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THE EFFECT OF SOCIAL SUPPORT SYSTEMS, HEALTH LOCUS-OF-
CONTROL AND VALUE ORIENTATIONS ON WELLNESS MOTIVATION IN
POST-MYOCARDIAL INFARCTION PATIENT

The University of Arizona

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THE EFFECT OF SOCIAL SUPPORT SYSTEMS, HEALTH LOCUS OF
CONTROL AND VALUE ORIENTATIONS ON WELLNESS MOTIVATION IN
POST-MYOCARDIAL INFARCTION PATIENT

by

Julie Margaret Derenowski

A Thesis Submitted to the Faculty of the
COLLEGE OF NURSING
In Partial Fulfillment of the Requirements
For the Degree of
MASTER OF SCIENCE
In the Graduate College
THE UNIVERSITY OF ARIZONA

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ABSTRACT

This research sampled a group of post-myocardial infarction patients to test the relationships among social support systems, health locus of control, value orientations and wellness motivation. The sample consisted of 33 subjects who had suffered a myocardial infarction. Subjects completed instruments that measured social support, health locus of control, health value orientation and wellness motivation. Pearson correlations revealed significant correlations between wellness motivation and health value orientations with the doing variation correlating highest. The health locus of control variables which correlated significantly with wellness motivation were chance and self control over health. The social support system variable total network was found to correlate significantly with the present and being in becoming variations of health value orientation. Social support system variables total functional and total network correlated significantly with the chance subscale of health locus of control. Total loss correlated significantly with the health value subscale. The highest correlations between value orientation variations and health locus of control subscales were the being in becoming and individual variations with self control over health. Social support systems, health locus of control and value orientation variables entered into a multiple regression equation explained 32 percent of the variation in wellness motivation.

CHAPTER 1

OVERVIEW OF THE PROBLEM

Cardiovascular disease has been the leading cause of death in the United States since 1940 (American Heart Association [AHA], 1985; Underhill, Woods, Sivarajan & Halpenny, 1982). Approximately 1,500,000 Americans will suffer a heart attack this year. Of this number, over 550,000 will die, with 45 percent of mortality in those under the age of 65 (AHA, 1980). Of the 950,000 individuals who survive an acute attack, 20 percent of males and 45 percent of females can expect to die within the first year (Kannel, 1981). There is a fivefold increase in the likelihood of death due to a recurrent coronary episode within five years following a myocardial infarction (MI) (AHA, 1980). Thus, coronary artery disease is not only a major cause of death in this country, but also of disability in those under age 65.

Total expenditures related to health care services, medication and lost occupational output for myocardial infarction survivors equal 78.6 billion dollars per year (AHA, 1986). Given recent development in medical therapies and technology, the percentage of myocardial infarct survivors as well as the expenditure related to those survivors is likely to increase dramatically over the next decades (Croog, 1984). Figures presented target coronary artery disease as a major public health problem in need of intervention. While physical and behavioral

characteristics which increase the risk of developing coronary artery disease have been established, the recovery and effective rehabilitation of the post-myocardial infarction patient has not been adequately addressed.

Research related to the psychosocial and behavioral functioning of patients post-myocardial infarction is limited. However, patterns of behavioral adjustment have been found to be a significant predictor of six month mortality (Garrity & Klein, 1985). Positive behavioral outcomes related to return to work, regular physical exercise and a level of high morale has been shown to correlate highly with patient perception of health status (Brown & Munford, 1984).

Studies examining the psychological functioning of post-myocardial infarction patients provide evidence that depression and anxiety persist over months and years (Runions, 1983). Outcome studies indicate that approximately 50 percent of individuals will continue to express irritability, tension, and symptoms of affective distress up to one year post-myocardial infarction (Wiklund, Sanne, Vedin & Wilhems-son, 1984). Psychological factors have been judged more important than physiologic considerations in delayed return to work (Croog, 1984) and social functioning (Bryne, 1981) post-myocardial infarction.

Although the vast majority, approximately 85 percent, of patients are reemployed one year post-MI, perhaps 25 percent report continuing anxiety and depression. Poor occupational adjustment is seen in a delayed return to work or no return to work with increased frequency in blue collar and less educated workers.

Between 24 percent and 75 percent reduction in sexual functioning has been found in two-thirds of post-MI patients (Kolman, 1984), while impotence regarded as permanent has been reported in up to 14 percent of patients interviewed (Tuttle, Cook & Fitch, 1964; Kolman, 1985). Runions (1983) has shown that approximately 50 percent of marriages will deteriorate post-infarction. Changes may occur due to alterations in patient self-esteem and sense of personal well being.

Barriers to recovery of full potential may be due to physiologic, psychologic and sociologic complications. A greater knowledge of the psychosocial and behavioral characteristics of post-MI patients may aid in identification of patients with a poor predictive outcome and thereby assist in development of effective interventions during the rehabilitation period.

Rehabilitation of the post-MI patient involves many diverse, interrelated factors. The goal of cardiac rehabilitation is to return the patient to an optimal level of physiologic, psychologic and vocational functioning as well as attempt to prevent the progression of underlying disease. However, cardiac rehabilitation efforts are often only minimally successful. Although physical and behavioral characteristics which increase the risk of developing coronary artery disease have been established, many persons remain unmotivated to initiate lifestyle changes following a myocardial infarction. Failure to comply with medically recommended improvements in lifestyle such as increased physical fitness and cessation of smoking have been noted (Mayou, 1981). Risk factor reduction programs have shown limited effectiveness

in patient consumption of high fat and cholesterol food items and weight loss (Sivarajan, Almes, Newton, Kempt, Manfield, & Bruce, 1983).

Some conditions which may motivate the patient toward lifestyle change have been identified. Environmental conditions such as social support, availability of health services and economic status all motivate toward risk factor modification (Hubbard, Muhlenkamp & Brown, 1985). Other predictors of motivation toward risk factor modification are hypothesized to be individual characteristics such as predisposition, health values and locus of control (Wallston & Wallston, 1978; Murdaugh, 1982). Consideration of these individual characteristics is necessitated in the establishment of effective interventions which will meet individual education and rehabilitation needs of the post-MI patient.

Purpose

The aim of this research was to investigate the relationship among social support systems, value orientations, health locus of control variables and health behavior motivation in the post-myocardial infarction patient. The specific objectives were to pursue the following questions.

1. Which social support system variables are significantly related to wellness motivation?
2. Which value orientations are significantly related to wellness motivation?

3. Which locus of control variables are significantly related to wellness motivation?
4. Which social support system variables are significantly related to value orientations?
5. Which social support system variables are significantly related to health locus of control?

Significance of Research

Lack of patient compliance to prescribed regimens is a fundamental problem in cardiac rehabilitation programs. Recurrent lack of success in risk factor modification efforts may play a primary role in explaining morbidity and mortality rates following a myocardial infarction (AHA, 1980). Few health education programs have been shown to successfully mediate lifestyle changes related to the control of established risk factors in coronary artery disease. A causative factor in lack of compliance may be related to failure to address differences in motivational effectors. An investigation of the relationship among dominant social support systems, value orientations, health locus of control variables, and patient motivation may allow for the development of interventions which promote individualized client education and will result in successful lifestyle changes.

Summary

This chapter has presented an overview of the problem under study: the investigation of personality variables which may be related to motivation in the post-myocardial infarction patient. The significance of the problem was addressed in relation to the recurrent lack of success in risk factor modification.

CHAPTER 2

CONCEPTUAL FRAMEWORK

The conceptual framework for this study was based on social, psychological and behavioral theories. The construct level includes social support, value orientations, locus of control and motivation (Figure 1). The concept level of the conceptual framework includes social support systems, health locus of control, health value orientation and wellness motivation. The operational level consists of the instruments that will be utilized to measure the variables to be studied. These instruments will be discussed in detail in the methodology chapter.

Rationale

The rationale for the conceptual framework will be presented in four sections: social support and the relationship of social support systems to wellness motivation; locus of control, including health locus of control and its relation to wellness motivation; value orientations, including health value orientations and how this concept relates to wellness motivation; and research related to both motivation and wellness behavior.

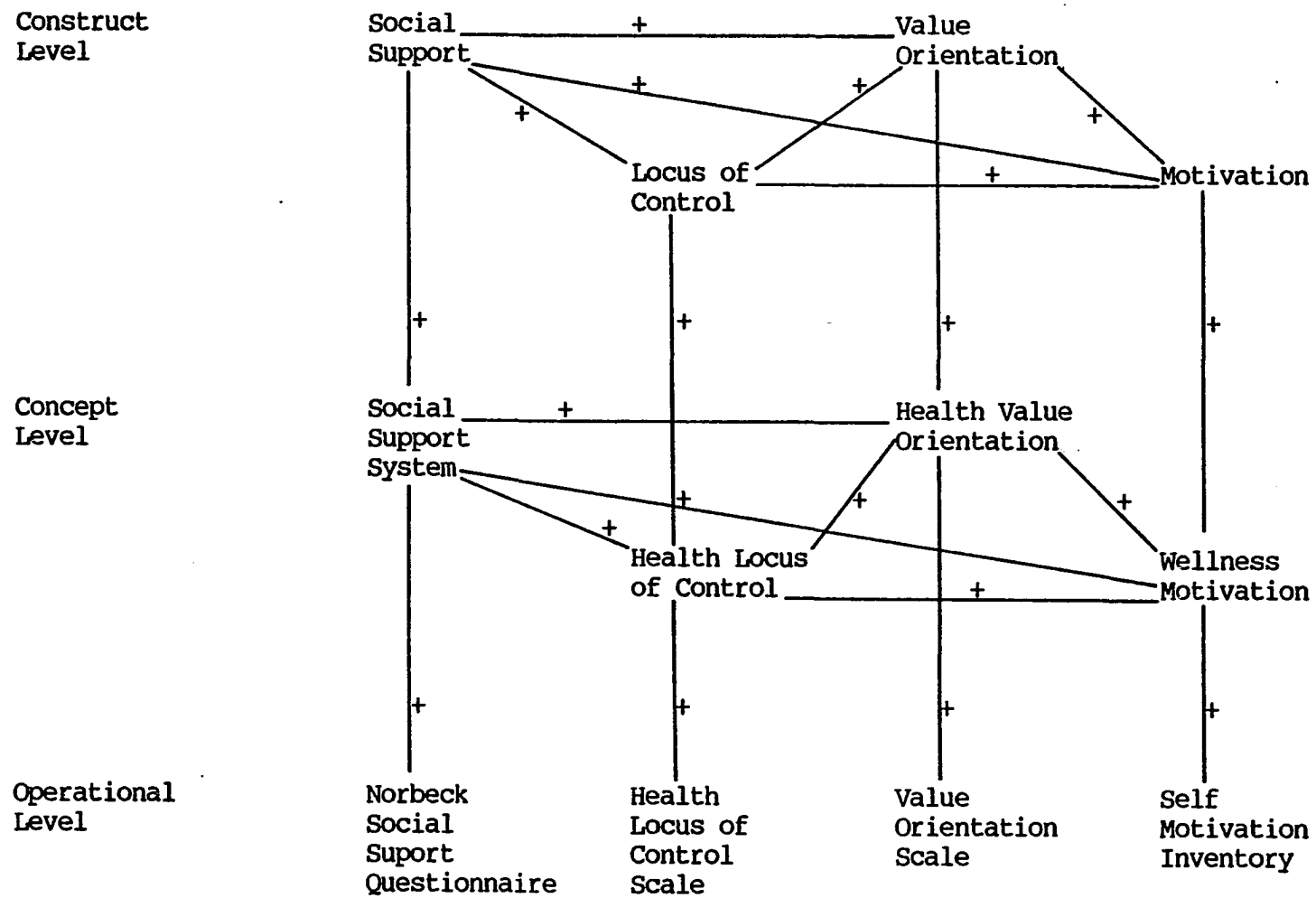


Figure 1. Wellness Motivation Framework

Social Support

The social environment is a complex structural, cultural, interpersonal and psychological system amenable to variation and change (Hubbard, et al., 1984). Human behavior within this environment may be viewed as under the influence of multiple sociocultural variables. One such variable, social support, is a multidimensional concept which has been indicated as an effector of individual performance (Ulmer, 1984).

Social support may be viewed as the extent to which basic social needs are met through communication with others (Kaplan, Cassel, & Gore, 1977). Social support is necessary to fulfill the individual need to belong. The extent to which social support exists depends upon the individual's perception of the supportive value of social interactions (Bruhn & Philips, 1984). Basic social needs include affection, approval, sense of belonging, identity and security. These needs may be satisfied through both emotional support and instrumental aid. Emotional support is directed toward the provision of affection, acceptance and esteem from significant others (Thoits, 1982), all of which contribute to the feeling that one is cared about or loved. Instrumental support includes the provision of information or advice which may provide feedback or assist in problem solving. Instrumental support may also be considered emotional in that assistance from others in the form of practical help assures the individual that he is cared for (Thoits, 1982).

The degree to which social support will be provided and received is dependent upon past social experiences, perceived need for

support, and the degree to which individual support resources are subject to conflicting demands (Bruhn & Philips, 1984). The individual must perceive that social support is available and will be beneficial in order for it to be used. Changes in the physical, psychological and social functioning of individuals over time will affect their perception of the need and availability of social support (Bruhn & Philips, 1984).

Social Support Systems and Wellness Motivation

The social support system is referred to as that set of relationships unique to an individual which provides socioemotional aid, instrumental aid, or both (Thoits, 1982). A support system reflects interpersonal ties to other individuals who may be relied upon in times of need and who share common standards and values (Asher, 1984). An individual support system may be described in terms of its content and structure related to particular relationships. The degree to which perceived support and relationship intensity occur is not determined solely upon the size and frequency of social interaction, but is directly related to the quality of interaction (Hibbard, 1985). Available social support systems may or may not be utilized depending upon the individual's attitude toward accepting help or the availability of alternative coping strategies (Schaefer, Coyne & Lazarus, 1981).

Evidence indicates that the development and maintenance of supportive relationships may be as important to individual wellness as are more traditional health practices (Hubbard, et al., 1984). An

inadequate social support system may both directly and indirectly cause poor health outcomes (Berkman, 1982). The loss or absence of supportive relationships has been linked to coronary artery disease, ulcers, cancer and individual longevity (Berkman, 1982; Lin, Simeone, Ensel & Kuo, 1981; Cohen, 1979). Thus, the greater the social support an individual receives in the form of close personal relationships, the less likely he is to experience illness (Antonovsky, 1974).

In stress mediation, support systems act as a buffer against both the physical and psychological consequences of stress. Support systems have been described as having a positive effect on individual coping ability and illness resistance (Schaefer, et al., 1981; Dean & Lin, 1977). During times of stress, individuals utilize the emotional and instrumental aid provided through their support system. Supportive relationships are related to improved mental health, morale and perceived well being (Bruhn & Philips, 1984). One factor identified as common to those at risk for coronary heart disease is that they have few social and community resources (Berkman, 1982). In a study of NASA professionals, Caplan (1971) has shown a significant association between occupational stress and risk of heart disease in those individuals reporting low levels of support.

A significant positive relationship has been identified between social support and compliance with prescribed regimens (Dracup, Meleis, Baker & Edlefsen, 1984; Dimond, 1983). Support systems assist patients in compliance with treatment regimens and play a role in illness recovery (Berkman, 1982). Research has shown that social support

systems positively affect risk reducing health behavior such as dental care and medical checkups (Langlie, 1977). As social stability decreases, the likelihood of noncompliance with prescribed treatment will increase (Schaefer, et al., 1981).

Spousal support has been linked to compliance by increasing patient motivation (Wankel, 1984); enhancing the perceived need to improve health status (Caplan, 1979); and positively affecting patient attitude and knowledge of condition (Maida, 1985). Noncompliance has been significantly correlated with those individuals who are single or separated (Schaefer, et al., 1981). In addition, those who have not married are shown to have a higher coronary heart disease mortality rates as well as overall mortality rates.

These findings gain increased significance in relation to the utilization of interpersonal support systems in patient education and reinforcement of health related behaviors. Programs geared toward inclusion of individual client support systems may allow for an increase in client motivation, compliance and positive treatment outcome.

Locus of Control

Locus of control was initially conceptualized by Rotter (1954) within social learning theory. Four classes of variables within social learning theory include behaviors, expectancies, reinforcements and psychological situations. Individuals will vary in the degree to which situational reinforcement is attributed to personal behavior. A basis

is therefore provided for internal and external orientation to self and environment. Those who believe they are an agent in effecting the occurrence of reinforcement are characterized as having an internal locus of control, while those who believe that situations are governed by fate, chance, or powerful others are considered to have an external locus of control. Behavior is seen as a function of expectancy of the reinforcement value that actions will bring (Lau & Ware, 1981). Reinforcement value is the degree of individual preference for a specified goal to occur if the possibilities of occurrence of all alternatives are equal (Rotter, 1954).

Thus, locus of control is a psychological construct related to varying individual expectancy of outcome control in subjective experiences (Arakelian, 1980). Within these subjective experiences, individuals judge the likelihood of success through situational expectancy. Past experiences are drawn upon to promote a generalized expectancy related to achievement of desired outcome. As a generalized expectancy in social learning theory, locus of control will influence both individual perception of present situations as well as behavior in those situations (Lau & Ware, 1981). Locus of control is seen as a personality factor which develops over time through varied learning experiences (Arakelian, 1980). As new learning experiences are introduced, expectancies related to success or failure may be altered, leading to change in individual locus of control orientation. Individual behavior directed toward the attainment of a learned goal may be predicted through assessment of the individual's situation, as

well as knowledge of his expectancies and reinforcement values (Rotter, 1954).

Health Locus of Control and Wellness Motivation

Health locus of control refers to the belief that one's health is controlled by one's behavior (internal health locus of control), or by external forces over which one has no control (external health locus of control) (Wallston & Wallston, 1980). In relation to health behavior, persons with an internal locus of control have been found to have greater assimilation of health related information (Lau, 1983), and an increased seeking of such information when value of health is high (Devito, Bogdanowicz & Reznikoff, 1983).

Research related to deferred gratification has shown that persons with an internal locus of control are more likely to postpone immediate rewards to obtain long-term goals (Smith, Wallston, Wallston, Forsberry & King, 1984). Health behaviors related to risk taking have shown an increased use of seatbelts and other safety measures among internally controlled persons (Strickland, Lewicki & Katz, 1966). Strickland (1978) indicated that internally controlled individuals were more likely to assume responsibility for personal health behaviors than were externally controlled individuals. Internal orientation has also been related to a favorable attitude toward physical activity (Arekelian, 1980), success in weight control programs (Cohen, 1978; Chavez & Michaels, 1980; Saltzer, 1982), decreased incidence of smoking

behavior (Coan, 1973; Foss, 1973), and control of sodium intake (Wallston & Wallston, 1981).

Kobasa (1982) has shown a relationship between internal locus of control and the ability to resist illness under stress. Persons studied were more likely to experience illness under stress if they were externally oriented. Theoretically, individuals are more likely to assume an active role in health maintenance if they believe that they can achieve the desired outcome (Lau & Ware, 1981).

Although individuals with an internal orientation are not shown to differ in terms of intelligence or learning ability from those who are externally controlled, internal control denotes a greater level of motivation (Earn, 1982). Studies concerning rehabilitation correlate internal orientation with better adjustment to the program and a higher level of motivation (Jordan-Marsh & Neutra, 1985). Thus, an internal health locus of control has been shown to positively effect both compliance and motivation related to health behavior.

Value Orientation

The concept of human values may be defined as that set of beliefs which will establish a preference for a specific mode of conduct or end-state of existence to one which is opposite (Rokeach, 1973). Five assumptions concerning the nature of human values have been established by Rokeach (1973): 1) The total number of values a person possesses is relatively small. 2) All men everywhere possess the same values to a different degree. 3) Values are organized into value

systems. 4) The antecedents of human values can be traced to culture, society and its institutions and personality. 5) The consequences of human values will be manifested in virtually all phenomena worth investigating or understanding.

Values are individual characteristics which may function as predictors of behavior. The value associated with a behavioral outcome and the context in which the behavior itself occurs are important determinants in choosing behavioral alternatives (Williams, 1979). When an act and its consequence are believed to lead to the attainment of a desired goal, the behavioral outcome will be interpreted as having a higher priority than other possible outcomes (Parcel, Nader & Rogers, 1980). Value orientations serve as the criteria by which evaluations of behavior are made (Williams, 1979). The reinforcement value of a behavior is inferred by the extent to which that behavior will be selected over another (Lotsof, 1971). Therefore, value orientations may be indicative of individual goal preferences.

Values are comprised of cognitive, affective, behavioral and motivational components (Rokeach, 1973). A value is an individual cognition concerning the desirable. Values are cognitively processed in that the individual will know the correct way to behave or end-state to strive for affectively; a value may allow the individual to react both positively and negatively to a specified behavior. A value orientation is that which intervenes in behavior and leads to action when activated (Kluckhohn & Strodtbeck, 1961). Individual value orientations establish the standards by which personally and socially acceptable actions are

initiated. In that values direct human behavior in daily situations, their ultimate functions are to give expression to basic human needs (Rokeach, 1973). Values may be seen as motivating in that they provide for the maintenance and enhancement of self-esteem (Rokeach, 1973).

Health Value Orientation and Wellness Motivation

Health value orientations are those specified principles which commit an individual to personally prefer well being as opposed to an opposite condition in a situation where a choice is available (Kluckhohn & Strodtbeck, 1961; Murdaugh, 1982). Health value orientations are the standards upon which choices concerning health behaviors are based. The relationships between individual values and behavior suggest that wellness behaviors may be governed by values regarding these activities (Murdaugh, 1982).

Since health beliefs, attitudes and behavior may be situation specific, an individual will be more likely to participate in wellness behavior if he values the results of that behavior (Parcel, et al., 1980). Related to this, research indicates that those who place a higher value on health will initiate more preventive actions than those who perceive health to have a lower value (Parcel, et al., 1980; Wallston & Wallston, 1978). Wallston (1980) found that those individuals who perceived health to have a high value were more likely to seek health related information than were those who placed a lower value on health. Children who place a higher value on health are less likely to

report frequent illness, and report a decreased susceptibility to illness (Parcel, et al., 1980).

Motivation

Motivation has been conceptualized as a nonspecific tendency to persevere in behavior regardless of extrinsic reinforcement and independent of situational influence (Dishman & Ickes, 1981). From a behavioral point of view, motivation cannot be regarded as a separate entity nor as a physiologic state. Neither is motivation an occurrence that only occasionally effects behavior. Thus, motivation is not a transient phenomenon that elicits an isolated response, but rather a continuous orientation that regulates interaction between the individual and his behavioral orientation (Oldridge & Stodefalke, 1984). Motivation may be viewed as an individual characteristic which is dependent upon the individual's capacity for self-reinforcement and the delay of immediate gratification (Dishman, 1982).

Although motivation serves as a continual regulator of individual behavior, it will also activate and direct specific behavior at given points in time (Nuttin, 1984). Motivation directed towards a specific behavior will involve both active and latent dynamic orientations (Nuttin, 1984). This structure may be altered due to both internal and external factors. Tendencies toward behavior may vary dependent upon the present course of action and the individual's perception of the situation.

Evidence has been presented which focuses behavioral motivation as a function of goal attainment (Hulka, 1979) or expected goal attainment (Deci & Ryan, 1984). Certain individuals may attend to the same goal across differing situations whereas others will respond impulsively to environmental stimuli. In each situation, motivational orientation is part of an underlying regulatory force which continually effects behavior by changing or reinforcing a goal, interrupting or supporting an activity, and determining the energy put forth toward specified goal attainment.

Wellness Motivation

Motivation directed toward wellness behavior may be defined as an individual tendency to persevere in health related behavior independent of situational influence (Dishman, Ickes & Morgan, 1980). Wellness motivation may be viewed as an essential variable effecting individual responses to both primary and secondary health behavior and subsequent health outcomes (Cox, 1985). A general predisposition to persevere has been correlated with a likelihood of compliance with wellness behaviors.

The role of motivation in medical compliance has implicated individual motivational dispositions as influencing health related behavior (Blumenthal, Williams, & Wallace, 1982; Baekland & Lundwall, 1975). Thirty-four of 41 studies related to health behavior conducted during the past 20 years have included individual motivation as an independent variable and have found it to be significant in influencing

patient compliance (Dishman, et al., 1980). Additional variables related to both the perceived importance of the wellness behavior and support from the family have been associated with maintenance of wellness behavior over an extended period of time (Oldridge & Stroedefalke, 1984).

However, in the majority of voluntary therapeutic settings patient compliance presents a primary impediment to effective treatment and satisfactory outcome. Approximately 50 percent of individuals who begin a cardiac rehabilitation exercise program will discontinue within the first six months (Oldridge, 1982). Similar statistics may be applied to dropout rates for a variety of therapeutic regimens which require adherence to behavioral change (Oldridge, 1982). Reduced motivational levels have been implicated as a cause of noncompliance in such programs (Dishman & Ickes, 1981). It has been noted that those patients who are referred for treatment are more likely to discontinue than are those who are self-referred (Goldfried, 1969). In addition, those patients most likely to discontinue treatment are those who have dropped out of previous programs (Baekland & Lundwall, 1975). These findings are indicative of an individual tendency to persevere regardless of extrinsic reinforcement.

Thus, individual motivational levels are shown to be directly related to level of perseverance in wellness behavior. The extent to which related variables may influence this process is unclear.

Definition of Constructs

Social Support

Social support is defined as the degree to which an individual's basic social needs are met through interaction and communication with others (Kaplan, et al., 1977). Individual needs may be met through the provision of socioemotional aid or instrumental aid.

Value Orientation

Value orientation is definitely patterned principles which give order and direction to human behavior. Human values are defined by Rokeach (1973) as "an enduring belief that a specific mode of conduct or end-state of existence is personally or socially preferable to an opposite mode of conduct or end-state existence" (p. 5). Orientation related to values is described as the cognitive, affective and directive elements which provide order and direction to human acts and thoughts within problem solving (Kluckhohn & Strodtbeck, 1961).

Locus of Control

Locus of control is a concept derived from Rotter's (1954) social learning theory. Locus of control has been defined by Lefcourt (1976) as "the degree to which individuals perceive events in their lives as being a consequence of their own actions or as being unrelated to their own behavior" (p. 11). The potential for behavior in a specific situation is a function of the expectancy that reinforcement will occur and the value that reinforcement has for an individual

(Rotter, 1966). Internal locus of control is the belief of an individual that he is in control of determining the occurrence of reinforcements (Rotter, 1966). External locus of control is the belief of an individual that forces beyond his control will determine the occurrence of reinforcements (Rotter, 1966).

Motivation

Motivation is the ability to initiate, sustain and terminate behavior (Oldridge & Strodalke, 1984). Motivation is a multidimensional construct which reflects a situation specific (Cox, 1985) tendency to persevere in habitual behavior removed from extrinsic reinforcement (Dishman, 1982).

Definition of Concepts

Social Support System

That set of persons who provide the individual with socioemotional or instrumental aid (Thoits, 1982) is the social support system. A support system relates to "those interpersonal transactions that include one or more of the following: expression of positive affect of one person toward another; the affirmation or endorsement of another person's behavior, perceptions or expressed views; the giving of material or symbolic aid to another" (Kahn, 1979, p. 85).

Health Value Orientation

Health value orientation is the base upon which health related decisions are made, that aspect of an individual which leads to a

preference for well being as opposed to an alternative state in a situation in which he is able to make a choice (Kluckhohn & Strodtbeck, 1961; Ware, Young, Snyder & Wright, 1974; Murdaugh, 1982).

Health Locus of Control

Health locus of control is a situation specific expectancy (Wallston & Wallston, 1980) applied to health related outcomes. This may be subject to positive or negative influences as described by the individual's general expectancy.

Wellness Motivation

Wellness motivation is the tendency of an individual to persevere in a program of both preventive and secondary health behavior. It is an important antecedent variable and correlate of an individual's cognitive and affective responses to health concerns and outcome (Cox, 1985).

Summary

A review of the literature indicates that support, value orientations and locus of control need further investigation to describe their relationship to wellness motivation. Findings indicated that individuals with strong social support systems, high value orientations and an internal locus of control may be more highly motivated to engage in wellness behaviors than those with weak social support, low value orientation and an external locus of control. A further investigation of the relationship among dominant social support systems, value orien-

tations, health locus of control variables and patient motivation is indicated to facilitate more effective interventions during rehabilitation of the post-myocardial infarction patient.

CHAPTER 3

METHODOLOGY

In Chapter Three, the research design, data collection procedure, sample population and instruments utilized are described. Reliability and validity of instruments will also be addressed.

Design

A descriptive design was utilized in which subjects completed four paper and pencil questionnaires: the Norbeck Social Support Questionnaire, Health Locus of Control Scale, Value Orientation Scale and Self-Motivation Inventory.

Sample

Thirty-three adults who had experienced a myocardial infarction were recruited. Specific criteria were as follows:

1. 35-75 years of age,
2. Male,
3. Diagnosed myocardial infarction from six months to three years prior to study,
4. Able to read and write English.

The age range 35-75 was chosen due to the high incidence of myocardial infarction within this grouping (AHA, 1986). This study is limited to males because a significantly lower incidence of cardiovascular disease occurs in women under the age of 55 (Haynes & Feinleib, 1980; AHA, 1986). Length of time post-myocardial infarction is indicated as 50 percent of myocardial infarction patients will exhibit a failure to adhere to wellness behaviors within six months following a myocardial infarction (Dishman, 1984; Oldridge, 1981). A sample who continues to maintain wellness behaviors past this time span shows a degree of motivation.

Instruments

Norbeck Social Support Questionnaire (NSSQ)

The NSSQ (Norbeck, Lindsey & Carrieri, 1981) is a self-report questionnaire designed to measure the multiple dimensions of social support system (Norbeck, et al., 1981). This instrument is composed of nine questions, eight of which are Likert format with the remaining being dichotomous questions. The functional components measured affect, affirmation, and aid. The affect subscale investigates the expression of positive affect from one person toward one another. Affirmation relates to approval of another's behavior. The aid subscale assesses the quantity of both tangible and symbolic aid given to another.

The concept of convoy (Kahn, 1979) or the medium through which social support is supplied is measured through three network properties: number in network, duration of relationships, and frequency of

contact with network members. Questions related to recent loss of network members are addressed secondary due to the fact that an individual's convoy may change over time.

Scoring for the functional components and network properties result from subject ratings for each member of the individual network. Data reflecting sources of support may be measured for the network as a whole and for isolated subscales and variables. Individual values for mean support reflect both the quality of support and the number present within the network.

Each of the functional and network property items had a test-retest reliability of .85 to .92 over one week. The stability of the instrument over seven months was high (.58-.78), but lower than values at one week. Level of functional support did not change over seven months, but expected changes were noted in network composition. Correlation coefficients for test-retest scores related to persons lost and amount of support lost were .83 and .71. Internal consistency for the instrument subscales range from .54 to .98 (Norbeck Lindsey, & Carrieri, 1983).

Construct validity for the instrument was established with convergence and discriminance. Evidence for construct validity, although of low positive value (.05-.27), was found between the NSSQ and constructs examining the need for inclusion and need for affection. A lack of positive association (.02-.22) was shown between the NSSQ and an unrelated interpersonal construct need for control. Criterion validity was established with another instrument measuring social support, the

Personal Resource Questionnaire (Brandt & Weinert, 1981). Medium levels of association (.35-.41) were found between the functional components of the NSSQ and the PRQ.

Evidence for predictive validity was found through an investigation of the stress buffering role hypothesized for social support. Results of multiple regression analyses indicated the network property subscales and their interaction with life stress accounted for 19 to 20 percent of the variance found. When the composite variable scores were substituted in other regressions, this effect was reduced to 1.2-1.9 of the variance. Although the subscales are highly intercorrelated, they are indicative of distinct information and should not be combined into a composite variable (Norbeck, et al., 1983).

Health Locus of Control

The health locus of control scale (HLC) (Cesarotti & Murdaugh, 1984) is a multidimensional scale measuring an individual's health locus of control. This instrument consists of a 26 item scale in a Likert type format. Items are worded as statements of opinion whereby responses are arranged on a seven point scale from strongly agree to strongly disagree.

The HLC is a revised version of the Lau-Ware Health Locus of Control Scale (1981). This instrument is a health specific locus of control questionnaire measuring beliefs related to chance, health outcomes, self-control and provider control over health. A subscale also measures health values. Studies conducted using this scale

indicate: 1) Attributions of provider control over health outcomes were independent of beliefs in personal control over health outcomes. 2) A belief in provider control over health outcomes were distinguishable from but related to belief in the competence of medical care providers. 3) Health locus of control is multidimensional. 4) Health specific locus of control measures were more accurate than generalized locus of control measures in predicting health related behaviors (Lau & Ware, 1981).

The HLC contains three subscales which measure health locus of control dimensions related to:

1. chance health outcomes
2. provider control over health
3. self-control over health

In addition, one subscale measures health values. An internal locus of control orientation is measured through a self-control over health subscale. An external locus of control orientation is measured through chance health outcomes and provider over health subscales.

Sample populations studied using this instrument consisted of Mormon adult women, undergraduate college females, and elderly hypertensives. Alpha coefficients for the subscales following the most recent testing ranged from .79 to .81. Two week test-retest coefficients have ranged from .76 to .84. Construct validity was estimated with exploratory factor analysis. Subscales were factored independently on the hypertensive sample due to small sample size. Analysis provides evidence for construct validity of the scale. However, more work is

needed as the chance items separated into luck and fate, and the provider control items loaded on two factors. These factors appeared to separate helping behaviors from curing ability. Self control also loaded on two factors which differentiated control over prevention versus attribution. Health value questions that discussed personal importance loaded on one factor whereas health as a value compared with other values such as happiness and family loaded on a second factor.

Value Orientation Scale

The value orientation scale (VOS) (Murdaugh, 1982) is an indicator of one's health value orientations. This scale consists of four subscales based upon a survey originally developed by Kluckhohn and Strodtbeck (1961). The VOS was designed to measure such orientations within the dimensions of time, activity, relationships and human nature. The VOS contains 45 items. This instrument is summative on a 6-point format with the score of each item ranging from strongly agree to strongly disagree. Variations within the subscales are labeled subscale variations. The higher the score on one of the subscale variations, the greater the likelihood that the subject values the variation in question (Murdaugh & Hinshaw, 1986).

The time orientation subscale includes past, present and future variations. Although all three variations are of equal importance, societies and individuals will differ as to which variation is stressed. Individuals who initiate preventive behaviors may be oriented toward the future and invest energies in that direction.

The activity orientation relates to the individual's response in activity. The range is threefold: being, being-in becoming, and doing. The being orientation denotes a voluntary expression of urges and intentions. The being-in becoming orientation focuses upon individual development and emphasizes those activities which will develop all aspects of that individual. Doing emphasizes the need for activity which will result in externally recognized accomplishments.

The relationship orientation relates to the individual's relationship with others. The three variations of this orientation are lineal, collateral and individual. Within a dominant individualistic orientation, personal goals take precedence over the goals of others. A dominant collateral variation will focus upon the goals and well being of the extended group. A lineal orientation will also stress group goals, but with emphasis upon heredity or kinship factors.

The human nature orientation is concerned with good and evil. The American puritan ethic provides an example of an evil but potentially perfectable orientation (Murdaugh, 1982). Within the human nature orientation, self control and self discipline are necessary to achieve goodness. Individuals who will adhere to a wellness program over time are an example of this orientation.

The VOS has undergone four tests for reliability and validity estimations since its construction. Two week test-retest reliabilities ranged from .49 to .84 with seven being .65 or greater. Coefficient alphas on the most recent testing ranged from .35 to .86 with five .70 or greater, two .60 or greater and one below .50 (Individual). Con-

struct validity was estimated with exploratory factor analysis. The four major subscales were factor analyzed independently due to the small sample sizes in the last two testings. In the Relational subscale all but two of the 15 items loaded as theorized accounting for 81 percent of the variance. All but one of the items loaded as theorized for the Activity subscale, accounting for 48 percent of the variance. For the Time subscale, seven of the ten items loaded as theorized accounting for 88 percent of the variance. All but one item loaded as theorized for the Human Nature subscale accounting for 76 percent of the variance. Thus, evidence for construct validity is apparent (Murdaugh & Hinshaw, 1986).

Self Motivation Inventory

The self motivation inventory (SMI) (Dishman, Ickes & Morgan, 1980) was developed to measure self motivation as a stable disposition of individual tendency to adhere independent of situation reinforcement (Dishman & Ickes, 1981). The instrument consists of a 40-item scale in a Likert type format. A five point format is used with each item ranged from extremely uncharacteristic to extremely characteristic. The scale consists of 19 positively keyed and 21 negatively keyed items. Factor analysis has revealed a ten factor substructure consisting of:

1. Effort/commitment
2. Goal striving
3. Reliability/dependability
4. Diligence

5. Lethargy/laziness
6. Apathy
7. Perseverance/persistence
8. Determination
9. Willpower
10. Organization

The overall 40 item scale yielded an internal consistency reliability of .91 suggesting a unitary concept underlying the obtained factor structure. Results of an oblique factor rotation showed that derived subscales were substantially related to each other. Test-retest measurements in varying populations from one to five months indicated a high degree of scale stability (.86-.92). These values reinforce the self-motivation concept as trait like and stable over time.

Convergent evidence for construct validity was provided through a high positive correlation (.63) of the SMI with the Thomas-Zander Ego Strength Scale (1973), and with other behavioral attitudes such as attention to physical activity and perception of exercise as having health, fitness, and aesthetic values (.47-.58). Discriminant and convergent construct validity was evidenced by correlations between self-motivation, social desirability, achievement motive, locus of control and ego strength (.12-.32). This allowed for support of the concept of self-motivation as both a behavioral trait and a distinct motivation concept.

Predictive validity was evidenced through instrument usage in a variety of settings in which perseverent behavior was accurately

measured. Self-motivation scores were found to be significantly correlated with subjects self-report of weekly exercise frequency. The wide range of subjects and settings used for instrument testing supports the concept of self-motivation as situationally invariant.

Data Collection Protocol

The sample was drawn from two cardiac rehabilitation programs within southwest hospitals. Subject eligibility for participation in the study was established through chart reviews.

Sixty subjects who met criteria previously outlined were approached for participation. Subjects were called prior to questionnaire mailing to obtain their verbal consent. These subjects were mailed a total of four instruments measuring social support, health locus of control, value orientation and self-motivation. A checklist was included to assess the demographic characteristics of subjects. In addition, a disclaimer form approved by the University of Arizona College of Nursing Human Subjects Committee with an explanation of the purpose of the study and assurance of subject anonymity was provided. Subject right to refuse to participate in the study was inherent in the questionnaire format. A stamped addressed envelope was included to facilitate return.

Compilation and analysis of data was carried out by the investigator following instrument return. Follow up phone calls were made to those subjects who did not return the packet two weeks after the initial mailing date to encourage packet completion and return.

Data Analysis

Following data collection, demographic data was analyzed. Means, frequencies, and standard deviations were computed to describe the sample in relation to demographic variables. Correlational statistics were used to answer the following questions:

1. Which social support system variables are significantly related to wellness motivation?
2. Which value orientations are significantly related to wellness motivation?
3. Which locus of control variables are significantly related to wellness motivation?
4. Which social support system variables are significantly related to value orientations?
5. Which social support system variables are significantly related to health locus of control?
6. Which value orientations are significantly related to health locus of control?

The Pearson Correlation Coefficient was used to analyze the relationships among social support systems, health locus of control, value orientations and wellness motivation. Level of significance was established at $p \leq .05$.

Multiple regression analysis was used to describe which of the following variables significantly affect wellness motivation in the post-myocardial infarction patient:

1. Social Support Systems
2. Health Locus of Control
3. Value Orientation

The level of significance for variables entered in the equation was established at $p < .05$.

Summary

This chapter has described the descriptive design, sample criteria and instruments utilized. Reliability and validity of instruments has also been discussed. Subjects who had participated in a cardiac rehabilitation program were mailed questionnaires measuring social support, health locus of control, health value orientation and wellness motivation, a demographic form, and a self addressed return envelope. Descriptive statistics were included in the analysis plan.

CHAPTER 4

RESULTS OF ANALYSIS OF DATA

The results of data analysis are presented in Chapter Four. The population sampled and instrument reliabilities are described. The results of correlational and regression analysis are also presented.

Description of the Sample

Thirty-three of the 60 questionnaires were returned for a 55 percent response rate. The sample consisted of 33 males with a mean age of 59 years (standard deviation (s.d.) 9.2 years). The mean weight was 163 pounds (lbs) with a range from 145 lbs to 195 lbs. The mean height was 67.1 inches (s.d. 5.9). Thirty-two subjects were married and one was divorced. All subjects had graduated from high school and 27 had some college education. The mean years of education was 15 (s.d. 3.3). Twelve subjects were employed full time, three worked part time and 18 were retired. Fourteen subjects stated that one or both parents had suffered a myocardial infarction; 11 claimed a family history of heart disease. When asked if subjects had heart disease, 27 of 33 responded negatively although all had suffered a myocardial infarction and were currently, or had been, involved in a cardiac rehabilitation program. Risk related conditions for this sample included diabetes (n=3); alcoholism (n=3); obesity (n=4); elevated cholesterol (n=9).

Subjects were also asked about their current wellness behaviors. Five of the subjects smoked. Twenty-eight were smokers prior to suffering a myocardial infarction. The majority of subjects (n=28) had smoked between one and one-half to two packs of cigarettes (mean=38 cigarettes) daily for approximately 40 years. Twenty-five subjects stated they engaged in physical activity on a regular basis. When asked about specific exercises, 67 percent stated that they walked, 45 percent bicycled; 12 percent jogged; 6 percent swam; 12 percent engaged in other physical activity which involved primarily weight lifting. Forty-four percent engaged in physical activity five to seven times per week, with 66 percent exercising for more than 30 minutes per session. Eighty-eight percent of subjects were normotensive, with 34 percent on medication for hypertension. Forty-five percent reported being under stress 25 percent of the time.

Health Value Orientation

Dominant value orientations for the sample studied were ascertained by examining the subscale variations for the highest subscale mean. The higher the sample score on a subscale variation, the greater the likelihood that the variation in question is the dominant value for that sample. The results of this analysis are shown in Table 1. Subjects scored high on the evil but mutable orientation. A dominant human nature orientation indicates self-control and self-discipline are necessary to achieve good health. Individuals who adhere to a wellness program over time are an example of this orientation. The being in becoming variation was the dominant activity orientation which indi-

Table 1. Dominant Value Orientations
 Subscale Means, Standard Deviations
 (N=33)

Subscale	Maximum Possible Score	Mean Score	Standard Deviation
(Value Orientation Scale)			
<u>Human Nature</u>			
Evil but Mutable	36	22.0	3.9
<u>Activity</u>			
Being	30	16.0	3.5
Doing	30	19.7	5.9
Being in Becoming	30	20.3	5.6
<u>Time</u>			
Present	30	13.9	4.9
Future	30	19.0	3.8
<u>Relational</u>			
Individual	30	16.7	4.9
Collateral	30	17.4	5.8
Lineal	30	19.6	6.1

cates an emphasis upon individual development and self expression in activity.

The doing variation was also valued by subjects. This shows value in the need for activity resulting in externally recognized accomplishments such as success in weight loss or exercise goals. The subjects scored highest on the future variation of the time orientation. Individuals who engage in wellness behaviors may be future oriented and invest energy in that direction.

The relationship orientation relates to the individual's relationship with others. A dominant lineal variation suggests an emphasis on group goals, specifically family factors which are continuous over time. The group scored highest on the lineal variation.

Health Locus of Control

The subjects scored highest on the self-control subscale of locus of control indicating a belief in self determined health outcome. The results of the subject's scores are shown in Table 2. A high score on the self-control scale indicated that the subjects believe wellness was under their own control. Self-control is a measure of internal locus of control. A belief in provider control over health was also high, indicating that subjects believed their well being was in part determined by health care professionals.

Social Support Systems

An examination of the Total Functional and Total Network support properties available to the subjects showed: affect, 4.1 (quite

Table 2. Health Locus of Control Scales:
 Subscale Means, Standard Deviations
 (N=33)

Subscale	Maximum Possible Score	Mean Score	r	Standard Deviation
Self Control Over Health	36	28.2	.78	1.3
Provider Control Over Health	42	27.9	.66	5.0
Health Values	42	26.6	.63	4.2
Chance	36	13.3	.37	5.6

a bit); affirmation, 3.6 (moderate); aid, 4.2 (quite a bit). The mean number of support systems available to subjects was 9.2. Support properties analyzed are based on a scale from 1 to 5, with 5 as maximum support provided. Duration of relationships was scored as 4.7, 2 to 5 years. Frequency of contact was scored as 3.6, or monthly to weekly. Eleven subjects had experienced recent loss. However, the amount of support lost was stated to be very little (.61), on a scale from 1 to 5, with 5 as maximum support lost.

Wellness Motivation

Wellness Motivation within this sample was assessed through analysis of total scale score for the Self Motivation Inventory (SMI) (Dishman, et al., 1981). The scoring range for the SMI is 40 to 200, with 200 being maximum motivational level. The mean score was 125.4 (s.d. 46.1). Those populations which exercise regularly have shown a mean score of 185. This indicates that subjects sampled for this study maintain a moderate level of motivation.

Research Questions

The first research question was: Which social support system variables are significantly related to wellness motivation? No significant correlations were found between social support variables and wellness motivation. The highest correlation was noted between total functional support and wellness motivation ($r=.23$, $p=.19$).

The second research question was: Which value orientations are significantly related to wellness motivation? Value orientation

subscales which correlated with wellness motivation are shown in in Table 3. All correlations were significant with the exception of the being subscale variation. The doing subscale variation correlated highest followed by being in becoming, evil but mutable, collateral, lineal and individual. The time orientation subscale variations correlated at lower values, with the future variation greater than the present variation.

The third research question was: Which health locus of control variables are significantly related to wellness motivation? The health locus of control variables that correlated significantly with wellness motivation are shown in Table 4. Two correlations were significant: chance and self control over health.

The fourth research question was: Which social support system variables are significantly related to value orientations? The social support system variable which correlated significantly with health value orientation is shown in Table 5. Total network was found to correlate significantly with the present and being in becoming variation.

The fifth research question was: Which social support system variables are significantly related to health locus of control? The social support variables which correlated with health locus of control are shown in Table 6. Three correlations were significant. Total functional and total network correlated significantly with the chance variation. Total loss correlated significantly with the health value subscale.

Table 3. Significant Correlations Between Value Orientations and Wellness Motivation; Pearson Correlation Coefficients (N=33)

Value Orientation	Wellness Motivation
Evil but Mutable	.58
Doing	.67
Being in Becoming	.59
Present	.37
Future	.45
Individual	.51
Collateral	.57
Lineal	.56

Table 4. Significant Correlations Between Health Locus of Control Variables and Wellness Motivation
Pearson Correlation Coefficients
(N=33)

Health Locus of Control	Wellness Motivation
Self Control over Health	.58
Chance	.35

Table 5. Significant Correlations Between Social Support
and System Variables and Health Value Orientation;
Pearson Correlation Coefficients
(N=33)

	Value Orientation Variations	
	Present	Being in Becoming
Total Network	-.31	-.35

Table 6. Significant Correlations Between Social Support Systems and Health Locus of Control; Pearson Correlation Coefficients (N=33)

Social Support	Health Locus of Control	
	Chance	Health Values
Total Functional	-.36	
Total Network	-.44	
Total Loss		-.65

The sixth research question was: Which value orientations are significantly related to health locus of control? Health internal locus of control was measured as the self control over health dimension. The value orientation variations that significantly correlated with self control are shown in Table 7. All subscale variations correlated significantly with the exception of the being variation. External locus of control was measured by provider control over health and chance. The value orientations that correlated significantly are also shown in Table 7.

The chance subscale significantly correlated with the individual, lineal, present, being in becoming, doing, and evil but mutable variations. Provider control correlated significantly with the collateral, future, being in becoming and doing variations. Only future health value orientation correlated significantly with the health values variation.

The last research question was: Which social support system variables, health locus of control variables and value orientation variables significantly effect wellness motivation? All variables were entered into a multiple regression equation with wellness motivation as the dependent variable. Only those significant at $\leq .05$ were retained. The 19 variables explained 32 percent of the variance in wellness motivation which was significant at $p \leq .06$. Within the equation, the doing variation was identified as contributing the greatest amount of variance in wellness motivation. Variables listed according to beta

Table 7. Significant Correlations Between Value Orientations and Health Locus of Control; Pearson Correlation Coefficients (N=33)

Value Orientations	Health Locus of Control			Chance
	Self Control	Provider Control	Health Values	
Evil but Mutable	.5775			.3580
Doing	.6979	.5696		.5687
Being in Becoming	.8045	.6131		.5120
Present	.4020			.5755
Future	.5642	.4215	.3775	
Individual	.6300			.7218
Collateral	.6015	.4851		
Lineal	.5438			.3527

weight are shown in Table 8. So, although the results did not meet the preset alpha level, they approached significance.

Reliability

Health Locus of Control Scale

The Cesarotti-Murdaugh Health Locus of Control (Cesarotti & Murdaugh, 1984) subscales were analyzed for internal consistency. Alpha coefficients obtained are shown in Table 9. The chance health outcome subscale, provider control over health subscale and self control over health subscales met the .70 criterion level. The health value subscale did not meet the .70 criterion level. Coefficient alpha was .57 for the total scale.

Value Orientation Scale

The value orientation scale (Murdaugh, 1982) includes subscales measuring relational, activity, time and human nature orientations. The standardized alphas for each subscale variation within the four orientations are shown in Table 9. Subscales measuring collateral, lineal, being in becoming and doing variations met the .70 criterion level.

Social Support

Due to the complexity of scoring, no new reliability coefficients were obtained for the Norbeck Social Support Questionnaire.

Table 8. Predictor of Wellness Motivation by Value Orientations,
Health Locus of Control and Social Support:
Multiple Regression Analysis
(N=33)

Variable	Beta ^b
Doing	1.05103
Total Functional	.67269
Evil but Mutable	.54361
Collateral	-.53716
Total Network	-.36776
Being in Becoming	-.33807
Future	-.21955
Present	.16779
Total Loss	-.10742
Individual	-.12000
Being	-.06562
Lineal	.03463

^a $R^2 = .32$ ($p = .06$)

^b Standardized coefficient greater than one reflects bias due to small sample size.

Table 9. Reliability of Likert Scales:
Internal Consistency
(N=33)

Scale/Subscale	Alpha Coefficient
Health Locus of Control (Total)	.57
Chance Health Outcomes	*.74
Provider Control Over Health	*.74
Self Control Over Health	*.77
Health Values	.36
Value Orientation Scale	
Individual	.03
Collateral	*.80
Lineal	*.92
Present	.45
Future	.45
Being	.13
Being in Becoming	*.82
Doing	*.79
Evil but Mutable	.12
Self Motivation Inventory (Total)	*.95

* Reliability coefficients above .70 are considered satisfactory.

Wellness Motivation

The Self Motivation Inventory (Dishman, et al., 1980) subscales were not analyzed for reliability. Coefficient alpha for the total scale was .95, as shown in Table 9.

Summary

Chapter 4 has reported the results of data analysis. The sample was described with the demographic data and their scores on the instruments. The results of analysis of data to answer research question posed was presented. Finally, reliability estimates of the three scales utilized were discussed.

CHAPTER 5

DISCUSSION, CONCLUSIONS AND RECOMMENDATIONS

The relationship between the conceptual framework and study findings, the conclusions based on these findings and recommendations for further research are included in the final chapter.

Findings Related to the Conceptual Framework

The conceptual framework utilized as a basis for this study will be summarized within the discussion of research findings. The aim of the study was to investigate the relationship among social support systems, health value orientations, health locus of control variables and wellness motivation in the post-myocardial infarction patient. The wellness motivation framework from which the variables were derived was based on social, psychological and behavioral theories related to individual motivation to engage in wellness behavior.

Social support is a multidimensional concept comprised of both functional and network properties ranging from simple contact with another during a stressful experience to elaborate social network properties (Norbeck, et al., 1981). Social support is necessary to fulfill the individual need to belong. Evidence indicates that the development and maintenance of supportive relationships may be as important to individual wellness as are more traditional health

practices (Hubbard, et al., 1985). Dimond (1983) has identified a positive relationship between social support and compliance with prescribed regimens. Support has been associated with patient compliance to prescribed regimens by increasing patient motivation (Wankel, 1985). Social support is hypothesized to positively influence wellness motivation. The research question addressed in this study asked which social support system variables significantly correlated with wellness motivation. Analysis of data showed no significant correlations for social support systems and wellness motivation in this sample. Total functional support approached significance, indicating a trend within the population studied. Analysis indicated that Total Functional support, which is comprised of affect, affirmation and aid (subscales) (Norbeck, et al., 1981) may positively effect wellness motivation. This would suggest that the degree to which the subject receives positive feedback, approval and assistance concerning wellness behaviors such as exercise post-myocardial infarction, the more likely he is to be motivated to continue such behavior.

Values are that set of beliefs which establish a preference for a specific mode of conduct or end state existence to that which is opposite (Rokeach, 1973). Values are individual characteristics which may function as predictors of behavior. Health value orientations are those standards upon which choices concerning health behavior are based. The relationship between individual values and behavior suggest that wellness behaviors may be governed by values regarding these activities (Murdaugh, 1982). Those who place a higher value on health

are shown to initiate more preventive actions than do those individuals who perceive health to have a lower value (Parcel, et al., 1980). It was hypothesized that a high health value orientation will positively effect wellness motivation. The research question addressed in this study asked which value orientations will significantly effect wellness motivation. Variations within the relationship orientation correlated with wellness motivation indicating that subject's relations with others will positively effect wellness behaviors. The collateral variation correlated most highly, indicating a focus upon goals of the extended group. This suggests that subjects may engage in wellness behaviors such as adherence to diet in order to please others in addition to themselves. Being in becoming and doing correlated with wellness motivation within the activity orientation. This indicates a focus upon individual development and emphasized the need for activity which will result in externally recognized accomplishments. Participation in a cardiac rehabilitation program which will increase self-knowledge and provide for achievement of weight loss and exercise goals is an example of the activity orientation.

The time orientation variations, present and future, correlated with wellness motivation almost equally. This suggests the subject's concern for health and value on wellness behaviors was "right now". Also, initiation of preventive behaviors was oriented toward wellness in the future. The human nature orientation, evil but mutable, correlated with wellness motivation indicating a positive relationship between self control, self discipline and wellness behaviors. This

suggests the subjects were aware that they were not perfect, but could achieve an increased level of wellness.

Research question four addressed which social support system variables are significantly related to value orientation. Total Network was found to correlate significantly with the being in becoming variation. This suggests that number in network, duration of relationships and a frequency of contact will encourage individual growth and foster those activities which develop all aspects of the individual. The greater the Total Network support available to an individual, the more that individual will value self development activities such as cardiac rehabilitation programs and risk factor education.

Locus of Control is a psychological construct related to varying individual expectancy of outcome control in subjective experiences (Arakelian, 1980). Internal locus of control is the individual's belief that he is in control of determining the occurrence of situational reinforcement (Rotter, 1966). External locus of control is the belief that forces beyond individual control determine the occurrence of reinforcements (Rotter, 1966). Health locus of control refers to situation specific expectancy whereby one's health is determined by one's behavior (internal health locus of control), or by external forces over which one has no control (external health locus of control) (Wallston & Wallston, 1980). Studies concerning health behaviors correlate an internal orientation with higher levels of motivation (Jordan-Marsh & Neutra, 1985) and a greater compliance with wellness behaviors

(Arakelian, 1980; Saltzer, 1982; Wallston, et al., 1981). An internal health locus of control was hypothesized to correlate positively with wellness motivation. The research question addressed in this study asked which health locus of control variables correlated significantly with wellness motivation. Significant correlations were noted between chance health outcomes, self control over health and wellness motivation. These findings indicate the sample scored high on both an internal and external health locus of control orientation. The individual who believes in his own ability to effect health and wellness will be more likely to initiate and consistently perform wellness behaviors. However, this same individual may feel that prevention of reinfarct and/or further debilitation rests largely with chance.

Three social support system variables correlated significantly with health locus of control subscales. Total functional and total network variables correlated significantly with the chance variation. This suggests that the amount of affect, affirmation, aid, number in network, duration of relationships and frequency of contact impact negatively upon the belief that wellness is due primarily to chance. Total functional and total network resources may correlate negatively with the chance health locus of control orientation in that support systems may be involved in monitoring and encouraging wellness behaviors, thereby reducing the amount of "chance" involved in the occurrence of illness. The total loss social support subscale correlated negatively with total health locus of control and the health value subscale. This shows that loss from supportive network will reduce the

total sense of control over health as well as the health value and amount of internal health locus of control perceived.

Health internal locus of control was measured as the self control over health dimension. Eight health value orientation variations significantly correlated with self control over health. All relationship orientation variations correlated positively with self control over health. Both the individual and collateral variations correlated highly. The individual variation also correlated positively with an external locus of control. This suggests that subjects may set individual goals as well as value group goals within self control over health. This may be seen in individuals who participate in cardiac rehabilitation programs. These persons use control in entering and participating in such programs, but value group and family reinforcement. The time orientation subscale variations also positively correlated with self control over health. This suggests a health internal locus of control in initiating wellness behaviors in the present while focusing energies toward wellness in the future. The future variation correlated more highly with self control over health. This may indicate a need for self control over health care post-myocardial infarction with a strong orientation toward continued wellness in the future.

The positive correlation of being in becoming and doing with self control may also be applied to cardiac rehabilitation. Both variations correlated highly, with being in becoming having a greater correlation value. The positive correlation with self control indicates that subjects value control over activities which will develop all

aspects of themselves, such as wellness education, in conjunction with a need for activity which will result in externally recognized accomplishments such as application of knowledge to modification of risk factors. The human nature orientation variation, evil but mutable, positively correlated with an internal health locus of control. This suggests individual control and self discipline are necessary to adhere to a wellness program over time.

Analysis of the external locus of control subscale revealed significant positive correlations with all value orientations except the being activity orientation. As variations correlated positively with both internal and external health locus of control, correlation values may be used to identify dominant orientations. This sample may value self control, but individual expectancy of control of outcome following a myocardial infarction may incorporate an external orientation. The health value orientation correlated positively with the future variation, suggesting that the sample values and may expend energy on preventive behaviors with a focus upon future wellness.

Variables which explained the majority of the variance within wellness motivation for this sample are shown in Table 7 (Chapter 4). The doing variation explained the majority of the variance in wellness motivation. This finding indicates a need for activity which will result in externally recognized accomplishments within wellness motivation. The evil but mutable variation suggests that self discipline and the awareness that one is not perfect but has the potential to change will also positively influence wellness motivation. The total func-

tional support subscale correlated positively, indicating that the positive affect, affirmation and aid provided to an individual will increase wellness motivation. The collateral health value variation correlated negatively with wellness motivation. This suggests that as focus upon the goals and well being of the extended group increase, individual wellness motivation will decrease. The total loss support subscale also correlated negatively with wellness motivation. This indicates that as loss from support systems increases, motivation to persist in, or adhere to wellness activities will decrease.

Limitations

Application of findings from this study are limited by a small sample size. As a result of the small sample size, the instruments showed instability and reliability values lower than previously reported. The small sample size also led to a decreased stability of statistics due to the number of variables used in relation to subjects. This provided for a poor theoretical test of the Wellness Motivation Framework. The use of mailed questionnaires as a data collection method may not have facilitated optimal response as subjects felt no obligation to respond. There was no face to face contact which may have increased the likelihood of questionnaire completion. Those subjects who did choose to respond constituted a volunteer sample which may have created a bias within findings.

Conclusion

Reliability of some instrument subscales were below expected criterion levels. Therefore, it is difficult to draw conclusions from this study. In addition, a small, volunteer sample size limits generalizability of findings. Analysis of data does provide some support for further investigations of social support systems, health locus of control and health value orientations in post-myocardial infarction patients.

This study may be viewed as an initial attempt to identify variables that significantly correlate with wellness motivation. Such correlations were identified between health locus of control, health value orientations and wellness motivation. The Wellness Motivation Framework warrants further research to further investigate relationships among the concepts. Also, additional estimates of instrument reliability and validity at the operational level are needed.

Suggestions for Further Study

1. Increase sample size. A larger sample size may clarify concept relationships and trends indicated in the present study. A larger sample may also increase subscale reliabilities as the smaller sample size does not provide a stable test.

2. Replicate the study in a healthy population to establish a baseline for concept relationships. Identification of variables that significantly correlate with wellness motivation in a healthy

population may allow for analysis of sample differences and a focus for preventive education.

3. Replicate the study in a female post-myocardial infarction population to identify differences in wellness motivation and concept relationships for this group. An identification of variables that significantly correlate with and effect wellness motivation in this population may allow for more effective education and successful patient outcome post-infarction.

Summary

This chapter discussed conclusions based on analysis of the data as related to the conceptual framework. Conclusions, limitations and suggestions for further research were discussed.

APPENDIX A

DEMOGRAPHIC DATA FORM

Demographic Data Form

Age _____

Present Marital Status:

Never married _____ Separated _____ Divorced _____
Widowed _____ Married _____

Level of Education:

Eighth grade or less _____ Some high school _____
High school graduate _____ Trade or business school _____
Some college _____ College graduate _____
Some graduate education _____ Graduate/postgraduate degree _____

Years of education _____

Employment Status:

Retired _____ Currently employed part-time _____
Currently employed full-time _____
What is your occupation _____

How long has it been since your heart attack? _____

Are you currently participating in a hospital based cardiac
rehabilitation program? Yes _____ No _____If the answer is no, have you ever participated in a cardiac
rehabilitation program? Yes _____ No _____Please check if you or either of your parents has had one or
more of the following: Indicate: 0 = neither 1 = you
2 = one parent 3 = both parentsHypertension _____ Emphysema _____ Obesity _____
Alcoholism _____ Diabetes _____ Heart Disease _____
Heart Attack _____ High Cholesterol _____Do you currently engage in any physical exercise on a
regular basis? Yes _____ No _____

If yes, what type of exercise do you do?

Walk _____ Tennis _____ Run _____ Racquetball _____
Swim _____ Basketball _____ Golf _____ Bicycle _____
Other _____

How many times per week do you engage in physical exercise?

1 - 2 times per week _____ 3 - 4 times per week _____
5 - 7 times per week _____

Indicate the usual length of time you engage in exercise.

10 minutes _____ 15 minutes _____ 20 minutes _____
30 minutes _____ more than 30 minutes _____

Have you ever smoked cigarettes, cigars or a pipe?

Yes _____ No _____

(If no, skip the following questions)

Do you smoke presently? Yes _____ No _____

If you did or do now smoke cigarettes, how many packs per
day? _____ Age started _____

If you did, or do now smoke cigars, how many per day? _____
Age started _____

If you did, or do now smoke a pipe, how many pipefuls per
day? _____ Age started _____

Approximately what was your blood pressure the last time you
had it taken? _____

Are you taking medication for your blood pressure now?
Yes _____ No _____

Approximately what is your present:
Weight _____ Height _____

During waking hours approximately what percent of the time
do you feel under pressure?
100% _____ 75% _____ 50% _____ 25% _____ Never _____

APPENDIX B

SOCIAL SUPPORT QUESTIONNAIRE

SOCIAL SUPPORT QUESTIONNAIRE *

PLEASE READ ALL DIRECTIONS ON THIS PAGE BEFORE STARTING.

Please list each significant person in your life when it comes to taking care of yourself to prevent (or live with) heart disease.

Although many persons may provide personal support and are important to you, consider only those persons who are important to you in relation to taking care of yourself to prevent (or live with) heart disease.

Use only first names or initials, and then indicate the relationship, as in the following example:

Example:

	First name or initials	Relationship
1.	Mary T.	Friend
2.	Bob	Brother
3.	M. T.	Mother
4.	Sam	Friend
5.	Mrs. R.	Neighbor

etc.

- spouse/partner
- family members or relatives
- friends
- work or school associates
- neighbors
- health care providers
- counselor or therapist
- minister/priest/rabbi
- other

Write your list on the following page.

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For each person you listed, please answer the following questions by writing in the number that applies.

- 1 = not at all
- 2 = a little
- 3 = moderately
- 4 = quite a bit
- 5 = a great deal

Question 1:

How much does this person make you feel liked or loved?

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

Question 2:

How much does this person make you feel respected or admired?

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

For each person you listed, please answer the following questions by writing in the number that applies.

- 1 = not at all
- 2 = a little
- 3 = moderately
- 4 = quite a bit
- 5 = a great deal

- 1 = not at all
- 2 = a little
- 3 = moderately
- 4 = quite a bit
- 5 = a great deal

Question 3:

How much can you confide in this person?

- | | |
|-----------|-----------|
| 1. _____ | 1. _____ |
| 2. _____ | 2. _____ |
| 3. _____ | 3. _____ |
| 4. _____ | 4. _____ |
| 5. _____ | 5. _____ |
| 6. _____ | 6. _____ |
| 7. _____ | 7. _____ |
| 8. _____ | 8. _____ |
| 9. _____ | 9. _____ |
| 10. _____ | 10. _____ |
| 11. _____ | 11. _____ |
| 12. _____ | 12. _____ |
| 13. _____ | 13. _____ |
| 14. _____ | 14. _____ |
| 15. _____ | 15. _____ |
| 16. _____ | 16. _____ |
| 17. _____ | 17. _____ |
| 18. _____ | 18. _____ |
| 19. _____ | 19. _____ |
| 20. _____ | 20. _____ |

Question 4:

How much does this person agree with or support your actions or thoughts?

Question 5:

If you needed to borrow \$10, a ride to the doctor, or some other immediate help, how much could this person usually help?

- | | |
|-----------|-----------|
| 1. _____ | 1. _____ |
| 2. _____ | 2. _____ |
| 3. _____ | 3. _____ |
| 4. _____ | 4. _____ |
| 5. _____ | 5. _____ |
| 6. _____ | 6. _____ |
| 7. _____ | 7. _____ |
| 8. _____ | 8. _____ |
| 9. _____ | 9. _____ |
| 10. _____ | 10. _____ |
| 11. _____ | 11. _____ |
| 12. _____ | 12. _____ |
| 13. _____ | 13. _____ |
| 14. _____ | 14. _____ |
| 15. _____ | 15. _____ |
| 16. _____ | 16. _____ |
| 17. _____ | 17. _____ |
| 18. _____ | 18. _____ |
| 19. _____ | 19. _____ |
| 20. _____ | 20. _____ |

Question 6:

If you were confined to bed for several weeks, how much could this person help you?

Question 7:

How long have you known this person?

- 1 = less than 6 months
- 2 = 6 to 12 months
- 3 = 1 to 2 years
- 4 = 2 to 5 years
- 5 = more than 5 years

Question 8:

How frequently do you usually have contact with this person? (Phone calls, visits, or letters)

- 5 = daily
- 4 = weekly
- 3 = monthly
- 2 = a few times a year
- 1 = once a year or less

Personal Network

		First name or initials	Relationship
1. _____	1. _____	1. _____	_____ (34)
2. _____	2. _____	2. _____	_____ (35)
3. _____	3. _____	3. _____	_____ (36)
4. _____	4. _____	4. _____	_____ (37)
5. _____	5. _____	5. _____	_____ (38)
6. _____	6. _____	6. _____	_____ (39)
7. _____	7. _____	7. _____	_____ (40)
8. _____	8. _____	8. _____	_____ (41)
9. _____	9. _____	9. _____	_____ (42)
10. _____	10. _____	10. _____	_____ (43)
11. _____	11. _____	11. _____	_____ (44)
12. _____	12. _____	12. _____	_____ (45)
13. _____	13. _____	13. _____	_____ (46)
14. _____	14. _____	14. _____	_____ (47)
15. _____	15. _____	15. _____	_____ (48)
16. _____	16. _____	16. _____	_____ (49)
17. _____	17. _____	17. _____	_____ (50)
18. _____	18. _____	18. _____	_____ (51)
19. _____	19. _____	19. _____	_____ (52)
20. _____	20. _____	20. _____	_____ (53)

9. During the past year, have you lost any important relationships due to moving, a job change, divorce or separation, death, or some other reason?

_____ 0. No

_____ 1. Yes

IF YES:

9a. Please check the category(s) of persons who are no longer available to you.

_____ spouse or partner

_____ family members or relatives

_____ friends

_____ work or school associates

_____ neighbors

_____ health care providers

_____ counselor or therapist

_____ minister/priest/rabbi

_____ other (specify) _____

9b Overall, how much of your support was provided by these people who are no longer available to you?

_____ 0. none at all

_____ 1. a little

_____ 2. a moderate amount

_____ 3. quite a bit

_____ 4. a great deal

APPENDIX C

HEALTH LOCUS OF CONTROL SCALE

HEALTH LOCUS-OF-CONTROL SCALE*

DIRECTIONS: The statements below describe ways people believe about things. Beside each statement is a scale which ranges from strongly agree (SA) to strongly disagree (SD). For each item, circle the response that represents the extent to which you agree or disagree with the item statement. Please make sure that you answer every item and that you circle only one response per item. There are no right or wrong answers, as this is a measure of your beliefs. You should respond according to your beliefs and not according to how you feel you should believe or how you think others want you to believe.

When making your response choice, please consider the spaces between each choice as being equal. This means that the difference between SA and MA is the same as between MA to A or between any other two adjacent choices.

Response Choices

	Strongly Agree (SA)	Moderately Agree (MA)	Agree (A)	Disagree (D)	Moderately Disagree (MD)	Strongly Disagree (SD)
1. Nothing is more important than good health.	SA	MA	A	D	MD	SD
2. My ill health results from my own carelessness.	SA	MA	A	D	MD	SD
3. Seeing my doctor for regular check-ups is a key factor in staying healthy.	SA	MA	A	D	MD	SD
4. Recovery from illness requires good medical care more than anything else.	SA	MA	A	D	MD	SD
5. If you don't have your health, you don't have anything.	SA	MA	A	D	MD	SD
6. "Taking care of myself" won't keep me from getting sick.	SA	MA	A	D	MD	SD
7. When it comes to getting sick some people just have "bad luck."	SA	MA	A	D	MD	SD
8. Most people are helped a great deal when they go to a doctor.	SA	MA	A	D	MD	SD

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Response Choices

	Strongly Agree (SA)	Moderately Agree (MA)	Agree (A)	Disagree (D)	Moderately Disagree (MD)	Strongly Disagree (SD)
9. I have a lot of confidence in my ability to stay well.	SA	MA	A	D	MD	SD
10. I could not be happy if I did not have my health.	SA	MA	A	D	MD	SD
11. Self-respect is more important to me than good health.	SA	MA	A	D	MD	SD
12. Doctors can rarely do very much for people who are sick.	SA	MA	A	D	MD	SD
13. Some things mean more to me than my health.	SA	MA	A	D	MD	SD
14. Staying well has little or nothing to do with chance.	SA	MA	A	D	MD	SD
15. My doctor can almost always help me feel better.	SA	MA	A	D	MD	SD
16. I can do little to prevent illness.	SA	MA	A	D	MD	SD
17. My family means more to me than good health.	SA	MA	A	D	MD	SD
18. I can't do very much for myself once I get sick.	SA	MA	A	D	MD	SD
19. Good health is largely a matter of fortune.	SA	MA	A	D	MD	SD
20. Practicing a few basic health principles can go a long way in preventing illness.	SA	MA	A	D	MD	SD

Response Choices

	Strongly Agree (SA)	Moderately Agree (MA)	Agree (A)	Disagree (D)	Moderately Disagree (MD)	Strongly Disagree (SD)
21. Seeing my doctor will do little to prevent illness.	SA	MA	A	D	MD	SD
22. In the long run, people who take very good care of themselves stay healthy.	SA	MA	A	D	MD	SD
23. People who never get sick are just plain lucky.	SA	MA	A	D	MD	SD
24. I would rather be rich than have good health.	SA	MA	A	D	MD	SD
25. No matter what I do, many diseases can wipe me out.	SA	MA	A	D	MD	SD
26. Many times doctors do not help their patients to get well.	SA	MA	A	D	MD	SD

APPENDIX D

VALUE ORIENTATION SCALE

VALUE ORIENTATION SCALE*

DIRECTIONS: The statements below describe ways people believe about things. Beside each statement is a scale which ranges from strongly agree (SA) to strongly disagree (SD). For each item, circle the response that represents the extent to which you agree or disagree with the item statement. Please make sure that you answer every item and that you circle only one response per item. There are no right or wrong answers, as this is a measure of your beliefs. You should respond according to your actual beliefs and not according to how you feel you should believe or how you think others want you to believe.

When making your response choice, please consider the spaces between each choice as being equal. This means that the difference between SA and MA is the same as between MA to A or between any other two adjacent choices.

	Response Choices					
	Strongly Agree (SA)	Moderately Agree (MA)	Agree (A)	Disagree (D)	Moderately Disagree (MD)	Strongly Disagree (SD)
1. It's more fun to do things with others than to do them alone.	SA	MA	A	D	MD	SD
2. The good things in life come of their own accord.	SA	MA	A	D	MD	SD
3. I am most satisfied when I am actively doing things.	SA	MA	A	D	MD	SD
4. The present matters more to me than the future.	SA	MA	A	D	MD	SD
5. I live my life preparing for the future.	SA	MA	A	D	MD	SD
6. Self-control is not so important in my life.	SA	MA	A	D	MD	SD
7. The ways of the future will be better.	SA	MA	A	D	MD	SD
8. My family's concerns are not as important as my own.	SA	MA	A	D	MD	SD

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Response Choices

	Strongly Agree (SA)	Moderately Agree (MA)	Agree (A)	Disagree (D)	Moderately Disagree (MD)	Strongly Disagree (SD)
9. Life should be enjoyed with relish and abandonment.	SA	MA	A	D	MD	SD
10. Planning for the future will not really be worthwhile.	SA	MA	A	D	MD	SD
11. I live for today and don't worry about tomorrow.	SA	MA	A	D	MD	SD
12. To me, life is a festival rather than a workshop.	SA	MA	A	D	MD	SD
13. It's not hard for me to avoid undesirable activities.	SA	MA	A	D	MD	SD
14. I believe the plans of my family should come before my own plans.	SA	MA	A	D	MD	SD
15. Personal growth is a measure of success in my life.	SA	MA	A	D	MD	SD
16. I like to be part of a group for companionship.	SA	MA	A	D	MD	SD
17. For the most part, I would rather not depend on others.	SA	MA	A	D	MD	SD
18. My life revolves around my family.	SA	MA	A	D	MD	SD
19. I exercise continuous self-discipline in my life.	SA	MA	A	D	MD	SD
20. Live for today for tomorrow you may die is a good motto to live by.	SA	MA	A	D	MD	SD
21. The best way to live is to look ahead.	SA	MA	A	D	MD	SD

Response Choices

	Strongly Agree (SA)	Moderately Agree (MA)	Agree (A)	Disagree (D)	Moderately Disagree (MD)	Strongly Disagree (SD)
22. The support of my family is the most important thing to me.	SA	MA	A	D	MD	SD
23. I believe I need to periodically take time to reflect and set new goals.	SA	MA	A	D	MD	SD
24. My greatest concern is with the present.	SA	MA	A	D	MD	SD
25. I prefer to be self-sufficient.	SA	MA	A	D	MD	SD
26. Group activities are more enjoyable than individual ones.	SA	MA	A	D	MD	SD
27. I like to be constantly active.	SA	MA	A	D	MD	SD
28. I would rather be too busy than not busy enough.	SA	MA	A	D	MD	SD
29. The good things in life usually happen spontaneously.	SA	MA	A	D	MD	SD
30. I try to include a balance of enjoyment, action, and learning in my life.	SA	MA	A	D	MD	SD
31. When I have days off I like to keep busy.	SA	MA	A	D	MD	SD
32. Since I cannot know the future, I must live for now.	SA	MA	A	D	MD	SD
33. My personal goals are more important than those of my family.	SA	MA	A	D	MD	SD

Response Choices

	Strongly Agree (SA)	Moderately Agree (MA)	Agree (A)	Disagree (D)	Moderately Disagree (MD)	Strongly Disagree (SD)
34. It's easy for me to maintain self-control in my life.	SA	MA	A	D	MD	SD
35. Friends do not occupy an important part of my life.	SA	MA	A	D	MD	SD
36. Continued learning is important in making my life meaningful.	SA	MA	A	D	MD	SD
37. Self-restraint is not necessary for a good life.	SA	MA	A	D	MD	SD
38. I prefer to rely on myself.	SA	MA	A	D	MD	SD
39. I usually choose whatever gives me the most enjoyment out of life.	SA	MA	A	D	MD	SD
40. My relationship with my family is more important than anything else.	SA	MA	A	D	MD	SD
41. I enjoy activities that develop me spiritually, emotionally, and physically.	SA	MA	A	D	MD	SD
42. I believe my future will be better than my present.	SA	MA	A	D	MD	SD
43. I would sacrifice almost everything for my family.	SA	MA	A	D	MD	SD
44. I work hard to avoid loss of self-discipline.	SA	MA	A	D	MD	SD
45. Time is precious, and I try to spend it doing something constructive.	SA	MA	A	D	MD	SD
46. A major part of my life revolves around my friends.	SA	MA	A	D	MD	SD
47. The aim of life should be to enjoy things as they come along.	SA	MA	A	D	MD	SD

APPENDIX E

SELF MOTIVATION INVENTORY

SELF MOTIVATION INVENTORY

Read each of the following statements and write by each item the letter of the alternative which best describes how characteristic the statement is when applied to you. The alternatives are:

- (1) Extremely uncharacteristic of me
- (2) Somewhat uncharacteristic of me
- (3) Neither characteristic nor uncharacteristic of me
- (4) Somewhat characteristic of me
- (5) Extremely characteristic of me

Please be sure to answer every item and try to be as honest and accurate as possible in your responses. Your answers will be kept in the strictest confidence.

1. I'm not very good at committing myself to do things.
2. Whenever I get bored with projects I start, I drop them to do something else.
3. I can persevere at stressful tasks, even when they are physically tiring or painful.
4. If something gets to be too much of an effort to do, I'm likely to just forget it.
5. I'm really concerned about developing and maintaining self-discipline.
6. I'm good at keeping promises, especially the ones I make to myself.
7. I don't work any harder than I have to.
8. I seldom work to my full capacity.
9. I'm just not the goal-setting type.
10. When I take on a difficult job, I make a point of sticking with it until it's completed.
11. I'm willing to work for things I want as long as it's not a big hassle for me.
12. I have a lot of self-motivation.
13. I'm good at making decisions and standing by them.
14. I generally take the path of least resistance.
15. I get discouraged easily.
16. If I tell somebody I'll do something, you can depend on it being done.
17. I don't like to overextend myself.
18. I'm basically lazy.
19. I have a very hard-driving, aggressive personality.
20. I work harder than most of my friends.

21. I can persist in spite of pain or discomfort.
22. I like to set goals and work toward them.
23. Sometimes I push myself harder than I should.
24. I tend to be overly apathetic.
25. I seldom, if ever, let myself down.
26. I'm not very reliable.
27. I like to take on jobs that challenge me.
28. I change my mind about things quite easily.
29. I have a lot of willpower.
30. I'm not likely to put myself out if I don't have to.
31. Things just don't matter much to me.
32. I avoid stressful situations.
33. I often work to the point of exhaustion.
34. I don't impose much structure on my activities.
35. I never force myself to do things I don't feel like doing.
36. It takes a lot to get me going.
37. Whenever I reach a goal, I set a higher one.
38. I can persist in spite of failure.
39. I have a strong desire to achieve.
40. I don't have much self-discipline.

APPENDIX F

HUMAN SUBJECTS FORM



THE UNIVERSITY OF ARIZONA
TUCSON, ARIZONA 85721

COLLEGE OF NURSING

MEMORANDUM

TO: Julie M. Derenowski, BSN, RN
Graduate Student
College of Nursing

FROM: Ada Sue Hinshaw, PhD, RN ^{ASH} Merle Mishel, PhD, RN
Director of Research Chairman, Research Committee

DATE: May 12, 1986

RE: Human Subjects Review: The Effect of Social Support Systems,
Value Orientation and Health Locus of Control on Wellness-
Motivation in the Post-Myocardial Infarction Patient

Your project has been reviewed and approved as exempt from University review by the College of Nursing Ethical Review Subcommittee of the Research Committee and the Director of Research. A consent form with subject signature is not required for projects exempt from full University review. Please use only a disclaimer format for subjects to read before giving their oral consent to the research. The Human Subjects Project Approval Form is filed in the office of the Director of Research if you need access to it.

We wish you a valuable and stimulating experience with your research.

ASH/fp

APPENDIX G

DISCLAIMER

HUMAN SUBJECTS DISCLAIMER FORM

The Effect of Social Support Systems, Health Locus of
Control and Value Orientations on Wellness Motivation in the
Post-Myocardial Infarction Patient

The aim of this study is to identify the role of social support, control of health and health value on wellness behavior motivation in people who have experienced a myocardial infarction.

You are being asked to voluntarily state your opinions on the attached questionnaires. By answering the questions, you are consenting to participate in the study. Your name is not on the questionnaire and only the primary investigator will have access to your responses. You have the freedom to withdraw from participation in this study at any time. Whatever your decision, the health care you receive will not be affected in any way. Any questions you have may be answered by calling me at 722-2510 after 5 pm on any day. There are no risks or discomforts involved in this study. Answering these questions should take approximately one hour of your time. Please return your questionnaire in the stamped envelope provided.

Julie Derenowski

Masters Student
University of Arizona
College of Nursing

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