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Date May 28, 1990

LEARNED HELPLESSNESS AND SELF-ESTEEM IN INDIVIDUALS WITH CHRONIC OBSTRUCTIVE PULMONARY DISEASE

A Thesis

Presented for the

Master of Science in Nursing

Degree

The University of Tennessee, Knoxville

Jane M. Mayo

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DEDICATION

To the memory of my cousin, Elinor Hieneman Palmore, whose unconditional love and friendship have always strengthened me.

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ABSTRACT

This investigation studied the occurence of learned helplessness and the level of self-esteem in individuals with chronic obstructive pulmonary disease as compared to individuals without chronic illness. A sample of 40 individuals with chronic obstructive pulmonary disease (COPD) and 40 individuals without chronic illness (WCI) completed three questionnaires which included the Learned Helplessness Scale (LHS), the Self-Esteem Scale (SES), and a demographic questionnaire. A t-test for independent samples was performed on the data to determine differences in the COPD and the WCI groups. Pearson's rho was applied to the data to determine any relationship between the LHS and the SES scores. Data from the demographic questionnaire were tallied for frequency of responses to further contribute to limited clinical information available regarding living with chronic obstructive pulmonary disease.

The results showed a significant difference between the two groups on both the LHS and the SES. A positive correlation between SES and LHS scores was determined. Also concluded was a relationship between variables such as frequency of hospitalization, frequency of socialization outside the home, financial worries, goal setting, and depression and SES and LHS.

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CHAPTER I

THE PROBLEM AND ITS SETTING

Statement of the Problem

The long-term effects of chronic illness are of increasing importance to health care professionals and society in general. Care of the patient with chronic obstructive pulmonary disease (COPD) depends on an understanding of the psychosocial needs as well as physical needs. Learned helplessness is one factor that may be related self-esteem and the ability to cope with the long-term effects of the COPD.

Purpose of the Study

The purpose of this study was to investigate the following questions:

1. Is there a significant difference between the level of learned helplessness in individuals with COPD and individuals without chronic illness?

2. Is there a difference between the level of self-esteem in individuals with COPD and individuals without chronic illness?

3. What is the relationship between learned helplessness and self-esteem?

Need for the Study

Chronic obstructive pulmonary disease is a major cause of disability in the United States. In fact, the National Health Interview Survey estimates that about 16 million Americans have COPD. However, these figures underestimate the incidence of COPD since this statistic includes only reported conditions (Higgins, 1984). Unlike acute conditions, COPD is characterized by a progressive and irreversible pathologic condition resulting in residual physical and psychosocial problems (Dudley, Glaser, Jorgenson & Logan, 1980). Persons with chronic illnesses respond to their illnesses and the limitations imposed in various ways. Researchers have investigated individual responses to specific chronic illnesses to acquire insights regarding rehabilitation and care of the chronically ill. However, a review of the literature indicates relatively few studies have focused specifically on COPD patients.

Significance

If COPD patients acquire learned helplessness (LH), nurses could improve their assistance to patients as they develop plans specific to their care. A LH screening tool could be used as a component of initial assessment. During the goal-setting phase of the nursing process, achievable realistic outcomes could be identified to minimize learned

helplessness. Inadvertently, nurses unaware of learned helplessness may make decisions about care or otherwise assume responsibility for patient care even when patients could assume such responsibility.

Definition of Terms

1. Chronic obstructive pulmonary disease. A progressive and irreversible condition characterized by diminished inspiratory and expiratory capacity of the lungs. Persons with COPD complain of dyspnea upon physical exertion, encounter difficulty inhaling or exhaling deeply, and experience episodes of coughing. COPD subjects included individuals diagnosed with chronic bronchitis, emphysema, asthma, or combinations of these conditions.

2. Learned helplessness. A learning theory which originated from animal studies and evidenced in humans states: "A person or animal is helpless with respect to some outcome when the outcome occurs independently of all his/her voluntary responses" (Seligman, 1980, p. 17). Thus, one learns to be helpless and will not try to effect change in the outcome even in situations where change can be effected. The "Learned Helplessness" measurement tool designed by Quinless and Nelson (1988) was used to measure this construct.

3. Self-esteem. Learned attitudes or feelings, either favorable or unfavorable, which individuals perceive about the themselves. For the purposes of this study, the

Rosenberg Self-Esteem Scale was used to measure this construct (Rosenberg, 1965).

Assumptions and Limitations

This study was based on the following assumptions:

1. Clinical research data regarding human response to COPD is significantly limited.

2. Data can be gathered to establish the occurrence of learned helplessness and the level of self-esteem in patients with COPD.

3. This data could be used to facilitate the rehabilitation and care of COPD patients.

4. Desirable health outcomes can be achieved when nurse-patient relationships become collaborative and patients are empowered to make decisions regarding the attainment of goals.

5. Helplessness is learned.

6. Williamson's (1981) interaction model, when implemented by nurses, can prevent learned helplessness.

Theoretical Framework

The theoretical framework for this research included learned helplessness theory and Williamson's mutual interaction model for nursing practice.

Learned Helplessness

Overmier and Seligman (1967) first identified learned helplessness as a serendipitous finding in laboratory

dogs. They observed that naive or untrained dogs efficiently learned to escape shock by jumping over a barrier in a shuttle box, but dogs that initially received shocks which they could neither avoid nor escape demonstrated difficulty in learning to escape shock in the shuttle box (Seligman & Maier, 1967). These dogs experienced difficulty "unlearning" the helplessness they had initially experienced. To "unlearn helplessness" the researchers first removed the barrier, but the dogs remained motionless. Secondly, the researchers allowed the dogs to become hungry and then placed salami on the side of the box without shock, again the dogs did not respond. Finally, the researchers repeatedly forced the dogs to respond. They placed leashes on the dogs and dragged them across the shuttle box. After 25 to 200 draggings, all the dogs again responded on their own (Seligman, Maier, & Geer, 1968). Since the original finding of learned helplessness in dogs, the effects of uncontrolled events leading to learned helplessness in humans has also been documented (Abramson, Seligman, & Teasdale, 1978). These studies will be discussed more extensively in Chapter II.

According to Seligman (1975), the cornerstone of the theory of learned helplessness occurs "when an animal or a person faces an outcome independent of his response, he learns that the outcome is independent of his responses" (p. 46). The theory further identifies three major

consequences of experience with uncontrollable events or deficits: (a) motivational--uncontrollable events undermine one's motivation to initiate voluntary responses that control other events, (b) cognitive--after experiencing uncontrollable events or deficits, one encounters difficulty learning that one's response has been successful, and (c) affective--emotional feelings that accompany the learned helplessness including inadequacy, hopelessness, and loneliness (Seligman, 1975).

The learned helplessness response in humans exceeds the complexity first described in laboratory dogs. Abramson, Seligman, and Teasdale (1978) identified the importance of the individual's causal explanation of outcomes. Their reformulation of the original learned helplessness theory states that humans exposed to uncontrollable events first ask themselves "why is this happening?" Their answer to the "why" affects how they react to the event rather than the event itself. Individuals ascribe the "why" of events to three attributional dimensions. In the first dimension, personal versus universal, a person determines if the cause is personal (internal) or situational (external). The loss of self-esteem occurs more frequently if internal factors explain the cause.

In the second dimension the person ascertains the duration of the cause as stable (persisting across time) or as unstable (transient). Stable events continue for

indefinite periods of time and are associated with a greater likelihood of depressive reactions than transient or unstable events.

In the third dimension, global versus specific, individuals identify either the cause as affecting only one specific part of their lives or affecting a variety of outcomes. If one perceives a global cause, they make generalizations about consequences and about themselves. The more specific the cause, the greater likelihood of helplessness affecting many different situations.

Mutual Interaction Model

Williamson's (1981) mutual interaction model, provided an integral part of the theoretical framework for this study, and consists of six interlinking phases: (a) exploratory, (b) information sharing and analysis, (c) mutual goal setting, (d) strategy devising, (e) implementation of alternatives and (f) evaluation. These steps parallel the nursing process except each step emphasizes a collaborative approach between the nurse and the patient.

According to Williamson (1981) mutual interaction diminishes dominance and dependence and emphasizes interdependence, sharing, and trust. The model assumes (a) self-determination, (b) reciprocal interaction between nurse and patient, (c) personal rather than professional responsibility for health, and (d) legitimacy of each individual's concept of health.

In order for mutual interaction to be effective in patient goal attainment, nurses embrace a particular value and belief system. Nurses must first believe that patients are trustworthy and are capable of decision making. Secondly, nurses cannot mutually interact toward goal attainment with patients unless they believe in the dignity and worth of the patients (Williamson, 1981). The essence of the mutual interaction model espouses that freedom can be achieved through democratic interactions, which empower all parties involved in the process. Therefore, nurses must value and believe in democracy as the best mechanism for patient goal attainment.

Freedom afforded patients to choose health goals and strategies for achieving such goals manifested at each phase of the process expresses existentialism in the mutual interaction model. Clemence (1966) in her classic essay on existentialism stated, "Man has freedom and through the courageous use of that freedom he is to make himself . . . man is not, but is forever becoming" (p. 502). Nurses must recognize the individual's need for freedom to choose and elicit viable options. Likewise, nurses must avoid making decisions for patients that stifle freedom and subsequently prevent the patient from "becoming."

Helplessness and powerlessness are terms used interchangeably by health care providers. Powerlessness is a prevalent nursing diagnosis in chronically ill patients (Miller, 1983). Complete alleviation of symptoms and cure

are not appropriate goals for the chronically ill. However, to focus on alleviating powerlessness, thus enhancing quality of life, is an appropriate nursing goal.

Combining the learned helplessness theory and the mutual interaction model provided a useful framework for the study of patients with COPD. As described, learned helplessness theory considers the effects of lack of or minimal control. By definition, persons with COPD exhibit certain human responses due to a chronic disease that minimizes their control. Figure 1 illustrates the six interlinking phases of the mutual interaction model, which correlate with the steps of the nursing process. Although helplessness could develop at any step in the nursing process, goal setting and strategy devising are the most critical steps. Emphasis on collaboration between the nurse and the patient during these steps increases patient control. Therefore, mutual goal setting and strategy devising are the critical phases wherein nurses can best avert the development of learned helplessness or minimize powerlessness. This concept is also identified in Figure 1.

If loss of control over an outcome or goal stimulates the learned helplessness response, a model of nursing practice that affords patients freedom to control their own health outcomes is desirable. This explains the criticalness of the mutual goal setting and the strategy devising phases of the model. The mutual interaction model requires a

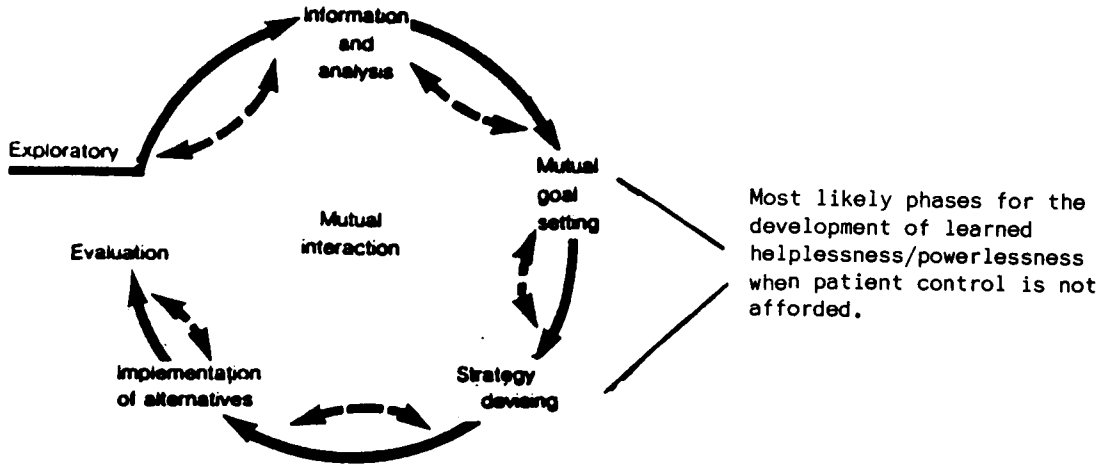

Figure 1. Diagram of Mutual Interaction Model identifying critical phases in which nurse-patient collaboration may prevent the development of Learned Helplessness.

Source: Adapted from Williamson, 1981, p. 105.

collaborative approach to define and attain health outcomes. This does not mean that nurses are expected to be omniscient, but rather professionals with specialized knowledge of the processes necessary to attain desired health goals. Patients can then use nurses as sources of information important to making decisions about their health outcomes. In this two-way interaction, control resides in the patient rather than with the nurse.

The nature of COPD, a slow progressive disease with many possible physical and psychosocial human responses, requires a collaborative approach. Maximizing control in the two-way interaction between the nurse and the patient offsets the self-limiting aspects of the disease that tend to minimize control of health outcomes. Ultimately, implementation of an interactive, collaborative nurse-patient relationship would limit the learned helplessness response.

CHAPTER II

LITERATURE REVIEW

Due to the lack of published research specific to learned helplessness in COPD patients, the four sections of the review of the literature include other models of helplessness and/or powerlessness. The first section is a review of lack of control as it contributes to the nursing diagnosis of powerlessness. The second section covers psychosocial or emotional aspects of patients with COPD. The third section consists of normal or healthy human studies of learned helplessness as a model for depression. The fourth section presents current studies of learned helplessness in the elderly. Finally a summary relates each section to the present study.

Lack of Control and Powerlessness

As indicated in Chapter I, powerlessness and helplessness are terms which have been used interchangeably. Powerlessness, a nursing diagnosis, is defined as: The state in which an individual perceives lack of personal control over certain events or situations (Carpenito, 1989, p. 17). A sense of powerlessness or loss of control often accompanies living with chronic illness.

Graduate students enrolled in a clinical nursing course involving care of chronically ill patients determined

indicators of the nursing diagnosis of powerlessness. The students recorded indicators which they believed reflected their feelings of powerlessness in their chronically ill patients. They rated indicators as "severe," "moderate," and "low." An example of each level of indicators follows: (a) severe--verbal expressions of having no control or influence over situations or outcomes, (b) moderate--nonparticipation in care or decision-making, and (c) low--expressions or uncertainty about fluctuating energy levels (Miller, 1983, p. 54).

Obviously control, or lack of control, affects humans. Kanfer and Seidner (1973) studied the effectiveness of self-controlling response in 45 women undergraduate students. The subjects, divided into three groups, all had one hand immersed in ice water. Subjects in group 1 viewed travel slides that they advanced at their own desired rate. Group 2 had the slides advanced by the experimenter. No slides were used for group 3. Subjects who advanced slides at their own rate exhibited the greatest duration of ice-water tolerance. The researchers did not attribute the tolerance for ice water to self-distraction techniques that may have been used by the group controlling the slides. They concluded that self-controlling responses increased tolerance for the aversive stimuli.

Powerlessness has been identified in patients with different chronic health problems. Evidence supports

existence of powerlessness in obesity. Hartz (1979) found a significant relationship between control and social responsibility and weight loss. In this study, women with low control and low social responsiblity scores were less successful in weight control than were women with high control and high social responsiblity.

Reichman and Levy (1972) determined helplessness to be the major feeling experienced by patients with chronic renal failure. The researchers related this finding to a dependence-independence conflict. In addition, they found the conflict seemed to increase after the initiation of dialysis when patients wanted to remain dependent and yet wanted to be free to experience the independence encouraged by the health care providers.

Any long-term energy deficit contributes to powerlessness. When humans lack the capacity to do work, powerlessness exists (Miller, 1983). It is not surprising that chronic energy depleting illnesses have been found to precipitate powerlessness. Powerlessness or helplessness of this nature is a noted psychological construct that appears relevant to psychosocial adjustment in patients with rheumatoid arthritis (Callahan, Brooks, & Pincus, 1988). In a similar study examining the construct of helplessness, Engle, Callahan, Pincus, and Hockbert (1990) found a significant relationship between the construct and psychosocial adjustment to systemic lupus erythematosus (SLE). In addition,

the researcher suggested that the helplessness construct may be relevant to outcomes of morbidity and mortality in patients with SLE.

This review of the literature reveals that powerlessness can have overwhelming effects on the individual's physical and emotional states. Persons with a diagnosis of powerlessness not only respond to nursing interventions but depend upon nurses as the professional group which takes action to alleviate the problem. Logically, a model for nursing such as Williamson's mutual interaction model, which empowers the patient to make decisions regarding his or her own health care, can be effectively employed to allay powerlessness.

Psychosocial and Emotional Aspects of the COPD Patient

Living with a chronic disease such as COPD requires many changes in daily living. These changes usually include limitations that vary with the extent of the disease process. Physical limitations become readily apparent to even casual observers, especially if the patient becomes short of breath during conversation. Less obvious aspects of the disease include emotional or psychosocial limitations.

Physical limitations of COPD patients involving vocational, social, and personal activities, have been well documented (Barstow, 1974; Foxall, Ekbert, & Griffith, 1987;

& Sexton & Munro, 1988). However, some authorities believe many of the physical complaints and problems of patients previously thought to have been disease related may be symptoms of emotional problems or depression (Agle, et al., 1973; McSweeney, Grant, Heaton, Adams, & Timms, 1982; Sexton & Munro, 1988). Dudley, Wermuth, and Hague (1973) observed that severely disabled COPD patients live in "emotional straitjackets." Expressions of emotions such as anger, depression, or even happiness may lead to distressing symptoms like dyspnea. In fact, emotional reactions may cause extensive physical decompensation and require hospitalization.

Barstow (1974) investigated coping mechanisms used by long-term emphysema patients. Using interviews with a convenience sample, she found patients experiencing energy loss changed their roles. These changes affected their roles at work, in recreational endeavors, and within their families. The contraction of the patients' roles forced the roles of others close to them to expand.

These role changes, because of their permanence, tended to affect the self-concept of the patients. Each change in their condition or increase in their limitations required new adjustments by both patients and their significant others. Patients also reported that when they felt they had some control over their condition and remained action-oriented, they were more likely to cope with the situation.

Barstow identified simplifying and pacing activities as the major concepts related to the development of positive strategies to cope with the disease. Both allowed patients some control and also better predictability of the outcomes for certain behaviors.

Supportive significant others proved to be the single, most important influence on adjustment. Although the presence of significant others led to easier patient adjustment from an energy standpoint, Barstow (1974) considered that over-sympathetic persons may increase dependence. In addition, some subjects reported feelings of worthlessness which also may have been related to increased dependence on others.

A study of 23 male COPD patients in a rehabilitation setting reported a relationship between psychologic and physiologic factors of the disease (Agle, et al., 1973). Each subject had at least three psychiatric interviews: one at the beginning of the project, another after eight weeks of rehabilitation, and another one year after completing rehabilitation. In addition, each subject participated twice a week in group therapy throughout the rehabilitation period.

Initially, 22 of the 23 patients displayed symptoms of anxiety sufficient to interfere with performance. Seventeen had some crippling degree of depression evidenced by complaints of sadness, lack of motivation, a sense of worthlessness, loss of appetite, and/or sleep disturbances.

Although these are classic signs of depression, they may be produced or exaggerated by the pathophysiology of the COPD. Other problems identified by these subjects included sexual dysfunction, body preoccupation, and suicidal ideations.

This study identified the need for COPD patients to set realistic and individualized goals, especially to anxiety and thus increase activity. To accomplish this goal, researchers desensitized subjects by repeatedly exposing them to exertional dyspnea, a prevalent fear associated with COPD. Disengaging the dyspnea-anxiety cycle produced an improvement in exercise tolerance. This repetitive experience contributed to the control of unrealistic fear and offered hope for the future.

Because there is no cure for chronic illness, health care providers have become increasingly concerned regarding the quality of life for individuals with chronic illness (Miller, 1983). McSweeney, et al. (1983) reported one of the first studies on quality of life of COPD patients. The subjects included 203 hypoxemic (Pa02 < than 60 mmHg) patients (79% male and 21% female) enrolled in a collaborative study to compare the effectiveness of nocturnal and continuous oxygen therapy. The study included COPD patients with chronic bronchitis or emphysema.

They assessed life-quality dimensions based on self-reports consisting of the Minnesota Multi-Phasic Inventory (MMPI), the Profile of Mood States (POMS), and the Sickness

Impact Profile (SIC). The Katz Adjustment Scale (KAS) assessed functioning from the perspective of spouses or some other close relative. Seventy-three healthy subjects, who served as the control group for the study, completed the series of questionnaires.

Compared to the control group, patients with COPD indicated impairment of life quality in almost all respects. The MMPI suggested major emotional disturbances including depression, dissatisfaction with life, and somatic preoccupation. Reactive depression occurred most frequently. Results of the POMS were generally consistent with those of the MMPI. The KAS indicated social withdrawal and an obstreperous attitude as common factors.

Chronic illnesses affect every member of the family, especially spouses on whom chronically ill individuals most often depend (Miller, 1983). Sexton and Munro (1985) studied the impact of 46 husbands' COPD on the lives of their wives. The husbands' severity of illness ranged from I through V, with I defined as diagnosed but without restrictions and V defined as very severely restricted activity. However, most subjects fell between these extremes. Using a variety of self-reporting tools including the Subjective Stress Scale and the Life Satisfaction Index, the investigators found wives of COPD patients had higher levels of subjective stress and lower life satisfaction than subjects in an unmatched control group of 30 wives of husbands who did not

have chronic illnesses. The wives of COPD patients assumed roles in addition to those that they had prior to their husbands' illnesses including decision-maker, finance manager, and caretaker. More importantly, many assumed the role of breadwinner due to the unexpected early retirement of the husband.

Based on their findings, the researchers raised certain questions with nursing implications: 1. Does the caretaker role assumed by the wife contribute to decreased self-esteem in the COPD patient? 2. Do behaviors of the caretaker spouse cause behaviors of helplessness to develop in spouses with COPD (Sexton & Munro, 1985)? Both questions are pertinent to investigate the idea of helplessness in patients with COPD.

Foxall, Ekberg, and Griffith (1987) compared the adjustment patterns of 24 subjects with COPD to 30 subjects with peripheral vascular disease (PVD). The subjects with COPD included 17 men and 7 women; the subjects with PVD included 15 men and 15 women. The disability level of subjects with COPD ranged from an absence of disability to complete disability: seven patients reported complete disability and seven reported partial disability. For subjects with PVD, disability levels ranged from partial to complete disability; four patients reported complete disability and 26 reported partial disability.

The investigators defined adjustment to include both psychologic and sociologic dimensions. Psychologic

adjustment was measured with the Life Satisfaction Index-Z Scale and the Mental Health Questionnaire of the Older Americans Resources and Services Multidimensional Functional Assessment Questionnaire. Sociologic adjustment was measured with the Social Role Rating Scale.

Results of the study suggested both similarities and differences exist between the two chronic illnesses in terms of adjustment patterns. Subjects with COPD tended to have lower life satisfaction scores and significantly lower mental health status than subjects with PVD. Subjects with COPD reported feelings of uselessness, wanting to leave home, lack of being understood, and loneliness. However, compared to subjects with PVD, subjects with COPD expressed more optimism about the future. The data further revealed that subjects with COPD experienced greater role loss than did subjects with PVD. This may partially explain why subjects with COPD had lower psychologic adjustment scores. Despite the small sample, the study indicated a significant need for nurses to be aware of the real potential for low self-esteem and decreased self-image in patients with either COPD or PVD (Foxall, et al., 1987).

In a recent study, Sexton and Munro (1988) examined the experience of women living with chronic obstructive pulmonary disease. They collected data from a group of 72 women diagnosed with COPD and an unmatched control group of 40 women without chronic illnesses. The subjects responded

to a questionnaire that included biographic and illness related questions, the Subjective Stress Scale and Life Satisfaction Index-A. In answer to an open-ended question "what is your biggest problem?" the COPD group reported: (a) shortness of breath and fatigue, (b) loneliness and depression, (c) restricted activity, and (d) financial concerns. The group without chronic illnesses reported major problems as: financial concerns and children. Both groups reported similar difficulties sleeping and living alone. Compared to the control group, subjects with COPD reported significantly higher subjective stress and lower life satisfaction.

William R. Jones (1967), describing his personal experience living with emphysema stated, "I was given two choices: to either adopt an entirely new outlook and way of life or degenerate into something similar to a human carrot--or some other type of bland, yellow vegetable" (p. 54). His personal account of COPD describes the quality of life experienced by persons living with COPD, but how does one avoid the degeneration of spirit? Jones further describes the inner feelings of shortness of breath, "We [COPD patients] actually experience a perpetual mental burden of apprehension, physical tension, constant fright, severe depression, and conscious and unconscious irritability" (p. 55). Research statistics fail to reflect the vivid human experience described here. Yet, those

who provide care to patients with COPD and their families must not fail to consider this kind of anecdotal data.

The review of the literature in this section identifies financial concerns, social isolation, and loneliness, as well as physical complaints such as shortness of breath and fatigue as common characteristics of patients with COPD. Also, these factors may contribute to depression and loss of self-esteem. Because significant others, usually spouses, must assume the role as caretakers, a potential exists for helplessness to develop.

Learned Helplessness: Depression and Loss of Self-Esteem

As discussed in the introduction, Overmier and Seligman (1967) originally identified learned helplessness in laboratory dogs unable to escape shock. Since that time, many investigators interested in human adaptation have considered the notion that learned helplessness might also explain certain behaviors in humans (Janoff-Bulman, 1979; Langer & Rodin, 1976; Murphy, 1982; Robertson, 1986; Schulz, 1976). In fact, helplessness theory has been used to explain a variety of human behaviors, but perhaps most significant is learned helplessness as a model for understanding depression (Miller & Seligman, 1975).

Seligman espouses four relevant lines of evidence that the two phenomena of helplessness and depression may be

similar: (a) symptomatology, (b) etiology, (c) cure, and (d) prevention. Similarities between the symptomatology and etiology of helplessness and depression are obvious (Peterson & Seligman, 1984). Therefore, considering the data to support the reversibility of helplessness in the dog, the notion that symptoms of depression in humans may be reversible in a similar manner warrants testing (Seligman, 1975).

If learned helplessness as an explanation for depression in man has value, then helplessness induced in the laboratory in nondepressed subjects should produce symptoms similar to those shown by depressed subjects without helplessness training (Klein, Fencil-Morse, & Seligman, 1976). To test this hypotheses, researchers administered the Beck Depression Inventory to the 80 volunteer subjects and from the results assigned the subjects to two groups. The groups consisted of 40 less depressed and 40 more depressed subjects; each group was composed of 20 males and 20 females.

As predicted, nondepressed subjects demonstrated deficits in solving "unsolvable" problems parallel to depressed subjects not exposed to any form of helplessness training. Although this finding supported earlier studies of helplessness, it neglected to account for the attribution of personal failure. When depressed subjects attributed their failure to the difficulty of the problems rather than

to their own incompetence, performance improved greatly (Klein, et al., 1976).

The findings of this study and other similar studies (Hirota & Seligman, 1975) led to a reformulation of the original learned helplessness hypothesis to consider causal attribution. Their reformulated theory incorporated the attributional framework which gave it more applicability as a model for depression. The new hypothesis states that an awareness of helplessness leads to a search for the cause. The cause or attribution chosen influences expectations of future helplessness, the chronicity, the extension to other life experiences, and adoption of long-lasting consequences such as lowered self-esteem (Abramson, et al., 1978).

Within the past decade, researchers have tested the attributional aspect of the theory. The first studies identified a strong correlation between internal causal attributes and helplessness, and depression and lowered self-esteem. Janoff-Bulman (1979) in a study of rape victims distinguished between blame directed toward one's own character and blame directed toward one's own behavior. She proposed character blame produces helplessness and depression but behavioral blame does not. She cited the following example: If a woman believes she was raped because she did (behavior) something which led to the rape, such as walking in an unlit area, she is less likely to experience helplessness than if she believes she was raped

because she is (character) the sort of person to whom things like rape happen. The investigator further concluded, if behavior is to blame for a bad outcome, then future bad outcomes can be avoided by changing the behavior. In contrast, if character is blamed, the individual lacks control and perceives bad outcomes as likely to reoccur regardless of what one does. Peterson, Swartz, and Seligman (1981) studied the relationship between self-blame and depressive symptoms. They administered the Beck Depression Inventory, Expanded Attributional Style Questionnaire (EASQ), and Life Events Questionnaire to 87 freshman females from the University of Pennsylvania. The EASQ instructed subjects to imagine themselves in a given hypothetical situation and write the major cause if the event were to happen to them.

Depressive symptoms correlated positively with the attribute of character for negative events. Subjects believed negative outcomes to be caused by character and associated them with helplessness and guilt more frequently than outcomes believed caused by behavior. However, the investigators emphasized that although their data showed correlation between self-blame and depression, it did not imply self-blame to cause later occurring depressive symptoms (Peterson, et al., 1981).

Studies on nondiagnosed depressive subjects led to the studies on diagnosed unipolar depressed inpatients (Raps,

Peterson, Reinhard, Abramson, & Seligman, 1982). The researchers administered the Attributional Style Questionnaire to hospitalized males in a veterans hospital. Subjects included 30 unipolar depressed patients, 15 nondepressed schizophrenic patients, and 61 nondepressed medical surgical patients. Consistent with the studies previously described, depressed patients explained bad events with an attributional style of internal, stable, and global. Because schizophrenic patients scored low on this same style, it did not appear to be a general characteristic of psychopathology (Raps, et al., 1982).

Other studies correlating the ASQ with depression symptoms have been reported. Eaves and Rush (1984) compared 31 depressed women diagnosed with unipolar, major affective disorders to a control group of 17 women matched for age and education. Again, in this study depressed women exhibited an attributional style of internal, stable, and global. This study also reported a high correlation between the stability measure and the total time of depression as well as the average length of a depressive episode. The researchers believe these findings suggest that the stability attribute for bad outcomes may predict the length of depressive episodes (Eaves & Rush, 1984).

Studies concerning attributional styles and responses to physical illness have also been reported. Affleck, Allen, McGrade, and McQueeney (1982) interviewed 43 mothers of infants

with perinatal complications. Mothers who explained their infant's condition as caused by unstable and specific attributes, such as some behavior of the mother during pregnancy, reported less mood disturbance and anticipated less caretaking problems than did mothers who explained the complications in terms of other people or stable and global causes.

Not all research supports the learned helplessness theory. Some research suggests limitations or unexplained questions regarding the learned helplessness theory such as: (a) For what events is causal information sought? (b) What conditions determine the adaptive or maladaptive nature of helplessness? (c) Is helplessness adaptive or maladaptive?, and (d) Under what conditions does helplessness exist? (Murphy, 1982).

Hanusa and Schulz (1977) exposed subjects to uncontrollable adversive outcomes and manipulated the attribution of causality for outcomes. Subjects induced to believe they had the attribution of inadequate ability performed better in the helplessness training than those who believed the causal attribute to be the degree of difficulty of the task. This finding contradicts studies reporting self-blame or the internal, stable, and global attribution to contribute to learned helplessness (Janoff-Bulman, 1979; Peterson, et al., 1981; Raps, et al., 1982).

Bulman and Wortman (1977) studied patients with spinal cord injuries for the attributions of causality for their

accident and their ability to cope with permanent paralysis. They asked young men and women with paraplegia or quadiplegia caused by traumatic accidents questions designed to assess their beliefs about blame for the accident; blaming either self, others, environmental factors, or chance. They determined coping abilities of the subjects by ratings assigned by social workers and nurses familiar with each subject. They defined coping well if subjects accepted their injury and had attempted to deal with their disabilities, for example by attending physical therapy. They rated subjects as coping poorly if they showed little interest in attending physical therapy or in attempting to learn how to deal with their disabilities. The more the subjects blamed environmental factors, the more they believed they could have avoided the accident, and the worse they coped. If they blamed themselves, they coped better with their paralysis.

Baum, Flemming, and Reddy (1986) offered a possible explanation as to how some individuals who blame themselves cope well with noncontingency and some who blame themselves do not cope with the noncontingency and develop learned helplessness. Their study investigated the progression and intensity of learned helplessness following the loss of a job. Subjects consisted of 10 unemployed for less than 3 weeks, 10 unemployed from three 3 to 8 weeks, and 10 unemployed for greater than 8 weeks and a comparison group of 10 employed

subjects. They exposed half the subjects in each group to an unsolvable or uncontrollable task and the other half to a solvable task.

Subjects unemployed for the longest period of time demonstrated the greatest impairment of performance. They demonstrated less persistence at the task and solved fewer puzzles than the other groups. Those unemployed for the shortest period of time were more reactive and performed more like the control group. Thus, in the presence of uncontrollability, the early response may likely be reactance followed by learned helplessness as the length of exposure to the negative outcome continues.

In summary, this section indicates reformulated learned helplessness theory, which includes the effects of attribution, may be applicable as a model of depression. As reported in the first section, patients with COPD reportedly suffer symptoms typical of depression. The literature indicates attributes for the negative outcomes correlate with depressive symptoms. Although some research contradicted the reformulated learned helplessness theory, Baum, et al., (1986) found that the contradiction may be explained by the length of time exposed to the lack of control. Further, research strongly indicates that the stable attribute of self-blame may be the connection between learned helplessness, depression, and lowered self-esteem.

Learned Helplessness in the Elderly

Nursing literature regarding learned helplessness usually reports operationalization of the theory to nursing care of the elderly (Decker & Kinzek, 1985; Fuller, 1978; Murphy, 1982; Robertson, 1986). Authors hypothesize the helplessness may result from losses which occur with aging. As cited in the first section of this chapter, similar losses, including physical ability, income, social isolation, and friends occur in patients with COPD. Logically, examination of research related to helplessness in the elderly would provide insights to helplessness in patients with COPD.

Schulz (1976) hypothesized that retirement and old age precipitate an abrupt decline in control. He assessed the effects of increased control and predictability upon the physical and psychological well-being of the aged. His subjects included 36 retired women and 6 retired men ranging from 67 to 96 years old living in a private, church-affiliated retirement home. All subjects could ambulate and converse. Subjects responded to four questionnaires including Activities, My Usual Day, Future Diary, and the Wohlford Hope Scale. The Activities questionnaire measured each subject's participation in activities. The remaining three questionnaires measured "successful" aging.

Subjects were then assigned to one of three groups: control visitor group, predict visitor group, or random

visitor group. The control visitor group subjects had opportunities to control both the duration and the frequency of social visits by undergraduate students assisting the researcher. Subjects in the predict visitor group were informed when to expect visitors but were not given control to determine when the visitors came or how long they stayed. Subjects in the random visitor group were visited as frequently and for periods of time equal to that of subjects in the control visitor group but were not given the opportunity to control either when the visitors came or the lengths of the visit.

Two months after the initial interview, subjects again responded to the questionnaires administered in the initial interview. These also responded to questionnaires pertaining to general satisfaction living at the home including questions regarding boredom, loneliness, physical problems, happiness, health status, and usefulness. In addition, subjects responded to a questionnaire regarding the visits they had received. Further, the activities director at the home, unaware of the ongoing research, rated each participant on the Health Status Scale and Zest for Life Scale. This study varied from previously cited research in that another persons imposed controls; the predict and control groups scored consistently and significantly higher on measures of psychological conditions, physical conditions, and level of activity.

Langer and Rodin (1976) also studied the effects of control in the institutionalized aging. They introduced the "notion" of decision making as factor in helplessness. One group of subjects who were patients in a nursing home was called to a meeting where their personal responsibility and their power to influence change in the home was emphasized. Before they left the meeting the subjects each chose a plant which they would tend. The investigators gave a second group of subjects information about living in the nursing home that emphasized staff responsibility to the residents and focused on following rules. They assigned plants to these subjects, rather than allowing them to choose and informed them that the nurses would tend their plants.

Although the intervention involved a rather weak, one-time only manipulation (communication from the nursing home administrator), after six months, the group allowed to make decisions for themselves scored significantly higher regarding activity, happiness, and mental alertness. This finding suggests the importance of increased control to those who have lost or relinquished so much control.

Maiden (1987) tested a combination of both the old learned helplessness theory and the reformulated theory as a model for depression. The Wechsler Information Subtest was administered to 50 women ranging from 65 to 96 years with a mean age of 76.4. (The investigator eliminated six subjects who scored below the mean.) About one-third of the remaining

subjects lived in a geriatric center, one-third in their homes, and one-third in apartments.

The subjects responded to the Rosenberg Self-Esteem Scale and a self-reported health scale, and performed a number guessing task. Subjects were told that luck, difficulty of task, ability, and effort could play a role in their performance on the task; however, the scores were determined solely by chance. Upon completion of the task, each subject rated the perceived causes for their scores.

Their depression measurement scores significantly correlated to self-esteem and the self-reported health scale. In addition, on the number guessing task, subjects with higher scores on the depression scale blamed themselves for failure and ascribed their successes to luck. Subjects with lower scores on the depression scale thought luck caused failure and attributed their success to their efforts and ability.

This data supports the reformulated model; and, in fact, in his discussion Maiden (1987) espouses the value of the old model combined with the reformulated model. He believes in the importance of changing cognition so that behavior is less threatening (the old model) and that patients alter behavior or set goals that can be achieved (the reformulated model). In this way, feelings about self improve which should break the helplessness cycle.

How much do nurses know about learned helplessness? Slimmer, Lopex, LeSage, and Ellor (1987) studied 44

nurses employed in a teaching center for the elderly, an extended care unit, and a rehabilitation unit to determine their perceptions of learned helplessness. Each subject completed a questionnaire entitled "My Feelings About Learned Helplessness in the Elderly," a form to record signs and symptoms of learned helplessness, describe the presence of learned helplessness, and cite appropriate nursing interventions. Findings indicated confusion about learned helplessness. Although most considered helplessness undesirable, they expressed uncertainty whether helplessness occurs as an expected or convenient behavior. Perhaps most significantly, nurses rated learned helplessness as a set of behaviors that controls others, rather than behaviors resulting form being controlled.

The studies in this section further support the strong relationship between learned helplessness and the attribute of self-blame and/or lowered self-esteem. Langer and Rodin (1976) support personal rather than professional responsibility for health. Individuals with more control adapt better and report greater happiness. The research indicates that nurses lack knowledge regarding the learned helplessness response in patients.

In summary, helplessness and powerlessness are used interchangeably in this study to denote the perception that one's own actions will not significantly affect an outcome. Chronic illness, because of lack of control imposed by the

disease, often results in powerlessness. Nursing can assess, diagnose, and implement interventions for powerlessness.

Few studies report the psychosocial aspects of living with COPD, yet most suggest a strong emotional component of the disease. Many patients with COPD report themselves or are reported by others to have frequent episodes of depression. The research implies that the nature of the disease leads to the patient's loss of control over certain aspects of the patient's life. No research has been reported dealing with learned helplessness in patients with COPD; however, learned helplessness as a model for understanding depression has been demonstrated in the literature.

Although the occurrence of learned helplessness in the elderly has been documented, when the elderly are given more control, responsibility, and allowed to make choices, this helplessness diminishes. Because of similarities between patients with COPD and the elderly, particularly loss of control over life choices, studies of helplessness in the elderly apply to this study of helplessness in patients with COPD. Employing the mutual interaction model, which provides opportunity for control whenever possible, should significantly improve the physical and psychosocial well-being of individuals of both groups.

Some research (Slimmer, et al., 1987) indicates that nurses have limited understanding of learned helplessness.

Most nurses agreed that helplessness was undesirable, but they believed it to be a set of behaviors that controls others rather than behaviors resulting from being controlled. Nurses who recognize that lack of control precipitates learned helplessness may implement Williamson's (1981) mutual interaction model, which increases the patient's control over health outcomes.

Finally, research regarding the psychosocial aspect of COPD is scant compared to investigations concerning the psychosocial aspect of other chronic diseases. The study by this investigator will add to the limited body of knowledge regarding living with COPD and perhaps generate further understanding of the occurrence of learned helplessness.

CHAPTER III

METHODS AND PROCEDURES

Design of the Study

This investigation studied the occurrence of learned helplessness and the level of self-esteem in individuals with chronic obstructive pulmonary disease as compared to individuals without chronic illness.

Subjects

Data was collected from the two groups. Group I or the COPD group included 40 subjects with a diagnosis of COPD. Subjects were: (a) mentally alert and able to answer the questionnaire, (b) English speaking, and (c) 55 years of age or older.

The WCI (without chronic illness) group consisted of 40 subjects without chronic illnesses. Although matching was not attempted, subjects in the WCI group were mentally alert and able to answer the questionnaire, English speaking, and 55 years of age or older. Fifty-five was chosen as the minimum age due to findings in the review of literature indicating the occurrence of learned helplessness in the elderly. Therefore, if subjects in both groups were of the approximate age, any differences in scores would result from the effects of COPD rather than from the effects of aging. In addition, because a longitudinal study was not feasible, comparison to

a control group was necessary to assess the learned helplessness response in patients with COPD. Table I shows the characteristics of subjects included in the study.

TABLE I

SUBJECT CHARACTERISTICS

	COPD Group		WCI Group	
	Female (N=21)	Male (N=19)	Female (N=23)	Male (N=17)
Age Range	54-88	58-76	55-82	55-88
Mean Age	64.4	66.6	62.9	64.4

Subjects in the COPD group were a convenience sample of patients with COPD involved in the Mercy Life Center Pulmonary Rehabilitation Program or the Better Breathing Club of the Scioto County Tuberculosis and Respiratory Health Association; both in Portsmouth, Ohio. The investigator attended these groups and invited potential subjects to participate in the research. The questionnaires were then distributed to those who had signed an informed consent form.

The WCI group was also a convenience sample of 40 subjects. Individuals participating in this group were of similar age to the subjects in COPD group. Notices were posted at Shawnee State University, Portsmouth, Ohio, asking

for volunteers for the study. Notices were posted in the library and other recreational facilities frequented by seniors from the local community. Volunteers first were interviewed to determine a health history of no chronic illness such as arthritis, diabetes, heart disease, hypertension, lung disease, or renal disease. Questionnaires were then distributed to those volunteers who qualified and had signed an informed consent form.

Descriptive Correlational Variables

After signing the informed consent form (Appendix A), each subject completed three questionnaires including, the Learned Helplessness Scale, the Self-Esteem Scale, and an investigator-designed demographic data form.

Learned Helplessness Scale (LHS)

The LHS, developed by Quinless and Nelson (1988) was used to measure learned helplessness. The tool rates 20 items on a four-point Likert scale ranging from strongly disagree (1) to strongly agree (4). The range of possible scores for this instrument is 20 to 80. The higher the score on the LHS, the higher the subject's degree of learned helplessness. Martin E. Seligman, Lyn Abramson, and Christopher Peterson, all of whom have been involved either in the initial finding of learned helplessness or in subsequent investigation, constituted the panel of experts in the development of the instrument (Quinless & Nelson, 1988).

They reported alpha reliability coefficients of .85 in the healthy population, .82 in an oncology sample, .92 in a hemodialysis sample and .94 in a spinal cord sample. This data indicates adequate internal consistency and reliability of the instrument. This investigator obtained permission from the developers to use the LHS tool.

Rosenberg Self-Esteem Scale (SES)

The Rosenberg Self-Esteem Scale (1965) a 10-item Guttman scale tool which measures self-esteem on a continuum of 0 = very high self-esteem to 6 = very low self-esteem (Appendix B). Rosenberg obtained a reproducibility coefficient of .92 when he used the instrument to evaluate self-esteem of 5,024 randomly selected high school juniors and seniors. Because of the nature of the subjects in this study, the investigator selected the SES over more complex measurements of self-esteem due to the ease of administration and the economy of time.

Subjects' self-esteem was measured due to the strong theoretical relationship between learned helplessness and self-esteem documented in the review of the literature. Additionally, because of the relative newness of the LHS used to determine learned helplessness, documentation of correlation between the SES and the LHS would lend further validity to the LHS.

Demographic Form

The investigator-designed demographic form (Appendix C) was used to gather data related to age, employment status, marital status, etc. Some of the completion statements were used to identify theoretically related data such as depression, socialization, and financial concerns which were identified in the review of the literature but not measured by the LHS or the SES.

Data Analysis

Data obtained from the questionnaires completed by the subjects in the COPD and WCI groups were analyzed using measures of central tendency, t-test for independent samples, and correlation. First, the mean scores and standard deviations were calculated for each group. To answer research Questions 1 and 2, a t-test for independent samples was used to determine significant differences in the COPD and WCI groups. In order to address research Question 3, a correlation coefficient index was necessary. For this study, the Pearson product moment r was used to identify a relationship between learned helplessness and self-esteem. The level of significance was set at .05 for both statistical procedures. Kwikstat (Elliott, 1989) was the software program used to analyze the data.

Data from the demographic questionnaire was evaluated to determine any possible significant differences between

groups. The review of literature indicated a relationship between employment status, frequency of social interactions, and depression to learned helplessness and self-esteem. Data from the demographic form were tallied and presented in table form in order to contribute to the limited information regarding the day-to-day living with COPD.

CHAPTER IV

RESULTS

This study attempted to investigate differences in learned helplessness and self-esteem in individuals with COPD and individuals without chronic illness (WCI). After questionnaires were completed by subjects in the COPD and WCI groups, descriptive data were computed. Group means were computed for each dependent variable: LHS scores and SES SCORES. The t test for independent means was used to ascertain the significant differences between the two groups. The results are presented in Table II and summarized in the following paragraphs:

Question 1: Is there a significant difference between the level of learned helplessness in individuals with COPD and individuals without chronic illness?

The mean score on the LHS for the COPD group was 42.08 and 25.55 for the WCI group. Figure 2 illustrates the distribution of LHS scores. The t value = 7.82, p value = 0.00 indicated that the means were significantly different. The LHS scores were significantly higher in the COPD group.

Question 2: Is there a significance between the level of self-esteem in individuals with COPD and individuals without chronic illness?

The mean score on the SES for the COPD group was 3.08 and 0.45 for the WCI group. Figure 3 illustrates the

TABLE II

COMPARISON OF MEANS FOR COPD AND WCI LHS SCORES

	COPD (n=40)	WCI (n=40)
LHS mean	42.08	25.55
	p = 0.00 t = 7.82	
SES mean	3.08	0.45
	p = 0.00 t = 8.08	

$p < .05$

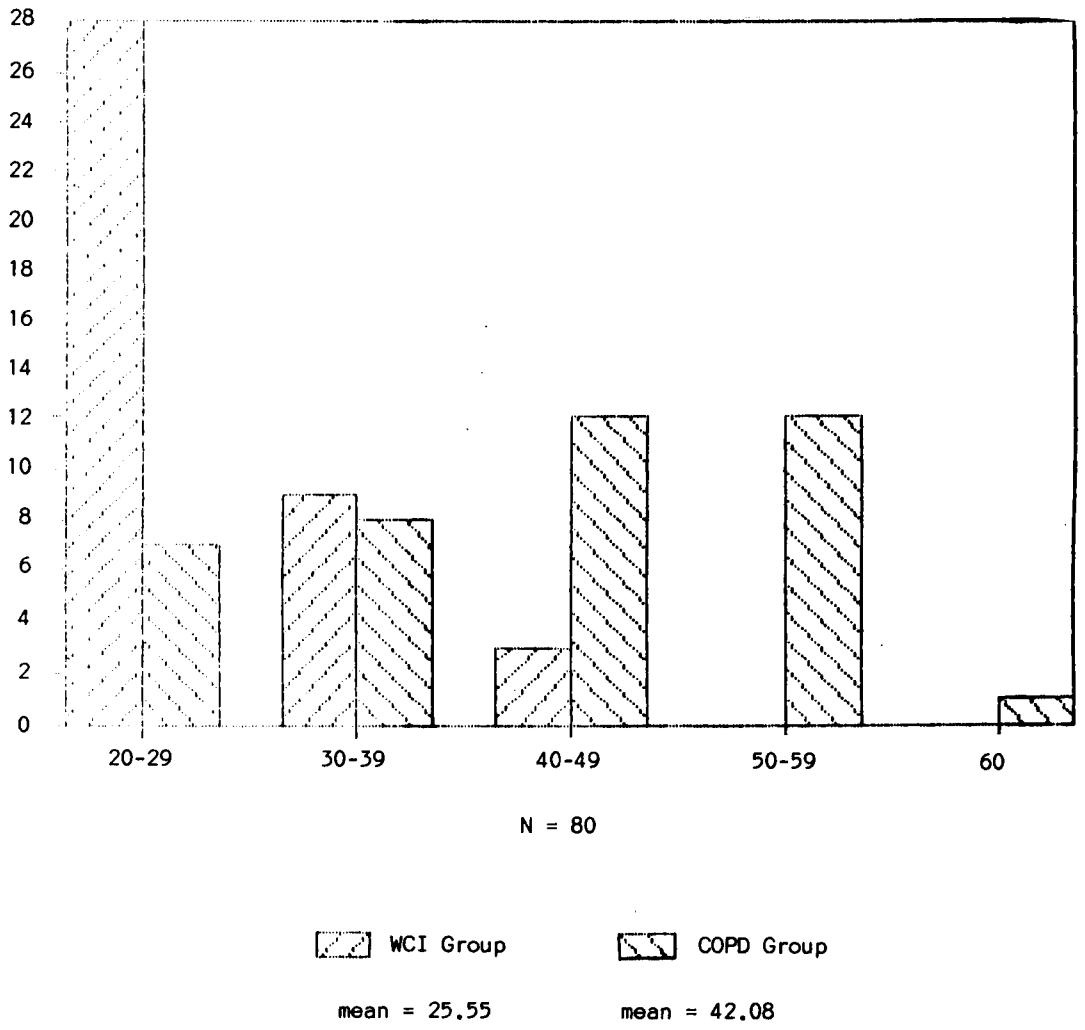

Figure 2. Frequency of Scores for LHS

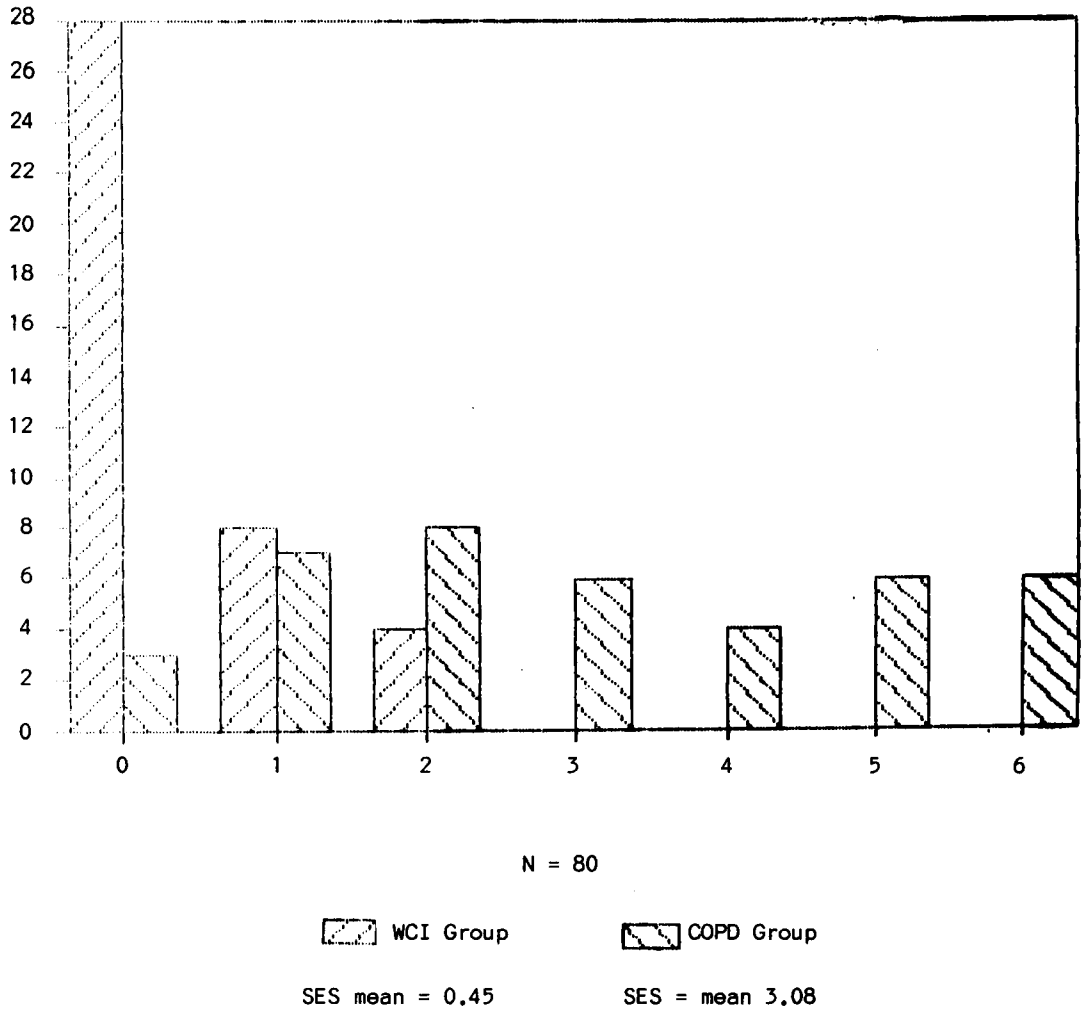

Figure 3. Frequency of Scores for SES

distribution of SES SCORES. The t value = 8.08, p value = 0.00 indicated that self-esteem was significantly lower for the COPD group.

Question 3. What is the relationship between learned helplessness and self-esteem?

Pearson's correlation was used to test for significant relationships between LHS and SES scores in the COPD group, the WCI group, and the total sample. In the WCI group, r = .7229, in the COPD group r = .8937, and in the total sample r = .8706. These findings were significant at the .05 level and showed a relationship between the LHS and SES scores, which was consistent with the findings of Quinless and Nelson (1988). Statistical results for this question are found in Table III. Scatter graphs of the distribution of scores for the WCI group, the COPD group, and the total sample are found in Figures 4, 5, and 6, respectively.

TABLE III

RELATIONSHIPS BETWEEN LHS AND SES FOR COPD, WCI, AND TOTAL SAMPLE SCORES

	N	Pearson r
COPD LHS/COPD SES	40	.8937 *
WCI LHS/WCI SES	40	.7229 *
LHS/SES for total sample	80	.8706 *

* $p < .05$

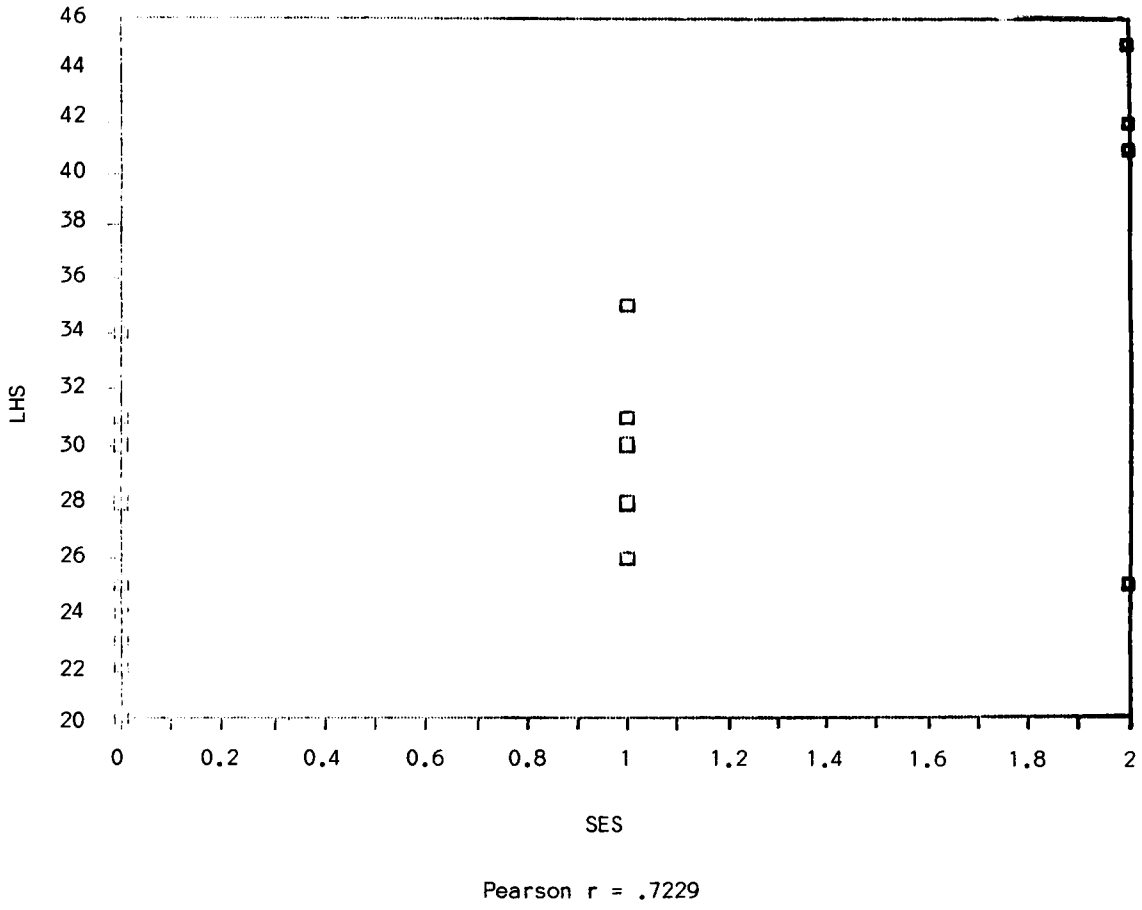

Figure 4. Scatter Graph and r Statistics for WCI Group

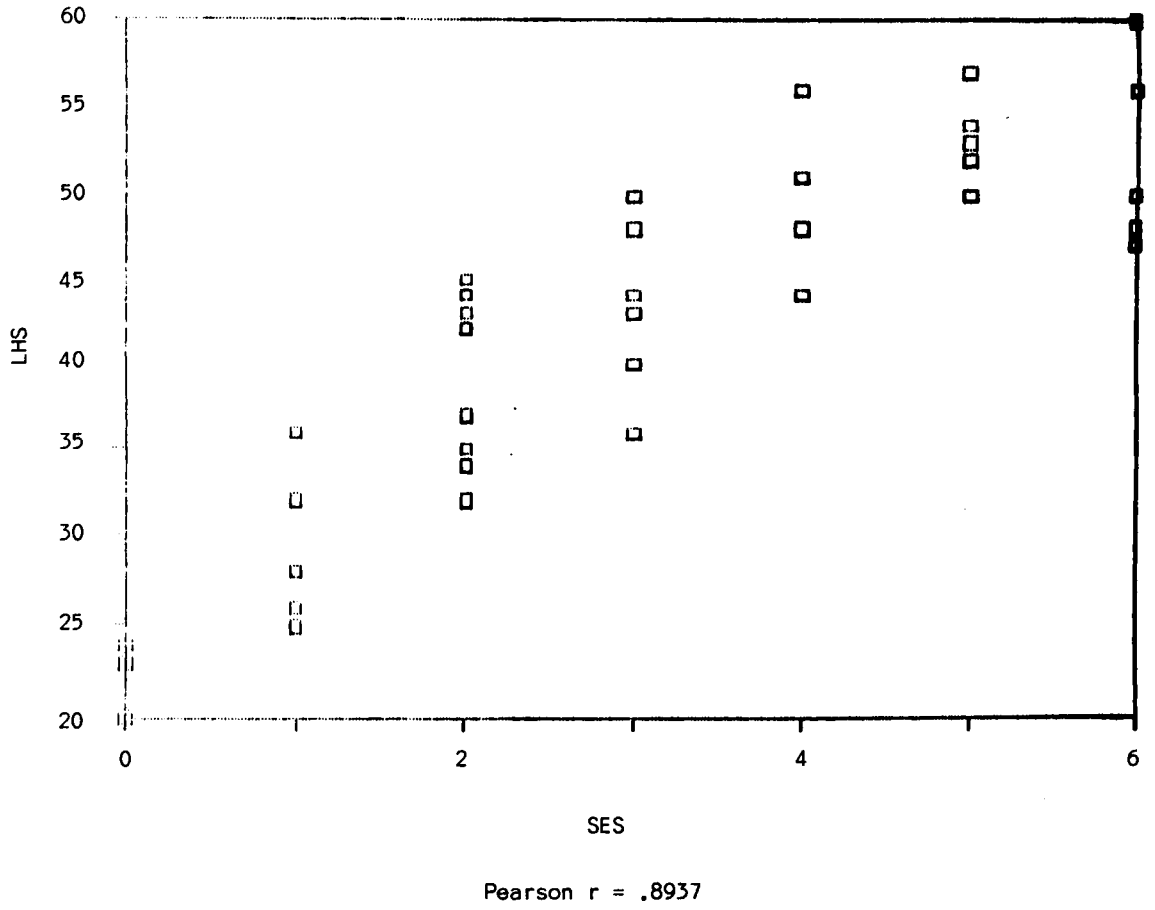

Figure 5. Scatter Graph and r Statistics for COPD Group

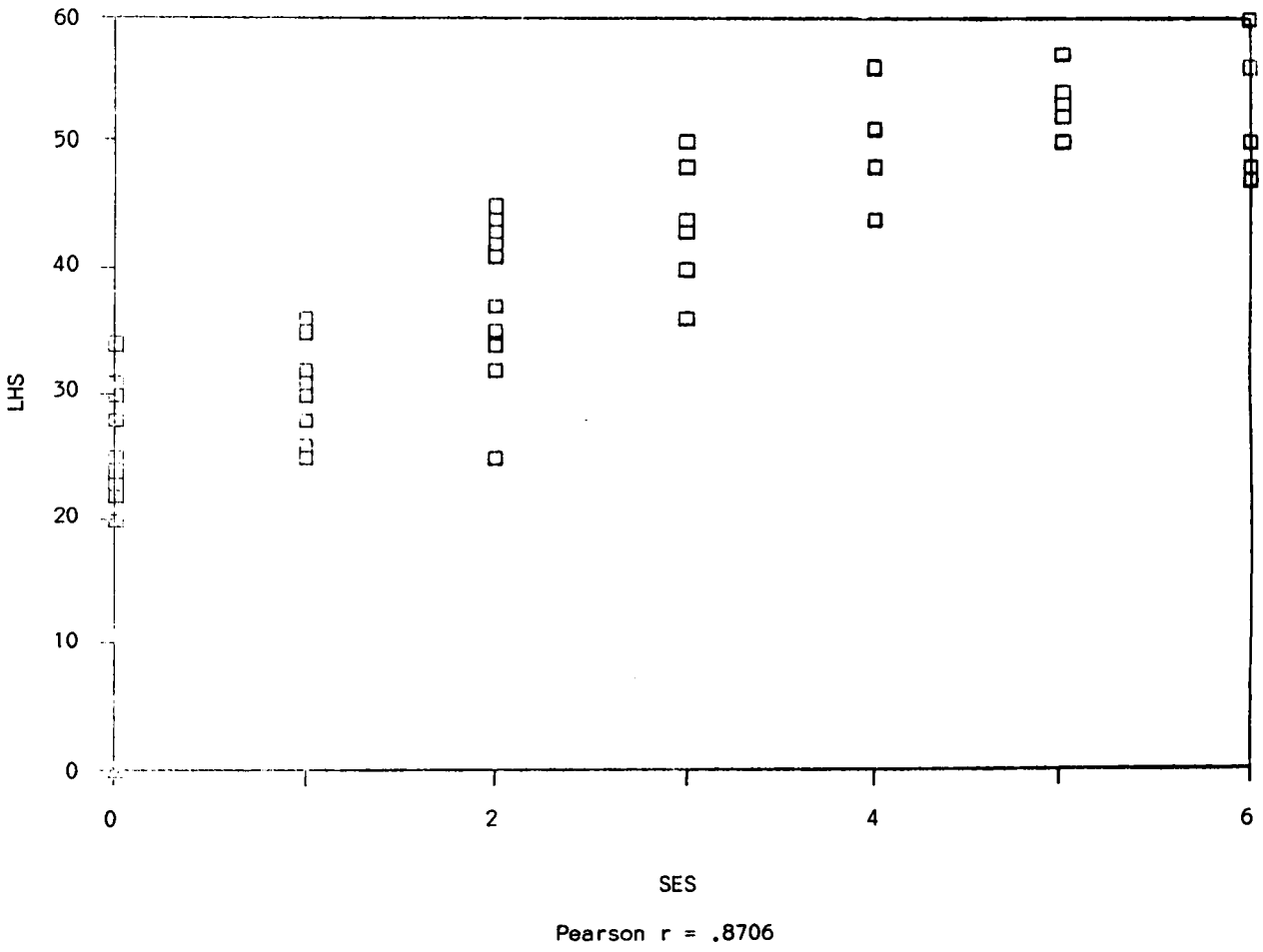

Figure 6. Scatter Graph and r Statistics for Total Sample

Data from the demographic questionnaire were summarized in a frequency chart to contribute to the limited knowledge regarding living with COPD.

Questions 1 and 2

Questions 1 and 2 asked for the sex and age of the subject. The WCI group included 17 males and 23 females. The COPD group included 19 males and 21 females. The age range for the WCI group was 55 to 88, and the age range for the COPD group was 55 to 88. Mean age for the WCI group was 62.60, and the mean age for the COPD group was 65.5. The results of these questions are found in Table I. Question 3, regarding subjects' marital status found no real difference in the WCI and the COPD groups.

Questions 4, 5, and 7

Questions 4, 5, and 7 considered employment status and concerns about personal financial state. Of the COPD group 40% identified themselves as disabled, while none of the WCI group were disabled. All the WCI subjects listed an occupation, even if they were retired. Only 24 out of the total 40 COPD subjects listed an occupation. Many of the disabled and some retired subjects left the occupation question blank. These findings were consistent with Foxall, et al., (1987) who found that COPD patients experienced significant role loss which contributed, in part, to low self-esteem. The occupations of subjects were not summarized due to the

diversity of responses; however, responses ranged from blue collar to professional occupations, with most being blue collar.

Question 6

Question 6 dealt with frequency of recreation/ socialization outside the home. Subjects in the COPD group were more limited in this area than were subjects in the WCI group, as seen in Table IV. These findings were consistent with those of Sexton and Munro (1988) and McSweeney, et al. (1983).

Question 8

Question 8 referred to the number of times subjects had been hospitalized in the past year. Responses ranged from 0 through 9 for the COPD group and 0 through 1 for the WCI group. In the COPD group, subjects who had more frequent hospitalizations had SES scores indicative of low self-esteem and LHS scores indicative of high learned helplessness.

Question 9

Question 9 asked subjects to respond to the open-ended statement, "When I am ill the person most likely to care for me would be . . . ," most subjects in both groups identified informal care givers such as spouses, children, other relatives, and friends.

TABLE IV

SAMPLE'S RESPONSES TO THE DEMOGRAPHIC

QUESTIONS 3, 4, 6, 7, 10, AND 11

Variable		COPD Group N	COPD Group %	WCI Group N	WCI Group %
3.	I am:				
	single	1	2.5	1	2.5
	married	23	57.5	20	50.0
	divorced	5	12.5	5	12.5
	widowed	11	27.5	14	35.0
4.	I am:				
	unemployed	1	2.5	2	5.0
	retired	20	50.0	21	52.5
	disabled	16	40.0	0	0.0
	employed	3	7.5	17	42.5
6.	I leave my home for recreation/socialization:				
	never	2	5.0	0	0.0
	1-2 time/month	11	27.5	4	10.0
	1-2 times/week	17	42.5	9	22.5
	more than twice/week	10	25.0	27	67.5
7.	I worry about my financial state:				
	never	5	12.5	5	12.5
	rarely	2	5.0	21	52.5
	sometimes	18	45.0	13	32.5
	often	15	37.5	1	2.5
10.	I set unrealistic goals for myself:				
	never	9	9.5	10	25.0
	rarely	21	22.5	24	60.0
	sometimes	9	7.5	6	15.0
	often	1	0.5	0	0.0
11.	I feel depressed:				
	never	0	0.0	8	20.0
	rarely	11	27.5	19	47.5
	sometimes	14	35.0	11	27.5
	often	15	37.5	2	5.0

Question 10

Question 10 regarded the setting of unrealistic goals. Minimal differences in responses from the COPD and WCI groups were found.

Question 11

Question 11 dealt with the occurrence of depression. Subjects in the COPD group reported a greater frequency of depression than did those in the WCI group. These findings are consistent with Agle, et al. (1974), McSweeney, et al. (1983), and Prigatano, et al. (1984). Also, Sexton and Munro (1988) found that depression was listed only second to shortness of breath when COPD patients were asked "What is your biggest problem?" All indicated the possible relationship between depression and lowered self-esteem in COPD patients.

Subject responses to the demographic questionnaire were summarized in frequency and percentages. Data regarding Question Numbers 3, 4, 6, 7, 10, and 11 are found in Table IV. Data regarding Question Numbers 8 and 9 are found in Table V.

TABLE V

SAMPLE'S RESPONSES TO THE DEMOGRAPHIC QUESTIONS 8 AND 9

Variable		COPD Group N	WCI Group N
8.	Number of times hospitalized in past years:		
	0	8	38
	1	11	2
	2	7	0
	3	5	0
	4	2	0
	5	3	0
	6	1	0
	7	1	0
	8	1	0
	9	1	0
		40	40
9.	When I am ill, the person most likely to care for me:		
	wife	13	11
	husband	7	6
	daughter	11	16
	friend	4	0
	granddaughter	1	1
	sister	2	1
	mother	1	0
	nurse	1	1
	daughter-in-law	0	2
	no one	0	1
	son	0	1
		40	40

CHAPTER V

DISCUSSION

Several years ago this investigator witnessed an interaction between a nursing student and a patient with COPD, referred to by the staff as a "regular." The enthusiastic student entered the room cheerfully and said to the COPD patient, "How are you this morning?" She was startled when he replied, "How in the hell do you think I am, tied to this leash?" gesturing toward the oxygen cannula. The idea of a human being tied to any sort of leash invoked a sense of outrage within the observer. Also the thought occurred that one would probably fight the leash at first but would eventually give in to a feeling of helplessness. This interaction has often been reflected upon and has, in part, led to this study.

The potential for helplessness to occur in patients with COPD exists for a variety of reasons. Patients may experience uncertain health with remissions and exacerbations and progressive physical deterioration. Dudley, et al., (1973) described the "emotional straitjacket" phenomenon found in COPD patients. Reactance to affect change in outcomes often leads to a highly emotional response. The resultant assumption may be that COPD patients gradually relinquish control to avoid dyspnea or even an exacerbation of the disease.

Conclusions

This study supports that COPD exposes individuals to factors which lead to the development of learned helplessness and diminished self-esteem. Also, an apparent relationship between increased learned helplessness and decreased self-esteem exists. This study did not determine a predictive relationship between learned helplessness and self-esteem. A possible relationship between variables of financial worries, frequency of socialization outside the home, frequency of hospitalization, goal setting, and depression, and SES and LHS was concluded.

Relationship to the Literature

The higher LHS in the COPD group as compared to the control WCI group is assumed to be due to less control over outcomes experienced by the COPD group. Numerous physical and psychologic losses associated with COPD lead to dependency on others for assistance with activities of daily living previously self-performed. Some researchers (Barstow, 1973; Sexton & Munro, 1985) have suggested that care givers may inadvertantly perpetuate such helplessness in COPD patients by doing for them what they are capable of doing for themselves. This type of behavior, while well-meaning, limits control and thus increases the occurrence of helplessness.

Schulz (1976) found greater control and predictability in the elderly correlated to levels of psychological and

physiological functioning. Langer and Rodin reported elderly allowed to make decisions for themselves scored higher in activity, alertness, and general happiness. Both studies suggest the importance of increased control to those who have lost or relinquished control. Barstow (1974) also recommended allowing patient control and increasing predictability of outcomes for behaviors could improve patient coping.

The literature indicated helplessness does indeed occur in individuals "leashed" by factors which limit control over events and outcomes. Much of the literature used the terms helplessness and powerlessness interchangeably. Both are perceptions that one's own actions will not affect an outcome, however, learned helplessness theory espouses that this perception becomes generalized to other actions where outcomes can be affected (Seligman, 1975). Although there are differences between the two terms, the essence of both lies in the element of lack of control and so both have been used in this study to describe the same undesirable effect on individuals caused by COPD.

Understandably, COPD frequently is associated with anxiety, dependency, loss of personal power, and loss of self-esteem. Although a small convenience sample was used, this study found that lowered self-esteem does occur in individuals with COPD. To the statement "I certainly feel useless at times" on the SES, most COPD subjects responded

in agreement. Regarding this issue, Barstow (1973) stated: "If autonomy and reaching an optimal level of performance are important for a heightened self-concept, expressions such as 'I'm worthless' might be less frequent if independence is maintained" (p. 143).

Health care providers may also reinforce feelings of worthlessness in COPD patients. Although not all patients with COPD have a history of behaviors contributing to the disease, such as cigarette smoking, many do. Some health care providers may judge COPD a self-caused disease. In addition, patients with COPD tend to be blue collar workers, such as coal miners. Again, it may be perceived by health care providers that such environmental exposures may have been avoided and, therefore, self-caused. The saying "you made your bed, now lie in it" expresses the judgment health care providers perhaps communicate to patients with COPD. Self-blame, if not previously existing, may be adopted from the cues provided by others.

COPD is a progressive disease resulting in a continual decrease of function and gradual loss of independent function. As the disease progresses, the patient must deal with each successive loss and adjust to a level of functioning that may change from day to day. This continual adjustment may well have a detrimental influence on the self-esteem of the individual. Increasing the COPD patient's control over the situation and outcomes, whenever

possible, could contribute to self-acceptance and thus improve self-esteem.

Of the COPD subjects, 16 were disabled, while none of the WCI group were disabled. Logically, greater financial worries were reported by subjects in the COPD group. Loss of the ability to generate income and general worry about money were reported in the literature as major psychosocial problems for patients with COPD (Barstow, 1974; Foxall, et al., 1987; Sexton & Munro, 1985). In addition, the role loss experienced by patients with COPD may be evident in the failure of 16 COPD subjects, both disabled and retired, to complete the occupation question. Yet, all WCI subjects, including retired subjects, completed the question. Such role losses were identified in the literature as contributory to helplessness and diminished self-esteem (Barstow, 1974; McSweeney, et al., 1982; Sexton & Munro, 1988).

COPD subjects reported fewer socialization experiences outside the home and lower self-esteem than WCI subjects. This finding supports previous findings which suggest that the loneliness and isolation produced by losses lead to decreased self-esteem (Schultz, 1976; Sexton & Munro, 1988). Further, Foxall, et al., (1987) found loss of social role activity, especially in roles fulfilled outside the home, to be the major attribute for the high frequency of loneliness in COPD patients.

In chronic illness, the focus on the medical condition and its treatment must be broadened to include important psychologic, social, and economic considerations. Most COPD subjects as well as WCI subjects indicated that when ill the person most likely to care for them was an informal care giver such as a spouse, daughter, or friend. No subject reported the physician as the likely person to provide care; and, in fact, only one subject from each group listed a nurse as the person most likely to provide care. Thus, adaptation to the illness requires that individuals with COPD and their families, rather than formal health care givers, become the prime decision makers because most of the care is given in the home rather than in the hospital.

For chronically ill patients, COPD patients in particular, hospitalization represents a temporary failure. In this study COPD subjects who reported greater number of hospitalizations also evidenced higher learned helplessness and lowered self-esteem. Thus, endeavors to empower the COPD patient and his or her informal care giver are necessary to decrease numbers of hospitalizations. Likewise, when COPD patients are hospitalized, nurses and other health care providers must employ techniques to reinforce patient control whenever possible. In addition, an important nursing goal should be to minimize the number of days hospitalized.

COPD subjects reported setting unrealistic goals more often than WCI subjects; yet, it should be noted that these

differences were minimal. Because subjects in both groups were 55 or older, age may have been the contributing factor to the similarities in setting unrealistic goals; the assumption being that subjects have not made adjustments to accommodate changes related to aging. However, Agle, et al. (1973), found the setting of realistic goals to be a major determinant of the quality of the psychologic state and physical performance in COPD patients.

Literature supported learned helplessness theory as a model of depression. This study found 29 COPD subjects with feelings of depression either sometimes or frequently, as compared to only 13 WCI subjects, which supports the link between helplessness and depression. These findings support previous findings of significant depression found patients with COPD (Agle, et al., 1973; McSweeney, et al., 1983; Sexton & Munro, 1988). However, the use of one question regarding depression, as compared to a complete depression inventory, must be considered as a limitation when appraising this finding.

Limitations

With convenience sample research design, the inability to randomize the sample creates certain biases. The regional values and beliefs as well as the practices of the agency and the support group selected for this study might have biased the sample results. Also, subjects in the COPD group were from a pulmonary rehabilitation program and a

support group, and did not represent the total COPD population. For these reasons the generalizability of the results to a larger COPD population may be decreased. This poses some threat to internal validity in that there may be competing explanations for the observed results of the study (Polit & Hungler, 1983). However, the use of a comparison group from the same general population as the group of concern provided a greater degree of validity.

Further, Polit and Hungler (1983) state that studies dealing with opinions and attitudes are more susceptible to the problems of people altering their responses as a result of the mere act of collecting information. Such a possible testing effect also poses a threat to the internal validity of the study.

The LHS tool may limit results of the study as it has had relatively little previous testing. However, in the reported testing of the tool the validity has been adequate. To establish the dependability of the LHS as research instrument, it must be used in additional studies.

Implications

The implications drawn from this study are made with some reservations due to the limited convenience sample which was biased in regard to the small geographic area from which the sample was drawn. However, this study supports that COPD exposes individuals to factors which lead to the development of learned helplessness and diminished

self-esteem. Lack of control over outcomes and lack of outcome predictability leads to the development of helplessness. Therefore, measures to maximize personal control in patients with COPD must be considered a crucial aspect of their care.

Recommendations for Nursing Practice

In view of the results of this study nursing and health care providers should:

1. Assess COPD patients for helplessness (powerlessness).
2. Employ the mutual interaction model or some similar model which affords COPD patients decision-making control.
3. Assist COPD patients in the setting of realistic, achievable goals. Remember that unlearning helplessness will require much effort and patience from all involved in the process.
4. Implement nursing measures which allow COPD patients personal control and afford some predictability of outcomes.
5. Teach informal care givers of COPD patients about the potential for learned helplessness and decreased self-esteem. Instructing care givers regarding the importance of maintaining as much independence as possible in the COPD patient should be a priority nursing intervention.

Suggestions for Further Study

This study has identified the occurrence of learned helplessness and lowered self-esteem in individuals with

COPD. Helplessness or powerlessness, precipitated by lack of control over situations and/or outcomes, can be inferred. Further, a model for nursing practice, such as the mutual interaction model, has been offered as a strategy for empowering individuals with COPD. Controlled studies implementing a model of interaction and its effects upon powerlessness should be conducted.

Further study to substantiate the occurrence of learned helplessness with a larger sample from a larger population random selection would provide results with better generalizability. General assessment criteria which would provide for identification of helplessness or powerlessness in patients should be generated. Specific strategies to empower chronically ill patients need to be developed.

The rising cost of health care for individuals with COPD, compounded by frequent hospitalization, concerns patients and society in general. Any approach to the care of COPD patients which decreases the frequency of hospitalization should be investigated. Also, further study of the care of COPD patients provided by informal care givers and its effectiveness is recommended.

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APPENDIXES

APPENDIX A

LETTER/CONSENT FORM

Dear Potential Participant:

I would like to tell you about and request your assistance for a study I am conducting as part of the requirements for my Master's degree in Nursing at the University of Tennessee, Knoxville. The purpose of my study is to compare patients with chronic obstructive lung disease (COPD) and individuals without chronic diseases. The research findings should provide information necessary to provide better health care to individuals with chronic obstructive lung disease.

If you decide to volunteer for my study, your participation will involve completion of a questionnaire that includes questions about you and your feelings. Completion of the questionnaire would require about 20 minutes of your time. There is no risk in this procedure.

The information you provide will be identified by a number, so that your name would not be used. All informatiuon will remain confidential--this means that all information will be summarized and your name will not be identified in any of the findings. Further, all information will be kept in a locked file in my office at Shawnee State University, for a period of 3 years and then destroyed.

Participation in this study is strictly voluntary. You have the right to withdraw from the study at any time and without any penalties by notifying me or my major professor at the address or telephone number below.

If you have any questions about the study or about participating, please call or write me or my major professor.

Jane M. Mayo, R.N.
102 Mullins Drive
Greenup, Kentucky 41144
Phone: (606) 473-9910
Work: (614) 354-3205

Major Professor:
Mildred M. Fenske, Ph.D., R.N.
Associate Dean
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University of Tennessee
1200 Volunteer Boulevard
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APPENDIX A (continued)

CONSENT FORM

I consent to participate in Jane M. Mayo's study comparing patients with chronic obstructive lung disease (COPD) with individuals without chronic disease.

I understand that my participation in this study is strictly voluntary and that I have the right to withdraw at any time without any penalties.

Date:_____ Signature:_____

APPENDIX B

ROSENBERG SCALE

Code #_____

Instructions to the Participant:

Please read the following statements carefully. After reading, respond as to how closely you agree or disagree with how each item describes you or your feelings about yourself. Place an X under the response which most closely describes your agreement or disagreement for each item.

ITEM	RESPONSE			
	Strongly Agree	Agree	Disagree	Strongly Disagree
1. On the whole, I am satisfied with myself.	_____	_____	_____	_____
2. At times I think I am no good at all.	_____	_____	_____	_____
3. I feel that I have a number of good qualities.	_____	_____	_____	_____
4. I am able to do things as well as most other people.	_____	_____	_____	_____
5. I feel I do not have much to be proud of.	_____	_____	_____	_____
6. I certainly feel useless at times.	_____	_____	_____	_____
7. I feel that I am a person of worth, at least on an equal plane with others.	_____	_____	_____	_____
8. I wish I could have more respect for myself.	_____	_____	_____	_____
9. All in all, I am inclined to feel that I am a failure.	_____	_____	_____	_____
10. I take a positive attitude toward myself.	_____	_____	_____	_____

APPENDIX C

DEMOGRAPHICS

Code # _____

Instructions to the Participant:

Please read carefully the following statements. For each statement circle the completion response in parenthesis that best describes you or fill in the blank with the response that describes you.

1. I am (male) (female).
2. My age is _____.
3. I am (single) (married) (divorced) (widowed).
4. I am (unemployed) (retired) (disabled) (employed).
5. My occupation is _____.
6. I leave my home for recreation/socialization (never) (1-2 times a month) (1-2 times a week) (more than twice a week).
7. I worry about my financial state (never) (rarely) (sometimes) (often).
8. The approximate number of times I have been hospitalized in the past year is _____.
9. When I am ill, the person most likely to care for me would be _____.
10. I set unrealistic goals for myself (never) (rarely) (sometimes) (often).
11. I feel depressed (never) (rarely) (sometimes) (often).

VITA

Jane Mauk Mayo was born in Portsmouth, Ohio, on September 5, 1953. She received her elementary and secondary education in the public schools of Greenup County, Kentucky, and was graduated from Greenup High School in 1971. In the fall of 1971 she entered Ashland Community College and was graduated from the University of Kentucky with a Bachelor of Science Degree in Nursing in 1975.

She has held clinical positions primarily in the areas of medical/surgical and critical care nursing. In the fall of 1981 she accepted a faculty position in the Associate Degree Nursing Program at Shawnee State University in Portsmouth, Ohio, a position she still holds. In June of 1985, while maintaining her teaching position at Shawnee State University, she began work on a master's degree. In August of 1990 she completed requirements for the Master of Science in Nursing.