AN INVESTIGATION OF HOPE AS MANIFESTED
IN THE PHYSICALLY ILL ADULT

by

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CHAPTER 1

INTRODUCTION

Statement of the Problem

Persons who are physically ill have many problems other than the physical problem of the disease and undergo social, psychological, and spiritual stress. One of the most destructive psychological problems is the loss of hope (Engel, 1964). Hopelessness is described by Travelbee (1971) as a phase of apathetic indifference. The individual who gives up and becomes apathetic generally feels that he is unable to cope with the changes in the environment because the psychological or social strategies he used in the past no longer seem effective or even available (Engel, 1969). Commonly, hopelessness can be a result of prolonged illness, loss of personal resources or feelings of loss of control (Limandri & Boyle, 1978), all three of which are encountered by the individual who is physically ill. The purpose of this study is to explore the relationships among these variables.

Individuals in all phases of illness can become hopeless. The literature mentions this as a problem in caring for the critically ill (Reichle, 1973), the
chronically ill (Field, 1953), and the terminally ill (Buehler, 1975). It can be a pervasive problem undermining the most expert and up-to-date health care. The individual's physical condition may seem to be getting better when, inexplicably, a change occurs. Upon closer examination, it is determined that the individual had given up the will to live. A search of the literature brings forth documented cases of sudden deaths due to no apparent reason other than loss of the will to live (Bettleheim, 1960; Richter, 1957; Cannon, 1957).

Hope is a vital force in sustaining life. It is characterized by a future orientation to goal attainment (Stotland, 1969; Mowrer, 1960) which is contingent upon a sense of control (Richter, 1957; Farber, 1968; Zipf, 1963). It functions as a coping strategy fostered by the ability to attribute meaning to life events (Lazarus, 1966; Friedman, Chodoff, Mason & Hamburg, 1963; Mechanic, 1977) and by supporting persons, beliefs, and resources (Parsons, 1977; Castles and Keith, 1979). The very essence of hope is expectation of reward, relief, fulfillment, that is, some desirable goal being achieved or obtained in the future. The expectation of achieving this goal is operationalized by action if the person believes that it is within his capabilities (or those around him) to obtain the goal. The attribution of meaning to life events and other personal resources help the person to put into perspective the circumstances in which he finds himself. Difficulty in any one of these areas can greatly affect the degree of hope
that a person is able to maintain.

Since the state of hopelessness can have such a negative impact on the entire being of the patient, it is important that it be understood. To understand hopelessness, one must begin with what it means to have hope. The problem for this study is to identify and describe the attributes of hope as they are manifested in the physically ill adult, to determine what these individuals believe to be the factors that influence their hope, and to explore possible relationships among type of illness, degree of hope, personal control, and length of illness.

Significance to Nursing

Sustaining and fostering the hope of individuals who are ill is an area of intervention of prime importance to professional nursing practice. Hope, or the lack of it, affects the whole human being. A sense of psychological impotence overwhelms the individual who experiences little hope for the future (Engel, 1968). The individual is described as feeling that the psychological strategies for dealing with the surrounding circumstances cannot be activated. As the will to live is given up, the individual withdraws from social relationships (Engel, 1964). The perspective becomes one of inability and futility in that there is the feeling that one cannot effect any changes or have any influence. As the individual no longer hopes for recovery, physical deterioration occurs (Reichle, 1973). The loss of hope may also be of a spiritual nature. Matters
of belief, hope, and faith are basic elements of that part of life which is called the soul or spirit (Blumberg & Drummond, 1971). Many people identify religious or philosophical beliefs as the major or only sustaining element in their time of crisis. Since professional nurses are concerned with the individual as a whole, they should be especially aware of levels of hope manifested by man.

The theoretical basis for professional nursing practice explains the relationships among hope, health, and professional nursing care. The integrity and characteristics of unitary man are more than and different from the sum of his parts. Man's oneness is characterized by an energy field which is the fundamental unit of life. The individual is an open system continually interacting with the energy of the environment. Man and environment are contiguous, free-flowing, one, which entails a dynamic interplay with man and environment evolving together (Rogers, 1970).

An important assumption of this conceptualization of unitary man relative to hope is that of the unidirectionality of life. This concept denotes the irreversibility of time as the process of life is bound in the three dimensions of space and the fourth dimension of time. The process of change takes place in space along the time axis (Rogers, 1970). Hope implies unidirectionality in that it connotes a perspective of the future with an awareness of the reality of the present.

The energy field as the basic unit of life imposes
pattern and organization on living things and it is pattern and organization which identify man as a unified whole and provide order in the universe as reflected by the laws of nature. Patterning is a dynamic process affording man a self-regulating ability which cannot be explained by the functioning of the subsystems but only as one considers the whole being (Rogers, 1970). Hope is an aspect of man's self-regulation. It helps to maintain the integrity of the human being by focusing on an expectation in the future to which the whole organism strives. Thus, hope can be understood as a vital force directed toward the orderly innovation and fulfillment of the potentialities of life.

Another important assumption for the understanding of hope is that of man as a sentient, thinking being. Basic attributes of man's humanness are the abilities for sensation and emotion, language and thought, abstraction and imagery. Man, alone, can be aware of the past and dream of the future. Religion and philosophy point to man's continuing search for the meaning of life and death. Abstract thought and language enable expression and exploration toward an understanding of the universe (Rogers, 1970). Hope requires emotion, thought, and abstraction and is fueled by man's religion and philosophy. These assumptions, unitary man, unidirectionality of life, pattern and organization, sentience of man, and man as an open system, constitute the underlying framework for the understanding and application of this conceptualization of unitary man to nursing.
Nursing, according to Rogers (1970), is the science of man; it exists to serve people. The goal of nursing is to promote symphonic interaction between man and environment, to strengthen the coherence and integrity of the human field, and to direct and redirect patterning of the human and environmental fields for realization of maximum health potential. (p. 122)

The practice of nursing is focused on man in his entirety and wholeness. Nursing diagnosis involves the relationship between man and environment and tries to delineate the patterning of the life process. The aim of nursing intervention is "repatterning of man and environment for more effective fulfillment of life's capacities" (p. 127). Nursing judgments and actions are not derived from the disorder of disease entities but develop from the wholeness of man and a unified concept of human functioning (Rogers, 1970).

Nursing is, therefore, concerned with the health state of the individual. According to Rogers (1970), health and illness can be found on the same continuum but are not dichotomous. Both are expressions of the life process, are value-laden, and are dictated by social inequities. The state of health is relative since what may be health for one is illness for another. This variation is accounted for by the differences in individuals. Rogers also defines death as representing a transformation of energy. The process of dying can be considered a period of transition during which
the identifiability of the human field diminishes and dies. Since the human energy field is transformed at death, the identity as a living human being is gone.

Rogers (1978) identifies and defines three principles central to the conceptualization:

1. Helicy - the nature and direction of human and environmental change is continuously innovative, probabilistic, and characterized by increasing diversity of human field and environmental field pattern and organization emerging out of the continuous, mutual, simultaneous interaction between the human and environmental fields and manifesting non-repeating rhythmicities.

2. Resonancy - the human field and the environmental field are identified by wave pattern and organization manifesting continuous change from lower frequency, longer waves to higher frequency, shorter waves.

3. Complementarity - the continuous, mutual, simultaneous interaction process between human and environmental fields. (p. 8)

The principle of helicy encompasses negentropic evolution which means that living things become more complex as they evolve. Part of this increase in complexity is the rise in cognition and feeling. Because of man's capacity for cognitive functioning, the individual is not satisfied until the world can be explained. Thus, meaning is assigned
to events in an attempt to make sense out of life (Rogers, 1970). The attribution of meaning to suffering in one's life is considered an important element of hope (Travelbee, 1971).

The concept of time is basic to this conceptualization of unitary man in that time is seen as unidirectional and non-repeatable, occurring with and unique to the three dimensions of space at any one moment, and underlying the rhythmic pattern of man and environment. Time is also basic to the concept of hope. Hope, by definition, denotes a future orientation. The individual can be aware of the past and present but must be looking toward the future to have hope.

The interaction process between the human and environmental fields also has relevance to the concept of hope. If the rhythms of these two fields are in harmony, man will feel good about the relationship. There will be the feeling of competence so necessary to hope. The individual will feel that his experiences are moving along smoothly and that he has some control. However, if the rhythms of the man and the rhythms of the environment are not harmonious, then an unpleasant situation will be perceived. Such situations can occur during illness. Generally in illness certain rhythms of the individual may increase while others decrease. For instance, heart rate and respiratory rate may increase while cognitive functioning decreases. When placed in a hospital setting, especially a unit such as critical care, the rhythms of the environment may be rapidly altered. This
situation can greatly stress the patient and decrease the ability to cope with it (Tomlin, 1977).

Nursing, therefore, is concerned with promoting harmonious interaction between man and environment. If it is determined that an individual is losing hope, the nurse can intervene by redirecting the patterning of the environment and the individual so that they may once again be aimed toward fulfilling the individual's potentialities of life. In order to do this, the nurse must make a diagnosis based on an examination of the individual as a whole and the factors which make up the environment.
CHAPTER 2

REVIEW OF THE LITERATURE

Hopelessness has been considered in the health care literature as a problem affecting the recovery of the physically ill (Schmale, 1958; Tomlin, 1977; Travelbee, 1971). In the psychological literature the variables that constitute hope or hopelessness are explored (Richter, 1957; Ziff, 1963) and it is discussed as a proposed theory of psychology (Stotland, 1969; Lynch, 1974). These areas will be examined as the theoretical framework for this study is developed.

Physical Illness

It is common in health care settings for individuals to have to endure with only the hope of relief. Often they must wait for wounds to heal without the certainty that the healing will actually occur and occasionally a death occurs that can be ascribed only to a lessened will to live (Lefcourt, 1973). The fact that the psychological state of an individual has influence on the physical state (and vice versa) has been increasingly studied in this century. Schmale (1958) interviewed 42 hospitalized individuals after admission for physical illness. Of these, 41 gave evidence that either helplessness or hopelessness was a factor in
their lives prior to the onset of illness. Schmale concluded that the states of helplessness and hopelessness may be related to increased biological vulnerability. Thus, for an individual who may have already been ill, a loss of hope could reduce the capacity for recovery.

Loss of hope does occur in those who are physically ill, often as a result of the illness. When an individual has suffered physically, mentally, and spiritually too intensely, over too long a period of time, a state of despairful not-caring occurs. Angry feelings of hopelessness usually dominate such a person and if not assisted, the individual will pass to the phase of apathetic indifference. Here the individual believes that no one can or will help. A feeling of utter hopelessness seems to dominate the emotions; the individual is beyond caring. When a person feels hopeless, an interpersonal emergency exists and should be dealt with before despair progresses to apathetic indifference (Travelbee, 1971).

Individuals with various kinds of illnesses can become hopeless, but there are certain groups that come to mind and are most often discussed in the literature. These include the chronically ill and those with life-threatening illnesses. These two groups of individuals are experiencing especially critical periods of living. Based on the assumption that life is characterized by rhythms, from the systems within man to the systems around man, it is expected that differences in behavioral manifestations can be more easily identified during the peaks of the rhythm patterns.
It is assumed that these peaks occur during crisis experiences which can be explained as turning points in the developmental process (Fitzpatrick, in press). Chronic illness may be viewed as a series of crises for the individual since one has to deal with and adjust to the loss of parts or functions of the body. As a result, there may be daily reminders that this alteration exists (Engel, 1964; Blumberg & Drummond, 1971). Those who are experiencing a life-threatening illness are undergoing the developmental phase of dying. Although they may not be terminally ill, they are exposed to the reality of their mortality in a more concrete way than the rest of humanity. This phase requires a repatterning and reorganization to accommodate the diminishing of the human field's integrity.

**Chronic Illness.** When one thinks of hope and hopelessness related to physical illness, chronically ill individuals readily come to mind. Chronic diseases are defined as those which comprise

all impairments or deviations from the normal which have one or more of the following characteristics: are permanent, leave residual disability, are caused by non-reversible pathological alteration, require special training of the patient for rehabilitation, or may be expected to require a long period of supervision, observation, or care. (National Conference on Chronic Disease, 1952, p. 14)

The individual who suffers a chronic illness faces
repeated relapses and hospitalization. Even when his symptoms abate and he begins to feel better, the fear of recurrence is as much a threat as the reality of the illness itself. Prolonged illness is often accompanied by discouragement, fear of recurrence, disruption of plans for the future, economic insecurity, exhaustion of savings, mounting debts and recognition of the ever diminishing hope for the future (Field, 1953). Often individuals with a prolonged illness are aware that theirs is a progressive disease with little or no hope of recovery. Their only hope may be that some new experimental drugs may delay its progress.

One of the most difficult aspects of a chronic illness with which an individual must deal is a relapse after a period of apparent improvement when one had begun to think he was getting better (Cospers, 1974). Most chronic illnesses are unpredictable and have discouraging ups and downs. They can be virulently destructive of hope since they assault one's sense of competence and impair the body image (Farber, 1968). The future of the chronically ill holds only continued discomfort, pain, and feelings of incompetence, yet it is the uncertainty of the future that is probably most frightening. This may be even more difficult for the individual to handle than the present pain and fears (Blumberg & Drummond, 1971).

Rheumatoid arthritis is an example of a disease of uncertainty since a flare-up may occur at any time in the most hopeful case or the most severe case may suddenly
become arrested. Because there is always the hope of another remission, the uncertainty which makes the disease so intolerable also mitigates against acceptance of the invalid status. As a result, individuals with arthritis develop a psychological strategy of juxtaposing the hope of relief and/or remission against the dread of progression in order to tolerate the uncertainty (Wiener, 1975).

The individual with a chronic illness must face its reality each day. It is a constant problem that reduces the ability to cope with an additional illness. The notion that chronically ill persons suffer less or are better able to cope with additional illness because it is familiar is not supported. In fact, Andreasen (1977) indicates that they suffer more and are less able to cope. Then the question arises as to how chronically ill individuals do maintain hope for their futures? Obviously they do not all give up. What strategies do they use to maintain hope?

Life-threatening Illness. Another group of individuals which comes to mind when one thinks of studying hope in the face of illness is composed of those with a life-threatening illness. One would expect that such individuals would have a great deal of difficulty maintaining their hope. The largest group of persons with a life-threatening illness is composed of those with a diagnosis of cancer. Other illnesses, however, may also be thought of as life-threatening. These include any illness that would drastically reduce the individual's life expectancy such as lymphoma, sickle-cell anemia, or aplastic anemia. Most of
The research in the literature considers the individual with cancer and his experiences.

Koenig, Levin, and Brennan (1967) administered the Minnesota Multiphasic Personality Inventory to 36 individuals with cancer to determine if they would demonstrate any significant degree of emotional disturbance. They did find that 1/4 of the participants were significantly depressed. They concluded that the occurrence of depression was associated with the individual's feeling that the medical situation was hopeless and that he no longer had control over his life in all the important areas. Important factors for this group in preventing emotional disturbance seemed to be the maintenance of an orientation to the future and an active, involved attitude by the ill individual. Depression was rarely seen in those individuals who actively participated in their treatment and thus retained some degree of control over their lives.

The element of an orientation to the future is important to the person with cancer. Shands (1966), in discussing the informational impact of cancer, states that the knowledge that one has cancer represents "a sudden amputation of the future" (p. 888) and refers to the victim of cancer as being "suddenly and powerfully afflicted by the destruction of a predictable future" (p. 886). This uncertainty can lead to many doubts. An exploratory study by Buehler (1975) found that, while hope was common among the sample of individuals with cancer, many did, at times, indicate doubts about their futures. When doubts occurred,
they were stimulated by new and unexpected symptoms and any additional stress. The doubts were relieved when the source of the new stress was relieved. In general, the interviews indicated that the participants tended to vacillate between hope and doubt, with hoping more common. In this same study the staff reported facilitating hope by always telling the individual, "we can help you", but they never said, "we can cure you". It was the staff's impression that the individuals who participated actively in their treatment by fighting the disease were more hopeful.

Neuringer and Harris (1974), in a time orientation study which compared terminally ill, geriatrically ill, suicidal, and normal subjects, found that the future orientation and achievement scores for the terminally ill were only slightly lower than those of the normal subjects. Also, the scores of the terminally ill were significantly higher than the suicidal and geriatrically ill subjects. Interviews of terminally ill subjects indicated that their orientation toward the future resulted from their awareness that they had so little future left. Because of this perspective, they felt they must intensively plan for the future and try to arrange the futures of their survivors. They were future oriented but the extension of their hopes into the future was very short range.

Hope has also been considered in relation to parents of children with a diagnosis of cancer (Friedman, Chodoff, Mason, & Hamburg, 1963). In this longitudinal study it was noted that the parents' hope became short-range as the
child's disease progressed; however, as death approached, there were always residuals of hope such as "if he would only have one more good day."

Kubler-Ross (1969) found that the one thing that usually persisted through the stages of grieving for the terminally ill was hope. Even the most accepting and realistic individuals always left the possibility open for a cure. She concluded that the glimpse of hope seemed to maintain them through the days, weeks, or months of suffering. The terminally ill seemed to be saying that if they could endure for a little while longer, their suffering would have some meaning or it would pay off. In another reference Kubler-Ross (1972) notes that as an individual passes from stage to stage in grieving, hopes change. The individual's original hope is always, "It's not true", but as one progresses to the stage of acceptance, hopes tend to extend only into the near future and to be more realistic in the face of death. Kubler-Ross determined that if an individual stopped expressing hope, it was usually a sign of imminent death.

The Attributes of Hope

Factors that characterize the concept of hope are identified in the psychological literature. The expectation of achieving a desired goal in the future is the essence of hope. This is modified by the individual's sense of competence or confidence in his ability to reach the goal. If hope exists, action toward the goal will result. Hope is
identified as a means of coping with stress which is aided by attributing meaning to the stressful situation as well as other situational contingencies.

A Future Orientation. Paul in his letter to the Romans (New American Standard Bible, 1973) said, "hope that is seen is not hope; for why does one also hope for what he sees?" (Romans 8:24). What, then, is hope? According to Farber (1968) it involves a confident expectation that a wished for outcome will occur. Menninger, Mayman, & Pruyser (1963) defines hope as "the positive expectations in a studied situation which go beyond the visible facts" (p. 386).

The object of hope is in the future as hope tries to transcend the present moment. The degree to which hope exists is the degree to which one moves into the future (Lynch, 1974). Lewin (1951) suggests that one's image of future time is closely related to hope and planning and that one's time perspective is important to the level of aspiration, mood, constructiveness, and initiative. If one has hope, expects something in the future, one suffers less in that the present moment is less preoccupying (Lynch, 1974). This expectation is the key to hope; that is, if hope is an expectation of achieving a goal, the degree of hopefulness is the level of this expectation (Stotland, 1969).

If one is hopeless, the sense of continuity between past, present, and future is disrupted. The strategies used in the past for dealing with problems no longer seem effective, and it becomes difficult to project oneself into
an uncertain future (Engel, 1968). Wishing for something in the future is a major factor in hope since when there is no wishing, there can be no hope (Lynch, 1974). In the time study by Neuringer and Harris (1974) the normal subjects evidenced the greatest amount of future concern and desire for achievement over the terminally and geriatrically ill and suicidal subjects. The normal individuals were concerned with getting over their illnesses and getting back to their everyday lives. The suicidal individuals, on the other hand, were incapable of contemplating a possible anxiety-free future and were thus deprived of hope. These findings were supported in a study by Greaves (1971) in which the suicidal subjects were found to be significantly more present-oriented than the non-suicidal group. To have hope requires one to be looking toward the future, wishing for a desired goal that one believes is within the possibility of achieving.

It is within man's ability to be aware of the past, present, and future simultaneously. Because of this ability, one's concepts of the past and future are shaped by efforts to comprehend the present experiences. It then follows that a person is more likely to have a positive outlook for the future if he can determine a "sense of continuity and of orderly, predictable change which accounts for his current circumstances" (Cottle, 1974, p. 9). In light of this, one can see why a person who is physically ill may perceive the future as very bleak. If the present experience is very difficult, it can cause a distorted view
of the future and an altered recollection of the past.

On the other hand, expectations for the future can influence perception of the present. May (1953) considered that current experiences are enhanced to the degree to which a person can connect present actions with desired future goals. This was apparent in a study of prisoners (Farber, 1944) in which the degree of their present suffering was affected most significantly by dimensions involving time perspective, particularly future outlook including such concerns as the uncertainty of their releases and the hope of getting a break.

Images of one's personal future affect current experience and motivate behavior by generating pleasant or unpleasant emotional states. Disturbing thoughts of future events are motivating, however, only if the person believes that something in the present can be done to prevent their occurrence. Thus, a narrowed present orientation can be a defense strategy aimed at protecting a person from the discomfort of unpleasant anticipation. As a result, the span of future time that a person will consider may be limited to those short-range events that can be controlled (Cottle, 1974).

In relation to this, Fson and Greenfield (1962) identified the defense mechanism of antepression which occurs if the future images do not elicit joy and the person, in light of the past or present, sees little hope for better things to come. This mechanism was first described in the findings of their study of individuals 10
to 65 years of age. The experiences that these subjects reported expecting for the future were usually rated by the subjects as pleasant. One might conclude that rarely is the worst expected from the future, and if it is, one tries to think about other things. The existence of the phenomenon of antepression was supported in a study by Wohlford (1966) in which college students were asked to describe in detail their yet unexperienced deaths. Following this, they were asked to list 20 topics about which they had recently thought or spoken. These lists included fewer future events compared to the lists they made before being required to envision their deaths. Since people generally try to avoid painful experiences, they are more likely to be oriented toward the future when they expect pleasurable events. When the future looks bleak and is felt to be under the influence of forces out of one's personal control, there will be little reason to defer immediate gratification or to develop long-range plans (Cottle, 1974). Those who are chronically ill or have life-threatening illnesses are very likely to perceive their futures as bleak and unpleasant. Days, weeks, months, or years of discouragement, pain, and/or psychic suffering may stretch ahead of these individuals.

Melges and Weiss (1971) studied suicidal individuals using measures of future extension, personal future outlook, internal-external control, and affect. It was determined that suicidal ideation was associated with a negative outlook on the personal future, what the authors labeled a sense of hopelessness; with a feeling of lessened personal
control over outcomes or helplessness; and with a diminished future time perspective. They found that a negative outlook on the future was associated with the belief of having little control over outcomes and concluded that as a person feels less mastery over the situation, the span of awareness into the future becomes narrowed. It was also concluded that a person's overall feeling tone, as measured by the unpleasant affect scores, reflected appraisals of what was likely to happen as well as the sense of mastery over these anticipated consequences.

Before concluding this discussion of sense of time, one related concept must be considered; that is, achievement. In essence, achievement is a way of handling properties of time. McClelland (1953) alludes to certain implicit attitudes toward time associated with a high level of achievement motive. Knapp and Garbutt (1958, 1965) in their studies of high achievers found that persons with high achievement motive have an acute awareness of time as a medium in which achievement might be realized. Since time is deemed more than usually precious, it is viewed as moving rapidly. Knapp and Garbutt concluded that anticipation of future goals, scheduling, and other such concerns with the management and measurement of time appeared to characterize the individual with high achievement.

In a study comparing scores on the Achievement Value Scale to those from the Experiential Inventory (a temporal orientation measure) it was found that future-oriented men valued achievement more than other men did. This rela-
tionship, however, was not found among women (Cottle, 1969). In another study, high achievers were determined to have a special concern with the future as evidenced by their predisposition to make up stories that occur in the future (Fpley & Ricks, 1963). In general, then, it can be concluded that there is a relationship between the achievement motive and the perception of time.

Temporality is a concept of great importance to an understanding of hope. Hope is a way of looking at the future in light of the past and present. It is most clearly manifested by an orientation toward the future, and therefore, it can be measured by determining an individual's orientation to the future. The expectation of achieving a goal in the future, however, will not survive if the individual does not believe that it is within his capabilities to reach. This will be explained in the following section.

The Element of Control. Hope may be characterized as a cognitive control mechanism. This refers to the process of dealing with one's environment not by manipulating it but by selectively attending to or interpreting it (Lazarus, 1977). One can maintain cognitive control by perceiving the environment to be predictable in certain relevant respects.

Studies with humans in various aversive situations (Glass & Singer, 1972; Glass, Feim, & Singer, 1971; Corah & Boffa, 1970) have supported the thesis that the ability to predict the occurrence of aversive stimuli reduces the aversiveness of the stimulus. In essence, predictability is
a major part of knowing something. Predictability allows some sense of confidence that one can act to create desirable effects (Lefcourt, 1973). Hoping allows the individual to achieve some measure of control in life, specifically the future, by predicting the desirable outcome. The individuals in these studies expected, predicted, and hoped that the aversive stimulus would occur only at the appointed time. This expectation gave them enough control to reduce their anxiety.

If hope is an expectation of future goal attainment, the degree of hope can be influenced by one's perception of the efficacy of his own behavior (Potter, 1954; Cofer & Appley, 1964; Tolman, 1948; Atkinson, 1964). The individual may, in some instances, perceive that goal attainment is dependent on the behavior of other people or on acts of nature or God. This way of conceiving of the expectation of goal attainment allows for a variety of factors, particularly social factors, to influence the level of expectation and to influence it in a variety of ways (Stotland, 1969; Gurin, Gurin, Lao, & Beattie, 1969; Wallston, Wallston, & DeVellis, 1978).

The concept of competence is used in relation to hope much in the same sense that it has been developed by White (1959) and Bandura (1977). It involves the basic sense of efficacy in mastering one's environment. It is a comprehensive feeling, both conscious and unconscious, that affects behavior. Factors that threaten this sense of competence, such as the loss of a loved one or illness, can alter one's
degree of hope. Farber (1968) diagrams this relationship as follows: \( H = f C/T \) where \( H \) is hope, \( C \) is competence, and \( T \) is threat. The person for whom the perception of threat is greater than the perception of competence will be without hope.

Engel (1968) has found that the person without hope tends to hold himself accountable for the failure to cope and does not expect that anything or anyone else can help. The individual perceives himself as one who is no longer competent or in control. In a study by Mannasse (1965), a lower level of hopefullness, manifested as a lower level of self-esteem, was apparent in mentally disturbed individuals who were exposed to, and therefore, compared themselves with healthy persons. As day care participants, they were confronted every day with relatives who were competent and responsible. In comparison to these relatives the mentally disturbed individuals perceived themselves as incompetent and not as able to function independently. On the other hand, a hospitalized group did not have opportunity for such comparisons and had higher self-esteem and greater hope for recovery than the day care group.

Other conceptualizations of control are relevant to this discussion. Bandura has done considerable research in the area of competence or self-efficacy. He theorizes that all behavioral change is achieved through the same cognitive mechanism. That is, cognitive events are induced and altered most readily by experience of mastery arising from effective performance. He states that expectations of
personal mastery affect both initiation and persistence of coping behavior (Bandura, 1977). His studies of self-efficacy have dealt mainly with individuals with snake phobia and their ability to perform certain tasks related to snakes. In these studies he attempted to measure efficacy expectations by self-report. Efficacy expectations are defined as the conviction that one can successfully execute the behavior required to produce certain outcomes. He found that efficacy expectations increased after participant modeling and self-instructed performance. It seemed to be the visualization of actual success, either someone else's or one's own, that produced expectations of success (Bandura, Blanchard, & Pitter, 1969; Bandura, Jeffery, & Gajdos, 1975; Bandura, Adams, & Beyer, 1977).

People who are ill often have experiences in which it appears to them that their efforts to improve their situations are ineffective. They may feel that they do not have the ability to effect changes, even minor ones, and that, in reality, they are completely at the mercy of others or of fate. The health care system is a major factor in the individual's feelings of powerlessness (Seeman & Evans, 1962). In addition, the nature of the disease can produce these feelings. Abrams (1966) explains that the person with cancer, in particular, has feelings of helplessness in relation to his disease since nothing he does, or refrains from doing, can alter its course. Other individuals with serious illnesses can exert some control such as altering diet, activity, and taking medication but these courses of
action are usually not available to the individual with cancer.

In conjunction with this discussion of personal control it is relevant to place the concept in a framework which considers control by others. This framework comes from Rotter's social learning theory (1954). According to this theory, expectancy varies as a function of whether the individual believes future events are determined by his own actions or by forces that are external to him. This is explained in the following manner:

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. (Rotter, 1966, p. 1)

In order to measure the degree to which a person is internally or externally controlled, Rotter (1966) developed the Internal-External Control scale. This scale is intended to measure the sense of control that people have in relation
to their life conditions. Rotter explains that the notion of generalized expectancies from internal versus external control of reinforcement has similarities to the concept of competence as developed by White (1959). If one believes that the outcomes of circumstances are more dependent upon external forces than upon his own actions, he does not have as much a sense of personal control or mastery.

Others (Levenson, 1974; Gurin, Gurin, Lao, & Beattie, 1969; Wallston, Wallston, DeVellis, 1978) have shown that the concept of control is multidimensional rather than unidimensional as Rotter has proposed. These authors have developed scales which tap internal or personal control, control by powerful others, and control by chance. The evidence strongly supports the hypothesis that these three dimensions are orthogonal to each other.

The element of control is vital to understanding the existence or non-existence of hope. The sense of control in whatever form (personal or powerful other) is antecedent to the expectation of achieving the goal. This is borne out in the following discussion of hope as a prerequisite for action.

Hope as a Prerequisite for Action. The therapeutic importance of hope is well-known and has been attended to by those in the fields of psychiatry and psychology. French (1952) proposes that hope is necessary to activate goal-directed behavior and Lewin (1951) identifies hope, or the outlook for the future, as the basis of persistency in achieving a valued goal. According to Stotland (1969), hope
is an essential element in motivating man to act, to move, to achieve. The man without hope has no goals, no wishes; he is listless, dull, even moribund. Tolman (1948) concurs with this viewpoint since he assumes that an organism would act if there were some expectancy that it would and could achieve its goals.

Stotland (1969) hypothesizes that "the greater the expectation of attaining a goal, the more likely the individual will act in order to attain it" (p. 19). If one examines the basics of operant or instrumental learning, support can be seen for this hypothesis. The process of learning was described by Mowrer (1960) in terms of the organism learning to hope; that is, if there is some hope of reward, the organism will continue to act. Extinction can be understood as a loss of hope that the habit will be reinforced.

Hopefulness is basically a mediating process used to tie together antecedent and consequent events. Often it is plausible and necessary to assume a certain level of hopefulness was involved in order to explain why a given antecedent led to a certain behavioral outcome. In this sense, hope relates to motivation. One assumes motivation when an organism acts, either overtly or cognitively, toward the attainment of goals. Attending to and thinking about the environment as it relates to goal attainment are part of the actions (Stotland, 1969).

Two laboratory studies directly support the proposition that hope is a prerequisite for action. Zipf (1963) gave
human subjects the task of tapping three holes in each of one hundred circles. A baseline rate of performance was established for each subject. Then they were informed, in experimentally varied steps from 0 to 1.00, of the probability of working fast enough to gain a $2 reward. The subjects' increases in speed were directly proportional to the perceived probability. In a study by Rosen (1960) subjects were told the probability of their attaining the goal of performing a card-sorting task at a certain high speed. The performance of the subjects speeded up as the probability was increased.

Hope is seen to be necessary for action even in aversive situations, Quarantelli (1954) reported studies of human behavior in potential disaster situations. He concluded that people panicked only if they sensed that being entrapped was a possibility rather than an actuality. In other words, people attempted to flee only if they expected that they could attain the goal of being safe. If they felt that they could not possibly escape, they did not panic but sat down to await death.

The importance of hope as a prerequisite for action, most basically action to avoid death, has been demonstrated in a study by Pichter (1957). After caging, handling, and de-whiskering wild rats, he placed them in a container of water. Normally rats placed in these containers would swim for up to 60 hours; however, the de-whiskered wild rats gave up swimming quickly and died, some within seconds. Only a few of the laboratory-raised rats behaved similarly. Post-
mortem examination revealed that the rats had not drowned but that the heart was engorged with blood indicating a slowed pre-mortem heart rate consistent with giving-up or hopelessness. Richter theorized that the rats' survival in the wild was dependent upon their whiskers and ability to run and flee and without these the rats were in a situation against which they had no defense. One can conclude that hope of survival is essential for action for survival.

Hope is also an essential element for sustaining life in humans. Of all people, those who experience the greatest degree of hopelessness are the suicidal. Generally the suicidal individual feels that he does not have the resources within himself to cope with the demands of life. He lacks the sense of competence so necessary for the maintenance of hope and can see no reason for continuing to live (Farber, 1968). Several studies show the importance of hope in maintaining life.

A study of American prisoners of war in Japanese prison camps determined that hope was a vital factor in the prisoner's survival (Nardini, 1952). After an extended period of suffering, when conditions were so bad and efforts at survival so difficult, some of the prisoners would just lay down to die. Nardini called this "apathy death" where there was no obvious physical basis for the death.

Bettleheim (1960) reported on his experience as a concentration camp inmate in Nazi Germany. He described some of the prisoners who were known for their fatalism:

Prisoners who came to believe the repeated
statements of the guards - that there was no hope for them, that they would never leave the camp except as a corpse - who came to feel that their environment was one over which they could exercise no influence whatever, these prisoners were, in a literal sense, walking corpses....They were people who were so deprived of affect, of self-esteem, and every form of stimulation, so totally exhausted, both physically and mentally, that they had given the environment total power over them. (p. 151)

Nettleheim reported that these prisoners soon died.

Henderson and Bostock (1977) studied the coping behavior of shipwrecked sailors. The sailors reported that their will to live enabled them to keep going and the investigators concluded that hope was a significant coping behavior. They defined it as "entertaining ideas that a situation perceived as distressing will ameliorate" (p. 18). According to Henderson and Bostock, hope is characterized by anticipating relief from distress either by one's own actions or through intervention by others. They concluded that the principle function of hope is to control mood, which will determine what other behaviors a survivor will undertake to increase chances of rescue.

These studies and reports have shown that data from controlled laboratory experiments to in situ and post-hoc observations and interviews all point to the importance of hope for action, "even action to prevent the greatest of all
disasters, death" (Stotland, 1969, p. 22). The point to be made is that the sense of control, the illusion that one can exercise personal choice, can act, can do something to influence the environment and alter the future outcomes, has a definite and a positive role in sustaining life.

**Hoping as Coping.** In general, then hope can be explained as a strategy for coping with a threatening event. When faced with a potentially threatening circumstance, the individual cognitively appraises the situation weighing resources against the attributes of the stimulus. If it is appraised as threatening, a second appraisal to determine the best way to cope with the threat. Lazarus (1966) identifies two classes of coping: direct action tendencies and defense mechanisms. He classifies hope as a direct action tendency aimed at strengthening the individual's resources against harm, and hopelessness as a direct action tendency characterized by inaction. The coping strategy used depends upon the results of the secondary appraisal and the element of control is an essential component in this appraisal process. Lazarus suggests that an individual will appraise a potentially aversive situation as less threatening if he perceives himself as having some measure of control over the aversive stimulus.

The coping process used depends upon a number of factors involved in the secondary appraisal such as the individual's personal characteristics and the nature of the environmental demands and contingencies. The interaction of these factors result in a wide variety of coping processes;
however, little is known about the factors and conditions that lead to a certain coping process or the effectiveness of the coping processes in regulating emotional states. It is believed that much coping activity is anticipatory and leads the individual to prepare against the future possibility of harm (Lazarus, 1977).

Part of the function of the coping process is to devise a means for handling the emotional reaction engendered by the threatening situation. The quality and intensity of an emotional reaction is determined by cognitive processes. Coping strategies are also a result of cognitive processes and these strategies continually shape the emotional reaction by altering the ongoing interaction between the person and the environment. The changes in the emotions during stress reflect the person's efforts to master the interchange with the environment by overcoming the damage, by postponing or preventing the danger, or by tolerating it. Whether a person will feel threatened or challenged by a certain situation can be influenced by the expectations about one's power to deal with the environment and master danger (Lazarus, 1977).

Hope is a coping strategy for dealing with overwhelming emotions such as fear or sadness. The element of hope, encompassing a favorable alteration of an expected sequence of events, was universally emphasized by the parents of children with leukemia (Friedman et al, 1963). Hope did not interfere with effective behavior nor intellectual acceptance of reality by the parents. Hope for a more
favorable outcome did not require the parents to intellectually deny the child's prognosis. It actually helped the parents to accept, and the physicians to deliver, bad news about the child's condition as the physician would couple hopeful comments with the discouraging news.

One factor that seems to lead to hope as a coping strategy is the ability to attribute meaning to the situation. When people face crises, it is common for them to attempt to assess meaning and possible consequences. Assigning meaning to an event is necessary for devising a coping strategy since a response is developed only through some understanding or appraisal of what is occurring (Mechanic, 1977; Lazarus, 1966).

The study of the coping strategies of parents of children with leukemia found that all the parents attempted to attribute a reason for or meaning to their child's illness. This attempt to assign meaning was found to be inseparable from the parents' religious beliefs and orientation; however, not all the parents attributed a God-oriented reason for the illness. Some found comfort in attributing the cause of the leukemia to the "viral theory" or similar "scientific" explanations. Those that settled on a satisfactory meaning for the illness maintained a more hopeful outlook. The parents generally found it intolerable to think of their child's leukemia as a chance or meaningless event (Friedman et al, 1963).

The application of one's religious beliefs toward finding the meaning of a life event is probably the most
common way of dealing with this for it is in the crises of life that one turns to God for solace (Allport, 1951). It is the individual's actual (not professed) religious convictions that will influence the ability to cope with suffering when undergoing a critical experience (Travelbee, 1971). Religious beliefs are an important factor in helping some people to deal with stress. A study of Burmese monks (Spiro, 1977) found that culturally constituted religious behavior served to preclude the outbreak of pathology by providing culturally acceptable ways of dealing with stress. One would anticipate that many people who are faced with a stressful illness claim their religious or philosophical beliefs as a major factor in maintaining their hope.

Other factors have also been mentioned as support for maintaining hope in physical illness. The family has been reported as the number one support system by those experiencing a terminal illness. In a study of 10 men and 10 women with metastatic cancer, Parsons (1977) found that all subjects said that they were hopeful and at some point in the interview, 19 of them affirmed dependence on one or more family members to furnish emotional support. Other factors mentioned which influenced their hope were their religion, inner strength or philosophy and health care workers. This was also supported in a study by Castles and Keith (1979) in which institutionalized subjects with cancer most frequently identified significant others and religion as their major sources of emotional support.

Man's ability to organize coping resources is a result
of self-regulation. The self-regulating ability of man serves to help one to cope with the constant state of change of the individual and the environment. As man evolves toward increasing complexity, he hopes, he expects to attain certain goals because he is directed toward fulfilling his greatest potential. Man finds meaning in the events of the past and present so that order and predictability of the future can be maintained in the mind. The uniqueness and complexity of man's sentience allows the development and sustaining of an image of a desired goal some distance into the future. There is no evidence that any other animal has this ability. So it is that man uses this imagery of the future to cope with the present. When man does not imagine, man is without hope.

Hopelessness. Hopefulness is probably best conceptualized as a construct on a continuum with complete hopelessness at the opposite end from total hope. Defining these extremes will not be attempted since they are conceptual and may extend into infinity.

The classic image of hope is overcoming some difficulty, escaping some kind of entrapment. The sense of hopelessness is that there is no way out (Lynch, 1974). Individuals generally describe hopelessness as a feeling of "despair," "nothing left," or "it's the end," and a "desire to do absolutely nothing" (Schmale, 1958). Isani (1963) defines hopelessness as a "lack of the belief that the object can be achieved" (p. 16). It is characterized by a paralysis of intellectual and behavioral actions toward the
attainment of a goal and thoughts and feelings about the inability to achieve the desired goal (Isani, 1963). The feelings involved in hopelessness are chiefly those related to being overwhelmed. The person feels mentally and physically incapable of dealing with the situation. The most habitual feeling of all is the sense of the impossible; one cannot do that which he must (Lynch, 1974).

Since it is futile to attempt to do anything to accomplish the desired goal, the individual does nothing. Lazarus (1966) concludes that the essence of real hopelessness is the condition of inaction in the face of threat. Certainly other factors such as the suddenness of the situation may be involved but the crucial antecedent of inaction and apathy is that there is no hope that any kind of active response could have an effect.

The person who is hopeless lives in an ever present "presence." The individual is so bound up in living in the present that he cannot and does not make plans for the future. One cannot conceive of a possible future change in status since there literally is no future in his own mind. The individual feels trapped in the unpleasant present which is viewed as not changing in any significant way (Neuringer & Harris, 1974). It may be difficult to recognize behavioral signs of hopelessness. Generally, however, people who feel hopeless appear depressed, passive, and are apathetic about their care (Limandri & Boyle, 1978; Farber, 1968).

It is important to speak to the confusion between the
concepts of hopelessness and helplessness. These terms seem to be used interchangeably in much of the literature. For example, Engel (1968) uses these concepts as the same affect in the "giving-up - given-up complex". Lynch (1974) identifies the three qualities of hopelessness as impossibility, entrapment, and helplessness. Helplessness, as a function of the sense of control, is merely a precursor to hopelessness.

In summary, hope is an expectation of goal attainment which is manifested by an orientation toward the future, and the degree to which orientation toward the future exists is the degree to which an individual is hopeful. Antecedent to this expectation is a sense of sufficient control over the environment to attain the goal. This sense of control may be based on a perception of a personal competence, or in trust in benevolent powerful others. If there is no sense of control, an individual feels helpless and unable to attain goals. Such disturbing perceptions of the future will be defended against by antepression and the individual becomes present or past oriented.

The individual who is without hope is in a critical condition since hope is a necessary although not sufficient condition for action and for sustaining life. Without hope, one does not act, one cannot even survive. Without the perceived probability, the hope, that food can be obtained, the effort to obtain food will not be made. If the infant did not hope that his mother would come when he cried, he would not cry. If the individual does not hope that he will
get well, that he can see his daughter married, or that he will have one more good day, he will not even try to reach these goals.

The chronically ill individuals and those with life-threatening illnesses may have special problems with sustaining hope. Do they differ in their level of hope? Do they differ in the range of their hopes? Do they differ from other individuals with less serious diagnoses? How do these individuals maintain hope in the face of illness? Answers to these questions are essential if interventions are to be developed which will promote hope in hopeless individuals.

Statement of Purpose

The purpose of this study was to test the following hypothesis: The more belief one has in internal locus of control of his health, the more hopeful he will be.

In addition, the following questions were explored:

1. Is the level of hope in the physically ill adult significantly related to factors of illness (category of illness* and length of time one has been ill) and personal factors (number of supportive family members, dependence on religion or philosophy, reported depression, attribution of meaning)?

2. Is the extension of hope (short-term versus long-term expectation of goal attainment) significantly related to the category of illness*?

*chronic and life-threatening
Definition of Terms

Hope. Hope is defined as an expectation of achieving a desired goal. It is manifested by an orientation to the future. In this study, level of hope was indicated by the future orientation and achievement score on the Time Opinion Survey.

Extension of Hope. Extension of hope is defined as the distance into the future at which the desired goal is expected to be achieved. In this study it was the time in days, weeks, months, or years in which the subject expected to achieve the goals he identified for himself in response to questions by interview (Cohen, 1967).

Internal Locus of Control. Internal locus of control is defined as a perception by the individual that reinforcement is contingent upon his behavior (Rotter, 1966). In this study, locus of control was indicated by scores on the Multidimensional Health Locus of Control Scales which are the Internal, Powerful Other, and Chance Externality scales.

Chronic Illness. Chronic illness is defined by the National Conference on Chronic Disease (1952) as diseases which comprise

all impairments or deviations from the normal which have one or more of the following characteristics: are permanent, leave residual disability, are caused by non-reversible pathological alteration, require special training of the patient for rehabilitation, or may be
expected to require a long period of supervision, observation, or care. (p. 144)

In this study chronic illness included such medical conditions as rheumatoid arthritis, diabetes mellitus, multiple sclerosis, and musculo-skeletal or nervous system handicaps. It is not a life-threatening disease.

**Life-threatening Illness.** Life-threatening illness is defined as disease which usually ends in death or is associated with death in the minds of the lay public. In this study the category of life-threatening illness included cancer of any type.
CHAPTER 3

METHODS

Subjects

The population from which the sample was selected consisted of adults living at home with a medical diagnosis of either chronic illness or cancer. Ninety participants were drawn randomly over a period of three months from the discharge list of the Metropolitan Detroit Visiting Nurse Association (VNA) which services Wayne, Oakland, and Macomb Counties. Forty-five participants were selected from each medical diagnostic group. The Chronic Illness Group consisted of individuals with a medical diagnosis of a non-life-threatening chronic illness. The Life-threatening Illness Group consisted of individuals with a form of cancer. Additional selection criteria included: age (18 to 65 years); ability to communicate in English; orientation to time, place, and person; knowledge of diagnosis by self-report; and diagnosis known for a minimum of two months.

The investigator approached 108 potential participants. There were nine from each diagnostic group who refused to participate. The participants ranged in age from 22 to 65 years with a mean age of 53.7 years. There were 35 males
and 55 females. Demographic characteristics of the participants are summarized in Tables 1 and 2. The majority of subjects were female, married, Protestant, homemaker or employed non-professional, with a high school education or less. There were no statistically significant differences between the groups on demographic variables. The largest number of chronically ill individuals were diagnosed with diabetes mellitus; the two largest categories for the participants diagnosed with cancer were gastro-intestinal and respiratory cancers.

**Instruments**

**Multidimensional Health Locus of Control Scales (MHLC).** These scales consist of six items each, utilizing a 6-point Likert-type format ranging from "Strongly Disagree" (1) to "Strongly Agree" (6) (Appendix A). The three scales which reflect three dimensions of health locus of control beliefs: internality (IHLC), powerful others (PHLC), and chance externality (CHLC) are in an 18-item questionnaire form. The three locus of control scores for each subject were obtained by summing the numbers assigned to the categories of response for each scale. Each scale yields scores which range from six to thirty-six. Each dimension consists of six items; each item is scaled from one to six. For each dimension the score ranges from six (strong disagreement with all items) to thirty-six (strong agreement with all items). Equivalent forms have been developed. The alpha reliabilities for the MHLC scales ranged from .673 to .767.
TABLE 1

Characteristics of Participants by Category of Illness

<table>
<thead>
<tr>
<th>Characteristic</th>
<th>Category</th>
<th>Chronic Illness</th>
<th>Life-threat.</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
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<td>15</td>
<td>20</td>
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<td></td>
<td>Female</td>
<td>30</td>
<td>25</td>
<td>55</td>
</tr>
<tr>
<td>Marital Status</td>
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<td>5</td>
<td>11</td>
</tr>
<tr>
<td></td>
<td>Married</td>
<td>24</td>
<td>28</td>
<td>52</td>
</tr>
<tr>
<td></td>
<td>Widowed</td>
<td>9</td>
<td>4</td>
<td>13</td>
</tr>
<tr>
<td></td>
<td>Divorced</td>
<td>6</td>
<td>8</td>
<td>14</td>
</tr>
<tr>
<td>Occupation</td>
<td>Professional</td>
<td>6</td>
<td>6</td>
<td>12</td>
</tr>
<tr>
<td></td>
<td>Non-professional</td>
<td>12</td>
<td>17</td>
<td>29</td>
</tr>
<tr>
<td></td>
<td>Retired</td>
<td>3</td>
<td>6</td>
<td>9</td>
</tr>
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<td></td>
<td>Disabled</td>
<td>5</td>
<td>6</td>
<td>11</td>
</tr>
<tr>
<td></td>
<td>Homemaker</td>
<td>18</td>
<td>10</td>
<td>28</td>
</tr>
<tr>
<td></td>
<td>Student</td>
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<td>0</td>
<td>1</td>
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<tr>
<td>Religion</td>
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<td>18</td>
<td>27</td>
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<td>Protestant</td>
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<td></td>
<td>Jewish</td>
<td>2</td>
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<td>3</td>
</tr>
<tr>
<td></td>
<td>None</td>
<td>3</td>
<td>6</td>
<td>9</td>
</tr>
<tr>
<td>Education</td>
<td>Primary or less</td>
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<td>3</td>
<td>12</td>
</tr>
<tr>
<td></td>
<td>Some secondary</td>
<td>13</td>
<td>16</td>
<td>29</td>
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<td></td>
<td>Secondary grad</td>
<td>9</td>
<td>18</td>
<td>27</td>
</tr>
<tr>
<td></td>
<td>Some college</td>
<td>8</td>
<td>6</td>
<td>14</td>
</tr>
<tr>
<td></td>
<td>College graduate</td>
<td>1</td>
<td>1</td>
<td>2</td>
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<tr>
<td></td>
<td>Prof/Grad school</td>
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<td>1</td>
<td>6</td>
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<table>
<thead>
<tr>
<th>Cancer</th>
<th>Number of Cases</th>
<th>Chronic Illness</th>
<th>Number of Cases</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gastro-intestinal</td>
<td>12</td>
<td>Diabetes Mellitus</td>
<td>27</td>
</tr>
<tr>
<td>Bone</td>
<td>2</td>
<td>Multiple Sclerosis</td>
<td>4</td>
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<tr>
<td>Respiratory</td>
<td>12</td>
<td>CVA</td>
<td>6</td>
</tr>
<tr>
<td>Genito-Urinary</td>
<td>7</td>
<td>Arthritis</td>
<td>2</td>
</tr>
<tr>
<td>Breast</td>
<td>6</td>
<td>Musculo-skeletal defect</td>
<td>5</td>
</tr>
<tr>
<td>Lymphoma</td>
<td>3</td>
<td>Emphysema</td>
<td>1</td>
</tr>
<tr>
<td>Neurological</td>
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<td></td>
<td></td>
</tr>
<tr>
<td>Undefined</td>
<td>2</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

and when the equivalent forms were combined into 12-item scales, the alpha reliabilities increased (.830 to .859). Initial construct validity has been determined by low positive correlations with Levenson's I, P, and C scales (Wallston, Wallston, & DeVellis, 1978).  

Time Opinion Survey (TOS). This is a 16 item questionnaire with successive multiple-choice response options assumed by the authors to form an approximate
interval scale. The questionnaire contains items relating to an individual's subjective sense of the speed of time passage, future orientation, emphasis on career achievement, the degree to which one feels under time pressure, preference for and ability to delay gratification, happiness, and the degree to which life is viewed as exciting. Only questions one through six relating to future orientation and achievement (as a measure of hope) were given to these subjects. The level of hope score was obtained by summing the numbers assigned to the categories of response on these questions. The responses change in number and content with each question, but all increase in magnitude ("no importance" to "extreme importance", "less rapidly" to "most rapidly", etc.) and are assigned numbers one through a maximum of six to represent that increase. The possible range of scores is six to twenty-seven with twenty-seven representing the greatest degree of hope and six representing the least degree of hope (Appendix B).

This scale has been used in previous research with death-involved individuals (Neuringer & Harris, 1974). The construct validity of the speed of time passage variable has been determined by low correlation with the Time Metaphor Test and significant correlations with direct rating of current speed of time passage (Kuhlen & Monge, 1968). This validity study employed two groups of subjects. One consisted of male and female graduate students enrolled in educational psychology courses. They ranged in age from 21 to 61 with a mean age of 28.5 years and a standard deviation
of 8.2 years. The other group consisted of a sample of adults attending church schools in a small town in New York. This group ranged in age from the 20's to the 80's with a mean age of 49.4 years and a standard deviation of 14.2 years. The validity of the future orientation factor has not been reported; this investigator assessed construct validity in a pilot study of the instruments reported below.

**Sources of Support Schedule.** This is a 17-item (plus related sub-item) questionnaire which was developed by the investigator. Direct questions were asked of the subject regarding the illness, his outlook about the illness, incidence of depression or discouragement, attribution of meaning to the illness, personal goals and expected time of achievement, and a self-rated level of hope on a scale of one to ten (Appendix C). The interview guide was pre-tested in a pilot study of the instruments.

**Pilot Study**

A pilot study was done to determine the validity of the Time Opinion Survey questions as a measure of hope and to pre-test the Sources of Support Schedule. Thirty participants (15 with a chronic illness and 15 with cancer) were selected from the files of the Metropolitan Detroit Visiting Nurse Association using the same selection criteria as was planned for the main study. In addition, 140 nursing students (graduate and undergraduate) participated in the validity test of the TOS questions. The procedure with the VNA participants was identical to that of the main study.
with the exception that the Health Locus of Control scales were not administered. The students were approached after class and asked to participate in the pre-testing of a questionnaire. All requirements for informed consent were met in the oral and written explanations.

The validity of the questions on the TOS concerned with future orientation and achievement was determined by correlating this score with the participants stated level of hope (on a scale of one to ten). The Pearson Product Moment Correlation coefficient (PPMC) was .19 with a probability level of .005. Although the correlation of these variables was low, the main study was pursued using these tools, since there were no other appropriate tools available. Also, it was thought that the additional descriptive data to be obtained from the study would be of value in establishing variables related to hope. Minor changes were made in the wording of some of the questions on the Sources of Support Schedule to increase their clarity.

**Design**

The study was descriptive with the purpose of determining the level of hope in relation to personal and situational variables as manifested in persons with a chronic or life-threatening illness. A relationship between the level of hope and the health locus of control score was predicted. The existence of relationships between the following variables were explored: the state variable of type of illness and the level of hope; the level of hope (as
indicated by future orientation) and reported personal factors; the level of hope and the length of illness; extension of hope and the type of illness.

Procedure

Subjects meeting the diagnostic category criteria were selected randomly using a random numbers table from a monthly master file in the VNA. The potential subjects were interviewed by phone by the staff nurse to obtain permission for the investigator to speak with them.

Contact with potential subjects was made by phone by the investigator or an assistant. The study was explained and it was determined by the responses to specific questions covering the subject selection criteria if the individual met the additional criteria. If he did, he was asked for an appointment to visit in the home. The subject was told that the purpose of the study was to explore ways that may assist people to keep a positive outlook during illness and that the investigator expected that the findings would help nurses to provide better care for patients while they are ill. The procedure of the study was explained along with the right of confidentiality and withdrawal. All requirements for informed consent were met in the oral and written explanations. At the home, the study was briefly re-explained and written consent to participate was obtained. The subject completed the six questions from the TOS and then the MHLC scales. This took approximately 10 minutes. Following completion of these instruments, the
subject responded to the questions on the Sources of Support Schedule. Responses were recorded on the interview guide during the interview. When the interview was completed, the subject was thanked for his participation and the investigator left.
CHAPTER 4

ANALYSIS OF DATA

Results

Hypothesis. A positively correlated relationship was hypothesized between internal locus of control of health and the level of hope. A bivariate regression analysis was done with the TOS score and the IHLC score. The hypothesized relationship between belief in internal locus of control of one's health and level of hopefulness was not supported (Appendix D1). Only 3% of the variation in the TOS score was explained by linear regression on the Internal Health Locus of Control variable ($R^2 = .03$). The $F (1,80)$ value of 2.668 was not statistically significant at the .05 level.

A multiple regression analysis of the TOS score as predicted by the three Health Locus of Control scores yielded an $F (3,78)$ value of .889 which was not significant at the .05 level. In this case the greatest increment was produced by the Internal scale (Appendix D2). The MHLC scales jointly explain only 3% of the variation on the TOS although statistical significance is approached in the IHLC variable $R^2$ square increment ($p < .08$).
**Question 1.** This question asked if a significant relationship could be identified between the level of hope and several personal factors. A multiple regression analysis was done with category of illness, length of illness, incidence of depression or discouragement, number of supportive family members and friends, dependence on religion or philosophy, and belief in a purpose for illness as the predictor variables. The TOS score was the criterion variable. The overall $F$ (6,75) ratio (1.193) for this analysis was not significant at the .05 level (Appendix D3). Only 8.7% of the variation in the TOS is explained by the personal factors jointly. Examination of the regression coefficients for the individual variables revealed a significant $F$ (6,75) ratio of 3.023 ($F < .002$) for the category of illness variable indicating a significant increment in the $R$ square as this variable was added to the equation; however, only 2% of the variation in the TOS score was explained by this variable.

**Question 2.** This question asked if the extension of hope or expectation of goal attainment was significantly related to the category of illness. A t-test analysis was done using category of illness as the independent variable and Extension of Hope as the dependent variable. More of the Chronic Illness Group than the Life-threatening Illness Group participants could set a time limit on their goals (36 versus 25). Also, the mean extension of hope for the Chronic Illness Group (50.7) was greater than that for the Life-threatening Illness Group (41.2) although the t-test
analysis with a $t$ (59) of .40 was not significant at the .05 level (Appendix D4). The standard deviations for the groups indicate a greater variance among the Chronic Illness Group (102.5) than among the Life-threatening Illness Group (72.27).

**Descriptive Data.** Generally, the participants reported a very optimistic outlook on their illnesses and how the illnesses affected their lives. Both categories of participants reported (at a 95.6% frequency) the tendency to think positively about their illnesses. A large majority of the participants (32 of the chronically ill and 29 of those with cancer) did report having experienced depression at one time or another in relation to their illnesses. All of these stated that the periods of depression were transient. Various strategies were reported as being helpful in allaying the feeling of depression and coping with the illness (Table 3). The most commonly reported strategies were: 1) get busy doing something (n=26, 29%), 2) prayer or religious activities (n=16, 18%), 3) think about other things (n=13, 14%), and 4) talk to others (n=12, 13%).

Religious or philosophical beliefs were reported to be helpful in coping with the illness. Of the Chronic Illness Group, 39 reported that these beliefs were helpful and 37 of the Life-threatening Illness Group reported the same. Faith and prayer were reported as the most useful religious strategies by both groups, but were ranked differently in relation to each other (Table 3). Philosophy (non-religious) was the next most frequently reported category.
TABLE 3

Response Frequencies for Support Systems Variables by Category of Illness

<table>
<thead>
<tr>
<th>Variable</th>
<th>Chronic Illness</th>
<th>Life-threatening</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Raise Spirits</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>a. Get busy</td>
<td>11</td>
<td>15</td>
<td>26</td>
</tr>
<tr>
<td>b. Prayer or religion</td>
<td>9</td>
<td>7</td>
<td>16</td>
</tr>
<tr>
<td>c. Think other things</td>
<td>9</td>
<td>4</td>
<td>13</td>
</tr>
<tr>
<td>d. Read</td>
<td>3</td>
<td>2</td>
<td>5</td>
</tr>
<tr>
<td>e. Talk to others</td>
<td>4</td>
<td>8</td>
<td>12</td>
</tr>
<tr>
<td>f. Express Emotions</td>
<td>3</td>
<td>2</td>
<td>5</td>
</tr>
<tr>
<td>g. Other</td>
<td>6</td>
<td>7</td>
<td>13</td>
</tr>
</tbody>
</table>

How Religion Helps

| a. Prayer                 | 11              | 21               | 32    |
| b. Minister               | 3               | 4                | 11    |
| c. People help            | 2               | 2                | 4     |
| d. Faith                  | 16              | 8                | 24    |
| e. Other                  | 1               | 1                | 2     |
| f. Philosophy             | 7               | 1                | 8     |
| g. Doesn't                | 5               | 8                | 13    |

Belief in a purpose or reason for the illness was not so common (Table 4). Twenty-seven persons in the Chronic Illness Group reported that they believed there was a purpose or reason for their illness; twenty-one of the Life-threatening Illness Group reported the same. The most commonly given reason or purpose was a scientific one related to the nature and causes of the disease, with 17 subjects in the Chronic Illness Group and 8 persons in the Life-threatening Illness Group responding in this way.
TABLE 4

Response Frequencies for Support Systems Variables by Category of Illness

<table>
<thead>
<tr>
<th>Variable</th>
<th>Chronic Illness</th>
<th>Life-threat.</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Purpose for Illness</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>a. Scientific</td>
<td>17</td>
<td>8</td>
<td>25</td>
</tr>
<tr>
<td>b. Accident</td>
<td>0</td>
<td>3</td>
<td>3</td>
</tr>
<tr>
<td>c. Spiritual</td>
<td>6</td>
<td>1</td>
<td>7</td>
</tr>
<tr>
<td>d. Neglect</td>
<td>2</td>
<td>4</td>
<td>6</td>
</tr>
<tr>
<td>e. Unknown</td>
<td>1</td>
<td>5</td>
<td>6</td>
</tr>
<tr>
<td>f. None</td>
<td>19</td>
<td>24</td>
<td>43</td>
</tr>
<tr>
<td>Who or What Helps</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>a. Family</td>
<td>12</td>
<td>21</td>
<td>33</td>
</tr>
<tr>
<td>b. Friends</td>
<td>7</td>
<td>4</td>
<td>11</td>
</tr>
<tr>
<td>c. Professionals</td>
<td>2</td>
<td>4</td>
<td>6</td>
</tr>
<tr>
<td>d. Self</td>
<td>3</td>
<td>5</td>
<td>8</td>
</tr>
<tr>
<td>e. Religion</td>
<td>12</td>
<td>6</td>
<td>18</td>
</tr>
<tr>
<td>f. Work/Keep busy</td>
<td>3</td>
<td>1</td>
<td>4</td>
</tr>
<tr>
<td>g. Other</td>
<td>3</td>
<td>2</td>
<td>5</td>
</tr>
<tr>
<td>h. None</td>
<td>3</td>
<td>2</td>
<td>5</td>
</tr>
<tr>
<td>How People Help</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>a. Visits</td>
<td>10</td>
<td>9</td>
<td>19</td>
</tr>
<tr>
<td>b. Transportation</td>
<td>1</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>c. Listen/talk</td>
<td>7</td>
<td>11</td>
<td>18</td>
</tr>
<tr>
<td>d. Physical help</td>
<td>8</td>
<td>4</td>
<td>12</td>
</tr>
<tr>
<td>e. Cheer up</td>
<td>5</td>
<td>4</td>
<td>9</td>
</tr>
<tr>
<td>f. Telephone</td>
<td>4</td>
<td>4</td>
<td>8</td>
</tr>
<tr>
<td>g. Disease management</td>
<td>3</td>
<td>0</td>
<td>3</td>
</tr>
<tr>
<td>h. Other</td>
<td>3</td>
<td>6</td>
<td>9</td>
</tr>
<tr>
<td>i. None</td>
<td>4</td>
<td>3</td>
<td>7</td>
</tr>
</tbody>
</table>

To the question "Who or what helps you to keep a positive outlook about your illness?", the most common response was "family" (n=33, 37%) (Table 4). "Religion"
(n=18, 20%) and "friends" (n=11, 12%) were the next most common responses. Asked to identify how people help them cope with their illnesses (Table 4) the participants responded most frequently by "visiting me" (n=19, 21%). It was also frequently reported that people help by "listening to me" or "talking to me" (n=18, 20%). The third largest category of response was "physical help" (n=12, 13%) such as help with activities of daily living.

When asked if they had a goal for themselves, 39 of the Chronic Illness Group and 43 of the Life-threatening Illness Group reported they did. Although a few stated that the goal was to be accomplished in a very short time (less than a week), the largest group identified goals to be accomplished in one to five years (Chronic Illness Group, 17; Life-threatening Illness Group, 19). Five of the Life-threatening Illness Group and four of the Chronic Illness Group had goals to be accomplished in six to twenty years.

Additional Analyses

Additional analyses were done using the self-stated level of hope as the Hope score in place of the TOS score. Also, correlational and Chi square analyses were run on all variables as appropriate. In addition to the TOS as a measure of hope, participants were asked to indicate how hopeful they were using a scale of one to ten as an indicator. There was very little difference between the mean score for the Chronic Illness Group and the Life-threatening Illness Group (8.3 and 8.4 respectively) on the
self-report of Hope scale.

A multiple regression analysis was done using the Hope score as the criterion variable and the Health Locus of Control scores as the predictors. The $F (3,78)$ ratio of 1.379 was not significant at the .05 level (Appendix D5). The MHLC scores explain only 5% of the variation in the Hope scores. In contrast with the TOS multiple regression analysis with the same variables, where the IHLC was dominant, the CHLC variable accounts for the greatest increment in variation on the Hope score ($p < .05$) although this was only 4% of the total variance.

A multiple regression analysis was also done using category of illness, length of illness, incidence of depression or discouragement, number of supportive family or friends, dependence on religion or philosophy, and belief in a purpose for the illness as the predictor variables. The $F (6,75)$ ratio of .820 was not significant at the .05 level (Appendix D6). Jointly these variables accounted for only 6% of the variation in the Hope score. The variable of dependence on religion or philosophy produced the greatest increment in the $R$ square (.029) although this was only 2% of the total variance.

T-tests were done with category of illness as the independent variable. The means of these groups were compared on the TOS and MHLC scales. The Chronic Illness Group had a significantly higher mean on the IHLC scale than the Life-threatening Illness Group ($t (86) = 2.35, p < .02$). The other scales and the TOS had no significant differences.
in means.

All the variables were either correlated using Pearson's Product Moment Correlation technique or examined by Chi square analysis to determine if any of the variables were related* . The responses to the question "Who or what helps you to keep a positive outlook about your illness?" were different by marital status at a statistically significant level with the relationship of a moderate magnitude (Chi square (18) = 30.38, $p < .03$, Cramer's $V = .33$). Single participants most often (n=5, 45%) reported friends as helpful. Married (n=25, 48%) and divorced (n=5, 35%) participants most often reported family as helpful and the widowed participants most often (n=6, 46%) reported their religion as helpful. When the variable of How People Help was added for a three-way analysis, the response that they "listen" or "talk to me" increased the statistical significance and magnitude of the relationship (Chi square (15) = 31.88, $p < .006$, Cramer's $V = .76$).

Statistically significant relationships were found between Religious Affiliation and five other variables. Here, again, the "who or what helps?" question showed differences of a moderate magnitude (Chi square (18) = 31.57, $p < .02$, Cramer's $V = .34$). Catholic participants most often (n=12, 44%) reported family as helpful.

*Categories involving similar, although too few, responses were collapsed for Chi square analysis to conform with the expected frequencies requirement. The original categories are reported.
Protestant participants reported family (n=17, 34%) and religion (n=16, 32%) almost equally as often and more often than any other category of help. The three Jewish participants reported either friends, professionals, or religion. Those with no religious affiliation most commonly (but only three out of nine responses) reported family as helpful. When the variable of how the individual Raised his Spirits was added for a three-way analysis, the response that they "talked to others" was the only variable that was statistically significant but it was less than without this variable even though magnitude of the relationship increased (Chi square (9) = 18.09, p < .03, Cramer's V = .70). When the variable of How their Religion or Philosophy helped was added in a three-way analysis, the response "faith" increased the statistical significance and magnitude of the relationship (Chi square (5) = 17.42, p < .003, Cramer's V = .85).

Responses to the question "Do your religious or philosophical beliefs help in any way?" were also related at a statistically significant level to Religious Affiliation with the relationship of a moderate magnitude (Chi square (3) = 14.91, p < .001, Cramer's V = .40). Over 90% of the Catholic and Protestant participants responded "yes" to this question. Two out of the three Jewish participants responded "no". Of the nine persons with no religious affiliation, five responded "yes". When the variable of how the individual Raised his Spirits was added in a three-way analysis, the response "talk to others"
increased the statistical significance and the magnitude of the relationship (Chi square (12) = 32.78, p < .001, Cramer's V = .55). When the variable How People Help was added for a three-way analysis, the response "by visits" was also statistically significant but less than without this variable (Chi square (2) = 6.96, p < .03). Again magnitude of the relationship was increased (Cramer's V = .60).

Religious Affiliation was also related to Belief in a Purpose or Reason for the illness with the relationship of a moderate magnitude (Chi square (3) = 8.06, p < .04, Cramer's V = .30). Eighteen (66%) of the Catholic participants and twenty-eight (55%) of those with no religious affiliation did not believe there was a purpose for their illnesses. Thirty-three (66%) of the Protestant and two of the three Jewish participants believed there was a purpose. The addition of two other variables for a three-way analysis (one at a time) also produced significance. The variable of Religion or Philosophy as Helpful increased the statistical significance and the magnitude of the relationship slightly (Chi square (3) = 11.34, p < .01, Cramer's V = .38). The variable of How People Help by "visits" also increased the statistical significance and the magnitude of the relationship in a three-way analysis (Chi square (2) = 7.23, p < .02, Cramer's V = .61).

There was also a statistically significant relationship of a moderate magnitude found between Religious Affiliation and strategies for Raising the Spirits (Chi square (18) = 29.37, p < .04, Cramer's V = .40). Catholic participants
most often reported "talking to others" (n=9, 30%) or "get busy" (n=7, 26%) as means for allaying depression. Protestant participants most often reported "prayer or religion" (n=15, 29%) or "get busy" (n=10, 19%). The Jewish participants reported "talk to others." The responses of those with no religious affiliation most often fell in the "read" (n=4, 40%) or "other" (n=4, 40%) category.

Finally, Religious Affiliation and How Religion or Philosophy Helps produced a statistically significant relationship of a moderate magnitude (Chi square (18) = 30.12, p < .03, Cramer's V = .33). Catholic participants responded "prayer" (n=13, 48%) and "faith" (n=9, 33%). Protestant participants responded "prayer" (n=16, 32%) and "faith" (n=15, 30%). Two of the three Jewish participants responded "it doesn't" and eight of the nine participants without a religious affiliation responded either "it doesn't" (three), "helps thinking pattern" (philosophy) (three), or "prayer" (two). When the variable How People Help by "visits" was added in a three-way analysis, statistical significance was decreased (Chi square (10) = 18.33, p < .04) but the magnitude of the relationship increased (Cramer's V=0.70).

Limitations

The major methodological limitation of this study was the tool to measure hope. To this investigator's knowledge, there has been no instrument developed which is claimed to measure hopefulness. In the pilot study a low positive
correlation was found between the six future orientation and achievement questions on the TOS and the participants' stated level of hope (on a scale of one to ten). Thus the validity of the TOS as a measure of hope is questionable; however, the direct measure of hope (self-stated level) also has questionable validity due to social desirability influences as well as the intangibility of the construct.
CHAPTER 5

DISCUSSION

Interpretations and Conclusions

The results of the study do not support the hypothesized positive relationship between internal locus of control and level of hope. In addition, there were no statistically significant relationships demonstrated between the level of hope as measured by the TOS score and the several personal and social factor variables or between category of illness and extension of hope. This could be interpreted to mean that there are, indeed, no significant relationships between the locus of control, personal and social variables in question and the level of hope. With this conclusion in mind, one might continue to search for other variables that are significantly related to the degree of hope in the physically ill.

The interpretation, however, requires consideration of the results of the pilot study, the limitations of the study, and the logical relationships in the theoretical framework in addition to the results of the data analysis. The major concern in the design of this study was the lack of a valid, reliable instrument which has been shown to
measure hope. The pilot of the TOS demonstrated low positive correlation between the six future orientation and achievement questions and the self-stated level of hope. It can be argued that a self-stated hope score would not be valid either because of the social desirability of giving a higher than actual score. With these considerations in mind, it would be premature to rule out in future studies, the variables considered in this study. With improved tools of measurement, relationships may be found between level of hope and these variables.

The higher mean score for the Chronic Illness Group as compared with the Life-threatening Illness Group on the IHLC may be due to the fact that the Chronic Illness Group had been ill longer than the Life-threatening Illness Group ($t^{*} (98) = 5.721, p < .001$). As a result of their experience, they may have developed a stronger belief in the right to exert themselves in their health care. The difference in mean scores may also be explained by Abrams' (1966) theory that the nature of cancer does not provide opportunity for one to exert himself or perceive that he has any control over the outcome of his illness.

The results of the interview provide additional insight into the coping strategies of the physically ill adult. A majority (67.8%) of the participants reported having experienced depression related to their illnesses as would be expected. Dealing with depression by "getting busy," as reported by the largest group of participants, is consistent with depression theory (Becker, 1974) and accepted
therapeutic management of depression (Beck, 1973). It is also evidence that this depression was generally of the mild variety. The next largest category of responses for dealing with depression was "talk to other people" followed closely in number of responses by the use of "prayer or religious activities" and "think of other things". These activities may all involve doing something to get one's mind off the unpleasant subject. This is a common and healthy means of psychological defense and serves to help the individual to cope with the stress generated by the situation (Stotland, 1969). These activities can also be seen as a means by which the individual maintains the integrity of his being by focusing on something concrete to do. It may also be a way of expressing his thoughts and emotions in constructive patterns allowing integration of these into his life.

The relationship between marital status and the "Who or What Helps" question may be explained by a matter of availability and pattern of personal relationships. Single persons may tend to relate with peers more than family. Married and divorced individuals may have developed greater familial ties and, therefore, found family more helpful. Often the married participant responded that the spouse was most helpful. Children were also frequently cited as helpful by married and divorced participants. Why the widowed participants reported religion as most helpful is a matter of speculation. Perhaps loss of their spouses caused them to consider their own mortality and turn to their
religion for solace. Of those individuals who reported that they were helped by people, the act of being available for listening and talking to the ill individual seemed most beneficial. Perhaps this permitted the individual to express his feelings and concerns and resulted in a sense of support on the part of the other individual.

The participants' answers to the questions regarding religion indicated that this dimension played a part in the coping strategies of a large proportion of the subjects in this study. Over 76% of the sample reported religion as helpful in coping with their illnesses. Prayer and faith were the most frequently reported religious strategies used. This may be interpreted to be related to the fact that the sample was an older group (mean age 53.7 years) and older people are generally thought to be more religious than those of more recent generations, although this has not been supported in gerontological research (Kimmel, 1974). Another possible explanation is that many of the sample had very difficult illnesses with which to deal and often in times of serious illness, people turn to their religious beliefs for support (Oates & Lester, 1969). This may be the case here; however, the Chronic Illness Group reported greater dependence on religion than the Life-threatening Illness Group. A breakdown of the diagnoses shows that 60% of the Chronic Illness Group had diabetes mellitus. Although it is a difficult condition with which to live, diabetes does not usually produce the same fearful response as cancer or cerebral vascular accident. Perhaps difficulty
of illness does not explain this phenomenon either. It may be that this sample of people would have reported the same dependence on their religious beliefs even if they were not ill.

The use of religious practices and beliefs as a healthy means of coping with illness has been reported in the literature. Katz, Weiner, and Gallagher (1970) categorize prayer and faith as ego defenses which were identified in a group of women awaiting breast biopsy for possible cancer. They concluded that those individuals who employed prayer and faith, or denial with rationalization appeared to experience considerably less psychological and physiological disruption than those who depended primarily upon projection or displacement. The subjects in the present study sample may have also employed prayer and faith in a manner similar to those in the Katz et al study.

In addition to those who reported dependence on religious beliefs, a smaller proportion of participants reported that a non-religious philosophy was helpful in coping with their illnesses. This points up the importance of some unifying philosophy (either religious or non-religious) for dealing with the stresses in life as theorized by Allport (1937). Adding these participants with non-religious philosophies to those who reported a religious philosophy as helpful, 84.4% of the participants identified some kind of philosophy as being helpful in coping with illness. Religious activities may aid the individual in integrating the many factors of the environment into a
pattern with which he feels comfortable. The religious and philosophical values to which the participants ascribed may have helped them to bring their problems into a framework which tended to reduce the disharmony with the environment.

The statistically significant relationships between Religious Affiliation and the Support Systems variables are difficult to interpret. Why Catholic participants reported most often that family was helpful while Protestant participants reported family and religion almost equally has no easily apparent answer.

It seems that the common thread through all these results was the helpfulness of being with others and being able to talk with them. Visits by others and talking with others repeatedly were the most significant responses given by the participants. It is evident that these individuals found interaction with others to be a helpful means for coping with their illnesses.

The relationship between Religious Affiliation and How Religion or Philosophy Helps was not entirely unexpected. What was unexpected was that some individuals who claimed no religious affiliation stated that their religious beliefs were helpful and specifically that prayer was helpful. Apparently these individuals were inwardly religious even though they claimed no affiliation with an organized religion.

Slightly over half of the participants reported that they believed there was a reason or a purpose for their illnesses. The need to attribute meaning to one's illness
was not as prevalent in this sample as in that studied by Friedman et al (1963). Perhaps the difference is that Friedman's research dealt with parents of children with leukemia rather than with the person who was ill. The need to attribute meaning for illness may be greater for relatives than for the patient just as it is often more difficult for relatives to accept a serious illness than it is for the patient (Kubler-Ross, 1969).

Of those who did identify a purpose or reason for their illnesses, 53% gave a scientific reason. The other answers, about equally divided among the remaining participants, were varied. These attributions included 1) for spiritual growth, 2) result of an accident, 3) self-neglect, and 4) an unknown reason. The responses reflect the increased sophistication of the consumer of health care as well as the individuality of coping strategies. According to Mechanic (1977) attributions are shaped to conform to the individual's success or lack of success with coping and are often formulated to minimize the individual's sense of personal responsibility. Only three individuals identified their own neglect as the reason for their illnesses. Apparently these three participants perceived a great deal of personal responsibility for their illnesses.

The relationship between Religious Affiliation and Belief in a Purpose or Reason for the illness is also difficult to explain. When the variable of What was the purpose was added for a three-way analysis, the significant relationship disappeared.
The results of the question regarding whether the participant had any goals demonstrated that a very large majority of this sample had identified goals. More of the Life-threatening Illness Group participants than the Chronic Illness Group participants were able to identify a goal of some kind in their lives. The participants had more difficulty putting these goals into a time frame than with identifying them. Many had goals to which they could not or would not attach an expected time of accomplishment. These goals were generally such things as "to live as happy a life as I can", or "to maintain my present abilities". Of those who could put the goal in a time frame, 40% expected to accomplish it within one to five years. The extension of hope (or expectation of goal attainment) was not any shorter for the Life-threatening Illness Group than the Chronic Illness Group. Perhaps because of the life-threatening nature of their illnesses participants with cancer were more aware of what they would like to accomplish in life. Most likely the extension of goals was not reduced in this group, as in the Neuringer and Harris study (1974), because this sample of individuals with cancer was not restricted to the terminally ill but included people who had been diagnosed and treated very early and therefore would have very good prognoses.

Recommendations

The results of the pilot study and the lack of significant relationships between the TOS and any variables
which theoretically may be related to hope point up a need for instrument development. Perhaps an instrument could be developed in conjunction with additional exploratory research on hope. The results of this study leave the investigator in doubt as to whether the construct "hope" actually was measured. Once a valid instrument has been developed, replication of this study is a possibility. The questions posed in this study regarding what variables may be related to the maintenance of hope still remain unanswered due to the questionable validity of the instrument.

Because of the mixture of stages of illness in this study, conclusions could not be drawn regarding the effect of illness on extension of hope. It had been anticipated that any diagnosis of cancer would result in an amputation of the future as proposed by Shands (1966); however, the results of this study do not support this. To determine what effect stage of illness may have on extension of hope it would be useful to take groups in varying stages of illness including a terminally ill group. It would be expected that the hope of the terminally ill individuals would encompass a shorter time frame than the hope of chronically ill individuals.

The large number of participants who reported that their religion or philosophy was helpful in coping with their illnesses gives support to the position that professional nurses need to consider this dimension of the individual more seriously than is currently done. The
breakdown of diagnoses shows that not only did the individual with a life-threatening illness use religious activities as coping strategies but so did the individual with a manageable chronic illness such as the person with diabetes mellitus. This dimension and what part it may play in the individual's physical and mental health requires further exploration before any conclusions can be drawn. Research may consider areas such as: patients' expectations of the nurse's role in meeting spiritual needs; patients' responses to nurses who offer interventions such as Bible reading, prayer, or assistance with meditation; any effect such activities may have on anxiety, hope, and rest patterns, and possible relationships between religious beliefs and coping strategies or success of coping.

The participants' reports regarding the incidence of depression give guidelines for practice to the professional nurse. Helping the individual to deal with the realities of his illness in doses which he can handle may be accomplished by providing diversional activities which can be initiated when he feels the need to "get busy". These diversions may take the form of physical activities when possible or conversation or prayer with another individual.

This study also points up the importance of relationships with significant others to physically ill individuals. The helpfulness of being with and talking with significant others in coping with a physical illness was reported by the participants repeatedly. The professional nurse should be alert to these needs of the patient and
wherever possible encourage visits by the family and close friends and allow them the privacy to communicate at a meaningful level. If such visits are not possible, the nurse should develop a therapeutic relationship and offer companionship and a listening ear.

In conclusion, this study leaves unanswered the questions posed regarding the maintenance of hope in the physically ill individual. It does offer insight into the most helpful support systems for coping with physical illness, as reported by the participants. It also points up the need for development of a valid and reliable instrument to measure hope. The need for more knowledge in this area is made more apparent than ever by the many unanswered questions brought to fore in this study and such knowledge is basic to the development of nursing science.
APPENDIX A: MHLCC

Form B

This is a questionnaire designed to determine the way in which different people view certain important health-related issues. Each item is a belief statement with which you may agree or disagree. Beside each statement is a scale which ranges from strongly disagree (1) to strongly agree (6). For each item we would like you to circle the number that represents the extent to which you disagree or agree with the statement. The more strongly you agree with a statement, then the higher will be the number you circle. The more strongly you disagree with a statement, then the lower will be the number you circle. Please make sure that you answer every item and that you circle only one number per item. This is a measure of your personal beliefs; obviously, there are no right or wrong answers.

Please answer these items carefully, but do not spend too much time on any one item. As much as you can, try to respond to each item independently. When making your choice, do not be influenced by your previous choices. It is important that you respond according to your actual beliefs and not according to how you feel you should believe or how you think we want you to believe.

KEY
1. Strongly Disagree 4. Slightly Agree
2. Moderately Disagree 5. Moderately Agree
3. Slightly Disagree 6. Strongly Agree

1. If I become sick, I have the power to make myself well again. 1 2 3 4 5 6

2. Often I feel that no matter what I do, if I am going to get sick, I will get sick. 1 2 3 4 5 6

3. If I see an excellent doctor regularly, I am less likely to have health problems. 1 2 3 4 5 6

4. It seems that my health is greatly influenced by accidental happenings. 1 2 3 4 5 6

5. I can only maintain my health by consulting health professionals. 1 2 3 4 5 6

6. I am directly responsible for my health. 1 2 3 4 5 6
7. Other people play a big part in whether I stay healthy or become sick.

8. Whatever goes wrong with my health is my own fault.

9. When I am sick I just have to let nature run its course.

10. Health professionals keep me healthy.

11. When I stay heathy, I'm just plain lucky.

12. My physical wellbeing depends on how well I take care of myself.

13. When I feel ill, I know it is because I have not been taking care of myself properly.

14. The type of care I receive from other people is what is responsible for how well I recover from an illness.

15. Even when I take care of myself, it's easy to get sick.

16. When I become ill, it's a matter of fate.

17. I can pretty much stay healthy by taking good care of myself.

18. Following doctor's orders to the letter is the best way for me to stay healthy.
APPENDIX B: TIME OPINION SURVEY

1. How important to you is advancement or "getting ahead in your career?"
   1. of little or no importance
   2. slightly important
   3. fairly important
   4. extremely important

2. Have you advanced as far as you had hoped by your present age?
   1. even more rapidly than I had hoped
   2. as rapidly as I had hoped
   3. less rapidly than I had hoped
   4. much less rapidly than I had hoped

3. Is there an important objective(s) or goal(s) that you want to achieve, within the next ten or fifteen years?
   1. no
   2. yes, but the objective(s) is not very important
   3. yes, a rather important objective(s)
   4. yes, an extremely important objective(s)

4. Do you have a feeling that "time is running out" or that there is a certain urgency with respect to time in the achievement of any major goals or hopes?
   1. no
   2. yes, but only slightly so
   3. yes, somewhat so
   4. yes, very much so

5. About how long do you think it will take to obtain or accomplish what you want in life?
   1. have already achieved it
   2. am just now achieving what I want
   3. another five years
   4. another ten years
   5. another twenty years or more

6. How much thinking do you do about things you want to do or accomplish in the future versus events and satisfying experiences you have had in the past? Check the one phrase that best describes you.
   1. Much more thinking about the past than the future
   2. somewhat more thinking about the past than the future
   3. the present dominates my thinking much more than either future or the past

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4. about equally divided between future, present, and past
5. somewhat more thinking about the future than the past
6. much more thinking about the future than the past
APPENDIX C: SOURCES OF SUPPORT SCHEDULE

Now I'd like to ask you some general questions about yourself.

1. Age ________

2. Sex  M  F

3. Marital Status  S  M  W  D

4. Occupation ________

5. Years of school  1  2  3  4  5  6  7  8  9  10  11  12  13  14  15  16
   17  18  19  20  +

6. Religious Affiliation: Catholic  Protestant  Jewish  Moslem  None

7. Can you tell me what your illness is?

8. When did you find out what your illness was?

9. Have you been hospitalized in the last year?  Yes  No
   If yes,
   9a. When?
   9b. Why were you hospitalized at that time?

As I mentioned before, I am trying to determine how people who are ill keep their spirits up. I would like to ask you some questions related to that now, if I may.

10. Do you find that you are able to think positively about how your illness affects your life?  Yes  No

   If yes,
   10a. Who or what helps you to keep a positive outlook about your illness?

   If no,
   10b. What do you find to be most difficult about your illness?

Most people have times when they become depressed or discouraged. Often illness will cause depression and discouragement.
11. Have you become depressed or gotten discouraged about this illness at any time? Yes No

If yes,
11a. When you become depressed or feel yourself starting to get discouraged, how do you pull your spirits back up?

11b. Are you depressed or discouraged now? Yes No

11c. Can you tell me about what is making you depressed or discouraged?

If 11 no,
11d. How do you keep from getting depressed or discouraged?

12. Are there family members or friends who are especially helpful to your outlook? Yes no

If yes,
12a. How many people are especially helpful?

12b. How do they help?

13. Do your religious or philosophical beliefs help in any way? Yes No

If yes,
13a. How do they help?

14. Do you believe that there is a reason or purpose for your illness? Yes No

If yes,
14a. What do you believe that is?

15. What goals do you have for yourself since your illness?
15a. How long do you think it will be before you can accomplish this?
_____ days _____ weeks _____ months _____ years

16. On a scale of 1 to 10, with 1 being least and 10 being most, how hopeful do you feel?
1 2 3 4 5 6 7 8 9 10
APPENDIX D: DATA ANALYSIS TABLES

**TABLE D1**

**Bivariate Regression Analysis of TOS with IHLC**

<table>
<thead>
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**TABLE D2**

**Multiple Regression Analysis of TOS with MHLC Scales**

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### TABLE D3

Multiple Regression Analysis of TOS with Personal Factors

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* P < .05

### TABLE D4

T-Test Analysis of Extension of Hope in Months by Category of Illness

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<th>Category</th>
<th>No. Cases</th>
<th>Mean</th>
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<th>T Value</th>
<th>DF</th>
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### TABLE D5

Multiple Regression Analysis of Hope Score with MHLC Scores

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* p < .05

### TABLE D6

Multiple Regression Analysis of Hope Score with Personal Factors

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Honors_and_Awards: Dean's List, Alma College and University of Michigan; Sigma Theta Tau, University of Michigan; Research Grant from National Sigma Theta Tau, 1979.

Memberships: American Nurses Association, Council of Nurse Researchers; Michigan Nurses Association; Sigma Theta Tau.