. Journal of Abnormal Psychology, 1970, 75, 328-332.

Smolen, R. C. Expectancies, mood, and performance of depressed and non-depressed psychiatric inpatients on chance and skill tasks. Journal of Abnormal Psychology, 1978, 87, 91-101.

Teasdale, J. D. Effects of real success on learned helplessness and depression. Journal of Abnormal Psychology, 1978, 87, 155-164.

United States Congress. Joint hearing before the subcommittee on long-term care and the subcommittee on health of the elderly of the 1975 special committee on aging: Mental health and the elderly (94th Congress, U.S. Public Health Service Publication No. L. 63-476). Washington, D.C.: U.S. Government Printing Office, 1976.

Watson, D. Relationship between locus of control and anxiety. Journal of Personality and Social Psychology, 1967, 6, 91-92.

Weiner, B., Heckhausen, H., Meyer, M. U., & Cook, R. E. Causal ascriptions and achievement motivation: A conceptual analysis of effort and reanalysis of locus of control. Journal of Personality and Social Psychology, 1972, 21, 239-248.

Willis, M., & Blaney, P. H. Three tests of the learned helplessness model of depression. Journal of Abnormal Psychology, 1978, 87, 131-136.

Woodruff, D. S. A physiological perspective of the psychology of aging. In D. S. Woodruff & J. E. Birren (Eds.), Aging scientific perspectives and social issues. New York: D. Van Nostrand Co., 1975.

Zung, W. K. A self-rating depression scale. Archives of General Psychiatry, 1965, 12, 63-70.

Zung, W. K. Depression in the normal aged. Psychosomatics, 1967, 8, 287-298. (a)

Zung, W. K. Factors influencing the self-rating depression scale. Archives of General Psychiatry, 1967, 16, 543-547. (b)

Zung, W. K. Mood disturbances in the elderly. Gerontology, 1970, 10, 2-4.