

PERCEIVED HEALTH STATUS, SPIRITUAL WELL-BEING,  
AND SELECTED HEALTH PRACTICES AMONG  
MEXICAN-AMERICAN WOMEN

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A DISSERTATION  
SUBMITTED IN PARTIAL FULFILLMENT OF THE REQUIREMENTS  
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IN THE GRADUATE SCHOOL OF THE  
TEXAS WOMAN'S UNIVERSITY

COLLEGE OF NURSING

BY  
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DENTON, TEXAS

MAY 1991

TEXAS WOMAN'S UNIVERSITY  
DENTON, TEXAS

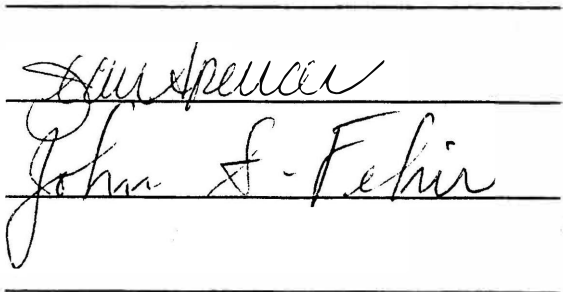
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To the Dean for Graduate Studies and Research:

I am submitting herewith a dissertation written by Dahlia Zuñiga Rojas entitled "Perceived Health Status, Spiritual Well-Being, and Selected Health Practices Among Mexican-American Women." I have examined the final copy of this thesis for form and content and recommend that it be accepted in partial fulfillment of the requirements for the degree of Doctor of Philosophy, with a major in Nursing.

  
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Major Professor

We have read this dissertation and  
recommend its acceptance:

  
John S. Fehin

Accepted

  
Dean for Graduate Studies and  
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ABSTRACT

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This descriptive study explored holistically the health of women. One hundred women utilizing a community health clinic for health care were surveyed. This sample was drawn by using a systematic random selection of Spanish-surnamed women with appointments. The women, aged 18-60 years, lived in a major city of a large southwestern state in the United States. Findings from a voluntary, self-administered questionnaire were analyzed. Of the 100 women, 98 were Mexican-American and 2 were Central American. Three instruments, the Self-Rated Health (SRH) Scale (Lawton, Moss, Fulcomer, & Kleban, 1982) ( $\alpha = .99$ ), the revised Health Practices Index (HPI) (Wiley & Camacho, 1980) ( $\alpha = .23$ ), and the Spiritual Well-Being (SWB) Scale (Ellison, 1983) ( $\alpha = .83$ ) were used.

Correlations were found between the following variables: self-rated health score with weight and Quetelet

Index (height/weight ratio) (-) and self-rated health score with physical activity (+). Thus, perceived health status as measured by self-rated health scores was correlated with weight and physical activity. A linear relationship between spiritual well-being scores and frequency of church attendance predicted perceived health status. A 24-48 hour dietary recall was used to describe the women's nutritional habits. The majority (94%) of the 15 pregnant women did not meet their caloric needs; they met only about half (49%) of them. Of the 85 non-pregnant women, 80% consumed less than the daily caloric allowance and 20% exceeded that amount. Of the fat consumed, the saturated fat exceeded the unsaturated fat at about a 2:1 ratio.

Additional findings revealed significant differences between U.S. born and foreign born women and between those preferring English language to Spanish language. U.S. born women were more likely to drink alcohol ( $p = .01$ ) than those foreign born. A highly significant difference existed in drinking habits of those choosing the English questionnaire from those choosing the Spanish one ( $p = .001$ ). Women who drank alcohol were also more likely to smoke cigarettes ( $p = .01$ ). As age of immigration to the United States increased, so did abstinence from alcohol and smoking.

## TABLE OF CONTENTS

DEDICATION . . . . .	iii
ACKNOWLEDGMENTS . . . . .	iv
ABSTRACT . . . . .	vi
LIST OF TABLES . . . . .	x
LIST OF FIGURES . . . . .	xi
CHAPTER	
1. INTRODUCTION . . . . .	1
Problem of Study . . . . .	3
Rationale for Study . . . . .	4
Conceptual Framework . . . . .	7
Assumptions . . . . .	19
Research Question . . . . .	19
Definition of Terms . . . . .	20
Limitations . . . . .	21
Summary . . . . .	22
2. REVIEW OF LITERATURE . . . . .	23
Spiritual Well-Being . . . . .	23
Health Practices . . . . .	30
Perceived Health Status . . . . .	33
Ethnicity and Culture . . . . .	39
Summary . . . . .	43
3. PROCEDURE FOR COLLECTION AND TREATMENT OF DATA .	44
Setting . . . . .	44
Population and Sample . . . . .	45
Protection of Human Subjects . . . . .	46
Instruments . . . . .	47
Data Collection . . . . .	54
Treatment of Data . . . . .	58



## CHAPTER

4. ANALYSIS OF DATA . . . . .	59
Description of Sample . . . . .	59
Findings . . . . .	63
Other Findings . . . . .	73
Summary . . . . .	75
5. SUMMARY OF THE STUDY . . . . .	78
Summary . . . . .	78
Discussion of Findings . . . . .	80
Conclusions and Implications . . . . .	91
Recommendations for Further Study . . . . .	94
REFERENCES . . . . .	99
APPENDIX	
A. AGENCY APPROVAL . . . . .	108
B. INFORMED CONSENT . . . . .	110
C. INSTRUMENTS--ENGLISH AND SPANISH FORMS . . . . .	113
D. PERMISSION TO USE INSTRUMENTS . . . . .	132

## LIST OF TABLES

### Table

1. Frequencies and Percentages of Age, Martial Status, Pregnancy Status, Income, Size of Household, and Years of School as Reported by 100 Latina Women . . . . .	60
2. Frequencies and Percentages of Religion, Frequency of Church Attendance, Birthplace, and Language Preference as Reported by 100 Latina Women . . . . .	62
3. Variations of Scale Scores, Sample Means, and Standard Deviations of Scores on Self-Rated Health (SRH) Scale, Health Practice Index (HPI) Scale, and Spiritual Well-Being (SWB) Scale and Subscales for a Sample of 100 Latina Women . . . . .	64
4. Reliability Coefficients of the Self-Rated Health (SRH) Scale, Health Practices Index (HPI) Scale, and Spiritual Well-Being (SWB) Scale and Subscales Used with a Sample of 100 Latina Women . . . . .	64
5. Revised Health Practices Index (HPI) Items, Category, and Available Points by a Sample of 100 Latina Women . . . . .	67
6. Correlations among Variables of Perceived Health Status (SRH), Spiritual Well-Being (SWB) and Selected Health Practices (HPI) among a Sample of 100 Latina Women . . . . .	73

## LIST OF FIGURES

### Figure

1. Major Concepts of the Roy Adaptation Model: The Person as a System . . . . .	8
2. The Self-Concept Mode with Subareas and Components . . . . .	15
3. Rojas' Application of Roy's Adaptation Model . .	17
4. Rojas' Application of Roy's Adaptation Model in Mexican-American Women . . . . .	90

## CHAPTER 1

### INTRODUCTION

The holistic health movement began in the 19th century (Jones, 1984). This movement was based on the ideas that the "body-mind-spirit-trinity" has the inherent capacity to heal and that the environment has more influence on humans than anything else (Jones, Lepley, & Baker, 1984). The term "holism" or "wholism" refers to a basic belief that all parts of a living organism work together to determine the health of the entire person. This interdependence of body, mind, and spirit in dynamic interaction with the environment is recognized as fundamental in the definition of health (Jones et al., 1984).

Nursing has, since its beginnings, accepted a holistic approach to the client as an essential part of its framework of practice. For example, Nightingale (1969), in her Notes on Nursing, recorded the many dimensions of the environment on the people she nursed. Nursing leaders such as Virginia Henderson, Martha Rogers, Callista Roy, and Dorothea Orem have also been holistic in their views of individuals (Jones et al., 1984).

Despite these understandings, consumers sense that health care providers might know a great deal about their

illnesses but very little about them as persons (Nagai-Jacobsen & Burkhardt, 1989). Tournier (1965) stated that "to treat the patient rather than the disease means helping our patients to resolve their problems. And this solution is often to be found . . . only on the spiritual level" (p. 61). Furthermore, he noted that a person is not just a body and a mind but also a spiritual being, and it is impossible to know the person if one disregards the person's deepest reality. With the understanding of the person as a unity--body, mind, spirit, Tournier stated that the life a person lives in the body corresponds with the life the person lives in the mind and the life lived in the spirit. Although the spirit expresses itself through the mind and body, "it is neither the mind nor the body" (p. 61).

Incorporating the spiritual nature of person into one's total health is congruent with the Latino view of health and illness. Religious beliefs greatly influence Mexican-Americans' attitudes toward life, health, illness, and death (Orque, Block, & Monrroy, 1983). Persons of Spanish heritage commonly hold a perspective of health as the body, mind, and spirit in harmony within oneself and the environment (Maduro, 1983). These beliefs may be expressed in "curanderismo." Curanderismo is "synergetic, eclectic and holistic; it is a mixture of beliefs derived from Aztec, Spanish, spiritistic, spiritualistic, homeopathic and modern

'scientific' medicine" (Maduro, 1983, p. 869). In a belief system of curanderismo, the mind, body, and soul (spirit) are inseparable. A person's sense of balance and harmony are essential aspects of health and an imbalance may produce disease or illness. Health and well-being (bienestar) is thought to depend upon balance in emotional, physical, and social arenas. Conversely, illness may also be caused by a separation of body and soul (Maduro, 1983). Thus, the beliefs of many persons of Spanish heritage are centered in the concept of body-mind-spirit-trinity.

#### Problem of Study

The concept of holistic health is becoming increasingly acceptable to society in the United States; researchers have examined common diseases, health beliefs practices, and illness behavior in Mexican-Americans. However, little is known about the health variables in a Mexican-American population of women who are a culturally, ethnically, and linguistically distinct group. Further study was needed to develop a "picture of health" in Mexican-American women. Thus, in this study, selected health practices of Mexican-American women and relationships to perceived health status and spiritual well-being were described.

### Rationale for Study

In today's complex society, an individual's search for optimal health seems to be limited by the fact that human beings are often not viewed in their entirety. In many instances, examination of the "whole" person has been put aside for study of one system or organ. Thus, "it is difficult to attain and maintain health if the essential aspects of health--the physical, spiritual and psychological perspectives--are not addressed" (Jones et al., 1984, p. 1).

Approaches to promote health and provide health care require a holistic view of persons. This type of approach implies an understanding of the human person as a unity where body, mind, spirit, and environment are descriptors of the interrelated manifestations of the person (Burkhardt, 1989). In this study of health practices among Mexican-American women, the concept of holism was forwarded as a means to view individuals' health practices. The interdependence of body, mind, and spirit in dynamic interaction with the environment is recognized as fundamental to health promotion efforts (Jones et al., 1984). This approach to health is particularly pertinent to a growing ethnic population of Hispanics.

The Hispanic population demonstrates rapid, escalating growth rates in the United States, and it is expected to

continue increasing significantly faster than the non-Hispanic population (Metropolitan Life, 1988). According to the Bureau of the Census (U.S. Department of Commerce [USDC], 1989), the Hispanic population, which totaled 20.1 million in March 1989, continued to grow at a rapid pace--about five times as fast as the rate experienced by the non-Hispanic population since 1980. This growth represents an increase of 39% over the April 1980 figure, while the non-Hispanic population grew by 8% (USDC, 1989). This population of Hispanics in the United States makes it the fifth largest population of Hispanics in the world.

The Hispanic population is composed of persons in the following origin subgroups: Mexican, Puerto Rican, Cuban, Central and South American, and other Hispanic origin. Mexican-Americans numbered 12.6 million (63%) of the total 20 million Hispanics, or more than three-fifths of all persons of Spanish heritage, and thus represented a majority of Hispanics (USDC, 1989). In addition, the median age of Mexican-Americans is 24 years (26 years for all Hispanics) as compared to 33 years for non-Hispanics. Thus, this youthful, rapidly growing population represents a substantial segment of actual and potentially new users of the health care system now, and this segment is projected to increase in the near future.



Registered nurses (RNs) are and will continue to provide primary, secondary, and tertiary care to clients of Spanish origin. Most of the published literature on Hispanics was focused on symptomatology and involved illness-oriented studies based on diseases, such as Diabetes Mellitus, cardiovascular disease (Diehl & Stern, 1989), cancer, and psychiatric disorders. Other studies were focused on folk beliefs/practices of Mexican-Americans (Castro, Furth, & Karlow, 1984; Trotter, 1985). Few investigators had examined Hispanics' health promotion or disease prevention, yet the literature supported the immediate needs for such studies (Clark, Martire, & Bartolomeo, Inc. 1985; Weitzel, 1989; Zepeda, 1982). Despite the many nursing investigations on health promotion behaviors, practices, beliefs, and values of non-Hispanic white adults (Duffy, 1988; Hallal, 1982; Pender & Pender, 1986; Walker, Sechrist, & Pender, 1987), there remained a paucity of studies on the health practices of Hispanics. No such published studies specific to Mexican-American women were found. The promotion of health and the prevention of disease in such a large population is economically beneficial to society and desirable to nursing as a segment of society charged with providing human services. Therefore, to promote health and, ultimately, to increase the

quality of health care provided to society, nursing must gather additional data on the health status and health practices of Hispanics. This study was designed to describe the health practices of Mexican-American women and examine associations with perceived health status and spiritual well-being.

### Conceptual Framework

Roy's (1980) Adaptation Model (RAM), a systems model, was utilized as the conceptual framework for this study (Figure 1). The person as patient is viewed as having parts or elements linked together in such a way that force on the linkages can be increased or decreased. Increased force, or tension, comes from strains within the system or from the environment that impinges on the system. The system of the person and interaction with the environment are the units of analysis of nursing assessment, while manipulation of parts of the system or the environment is the mode of nursing intervention. The concepts in Roy's Adaptation Model are applicable to the four metaparadigms in nursing's domain: person, environment, health, and nursing.

### Person

The person as an individual and as a member of a group is viewed as a holistic adaptive system. "Holistic" asserts

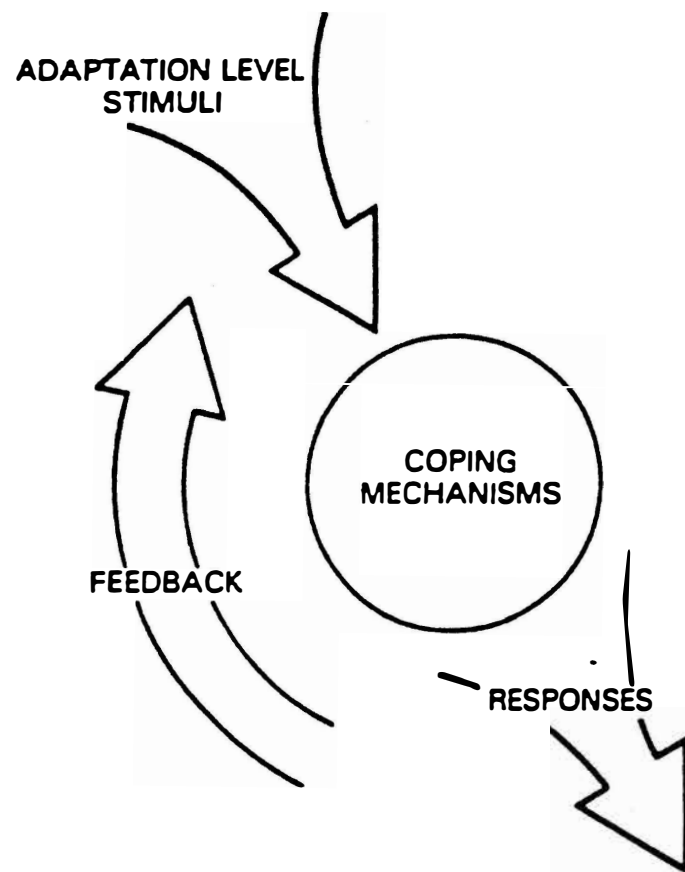


Figure 1. Major Concepts of the Roy Adaptation Model:  
The Person as a System (Andrews & Roy, 1986,  
p. 22)

that the human system functions as a whole and is more than the mere sum of its parts (Andrews & Roy, 1986). Adaptive implies that the human system has the capacity to adjust effectively to changes in the environment and, in turn, affects the environment (Andrews & Roy, 1986). The person as a biopsychosocial human being is in constant interaction with a changing environment; therefore, a person is continually changing and attempting to adapt (Meleis, 1985).

As with any system, the person receives input (stimuli) and processes this input, producing output (response) which is feedback to the system (Andrews & Roy, 1986). The person's behavior is influenced both by the environment and by the person's ability to deal with the world. Roy classified the environmental input (stimuli) as focal, contextual, or residual. The person's coping mechanisms in Roy's (1980) Adaptation Model are broadly categorized as the regulator and the cognator subsystems. The regulator subsystem responds automatically through neural, chemical, and endocrine activity, while the cognator subsystem responds through cognitive-emotive channels. The behaviors that result from the regulator and cognator subsystems are observed in adaptive modes.

Adaptive modes in the Roy (1980) Adaptation Model show the activity of the regulator or cognator subsystems and

their coping mechanisms. The four categories of adaptive modes are physiological mode, self-concept mode, role function mode, and interdependence mode.

The physiological mode is associated with the way the person responds physically to stimuli from the environment. Behavior in this mode is the manifestation of physiological activities of all the cells, tissues, organs, and systems comprising the human body. Roy (1980) identified five needs in this mode: oxygenation, nutrition, activity/rest, elimination, and protection.

The self-concept mode is focused specifically on the psychological and spiritual aspects of the person. The basic need underlying the self-concept mode is "psychic integrity"--the need to know who one is so that one can be or exist with a sense of unity (Roy, 1980).

The role function mode is focused on the roles the person occupies in society. A role is defined as a set of expectations about how a person occupying one position behaves toward a person occupying another position. The basic need underlying this mode is "social integrity"--the need to know who one is in relation to others so that one can act (Roy, 1980).

The interdependence mode is focused on interactions related to giving and receiving love, respect, and value.

The basic need of this mode is "affectional adequacy"--the feeling of security in nurturing relationships (Roy, 1980).

Thus, Roy (1980) described the person as a holistic adaptive system with regulator and cognator subsystem coping mechanisms that act through four adaptive modes to produce adaptive responses to the environment. As a systems model, stimuli and adaptation levels are inputs, coping mechanisms are controls, and adaptive and ineffective responses are outputs which feedback to the system (Andrews & Roy, 1986).

#### Environment

Environment in Roy's (1980) Adaptation Model is the world within and around the person. According to Roy, the changing environment stimulates the person to make adaptive responses. For human beings, life is constantly changing and presenting new challenges. The person has the ability to develop new responses to these changing conditions. As the environment changes, the person has the opportunity to continue to grow and develop, thus enhancing the meaning of life for self and others.

In describing the environment, Roy (Andrews & Roy, 1986) pointed out that she drew upon the work of Harry Helson. Roy stated that this physiological psychologist defined "adaptation" as a function of the degree of change taking place and the person's adaptation level. "Adaptation

level" was defined as the changing point representing the person's ability to respond positively in a situation (Andrews & Roy, 1986).

Three types of stimuli pool to make up the person's adaptation level (Andrews & Roy, 1986). Those stimuli immediately confronting the person are termed "focal stimuli." All other stimuli identified as influencing the current situation are called "contextual stimuli." The "residual stimuli" are those that may influence the adaptation level, but whose effect has not been confirmed or validated. Thus, in Roy's (1980) Adaptation Model, environment includes all conditions, circumstances, and influences surrounding and affecting the development and behavior of the person, and those influencing factors are categorized as focal, contextual, and residual stimuli.

### Health

Roy (1980) postulated that each person has a unique purpose in life and the potential for fulfilling that purpose. The person, as an adaptive system, is constantly growing and developing within a changing environment. Adaptation is viewed in terms of the goals of the human system--survival, growth, reproduction, and mastery. A person's health is a reflection of this adaptation. Adaptive responses promote integrity or wholeness relative

to these goals, with integrity implying soundness, an unimpaired condition leading to wholeness. The fulfillment of one's purpose in life is reflected in becoming an integrated and whole person. Thus, in the Roy Adaptation Model, health is defined as a state, a process of being and becoming an integrated and whole person.

### Nursing

Nursing in the Roy (1980) Adaptation Model is viewed as an interpersonal process that is initiated by the individual's adaptation to change in the environment. Nursing actions are directed to reducing or removing stimuli and enhancing the adaptive level of the individual (Chinn & Jacobs, 1983). Nursing acts to enhance the interaction of the person within this environment. The goal is to promote growth and meaningful life for the individual in harmony with the social and physical environment. In this way, nursing promotes health (Andrews & Roy, 1986).

The focus of nursing in the Roy (1980) Adaptation Model lies in identifying focal, contextual, and residual stimuli and their effects on the cognator and regulator mechanisms which, in turn, affect the four adaptive modes. The goal of nursing is promotion of a person's adaptation in the physiological, self-concept, role function, and interdependence modes. Nursing problems consist of the ineffective coping



mechanisms which cause ineffective responses that disrupt the integrity of the person. Nursing therapeutics are the manipulation of focal, residual, and contextual stimuli within a client's zone of positive coping. The role nurses play in patient care are as the pace setter: an external regulatory force to modify stimuli affecting adaptation via the adaptive modes.

#### Self-Concept Mode

The phenomenon investigated in the present study related to one of the four adaptive modes--the self-concept mode (Figure 2). Inherent in Roy's (1980) description of the person as an adaptive system is the concept of holistic functioning. In viewing the person as an integrated whole, the nurse is concerned with the well-being of the total person; thus, adaptation level or an ineffective behavior in any area affects the person as a whole. This mode is focused specifically on the psychological and spiritual aspects of the person. The basic need in the self-concept mode is "psychic integrity"--the need to know who one is so that one can be or exist with a sense of unity.

Self-concept was defined as the "composite of beliefs and feelings that one holds about oneself at a given time" (Andrews & Roy, 1986, p. 124). It is formed from internal perceptions and of others' reactions. Perception of self

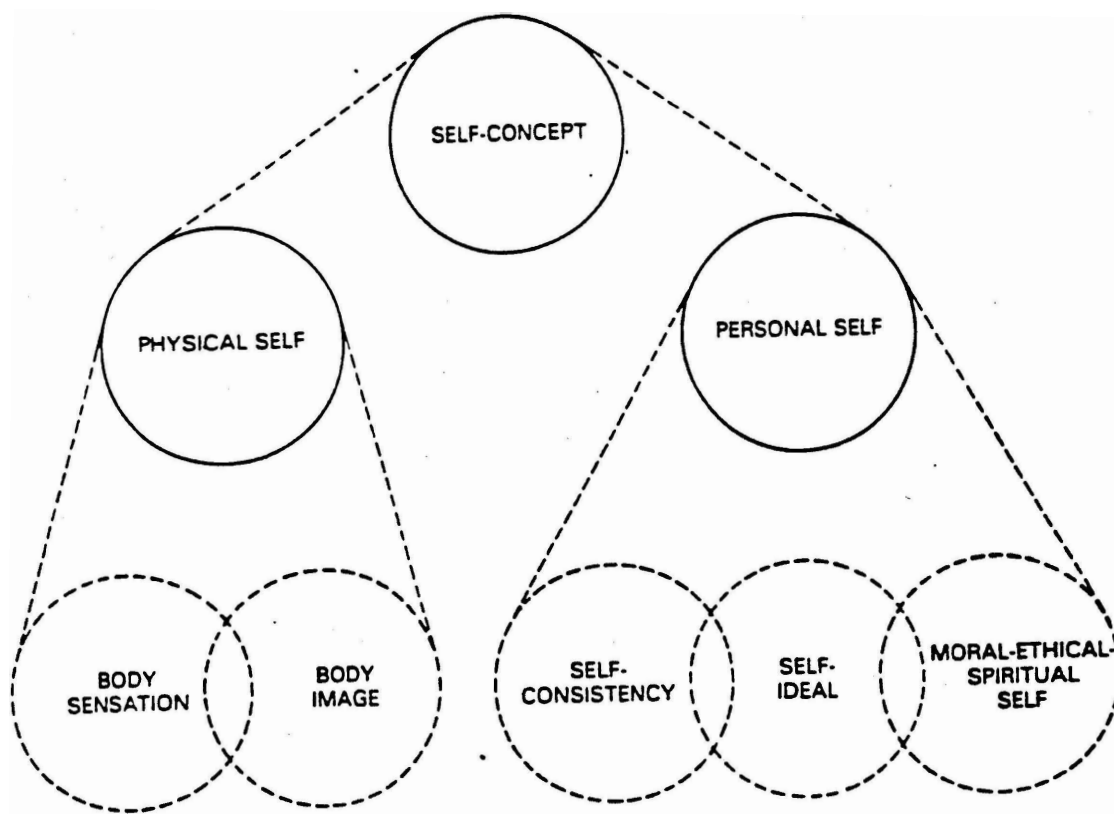


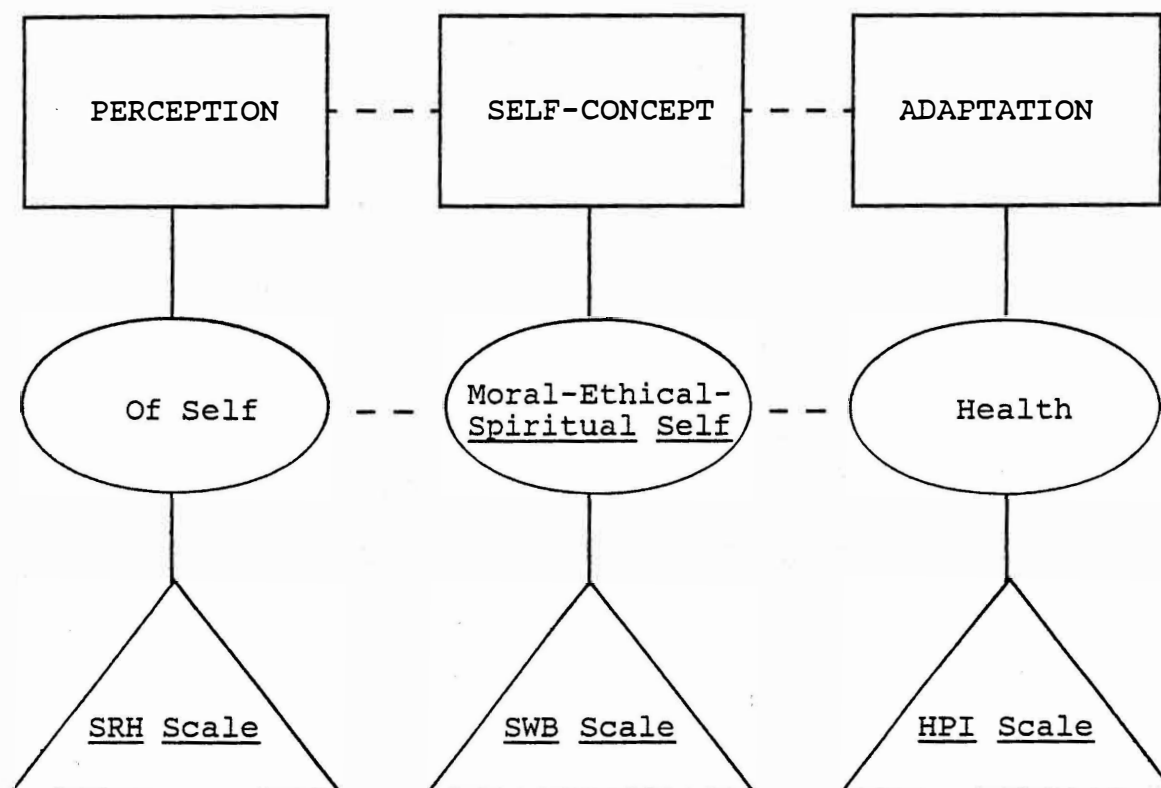
Figure 2. The Self-Concept Mode with Subareas and Components (Andrews & Roy, 1986, p. 125)

plays a major part in everything a person does. A person's self-concept directs one's behavioral responses in adaptation and feedback as stimuli to the system.

The self-concept mode in the Roy (1980) Adaptation Model has two subareas: the physical and personal self. The physical self includes two components: body sensation and body image. The personal self has three components: self-consistency, self-ideal, and moral-ethical-spiritual self. For self-consistency, the person strives to maintain a consistent self-organization and thus avoid disequilibrium. Self-ideal personal self is related to what one would like to be or is capable of doing.

#### Application of Model

In Rojas' application of the Roy Adaptation Model (Figure 3), the self-concept construct is viewed as the manifestation of behavior and level of adaptation relative to a person's beliefs and feelings about themselves. The perception of health status and spiritual well-being affects adaptation in the self-concept mode. A person's self-concept directs behavioral responses in adaptation and feedback to the systems. Health practices, specifically health habits, are seen as one example of a behavioral response to adaptation.



KEY:

SRH = Self-Rated Health  
Scale

SWB = Spiritual Well-  
Being Scale

HPI = Health Practices  
Index Scale

-- = Relationship To Be  
Tested

Figure 3. Rojas' Application of Roy's Adaptation Model

The adaptation construct relates to the adaptation level of the person with the environment. The adaptation level is defined as the changing point that represents the person's ability to respond positively in a situation. Health is a positive response to the environment. In Roy's model, adaptation is determined by the pooled effect of focal (immediate), contextual (present and influential), and residual (present but not validated) stimuli. In the present study, the perception (stimuli) of physical and spiritual health may be either focal (immediate) or contextual (situation-related) for each individual woman. Input of perceptions influences the adaptation (health) via the self-concept mode. Internal perceptions influence the self-concept directing behavior. Health practices (i.e., habits) are a measurable behavioral response (output) of adaptation to the environment.

In Roy's (1980) model, the moral-ethical-spiritual self includes one's belief system and an evaluation of who one is. Spiritual well-being is a manifestation of a positive relationship with God and a satisfaction with life-meaning and its purpose (Ellison, 1983). Utilizing Roy's Adaptation Model, the constructs, concepts, and empirical referents under study are diagrammed in Rojas' application of Roy's Adaptation Model (Figure 3).

### Assumptions

The assumptions utilized from the Roy Adaptation Model (Andrews & Roy, 1986) for the present research were the following:

1. The person is a biopsychosocial being.
2. The person is in constant interaction with a changing environment.
3. To cope with a changing world, the person uses both innate and acquired mechanisms which are biologic, psychologic, and social in origin.
4. To respond positively to environmental changes, the person must adapt.
5. One mode of adaptation is a self-concept mode whose need is "psychic integrity".
6. Each person has a moral-ethical-spiritual self within which is included the person's own belief system and an evaluation of who one is as a person.
7. There is a dynamic objective for human existence with the ultimate goal of achieving dignity and integrity.

### Research Question

In the present study of Mexican-American women and their health, the following research question was generated:

What is the relationship between perceived health status, spiritual well-being, and selected health practices among Mexican-American women?

#### Definition of Terms

The following terms were defined for this research:

1. Health practices: activities which occur in adapting to stimuli; operationally defined as those health habits of smoking (cigarettes), drinking (alcohol), sleeping, and physical activity, as measured by the Wiley and Camacho (1980) Health Practices Index (HPI) Scale with scores of 2-5 points indicating "good" and 0-1 points indicating "poor" health practices. In addition, dietary health practices, defined as eating habits in the physiological adaptive mode, were measured by a 24-48 hour dietary recall of foods and drinks consumed.
2. Mexican-American: an individual of Spanish descent, whose origin is Mexico, living in the United States. A Mexican-American is referred to as Hispanic, Latina, and/or Chicana. For the purposes of this study, Mexican-Americans were women who had Spanish surnames and identified their birthplace as the United States or Mexico.
3. Perceived health status: individuals' perceptions of their overall state of physical health; operationally

defined as the total score ranging from 4-13 on the 4-item Self-Rated Health (SRH) Scale, a subindex of the self-report Multilevel Assessment Instrument (MAI) developed by Lawton et al. (1982).

4. Spiritual well-being: a perception of a positive relationship with God and a satisfaction with life-meaning and its purpose (Ellison, 1983); operationally defined as a score of 20-120 on the 20 items of the Spiritual Well-Being (SWB) Scale.

#### Limitations

The limitations of any study are defined as a listing of the factors which are recognized as diminishing the generalizability and/or conclusions of the study. The following limitations apply to the present study:

1. Mexican-American women represented only one segment of the total Hispanic population of women.
2. The women in this study were from different generations of residency, acculturation, and assimilation experiences in the U.S. which may have affected their responses.
3. The setting of this study was limited to one metropolitan area; therefore, findings are not generalizable to Mexican-American women living in areas other than a metropolis.



4. The sample of women was drawn from a community health setting; women from other health care settings were excluded from the sample.

#### Summary

Because little is known about the health practices of Hispanic women, this study was designed to describe the health practices of Mexican-American women and relationships to perceived health status and spiritual well-being. Roy's (1980) Adaptation Model was utilized as a conceptual framework. This framework served as a means from which to begin identifying concepts and stimuli which may confront the women sampled from this population.

## CHAPTER 2

### REVIEW OF LITERATURE

This descriptive study encompassed the constructs of perception, self-concept, and adaptation using Roy's adaptation model. The study was designed to specifically examine spiritual well-being and its relationship to perceived health status and selected health habits among Mexican-American women. The literature review was focused on the concepts of moral-ethical-spiritual self, or spiritual well-being, health practices, perceived health status, and ethnicity and culture as contextual stimuli.

#### Spiritual Well-Being

Nursing theorists defined the whole person as consisting of body, mind, and spirit (Carson, Winkelstein, Soeken, & Brunins, 1986). A holistic approach to patient care demands that practitioners address the physical, psychological, and spiritual components of the self (Fehring, Brennan, & Keller, 1987). This action implies an understanding of the human person as a unity where body, mind, spirit, and environment describe the interrelated manifestations of the person (Burkhardt, 1989). The need for attentiveness to the spiritual concerns of clients by

nurses and other health care professionals was recognized by many authors (Carson et al., 1986; Conrad, 1985; Ellis, 1980; Granstrom, 1985; Highfield & Cason, 1983; Hubert, 1963).

The concept encountered most frequently in the literature was "spirituality" and the usage of this concept fell into four main categories (Burkhardt, 1989). These were spirit/spirituality, spiritual dimension, spiritual well-being, and spiritual needs.

Spirit/spirituality was described as having many facets. These descriptions included a process and sacred journey; the essence of life principle of a person; the experience of the radical truth of things; a belief that relates a person to the world giving meaning to existence; any personal transcendence beyond the present context of reality; a personal quest to find meaning and purpose in life; and a relationship or sense of connection with Mystery, Higher Power, God, or Universe (Burkhardt, 1989).

The definition of the spiritual dimension of health was based on four parts. These four aspects included a unifying force within individuals integrating and transcending all other dimensions, meaning in life, a common bond between individuals including God, and individuals' perceptions and faith (Banks, 1980). Banks, a health educator, surveyed 56

health educators regarding the concept of the spiritual dimension of health, its underlying characteristics/ components and ramifications regarding its inclusion in professional preparation of health educators, and the role of spiritual dimension in the future (the next 25 years). The majority of the health educators believed there was a spiritual dimension of health and that this dimension should be included in the health educator preparation program.

Spiritual needs were also described. These needs represent the deepest requirement of the self and any lack of any factor necessary to be in a dynamic relationship with God (Burkhardt, 1989).

In their pioneering work, Moberg and Brusek (1978) suggested that spiritual well-being was best conceived as having two dimensions. A vertical dimension refers to one's sense of well-being in relationship to God. A horizontal dimension connotes one's perception of life's purpose and satisfaction apart from any specifically religious reference. Ellison (1983) further developed the concept of spiritual well-being and its measurement, the Spiritual Well-Being (SWB) Scale. Paloutzian and Ellison (1982) found that scores on the SWB correlated negatively with loneliness and correlated positively with purpose in life test scores.

That is, the higher the SWB score, the lower the loneliness scores and the higher the purpose in life test score.

Spiritual well-being and its association with psychological well-being was examined. Miller (1985) studied characteristics of loneliness and spiritual well-being in 64 chronically ill adults and 64 randomly selected healthy adults to determine if a relationship existed between the two variables as well as to determine if a significant difference in loneliness and spiritual well-being between the ill and health groups existed. Using the SWB, Miller found that the ill group had significantly higher ( $p = .01$ ) total spiritual well-being scores as well as religious well-being scores than did the healthy group. For these subjects, chronic illness appeared to be a factor in stimulating the person's valuing religion, having faith in God, and having a relationship with God. In addition, the data supported the predicted negative correlation between loneliness and spiritual well-being in both the chronically ill and healthy subjects. That is, the higher the spiritual well-being score, the lower the loneliness score.

Fehring, Brennan, and Keller (1987) conducted two separate correlation studies to investigate the relationship between spirituality and psychological mood states in response to life change among 170 college students.

Findings from both studies supported the premise that depression in response to life change is in some way mediated by the individual's sense of spiritual well-being. For the college students in this study, this mediation was reflected in a purpose and satisfaction in life (existential well-being) as measured by the SWB Scale. These results supported the existence of some relationship between stress responses and spiritual phenomena (Fehring et al., 1987).

Reed (1987) examined spirituality and well-being in terminally ill hospitalized adults. Two hypotheses were examined using three groups of 100 adults matched on age, gender, education, and religious background: (1) terminally ill hospitalized adults indicated a greater "spiritual perspective" than non-terminally ill hospitalized adults and healthy non-hospitalized adults and (2) "spiritual perspective" was positively related to well-being among terminally ill hospitalized adults. Spiritual perspectives were defined as "a way of defining one's conceptual boundaries such that concepts like prayer and a higher being are meaningful in the present life situation" (Reed, 1987, p. 336). Data supported both predicted hypotheses. The results provided support for viewing spirituality as a potentially significant variable in the dying process. Research on adults who, because of their health status, were

likely to have had an increased awareness of personal mortality also supported these findings. In addition, a notable level of spirituality was found among hemodialysis and burn patients.

O'Brien (1982) examined religious faith as associated with adjustment to end-stage renal failure and its treatment regimen of maintenance hemodialysis. Both quantitative and qualitative data were collected initially and after a 3-year interval in order to observe changes over time. The patient's perception of the import of religious faith was found to be positively related to interactional behavior, sick role behavior, and to be inversely associated with alienation. Content analysis of qualitative responses for the item of perceived import of religious faith revealed a pattern of increasingly more positive patient attitudes occurring over time. Those patients who reported the most positive attitudes toward the importance of religious faith for the acceptance of their illness also demonstrated the greatest degree of interactional behavior, the most positive assumption of appropriate sick role behavior as manifested by adherence to the therapeutic regimen, and the lowest degree of alienation. Thus, the variable of religion was found by both objective and subjective measures to be of notable influence for long-term adjustment to end-stage

renal failure and its treatment regimen of maintenance hemodialysis.

Adult burn patients frequently mentioned religious thoughts, ideas, and questions as they struggled to come to terms with their injuries (Sherrill & Larson, 1988). Furthermore, positive therapeutic effects of intercessory prayer were validated (Byrd, 1988). Over 10 months, 393 patients admitted to a coronary care unit (CCU) were randomized to an intercessory prayer (IP) group ( $n = 192$ ) or to a control group ( $n = 201$ ) while hospitalized. The first group received IP by participating Christians praying outside the hospital; the control group did not. The IP group had a significantly lower severity score based on the hospital course ( $p < .01$ ). Multivariate analysis separated the groups on the basis of the outcome variables ( $p < .001$ ). The control group required ventilatory assistance, antibiotics, and diuretics more frequently than the IP group (Byrd, 1988).

Larson et al. (1989) investigated the relationship between church attendance, religious importance, and health. Larson et al. found that white men ( $n = 407$ ) who reported high frequency of church attendance and high religious importance had significantly lower diastolic blood pressure than those who reported low frequency of church attendance,



low religious importance. This difference persisted after adjusting the analyses for age, socioeconomic status, smoking, and weight-height ratio.

Thus, spiritual well-being and its association with psychological and physical well-being was examined in healthy, chronically and terminally ill white adults. However, the relationship between spiritual well-being, perceived health status, and health habits had yet to be examined.

#### Health Practices

The terms "high level wellness," "health maintenance," and "health promotion" have come into popular use among health professionals (Moyer, 1982). In a survey of nurses, for example, 61% claimed health promotion and maintenance as one of their functions (Moses & Roth, 1979). Associated with this emphasis is the assumption that people's health habits affect or largely determine their health status (Moyer, 1982). So, most health care providers would concur with Haggerty's (cited in Moyer, 1982) statement that "one's life style including patterns of eating, exercise, drinking, coping with stress, and use of tobacco and drugs, together with environmental hazards, are the major known modifiable causes of illness" in the United States (p. 51). The importance of a person's habits is underscored by research that

demonstrated a positive correlation between health practices and health status (Belloc & Breslow, 1972) and mortality (Belloc, 1973).

Belloc and Breslow (1972) depicted health practices as "certain aspects of daily living that may be considered as personal habits related to health" (p. 409). Having examined the relationship between common health practices and physical health status in a probability-based sample of 6,928 white married adult residents of Alameda County, California, they found that regular meals, adequate sleep, near average weight, physical activity, and avoidance of smoking and excessive drinking were all positively related to health. This association was found to be independent of age, sex, and economic status.

In a 9-year longitudinal study, Wiley and Camacho (1980) discovered certain aspects of daily lifestyle were predictive of future health status among survivors. A subsample of 3,892 respondents to the 1965 Alameda County survey were reinterviewed in 1974. The 1974 health status scores were adjusted for age, sex, and 1965 health status. Nonwhites were excluded to control for confounding due to known correlations among race, health status, and lifestyle.

In this sample of white adults under the age of 70, cigarette smoking, alcohol consumption, physical exercise,

hours of sleep per night, and weight/height ratio were found by Wiley and Camacho (1980) to be significantly associated with overall health outcomes 9 years later, controlling for initial level of health. A revised index of health practices combining these five elements was associated with future health status within subgroups defined by socioeconomic level. Unlike Belloc and Breslow, Wiley and Camacho found that eating regular breakfasts had a weak association with good health among men, and the relationship was not significant in the female sample nor in the combined sample of males and females. Eating between meals showed no relationship with future health among men or women.

Reed (1983) conducted a similar study in a sample of 542 adults, of whom 461 were white and 81 were non-white. Physical health status was examined by a set of selected practices depicting personal lifestyles. Participation in up to three "good" health practices (sleep 8 hours, physical exercises often, never smoked cigarettes, eat breakfast almost every day, and not 10 pounds overweight) were correlated with the level of physical health status. Physical health status was categorized as (1) mobility limitation, (2) chronic conditions, (3) activity limitation, (4) symptoms, and (5) without complaints. Previous health practices were also positively associated with a measure of subsequent

health status. This relationship persisted when baseline health status was controlled. Thus, the findings of this study added to the growing evidence of the importance of lifestyle in determining health status.

Reed (1983) also reported that inherent to self-reporting of health status may be a bias. In addition to the problem of accurately recalling illness episodes, the extent of health problems reported might be a function of the respondents' perceptions of their health status. Reed concluded that persons who perceive themselves as generally healthy with favorable health practices might tend to overlook and not report certain health characteristics that might be reported by others. However, the literature provided additional insight regarding perceived health status.

#### Perceived Health Status

A variety of terms which shared the same fundamental meaning were encountered in the literature. These terms were "self-rated health status" (Lawton et al., 1982), "self-perceived health" (Geleyn, 1983), "perceived health" (Goldstein, Siegel, & Boyer, 1984), "self-perceived health status" (Cox, Spiro, & Sullivan, 1988), and "subjective health" (Levin & Markides, 1986). All of these terms were defined as the individuals' perceptions of their own health state, and they were used interchangeably in the literature.

Self-report indices of health status, or perceived health status, have been widely used in health surveys (Goldstein et al., 1984). For example, between 1958 and 1976, 38 studies utilized such indices empirically (Ware, Davis-Avery, & Donald, 1978). The correlation of self-reported health status with the objective assessment of health status has been substantiated (Cockerham, Sharp, & Wilcox, 1983; Ferraro, 1980).

Self-perceived health was an area of particular interest in the field of gerontology (Horgan, 1987). Early research on perceived health in old age was primarily designed to demonstrate that an older persons' estimates of their health could supplement, or replace, more objective, physical examinations of health made by physicians (Gelein, 1983). One of the first studies demonstrated that when a physician said a person's health was favorable, approximately 77% of the older people evaluated agreed. When a physician rated a person's health as unfavorable, about 61% of the individuals said the same (Suchman, Phillips, & Streib, 1958). Longitudinal data on perceived health status generally supported the findings of this research. Over a period of approximately 15 years, self- and physician-evaluations of health correlated consistently at about 65% agreement (Maddox, 1962).

A variety of other investigations demonstrated that physicians' and older people's assessments of health were congruent between 58% and 70% of the time, and, if there were discrepancies between physician and patient evaluations of health, they tended to involve older people assessing their health as more favorable than did physicians (Gelein, 1983). These findings supported the acceptance of perceived health status as a reliable, cost-effective means of gathering health information (LaRue et al., 1979).

Lawton, Moss, Fulcomer, and Kleban (1982) developed a Multilevel Assessment Instrument (MAI) to measure the well-being of the aged in a number of significant domains at the Philadelphia Geriatric Center. The physical health domain was composed of subindices measuring self-rated health, health behavior, and health conditions. The self-rated health subscale consisted of four items to measure perceived health status. The items were as follows: a rating of overall health as excellent, good, fair or poor; a comparison of present health compared to 3 years ago; an assessment of health impediments; and a comparison of personal health to others of same age. Self-rated health responses were found to be associated with mortality.

Data from the Manitoba Longitudinal Study on Aging (Mossey & Shapiro, 1982) revealed that when controlling for

objective health status, age, sex, life satisfaction, income, and residence, the risk of mortality was almost three times greater for those individuals who earlier reported their health status as "poor" compared to those who rated their health as "excellent." The risk associated with poor self-rated health was actually higher than that associated with poor prior objective health status, as assessed by physician versus self-reported conditions (Goldstein, Siegel, & Boyer, 1984). Kaplan and Camacho (1983) reported a twofold mortality risk over 9 years for "poor" compared to "excellent" self-rated health among the participants in the Alameda County Human Population Laboratory sample. Both of these studies showed that perceived health status was a predictor of mortality, independent of physical health status.

Cockerham et al. (1983) focused on the relationship between age and perceived health status when sampling 660 adults in Illinois. These authors investigated perceived health status across a spectrum of adult age groups by measuring respondents' answers to the question: "Compared to others your age, how would you rate your health?" (p. 351). Responses, varying from "much better" to "much worse," indicated that people began to define their health as "much better" than others of their age after they entered

the sixth decade of life. Persons aged 18 to 60 showed similar patterns in their self-assessment of health. Forty-two (42%) of those aged 61 to 70 rated themselves as "much better" in health than their peers. The proportion of people who believed their health was "much better" than others of their age was approximately two times greater for people 60 and over than those under 60 years old. In addition, blacks are more likely than non-blacks to express positive perceptions about their health when controlling for symptom levels. When number of symptoms was treated as a dependent variable, blacks reported a proportionally greater number of symptoms. Education and number of symptoms were likewise statistically significant. The more formal education a respondent had, the more likely health will be perceived positively. The number of symptoms significantly differentiated between respondents in that those with fewer symptoms tended to have the most positive perceptions of personal health. The number of symptoms was the strongest predictor of perceived health status followed by age, education, and race, respectively. The more educated elderly persons were most likely to perceive their own health in a significantly more positive fashion after controlling for symptom levels. Thus, these data indicated that among aged individuals, especially those with more years of schooling,



there was a tendency to adjust one's perspective about personal health.

Wolinsky, Coe, Miller, and Pendergast (1985) examined two related issues concerning the subjective well-being of elderly adults: change over time and correlates of that change. Data were obtained from a three-wave panel study of 401 elderly residents in St. Louis, Missouri. Findings indicated that (1) there was a change in subjective well-being over 4-5 months and over 12 months, (2) the 4-5 month and 12 month changes were similar, (3) the effect of subjective well-being over time indicated regression to the mean, and (4) only socioeconomic status was a significant predictor of change in subjective well-being.

More recently, Weitzel (1989) studied health status using Lawton's self-rated health scale and found that health status and self-efficacy were the most powerful predictors of health-promotive behaviors in a sample of 179 blue collar workers. The subjects were 70% males and 30% females ranging from 20-60 years of age with the modal group between 30 and 39 years of age. The majority (51%) were white; the remainder were Hispanic (27%), black (20%), and other (2%) ethnic groups. The largest proportion of participants reported their highest level of education was high school graduation (44%); 32% had some post high school preparation,

14% had some high school, and 10% had eighth grade or less formal education.

Thus, the literature reflected that perceived health status was a predictor of mortality and health promotive behaviors. According to the literature, perceived health status may be affected by age, level of education, and socioeconomic status.

#### Ethnicity and Culture

The term "ethnic," derived from the Greek word "ethnikos," means "people" or "nation." Members of some ethnic groups or their ancestors coming from the same country are often referred to as "nationalities." Mindel and Habenstein (1977) stated that "an ethnic group consists of those who share a unique social and cultural heritage that is passed on from generation to generation" (p. 4).

Factors commonly used to determine an individual's ethnic identity are origins, concept of sociocultural distinctiveness, subcultural social relations, territoriality, kinship, and symbolic identification (Abramson, cited in Wright & Leahey, 1987). Ethnicity distinguishes aggregates on the bases of common origins and shared behavioral symbols and standards (culture) (Wright & Leahey, 1987). As Parsons (cited in Wright & Leahey, 1987) stated, "a common culture represents the core of the concept of ethnicity" (p. 79).

In essence, the ethnic group is society's "culture-bearing unit" (Wright & Leahey, 1987).

As such, ethnicity colors the perceptions of life and death, wellness and illness, thus providing a framework for thoughts, feelings, and behaviors. Ethnicity is transmitted primarily through family emotional processes, reinforced by the community at large (Giordano, cited in Leahy & Wright, 1987). The family unit, nuclear and extended, provides a sense of community and history to its members. Furthermore, culture is "the learned ways of acting and thinking which are transmitted by group member to other group members and which provide for each individual ready-made and tested solutions for vital problems" (Walter, 1952, p. 17).

Culture includes such areas as "diet, language and communication processes, religion, art and history, family life processes, social groups' interactive patterns, value orientations, and healing beliefs and practices" (Orque, Block, & Monrroy, 1983, p. 8). Therefore, culture influences an individual's perceptions and behaviors.

Health practitioners in the United States, according to Wright and Leahey (1987), often erroneously assume that Caucasians constitute a single cultural group. Clinton's (1982) research revealed that ethnic identity determined through the fifth generation much of what Americans of

European descent believe and do about health. The research also indicated that Caucasian Americans are not homogeneous in their ethnic identity and patterns of health behavior.

The term, Hispanic, was a relatively new generic term derived by the Federal government to describe the a group of several heterogeneous ethnic groups and cultures. Hispanics may share many characteristics, values, traditions, and customs; yet, there are important differences among and within specific groups. These differences among Hispanics are influenced by educational level, socioeconomic level, immigration status (documented versus undocumented), length of time in the United States, degree of adoption to Anglo behavior, rural versus urban residence, and historical, economic and political experiences in the country of origin.

Mexican-Americans constitute one of the most heterogeneous of all ethnic groups. "Mexican-American culture or subculture, whatever its precise nature, composition, and structure . . . appears to be a product of multiple origins, as one would expect in light of its history" (Peñalosa, 1973, p. 96 ).

Peñalosa (1973) suggested that there are four chief sources of Mexican-American culture. First, there is the initially overriding but subsequently attenuated influence of the "traditional" Mexican culture, the way of life

brought from Mexico. Second, there is the initially weak but subsequently growing influence of the surrounding majority North American culture. Mexican-Americans are subject to approximately the same educational system and mass media communication as are others in the United States, and they participate to a varying extent in the economic, social, intellectual, and religious life of the broader society.

A third source of influence upon Mexican-American culture is class influence. The bulk of the Mexican-American population has been concentrated at the lower socioeconomic levels of the society; thus, some aspects of Mexican-American culture may have their source in behavior characteristics generally of lower-class people regardless of ethnic group. The fourth source of influence on Mexican-American culture results from the "minority" status of its bearers.

The term, minority, suggests that a group has less than its share of political, economic, and social power vis-a-vis the majority population; and, therefore, suffers from educational, social, occupational, and other economic disadvantages mediated through the processes of prejudice, discrimination and segregation.  
(Peñalosa, 1973, p. 97)

Thus, Peñalosa asserted that Mexican-American culture is a multidimensional phenomenon to be studied within these four dimensions as well as in terms of its historical, regional, and ecological variants.

### Summary

The concepts of spiritual well-being, health practices, and perceived health status were reviewed. The literature reflected a growing awareness of spirituality, low reporting on Hispanics and Mexican-Americans as a distinct ethnic group, and the need for a knowledge base regarding health variables of this culturally, ethnically, and linguistically distinct group, particularly in regards to health promotion in this population. The research question posed in this study was "What is the relationship between spiritual well-being, health practices, and perceived health status among Mexican-American women?"

## CHAPTER 3

### PROCEDURE FOR COLLECTION AND TREATMENT OF DATA

According to Wilson (1985), a factor-relating, or relation-searching, study is done to develop links among variables to describe the relationships that are found. This type of study occurs at a second level of inquiry after a phenomena has been explored, named, and described. This factor-relating study was designed to examine perception, self-concept, and adaptation among Mexican-American women. A survey research design was utilized to describe the variables of perceived health status and spiritual well-being and their relationship to the variable of selected health practices. Extraneous variables of ethnicity and gender were controlled by sample selection.

#### Setting

A community health clinic was utilized as the setting for data collection. The neighborhood clinic was located in the south side of a major city of a large southwestern state. This "barrio" clinic served as a comprehensive primary health care center for medically indigent and working class families. Services provided were pediatric,

adult internal medicine, obstetrical/gynecological, dental, and social work services. Families utilizing this not-for-profit center for health care were predominantly of Mexican heritage without any health insurance. Sliding scale fees were calculated by family size and income. Other methods of payment were Medicaid and Medicare. This center served 19 census tracts, and it served 12,000 individuals at 37,000 total visits in 1989. Most (70%) of the clients served in 1988 were women about 28 years old. The free-standing clinic was operated interdependently with its own Board of Directors. The clinic was partially funded by United Way.

#### Population and Sample

The population served by this community-based clinic was predominantly poor with a median annual income in the category of \$5,000-\$10,000. Many families (99%) living in area served by the center were Mexican-American. These family members have a variety of health care needs including well baby, well child, pregnancy, sickness, and chronic disease. The population from which the sample was drawn was comprised of Hispanic women who were clients of the clinic.

Criteria for participating in the study included women between the ages of 18-60 years, with a Spanish surname, and able to read English or Spanish. A systematic random sampling technique was used to obtain the sample of 100



subjects. A list of patients with clinic appointments was provided to the researcher, who eliminated men and women under 18 or over 60 years. A number, selected from a table of random numbers, was assigned to each patient. This process continued until the sample of 100 women was obtained.

#### Protection of Human Subjects

Agency approval was obtained (Appendix A). In addition, Texas Woman's University Human Subjects Review Committee approval was received to comply with requirements for extramural funding. Guidelines from both the agency and the Human Subjects Review Committee were followed to protect the rights of the subjects. After an invitation to participate, an oral explanation of the informed consent was offered to each woman. The informed consent form was read by each woman in her preferred language, either English or Spanish (Appendix B). Each woman was assured that her confidentiality would be maintained; no names would appear on the instruments, and no personal identification would be made in reporting the data. Each subject was assigned a number as she entered the study. The women were informed that their participation was voluntary and that they could choose not to participate and they could withdraw from the

study at any time without fear of reprisal from the clinic. An offer to answer all questions about the study was made.

### Instruments

All instruments were available in English or Spanish (Appendix C). Written permissions to use and reproduce the instruments were obtained from their authors (Appendix D). Demographic data were collected on the subject's age, birth place, marital status, religious background, frequency of church attendance, pregnancy status, last grade completed in school, family size, and family income.

#### Self-Rated Health Scale

The Self-Rated Health (SRH) Scale was used to measure perceived physical health status. This scale is a subindex of the Multilevel Assessment Instrument (MAI) developed by Lawton, Moss, Fulcomer, and Kleban (1982). This instrument was developed to measure the well-being of older adults ( $N = 590$ ) in the domains of physical health, activities of daily living, cognition, time use, and social interaction when all its subscales are utilized. Respondents rate the quality of their health, and total scores of the 4-item tool can vary from 4 to 13. Higher scores indicate better health perceptions.

The reliability of the Self-Rated Health Scale, subindex in the domain of physical health, as reported by Lawton et al. (1982), was  $\alpha = .76$  with its retest reliability at  $\alpha = .92$ . Although this scale was originally tested in a sample of older adults, Weitzel (1988) utilized this scale in a study of the health promotion model with 179 blue collar workers. The sample included 70% males and 30% females who ranged from 20 to 60 years of age ( $M = 46$  years). The majority (51%) of this sample were white; however, Hispanics represented 27% of the sample, while Blacks represented 20% and other ethnic groups represented 2%. Weitzel reported the reliability in this sample as  $\alpha = .72$ . The author found that in the blue-collar worker sample, the most powerful predictors of health-promoting behaviors were perceptions of health status and self-efficacy. The coefficient alpha was used in the present study to establish reliability for the sample of Mexican-American women.

Lawton et al. (1982) determined validity in a number of ways. First, the correlation between MAI score and the consensus summary domain ratings was  $\alpha = .67$ . Internal validity correlations between domain index items and domain summary rating yielded  $\alpha = .47$  for the Self-Rated Health Scale. The correlation between the MAI scale and the

independent blind domain ratings made by a clinical psychologist and a housing administrator were  $\alpha = .63$  and  $\alpha = .52$ , respectively.

### Spiritual Well-Being Scale

The Spiritual Well-Being (SWB) Scale was developed by Ellison and Paloutzian in 1982 (Ellison, 1983). This 20-item self-administered tool measures religious well-being and existential well-being. Subjects rate each item on a 6-point Likert-type scale from "strongly agree" to "strongly disagree." Some items have a value of 1 for strongly agree to 6 for strongly disagree, while other items have reversed point values. This instrument yields three scores: a total spiritual well-being (SWB) score (20-120), a summary score (10-60) for 10 religious well-being (RWB) items, and a summary score (10-60) for 10 existential well-being (EWB) items.

Alpha coefficients reflecting internal consistency were  $\alpha = .89$  for SWB,  $\alpha = .87$  for RWB, and  $\alpha = .78$  for EWB in a sample of 206 college students (Ellison, 1983). Test-retest reliability coefficients were  $\alpha = .93$ ,  $.96$ , and  $.86$ , respectively. The correlation between the RWB and EWB subscales was  $r = .32$  ( $p \leq .001$ ). The SWB scale appears to have sufficient validity for use as a quality of life indicator.

The Spiritual Well-Being scale correlated in predicted ways with several other scales (Ellison, 1983), which established criterion validity. People who scored high on SWB tended to be less lonely, more socially skilled, higher in self-esteem and more intrinsic in their religious commitment as exhibited on Peplau's (Peplau & Perlman, 1982) Intrinsic-Extrinsic Religious Orientation Scale. Correlations between SWB scores and the UCLA Loneliness Scale and the Abbreviated Loneliness Scale scores of Ellison's 206 subjects were  $r = -.37$  ( $p \leq .001$ ) and  $r = -.41$  ( $p \leq .001$ ), respectively. The SWB, RWB, and EWB all correlated positively with the Purpose in Life Test (Peplau & Perlman, 1982).

Miller (1985) utilized the SWB scale in a sample of 64 chronically ill and 64 healthy adults while investigating loneliness and spiritual well-being. The mean age of the ill group was 51 years, while the mean age of the healthy group was 40 years. Miller found significant differences in SWB ( $p \leq .01$ ) and RWB ( $p \leq .001$ ) scores between groups. The ill group had higher total SWB scores and RWB scores than the healthy group. Miller recommended further research on age and gender differences and spiritual well-being.

Fehring, Brennan, and Keller (1987) utilized the SWB scale in two separate correlational studies of college students to investigate the relationship between spirituality

and psychological mood states in response to life change. In the first study, the SWB scale, a spiritual-maturity scale, a life-change index, and the Beck Depression Inventory scale were administered to 92 female and 3 male freshman nursing students. Both SWB and EWB scores correlated negatively with depression ( $r = -.41$  and  $-.61$  [ $p \leq .001$ ], respectively). In the second study, the examination of SWB as a mediator in the depression response to life changes in 35 male and 40 female college students (ages 18-28 years) was extended. Findings from both studies supported the premise that depression in response to life change is in some way mediated by the individual's sense of SWB. Fehring et al. recommended further examination into the developmental process of SWB and its role in stress response.

Kirschling and Pittman (1987) utilized the SWB scale in their study of 51 women and 19 men family caregivers with a mean age of 62 years. For the 70 family caregivers, coefficients for the SWB, RWB, and EWB were  $\alpha = .94$ ,  $.94$ , and  $.84$ , respectively.

In an initial pilot study of 27 Mexican-American women completed by this investigator, the SWB scale yielded a reliability of  $\alpha = .89$ , with scores varying from 75 to 120 and a mean scale score of 105. The possible scores can vary

from 20 to 120 with the higher scores indicating higher spiritual well-being. No significant difference was found between scores of women who completed the English versus the Spanish questionnaire.

### Health Practices Index

The Health Practices Index (Belloc, 1972) was revised by Wiley and Camacho (1980) following a 9-year longitudinal study of 3,892 white adults under the age of 70. An index of five health practices was found to be significantly associated with overall health outcomes 9 years later, controlling for initial level of health. These variables were the habits of cigarette smoking, alcohol consumption, exercise (physical activity), hours of sleep per night, and weight in relation to height. This index of health practices which combines these five elements is associated with future health status within subgroups defined by socioeconomic level.

"Good" health practices, as defined by this index, are as follows: (1) alcohol consumption: 0-45 drinks of beer, wine, or liquor = 1 point; (2) activity level (exercise): range of 5-16 score = 1 point; (3) Quetelet Index (weight [pounds]/height [inches]<sup>2</sup>): score of 1 point if weight ranges from 9.99% underweight to 29.9% overweight; (4) sleep: 7-8 hours per night = 1 point;

(5) never smoked = 1 point. Thus, one point is assigned for each positive health practice, with a range of 0 to 5 summative score for this index. The higher the score, the more positive the health practices reported.

An open-ended question was added by this researcher to incorporate other health habits yet unknown to researchers but identifiable by respondents as health practices which maintain and promote their health. This question provided the respondents an opportunity to report culturally and ethnically relevant health practices/habits. This item was not included in the scoring of the health practice index as it is purely descriptive. A qualitative analysis was conducted on these data.

In addition, a dietary recall of all foods and drinks consumed in the last 24-48 hours and amounts of each were collected. The subject was asked to write down foods and drinks eaten at breakfast, lunch, dinner, and snacks for "yesterday" and "today." This method of nutritional assessment of dietary practices was adapted from the currently used WIC (women, infants, and children) application for nutritional supplements (Texas Department of Health, 1989). It is both in English and Spanish. This item also was excluded from the Health Practices Index Score. A nutritional analysis including caloric count, carbohydrates, protein, and fat (saturated and unsaturated) was conducted.



### Data Collection

After receiving agency approval to conduct the study, Mexican-American women with Spanish surnames were randomly selected. After verbal review of the purposes of the study and voluntary participation, the subjects were asked to read and sign a consent form in the language of their choice (English or Spanish) before completing the questionnaire. Participants' names were listed in a separate folder kept by the researcher to prevent duplication of subjects.

After consent forms were reviewed, subjects were asked to choose between the English and Spanish language questionnaires. Upon completion of the questionnaires, which took about 15 to 20 minutes, subjects were asked to return them to the researcher. Subjects chose, depending on the patient care flow at the clinic that day, to complete the questionnaires while waiting to be called or after they had been seen for their personal or family health care appointment. Data collection occurred during the summer of 1990.

### Pilot Study

A convenience sample of 27 Mexican-American women completed the Spiritual Well-Being Scale when offered voluntary participation while waiting to be seen at a city public community health clinic run by a religious order. The clinic offered general medical, pediatric, and

obstetrical services to uninsured working class families and was located in a downtown area of a major Southwestern state. The mean age of the 27 women was 30.5 years. No significant differences were found in scores between those 17 subjects who completed the English tool versus those 10 subjects who completed the Spanish instrument. The reliability of the SWB scale for the pilot study was  $\alpha = .89$ .

A second pilot study was completed to test the methodology in the setting selected for the present study. A self-administered questionnaire had been developed by the investigator for the purposes of this study. The questionnaire was a combination of three instruments plus demographics and a dietary recall. The three instruments were the Self-Rated Health (SRH) Scale, the Health Practices Index (HPI), and the Spiritual Well-Being (SWB) Scale. The questionnaire was prepared in both English and Spanish languages. The HPI was translated to Spanish for a 1974 survey (Camacho, personal communication, September 8, 1989). The SWB was translated by the researcher and pilot tested with a convenience sample of 27 Mexican-American women, some of whom utilized a public community health clinic in a large southwestern city.

After receiving Human Subjects Review Board approval from Texas Woman's University and the community health

agency where the project was to be conducted, a randomly selected sample of Mexican-American adults women between the ages of 18-60 years was obtained. The afternoon prior to data collection, the researcher obtained an appointment roster with patients' names from the agency administrator. Adult men were automatically excluded. Those Spanish surnames who met initial sample criteria were assigned numbers starting with 1 until all names were assigned a number. Using a table of random numbers, a list of numbers with corresponding names was generated. The following morning, the researcher went to the agency site and invited those whose names had been randomly selected to participate in the study. This invitation was made after potential subjects signed in at the appointment desk in the reception area. In the case where the name corresponded to a child, the mother of the child was invited to participate.

After the woman was verbally invited to participate, she was asked to read the consent form in English or in Spanish, and an opportunity for questions and clarification was offered. The patient was then asked to choose between an English or Spanish questionnaire. After this point, the subject was handed the questionnaire to complete on her own and return after completion. The researcher remained at hand to answer any questions. After the questionnaire was

completed, usually in 20 minutes, the subject returned the questionnaire, and the investigator reviewed it for completeness. If items were found to be unanswered, then the subject was asked to answer them. In one case, a subject indicated more than one response when only one response was requested on the Self-Rated Health Scale. Clarification was provided and the subject was asked to choose one. Specific written instructions were added in the final questionnaire.

In summary, a pilot sample of 14 Mexican-American women between the ages of 21 to 57 years completed the self-administered questionnaire in the clinic waiting area during one day of clinic operation. Loss of subjects was due to "no shows" or not meeting all the sample criteria. The methodology employed proved appropriate for data collection and was used for the remaining 86 subjects. Statistical analysis for the SRH and SWB instruments indicated sufficient reliability ( $\alpha = .65$ ,  $\alpha = .50$ , respectively) to be retained without major revisions in items or scoring for use in collecting data on 86 additional women for a total sample of 100 women. The 5-item HPI scale scoring was retained although reliability was low ( $\alpha = .04$ ) with the revised 6-item physical activity subscale whose reliability was sufficient ( $\alpha = .65$ ). A "dance" item was substituted for a "fishing" item, for gender and cultural relevancy.

### Treatment of Data

Data analysis was conducted using a variety of descriptive statistics. Nominal level data were obtained to describe the sample, while interval level data were obtained to answer the research question. Frequency and percentage distributions and measures of central tendency and variability were calculated for the variables of age and scores of the three instruments measuring the independent variables perceived health status (SRH Scale) and spiritual well-being (SWB Scale) and the dependent variable health practices (HPI Scale). Multiple regression and correlation analysis were used to describe the relationship between the Self-Rated Health Scale score, existential and religious well-being score, and health practices. Alpha reliability coefficients were calculated for each scale and subscales.

## CHAPTER 4

### ANALYSIS OF DATA

A population of Latina women who utilized a community health clinic for health care was surveyed. The Latinas, aged 18-60 years, lived in a major city of a large southwestern state in the United States. The findings from a voluntary, self-administered questionnaire were delineated. Correlations and multiple regression analysis are reported.

#### Description of the Sample

Demographic data were collected from a sample of 100 Spanish-surnamed Latinas (Table 1). The majority (79%) of the women were 18 to 39 years old, with a mean age of 32 years, 5 months (SD = 10 years). Most (55%) women were married.

A total of 96 women (96%) reported annual family incomes; 4 (4%) women did not respond to the question (Table 1). The incomes varied from <\$5,000 annually to \$25,000 annually. The majority (54%) reported incomes from <\$5,000 to \$10,000; the mean annual income was \$9,281. Almost half (47%) of the women reported 4-5 members living in their household, with a mean of 4 members living in their household.

Table 1

Frequencies and Percentages of Age, Martial Status,  
Pregnancy Status, Income, Size of Household, and  
Years of School as Reported by 100 Latina Women

	<u>n</u>	<u>%</u>
<u>Age (Years)</u>		
18-28	40	40
29-39	39	39
40-50	15	15
51-60	6	6
Total	<u>100</u>	<u>100</u>
<u>Marital Status</u>		
Married	55	55
Divorced/Separated/Widowed	29	29
Single, Never Married	16	16
Total	<u>100</u>	<u>100</u>
<u>Pregnancy Status</u>		
Pregnant	15	15
Not Pregnant	79	79
Unsure	6	6
Total	<u>100</u>	<u>100</u>
<u>Income (Annual)</u>		
<\$5,000	22	22
\$ 5,000-\$10,000	32	32
\$10,001-\$15,000	25	25
\$15,001-\$25,000	17	17
No Response	4	4
Total	<u>100</u>	<u>100</u>
<u>Size of Household</u>		
1-3 Members	36	36
4-5 Members	47	47
6-10 Members	17	17
Total	<u>100</u>	<u>100</u>
<u>Years of School</u>		
1-9	38	38
10-12	43	43
13-16	18	18
No Response	1	1
Total	<u>100</u>	<u>100</u>

Completed years of school spanned from 1 year to 16 years, although the mean was 10 years ( $SD = 3$ ). The largest group of women (43%) reported 10-12 years of education, equivalent to a senior high school education (Table 1). One (1%) respondent did not report her years of school.

The majority (72%) of the women reported Catholicism as their religion (Table 2). The largest frequency of church attendance reported was at least weekly (44%). Two (2%) women did not respond to the question of frequency of church attendance.

The Spanish-surnamed women were asked to choose a self-administered questionnaire in the English or Spanish language. The English form was chosen by 61% of the women, while 39% chose the Spanish form (Table 2). The majority (62%) of the women indicated that the United States was their birthplace. Two (2%) women reported their birthplaces as Honduras and El Salvador, respectively. Of the 62 women who reported the United States as their birthplace, 53 chose the English form of the questionnaire and 8 chose the Spanish form. Of the 36 women who reported Mexico as their birthplace, 29 chose the Spanish form and 8 chose the English form. Both Central American women chose the Spanish form of the questionnaire.



Table 2

Frequencies and Percentages of Religion, Frequency of Church Attendance, Birthplace, and Language Preference as Reported by 100 Latina Women

	<u>n</u>	<u>%</u>
<u>Religion</u>		
Catholic	72	72
Protestant	22	22
Other	3	3
None	3	3
Total	<u>100</u>	<u>100</u>
<u>Frequency of Church Attendance</u>		
More than Once a Week	17	17
Once a Week	27	27
Once or Twice a Month	16	16
Monthly	7	7
Once or Twice a Year	20	20
Almost Never/Never	11	11
No Response	2	2
Total	<u>100</u>	<u>100</u>
<u>Language Preference</u>		
English	61	61
Spanish	39	39
Total	<u>100</u>	<u>100</u>
<u>Birthplace</u>		
United States	62	62
Mexico	36	36
Central America	2	2
Total	<u>100</u>	<u>100</u>

### Findings

One research question was posed for this study: What is the relationship between perceived health status, spiritual well-being, and selected health practices of Mexican-American women? To obtain the data to answer this question, a self-administered questionnaire composed of three instruments was used. These instruments included the Self-Rated Health (SRH) Scale (Lawton, Moss, Fulcomer, & Kleban, 1982; Lawton, 1984), the revised Health Practices Index (HPI) (Wiley & Camacho, 1980) with the investigator-revised physical activity subscale, and the Spiritual Well-Being (SWB) Scale with its two subscales--existential well-being (EWB) and religious well-being (RWB) (Ellison & Paloutzian, 1983). The variation of scale scores, sample means, and standard deviations were computed (Table 3).

A 24-48 hour dietary recall was utilized to describe nutritional habits of the women. In addition, a qualitative question was added to the questionnaire to solicit information regarding additional health practices which were not included in those selected (eating, drinking, smoking, sleeping, exercising). The findings of each instrument are described. The alpha coefficients of the instruments used in this study are presented (Table 4).

Table 3

Variations of Scale Scores, Sample Means, and Standard Deviations of Scores on Self-Rated Health (SRH) Scale, Health Practice Index (HPI) Scale, and Spiritual Well-Being (SWB) Scale and Subscales for a Sample of 100 Latina Women

Scale	Variation of Scale Scores	<u>M</u>	<u>SD</u>
SRH Scale	4- 13	9.23	2.01
HPI Summated	0- 5	3.34	1.15
Physical Activity Subscale	0- 23	8.12	10.05
SWB Scale	20-120	91.00	13.83
EWB Subscale	10- 60	46.00	7.35
RWB Subscale	10- 60	45.00	7.58

Table 4

Reliability Coefficients of the Self-Rated Health (SRH) Scale, Health Practices Index (HPI) Scale, and Spiritual Well-Being (SWB) Scale and Subscales Used with a Sample of 100 Latina Women

Scale	Number of Items	<u>n</u>	<u>α</u>
SRH Scale	4	100	0.99
HPI Scale	5	88	0.23
Physical Activity Subscale	6	100	0.46
SWB Scale	20	100	0.83
RWB Subscale	10	100	0.68
EWB Subscale	10	100	0.72

### Self-Rated Health Scale

The Self-Rated Health (SRH) Scale measuring perceived health status consisted of 4 items. The scale scores varied from 4 to 13; that is, the higher the score, the higher the perceived health status. The sample mean score for this group of 100 Latina women was 9.23. That is, in general the women rated their overall health as "good." They perceived their health "about the same" as it was 3 years ago, they believed that their health problems stood in their way "a little" or "not at all," and they perceived their health to be about the "same" as others their age.

### Health Practices Index Scale

The revised Health Practices Index (HPI) Scale included the following 5 items: (1) amount of sleep (hours), (2) alcohol (beer + wine + liquor) consumption score (frequency X amount), (3) physical activity, (4) smoking status (present, past, never), (5) Quetelet Index ( $\text{weight}/(\text{height})^2$ ). One item related to smoking inhalation was dropped because it did not contribute to the HPI summated score. The revised HPI Scale yielded a summated score of 0-5 points.

A score of 0-1 indicated "poor" health habits, and a score of 2-5 indicated "good" health habits (Belloc, 1973). Points were awarded for sleeping 7-8 hours, drinking less

than 45 drinks/month, not ever smoking, scoring 7 or greater in physical activity subscale, and having a ratio of weight not less than 10% under or more than 30% over for height. The sampled women scored 3.34 points as an average, which indicated "good" health habits.

The items, variation of sample scores, sample size, and points awarded were calculated (Table 5). The revised physical activity subscale had 6 items: long walks, dancing (substituted for fishing), gardening, exercising, swimming, and active sports. Long walks were taken on an average of "once a month" frequency by most of the women ( $\underline{n} = 65$ ). Dancing ( $\underline{n} = 49$ ), gardening ( $\underline{n} = 47$ ), and exercise ( $\underline{n} = 42$ ) were also reported. Swimming ( $\underline{n} = 28$ ) and active sports ( $\underline{n} = 24$ ) were least popular. All activities were reported at an average of "once a month" frequency. An additional item was added to solicit qualitative data on "active things people do in their free time. Something else? Describe." These responses included the following: taking the family out to have a good day, sewing, crocheting/embroidering, lifting weights, reading and studying, child care, bicycling, volunteer work, housework, and running 2 miles daily.

Table 5

Revised Health Practices Index (HPI) Items, Category,  
and Available Points by a Sample of 100 Latina Women

Item	Category	<u>n</u>	%	Available Points
Sleeping:	3-6 hours	21	21	0
	7-8 hours	58	58	1
	9-10 hours	21	21	0
Alcohol Consumption (Frequency and Amount):				
Abstainers	0 drinks	63	63	1
Drinkers	1-25 drinks/mo.	37	37	1
	>45 drinks/mo.	0	0	0
Smoking (Cigarettes) Per Day:				
Non-Smokers	0 cigarettes/day	67	67	1
Present/Past	5-20 cigarettes/day	33	33	0
Quetelet Index:				
Ideal Body Weight		57	57	1
Underweight	(10% <IBW)	1	1	0
Overweight	(30% >IBW)	37	37	0
Physical Activity:	0-23			100
Summated Score:	0-1 = "poor" health habits			
	2-5 = "good" health habits			

### Nutritional Habits

A 24-48 hour dietary recall was collected from 100 women to measure nutritional status. Each dietary recall was combined with age, height, weight, and pregnancy status for a nutritional analysis. The nutritional analysis included ideal body weight (IBW), Harris-Benedict "basal energy expenditure" formula (BEE), estimated caloric needs (BEE X activity factor = 1.25 for an ambulatory person), estimated protein, fat and carbohydrate (CHO) needs. In addition, an estimated polyunsaturated fatty acids (PUFA) - saturated (SAT) fats ratio was calculated. A 2:1 ratio is recommended of polyunsaturated fatty acids to saturated fats (DHHS, NIH, 1987).

The heights of this sample ( $N = 93$ ) varied from 4 feet 7 inches to 5 feet 7 inches, with an average height of 5 feet 2 inches. The sample's weight varied from 98 to 300 pounds, with an average weight of 154 pounds. The average age of the women was 32 years, 5 months.

Pregnant women. Of the 100 Latina women, 15 were pregnant. For the pregnant women, kcal needs were based on 40 cal/kg pregnant weight, protein needs were based on 1.3 gm/kg pregnant weight (Mayo Clinic, 1988). Fourteen (94%) of the 15 women did not meet their caloric needs. The average number of calories recommended for these pregnant

women was 2,559 kcal. The approximate number of calories consumed, on the average, was 1,244, which only met about half (49%) of their caloric needs for pregnancy.

Approximately 13% of the calories were consumed as protein, while the recommended number was 20% of calories. Only 3 (20%) of the 15 pregnant women consumed the recommended amount of protein. Approximately 54% of the calories consumed were in the form of carbohydrates and met the recommended daily allowance (50%-55%). About 31% of the calories consumed were in the form of fat; the recommended daily allowance is 25%-30%. All of the 15 women consumed high saturated fats at a ratio of minimum 1:1, maximum 1:7, average PUFA-SAT 1:4. The recommended ratio of PUFA-SAT is 2 (unsaturated):1 (saturated) (DHHS, NIH, 1987).

Non-pregnant women. For the remaining 85 Latina women who were not pregnant, IBW was calculated: 100 pounds for the first 60 inches and 5 pounds for every additional inch. If height was not recorded, based estimated kcal needs were based on 35 kcal/kg. If weight was not recorded, estimated kcal needs were based on 35 kcal/kg IBW. Estimated protein needs = .8-1 gm protein/kg body weight; estimated CHO needs = 50% of estimated caloric needs; and estimated fat needs = 25%-30% of estimated caloric needs. Estimated PUFA-SAT was 20% of caloric needs (unsaturated fats)/10% of caloric needs



(saturated fat) = 2:1 recommended ratio. Protein = 4 calories per gram, CHO = 4 calories per gram, fat = 9 calories per gram. The following formula for obese (25% above IBW) was used:

$$[\text{ABW (actual body weight)} - \text{IBW} \times .25] + \text{IBW}.$$

where,

0.25 = 25% of body fat is metabolically active.

All formulas were recommended by The American Dietetic Association ([ADA], 1988).

Twenty-nine (34%) of the 85 Latina women were obese (25% above IBW). The women's ages varied between 22 and 60 years old. Of the 29 obese women, 6 (21%) were 22-33 years old, 11 (38%) were 31-40 years old, 7 (24%) were 41-50 years old, the remaining 5 (17%) were 51-60 years old. Thus, about one third of the non-pregnant women were obese and, of these, more than half were under 40 years old. The average recommended daily caloric allowance for the 85 non-pregnant women was 1,655 kcal; 80% consumed less while 20% exceeded that amount. The average number of calories consumed was 1,235. The average recommended protein allowance = 46 grams representing 20% of caloric intake; 15% of caloric intake was protein. About 54% of the calories were consumed as carbohydrates as the recommended daily allowance (50-55%) of total calories. The recommended daily allowance of fat is

25%-30% and the group met 30% of their calories as fat. However, of the fat consumed, the saturated fat exceeded the unsaturated fat. The recommended ratio is 2 (unsaturated):1 (saturated) fat. This ratio varied from 1:1 to 1:15!

Summary. The dietary recalls showed that these Mexican-American and Central American women consumed less than the recommended daily caloric and protein requirements. The carbohydrate and fat requirements were met. The nutritional analysis also indicated the carbohydrate sources to be moderately low in fiber (ADA, 1988). The best fiber sources recorded were pinto beans and apples.

#### Qualitative Data

A qualitative response was added by the investigator to solicit perceptions of activities which promote and maintain health via a statement, "Describe what other things you do to keep or have better health." The responses of the 100 Latina women were as follows: balanced nutrition (13%), exercise (9%), child-rearing activities (6%), walking (5%), housework activities (4%), spiritual activities (4%), recreational activities (4%), sleeping well (3%), avoiding junk, fatty, or sugar foods (3%), taking vitamins (3%), and "hot/cold balance" (2%).

### Spiritual Well-Being Scale

The Spiritual Well-Being (SWB) Scale measuring spiritual well-being consisted of 20 items scored on a Likert-type scale with responses varying from strongly agree (1) to strongly disagree (6). Ten items (even-numbered) measured existential well-being (EWB) and 10 items (odd-numbered) measured religious well-being (RWB) for a summated score of SWB. The higher the score, the higher the spiritual well-being which varied from 20 to 120 points. The women, on an average, scored 91 on this scale.

### Interrelationship of Findings

Correlational associations were established to answer the research question of this study: What is the relationship between perceived health status, spiritual well-being, and selected health practices of Mexican-American women? These correlational associations are presented in Table 6.

### Perceived Health Status

Perceived health status as measured by the SRH Scale was negatively correlated ( $r = -0.334$ ,  $p = .001$ ,  $N = 92$ ) to weight. As SRH score increased, weight decreased. Furthermore, as SRH score increased, so did physical activity ( $r = 0.32$ ,  $p = .001$ ) and Quetelet Index (wt/ht ratio) decreased ( $r = -0.323$ ,  $p = .002$ ).

Table 6

Correlations among Variables of Perceived Health Status (SRH), Spiritual Well-Being (SWB) and Selected Health Practices (HPI) among a Sample of 100 Latina Women

Variable	Weight	Physical Activity	Quetelet Index (wt/ht ratio)
SRH Score	-0.334**	+0.334**	-0.323*
SWB Score	-0.031	+0.129	-0.055

\* $p \leq .01$

\*\* $p \leq .001$

When a multiple regression and correlation analysis was applied to the variables of church attendance, spiritual well-being score, and perceived health status score, a linear relationship was found. Perceived health status, church attendance, and total spiritual well-being were closely related. Frequency of church attendance and spiritual well-being scores (independent variables) predicted perceived health status scores (dependent variable).

#### Other Findings

Several demographic variables were found to be correlated with drinking and smoking practices. Income was positively correlated ( $r = +0.254$ ,  $p = .01$ ) with wine intake. Wine intake was positively correlated to years in the United States ( $r = +0.478$ ,  $p = .006$ ,  $n = 32$ ). Alcohol

(wine+beer+liquor) intake (frequency X amount) was positively correlated with years in the United States ( $r = +0.322$ ,  $p = .07$ ). The variable, age arrived in the United States, was extrapolated from the reported age, birthplace, and years lives in the United States. As the ages of the women when they arrived in the United States increased, the liquor intake decreased ( $r = -0.324$ ,  $p = .069$ ). Furthermore, when examining whether the women who drank or abstained from alcohol by birthplace, an interesting difference was found.

Of the 100 Latina women, most (63%) did not drink alcohol. However, 29 (78%) of the 37 women who did drink were born in the United States and only 8 (22%) were born in Mexico (foreign-born). Of the 63 women who reported abstaining, 33 (52%) were born in the United States and 30 (48%) were foreign-born. There was a significant difference ( $X^2 = 7.088$ ,  $df = 2$ ,  $p = .05$ ) between the drinkers and non-drinkers according to birthplace.

Furthermore, when examining drinkers and non-drinkers by language chosen for the questionnaire, a highly significant ( $p = .001$ ) difference was found. Of the 100 women, 62 did not drink alcohol while 37 did. Of the 37 women who drank, 31 (84%) chose the English questionnaire,

while 6 (16%) chose the Spanish one ( $X^2 = 13.294$ ,  $df = 1$ ,  $p = .001$ ).

Those women who drank were also much more likely to smoke cigarettes than non-drinkers ( $X^2 = 8.946$ ,  $df = 1$ ,  $p = .003$ ). Thus, birthplace and English language variables were significantly related to both alcohol consumption and smoking habits among the 100 Latina women sampled.

#### Summary

Three instruments, the Self-Rated Health (SRH) Scale, the revised Health Practices Index (HPI) Scale, and the Spiritual Well-Being (SWB) Scale, were used in this study. These instruments yielded the following scale reliabilities: 0.99, 0.23, and 0.83, respectively.

A description of a sample of Spanish surnamed women aged 18-60 years old was reported. Perceived health status, spritiual well-being, and selected health practices among Mexican-American women were analyzed.

Correlations were found between the following variables: self-rated health score with weight and Quetelet Index (ht/wt ratio) (-), self-rated health score with physical activity (+). Thus, perceived health status as measured by self-rated health scores was correlated with weight and physical activity. This was a positive

association in this sample, since one-third (34%) of the women were obese as measured by their dietary recalls.

A 24-48 hour dietary recall was utilized to describe nutritional habits. The majority (94%) of the 15 pregnant women did not meet their caloric needs; they met merely half (49%) of their caloric needs. Only 3 (20%) of the 15 pregnant women met their protein needs, 12 (80%) did not. Of the 85 non-pregnant women, 80% consumed less than the daily caloric allowance, 20% exceeded that amount. The average number of calories consumed was approximately 1,235 kcal. About 15% of the calories were consumed as protein (20% recommended). The fat and carbohydrate sources of calories met daily recommendations. However, of the fat consumed, the saturated fat exceeded the unsaturated fat at about a 2:1 ratio.

Spiritual well-being scores and frequency of church attendance predicted perceived health status. A linear relationship was found between the scores and church attendance.

Additional findings revealed a significant difference between the women who were born in the United States and those who were foreign-born as well as in those who preferred the English language to the Spanish language. The women who were born in the United States were more likely to

drink alcohol ( $p = .01$ ) than those foreign-born. Those women born in Mexico and Central America and those who chose the Spanish questionnaire were more likely to abstain from alcohol and cigarettes. As the age of immigration to the United States increased, so did abstinence from alcohol and smoking.

Furthermore, a highly significant difference was found in the drinking habits of those who chose the English questionnaire from those who chose the Spanish one ( $p = .001$ ). Those women who drank alcohol were also more likely to smoke cigarettes ( $p = .01$ ).

Thus, women who were foreign born and who preferred the Spanish language were significantly more likely to abstain from drinking alcohol and smoking cigarettes than those who were born in the United States and those who preferred the English language. In addition, birthplace seemed to also affect drinking habits of the pregnant women. Of the 15 pregnant women, none were present or past smokers. Thirteen of those 15 pregnant women were non-drinkers. However, of the two who reported drinking alcohol, both were born in the United States and chose the English language questionnaire. Therefore, it seems that the pregnant women born in the United States with English language preferences also reported drinking alcohol more often than their non-drinking foreign-born counterparts.



## CHAPTER 5

### SUMMARY OF THE STUDY

This study was a descriptive analysis of health practices in a Mexican-American community and an examination of relationships between health practices, perceived health status, and spiritual well-being using a systems model. Roy's (1980) Adaptation Model, a systems model, was utilized as the conceptual framework for this study. Roy's holistic approach to humanity lent itself to the examination of mind (perceptions), body (health practices), and spirit (spiritual well-being) interactions. The constructs of perception, self-concept, and adaptation were applied to Roy's Adaptation Model. Consequently, the research question which arose was as follows: What was the relationship between perceived health status, spiritual well-being, and selected health practices among Mexican-American women?

#### Summary

A survey research design was utilized to study women living in a major city of a large southwestern state with a high population of Mexican-Americans. A randomly selected sample of 100 Spanish-surnamed women aged 18-60 years with medical and dental appointments in a community health

setting was used. A voluntary, self-administered questionnaire composed of three instruments, available in either English or Spanish, was developed for gathering data on perceived health status, spiritual well-being, and health habits. These health habits included eating, sleeping, drinking (alcohol), smoking (cigarettes), and exercising (physical activity).

The survey of the sample's eating habits indicated inadequate caloric and protein intake, adequate carbohydrate intake, and high saturated fat intake. The majority of women abstained from drinking alcohol and smoking cigarettes; however, women born in the United States were more likely to drink and smoke than foreign-born women. This significant difference in drinking and smoking habits was further highlighted by language. Those who chose the English language questionnaire were much more likely to drink and smoke than those who chose the Spanish one. Exercising habits were infrequent with the most common physical activity reported as "taking long walks." Frequency of church attendance and spiritual well-being predicted perceived health status. Perceived health status was correlated with decreased weight and height/weight ratio and with an increase in physical activity.

### Discussion of Findings

In general, this sample of Mexican-American women was Catholic, married, of childbearing age, with a household of 4-5 members, and living in poverty (~\$9,281 annual income). The poverty line in 1987 was \$9,056 for a family of three. Hispanics are twice as likely as the general population to be poor (U.S. Department of Commerce [USDC], 1989). The findings from this study validated the national data. The median annual family income of Mexican-Americans in 1987 was \$19,970 (USDC, 1989). These subjects' median annual family income was certainly below the national median by about \$10,000.

### Perceived Health Status

The Self-Rated Health (SRH) Scale was used to measure perceived health status. Lawton, Moss, Fulcomer, and Kleban (1982) reported a reliability of  $\alpha = 0.76$  ( $N = 590$ ) and Weitzel (1989) reported  $\alpha = 0.72$  ( $N = 179$ ). Thus, the reliability of  $\alpha = 0.99$  ( $N = 100$ ) found in this study exceeded previously reported alpha coefficients. In addition, the instrument was translated into Spanish which established for the first time its reliability for use with a Mexican-American population who may be English or Spanish speaking.

Overall, in this study, the women's perceptions of their health was positive ("fair" to "good"). The women may have associated weight with health as demonstrated by the correlation that as weight increased, perceived health status decreased. Interestingly, as the women's perceptions of health increased, so did their physical activity increase. Thus, the women may have associated health with physical activity as demonstrated by their responses to the physical activity subscale and the question, "What do you do to maintain your health or be healthier?" So, personal perceptions of health were related to the individual's level of physical activity.

#### Selected Health Practices

The Health Practices Index (HPI) Scale was used in this study to measure selected health practices. No reliability was reported by the scale's originator, Belloc (1972) or Wiley and Camacho (1980) who revised the index. The low reliability of this index ( $\alpha = 0.23$ ), found in this study, indicated that its use in this population was limited. However, the revised physical activity subscale with the item "dance" activity, which was culturally based, should be retained. The item "swim" activity should be dropped if used in a low-income urban population of Mexican-Americans. Access to swimming pools and lessons may be limited by

income and neighborhood conditions. The reliability of the physical activity subscale ( $\alpha = 0.46$ ) indicated its usefulness to measure physical activity. Bicycling and running items may be added and tested.

More importantly, it was found that the women in this study who were foreign born abstained from alcohol and smoking as compared to their United States born counterparts. Of the 15 pregnant women in this study, none smoked. However, 2 reported alcohol consumption; both were born in the United States. In addition, assimilation to the mainstream values of the United States as measured by use of the English language also seemed to be a factor in smoking and drinking. Those who chose the Spanish language questionnaire reflected the practices of foreign-born women; they also abstained from alcohol. Those who chose the English questionnaire were more likely to drink alcohol, including two pregnant women. Those women who drank were more likely to smoke cigarettes. Furthermore, years living in the United States was correlated with drinking alcohol, especially beer and wine (correlated with higher income), and with smoking cigarettes. That is, the longer the women lived in the United States and assimilated to the mainstream societal values of the United States, especially to the English language, they were more likely to drink alcohol and

smoke. Thus, in this sample, assimilation was bad for their health. These findings validated those reported by Scribner and Dwyer (1989) and Siantz (1990). Scribner and Dwyer found that women born in Mexico had healthier babies than United States born Latina women in California. This is paradoxical because foreign born women were less likely to receive prenatal care, were participating in the labor force, and were often living with the stress of criminalization due to undocumented employment status. Despite benefits of United States citizenship, the United States born Latinas were more likely to have low birthweight babies than their foreign-born counterparts. Additionally, when examining national Hispanic Health and Nutrition Examination Survey (HHANES) data, Siantz found that women born in Mexico were more likely to breast feed than their United States born counterparts. United States born women were less likely to breastfeed their babies.

### Nutritional Habits

Only half of the nutritional needs of the pregnant women in this study were met during a time when calories and protein are vital to fetal growth and development. In addition, most (80%) of the non-pregnant women ( $n = 85$ ) did not meet their recommended daily allowance of calories and protein. Most (79%) women were of childbearing age, between

18-39 years old. The women's carbohydrate needs were met but their diets were low in fiber. The dietary recalls included pinto beans and apples but not a frequent intake of corn tortillas which are usually considered a staple among Mexican-Americans. Practically none of the women ate "wheat" bread or seafood. It was also noted that many reported "fast food" consumption which is often "fatty."

The high saturated fats diet consumed by both the pregnant and non-pregnant women in this study is cause for concern due to the link between saturated fat and atherosclerosis and considering the young ages of these women (79% were between 18-39 years old). This diet, coupled with the infrequent (once a month) physical activity, causes greater health concern.

About one-third of the non-pregnant women were obese, and most of these women were young (22-40 years old). The sedentary activity reported may also contribute to obesity, thereby increasing the risk for diabetes.

Diabetes is a major health problem among Mexican-Americans and Puerto Ricans. Hispanics in the United States are 3 to 5 times more likely than non-Hispanic whites and blacks to develop adult-onset diabetes and to suffer complications from the disease (Thompson, 1991). Findings from one study in San Antonio, Texas, showed that women living in

poor, urban neighborhoods (barrios) were four times more likely to have diabetes than Hispanic women living in the suburbs. For men, the diabetes rate was twice as high (U.S. DHHS, Office of Minority Health [OMH], 1987). The Secretary's Task Force on Black and Minority Health noted that obesity was more common in barrios and that most adults who developed diabetes were obese. "Mexican Americans studied in San Antonio, Texas were more than twice as likely to develop diabetes if they were overweight" (DHHS, OMH, 1987, p. 3). Furthermore, Mexican-American diabetes are also more likely to develop complications of their disease. Thus, the OMH concluded that "obesity is the single most controllable risk factor both for diabetes and many of its complications such as heart disease and renal failure" (p. 3).

Adding to the problem of high risk of diabetes is the lack of medical insurance. In general, Hispanics are less likely to have medical insurance than any other group. In 1988, the latest year for which statistics were available, those lacking health insurance were 13% of the general population, 10% of whites, 20% of blacks, and 32% of Hispanics (Thompson, 1991). Consequently, Mexican-Americans tend to visit a physician less often (3.7 times a year) than non-Hispanic whites and black who go to a physician an average of 4.8 times per person per year (Thompson, 1991).



### Spiritual Well-Being

The moral-ethical-spiritual self was measured by the 20-item Likert-type Spiritual Well-Being (SWB) Scale with responses varying from strongly agree to strongly disagree (1-6). The SWB scale measured religious well-being measuring relationship with God and existential well-being measuring a sense of life purpose and life satisfaction. Ellison (1983) reported alpha coefficients of 0.89 for SWB, 0.87 for RWB, and 0.78 for EWB ( $N = 207$ ). Kirschling and Pittman (1987) reported alpha coefficients for SWB, RWB, and EWB as 0.94, 0.94, and 0.84, respectively ( $N = 70$ ). In the present sample ( $N = 100$ ), the alpha coefficients were 0.83 for SWB, 0.68 for RWB, and 0.72 for EWB. This instrument was translated into Spanish, back translated, pilot tested, and retested. The visual format was revised to facilitate its use with a population with low literacy levels, particularly with the range of 6 degrees of responses. Thus, these findings established for the first time its reliability in a Mexican-American population who may be English or Spanish speaking.

Norms had not been established for the Spiritual Well-Being Scale; however, means in various samples were available for comparison (Bufford, Paloutzian, & Ellison, no date). The means for SWB in nine religious group samples

( $\bar{N}$  = 988) varied from 82 to 106; means from three college student samples ( $\bar{N}$  = 117) varied from 70 to 104; and the mean from inpatient and outpatient counselees ( $\bar{N}$  = 182) with disorders was 83. Other sample means were also reported from Christian sociopathic convicts ( $\bar{N}$  = 27,  $\bar{M}$  = 105), non-religious sociopathic convicts ( $\bar{N}$  = 25,  $\bar{M}$  = 76), and medical outpatients ( $\bar{N}$  = 56,  $\bar{M}$  = 100). Soeken and Carson (1986) found a mean SWB score of 95 in a survey of undergraduate and graduate nursing students ( $\bar{N}$  = 53). Thus, the mean score of 91 of the present study's sample of 100 Latina women outpatients was similar to other medical outpatients and nursing students.

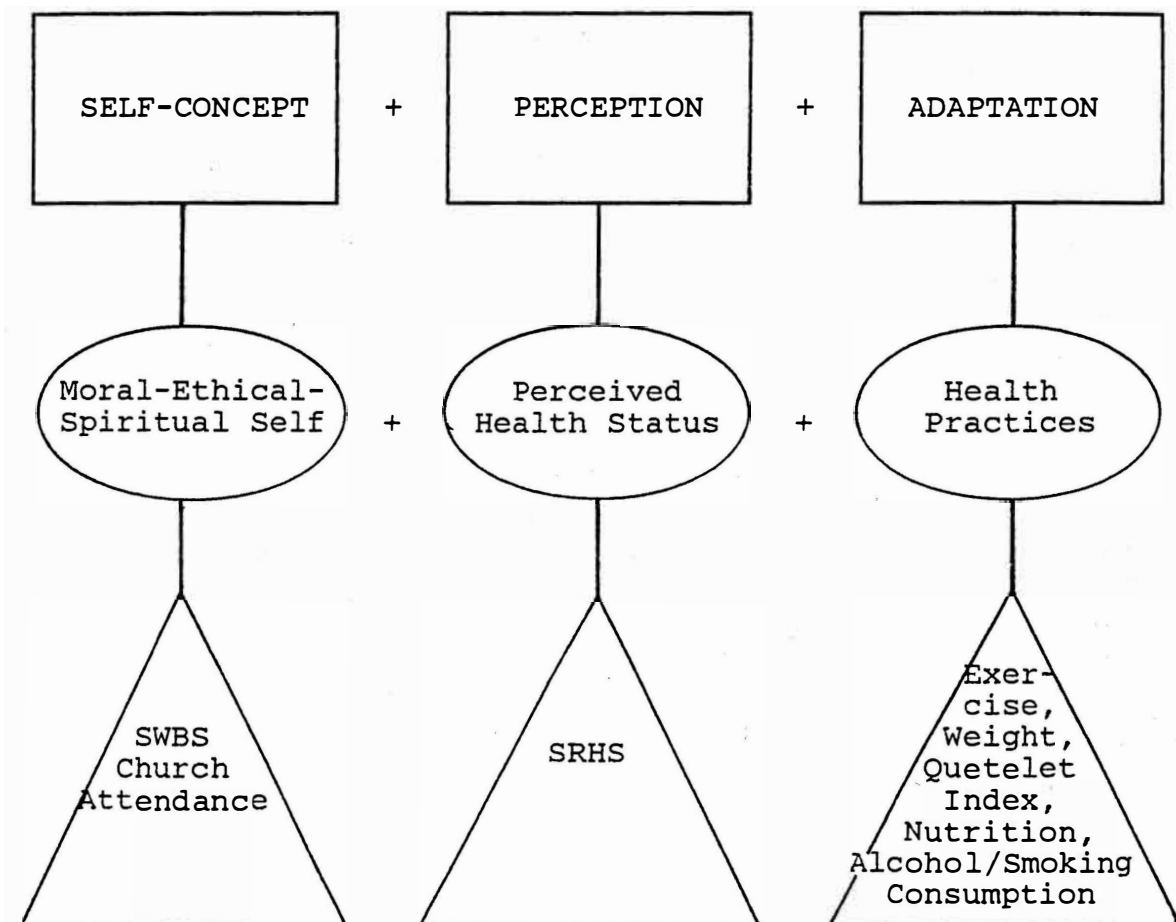
Reed (1987) found that spiritual well-being was a potentially significant variable in the dying process and O'Brien (1982) found it to be a significant variable in the adjustment to and treatment of end-stage renal failure. In addition, Miller (1985) found that higher scores of spiritual well-being in the chronically ill were associated with lower loneliness scores as compared to healthy adults. Fehring, Brennan, and Keller (1987) found that spiritual well-being mediated depression in response to life change in college students. Cox, Spiro, and Sullivan (1988) found that friends, relatives, and church activities were the most significant of the social network components in predicting

health status in the elderly ( $N = 379$ ). Levin and Markides (1986) found that religious attendance represented a proxy for functional health, especially in older people, thus lending empirical support to theoretical work in social gerontology. Mull, Cox, and Sullivan (1987) studied senior residents ( $N = 380$ ) and found that religious practices and beliefs served as a coping mechanism to deal with life's problems and/or as a social network and source of social support. In the present sample of ambulatory women, spiritual well-being and frequency of church attendance were found to predict perceived health status. Spiritual well-being had not previously been examined in ethnic and linguistically diverse groups such as Mexican-Americans, nor had relationships between spirituality and church attendance been examined. Thus, both church attendance and spirituality contributed to well-being among Mexican-American women.

#### Relevance of Findings to Rojas' Application of Roy's Adaptation Model

Roy's (1980) Adaptation Model was useful in this study as a conceptual framework primarily because of the identification and integration of the trinity of mind, body, and spirit. The constructs studied were perception, self-concept, and adaptation. The concepts studied were perceived health status as measured by the Self-Rated Health

Scale, moral-ethical-spiritual self as measured by the Spiritual Well-Being Scale, and health as measured by the Health Practices Index Scale. The relationships tested were those between perception, self-concept, and adaptation. A positive relationship between perception (perceived health status) and health (weight, Quetelet Index, physical activity) was demonstrated. A positive relationship between perception and spiritual self in combination with church attendance was also demonstrated. The variable, church attendance, and its relationship to spiritual well-being provides support to Roy's moral-ethical-spiritual self and depicts the religious practice of church attendance as a component of the moral-ethical-spiritual self. Both church attendance and spiritual well-being were discovered to positively affect perceived health status. The variable, ethnic identity, in this case, Mexican ancestry, may be classified as contextual stimuli. In addition, variables of birthplace, years lived in the United States, and use of the English language impacted the practices of alcohol and smoking intake. As a result of this study, findings led to a revision of Rojas' Application of Roy's Adaptation Model (Figure 4).



# CONTEXTUAL STIMULI

Mexican Ancestry  
 Birthplace  
 Years Lived in the USA  
 Use of English Language  
 Gender

## KEY:

SWBS = Spiritual Well-Being Scale  
 SRHS = Self-Rated Health Scale

Figure 4. Rojas' Application of Roy's Adaptation Model in Mexican-American Women

### Conclusions and Implications

"Leadership and change in public and community health nursing" is "an essential intervention" (Salmon & Vanderbush, 1990, p. 187). Nurses "must be involved in the shaping of public policy and must win positions of influence to gain and protect their ability to serve the public" (Beyers, 1990, p. 495). The limited information available about Mexican-American populations regarding their health status, health needs, and services utilization has implications for health care policy, particularly in health promotion and access.

Health care is an area to be most directly affected by the aging of the Anglo-Saxon population in the United States. The documentation of the health needs of the elderly are sufficient to predict future needs. A population that has a large number of childbearing women such as Mexican-Americans will predictably require services in prenatal care, in childbirth, and in child growth and development. Since the younger population in the early 21st century will be a heavily Latino population, the one uncertainty is the degree to which that population may vary from United States norms (Hayes-Bautista, Schink, & Chapa, 1988). Despite the growing impact of Latinos in this country, there is less information available about them than

about white and black populations (Romo, 1990). Thus, the degree of variance is not known due to the limited information on Mexican-Americans.

A generational competition for health care resources may be developing as evidenced by examining the current and future trends in health care costs for the different generations (Hayes-Bautista et al., 1988). The rapid increase in health costs has been a major policy concern for the past 20 years. Increasingly, since 1960, the elderly have turned to public programs to assist in obtaining health services. By contrast, the number of children enrolled nationally under Medicaid declined in 1982. The children are likely to have fewer resources available to them in the future than they do now, and the elderly are likely to have more (Hayes-Bautista et al., 1988). Nationally, Latinos are able to expend only 79% as much on health care as the rest of the under-64 population, are much less likely to see a physician, and are much less likely to be hospitalized (Guendelman & Schwalbe, 1986). This low rate of participation will intensify the generational competition. Ultimately, resources will be allocated. These decisions will be ethical, moral, and economic, but how do Latinos participate in these discussions when so little is known about their health-care needs?

The findings from the present study described health variables in a sample of 100 predominately Mexican-American Spanish-surnamed women who accessed a community health clinic for health care in a major city of a large southwestern state. The relationships between perceived health status, health practices, and spiritual well-being were depicted. In addition, the degree to which spirituality was part of wholeness was reflected in the sample's church attendance and in their high spiritual well-being which may help to explain how the women coped with the stress of poverty. Frequent church attendance and spiritual well-being were important to these women, and this may have played a role in predicting their perceptions of their personal health.

The findings of most concern with the inadequate nutritional intake of calories and protein, especially among pregnant females, the high saturated fat diet consumed, and the low levels of physical activity. The qualitative data indicated that the women believed that eating "right," exercising, and "getting enough sleep" were healthy, and this finding was substantiated by the quantitative data. Yet, their nutritional habits and physical activities were not within recommended levels.



All these factors (poverty, obesity, ethnicity, high saturated fats diet, pregnancy, risk for diabetes) made these findings particularly alarming because the setting was an ambulatory primary care setting serving a Mexican-American community and their health care needs. These findings indicated that this community health clinic is serving the role for detection and treatment of disease (secondary and tertiary prevention), not health promotion (primary prevention)! Although the clinic provided immunizations, it did not provide a structured comprehensive health education program integrated into the medical, dental, obstetrical, gynecological, high-risk prenatal, and pediatric services. This fact has implications for availability, accessibility, acceptability, and accountability of the health care system to a Mexican-American population, particularly related to community health settings.

#### Recommendations for Further Study

Recommendations for further study fall into four major areas: Latino health statistics, health services needs, mental health, and access (Hayes-Bautista et al., 1988).

#### Latino Health Statistics

A baseline of information about one subpopulation of women in one southwestern state has been gathered and

analyzed. However, a replication of this study is needed in other major cities in one or several southwestern states to explore the possibilities of regional similarities and differences (i.e., urban, rural, border). Further study could be done on families by surveying and perhaps interviewing both the father and mother.

Additional research is needed in health service needs, particularly in maternal and child care. A culturally based model, or an adaptation of Roy's model, for assessment, diagnosis, and treatment is warranted.

#### Health Services Needs

Health services that are focused on health promotion and utilize the findings of this study are indicated, particularly applied to nutrition, obesity, and physical activity. To provide health services, additional information is needed to describe where and when these "long walks" took place: functional--"taking my kids or school" or recreational--"walking to the park." Increasing "long walks" which was the most frequent type of physical activity should be tested as an intervention. Describing the meaning and perceptions of "eating" and its ethno-cultural significance to Mexican-Americans is necessary. For example, is eating a bologna sandwich perceived as a meal without the beans and tortillas?

During the pilot study of this research, subjects seemed eager to learn about foods and how to get the most nutritional value from them; for example, leaving the skin of the potato for vitamins and fiber and which foods had low caloric value for weight reduction. Therefore, nutritional counseling in English and Spanish including budgeting and food preparation is indicated.

#### Mental Health

The area of mental health, its relationship to church attendance and spiritual well-being could be tested particularly in families who have immigrated. The effects of immigration--changes in culture, in sex roles, and in family structure (Hayes-Bautista et al., 1988)--should be examined. Further study is also needed in the area of substance abuse prevention and promotion of substance abstinence in Latino populations, especially since the foreign-born women do not consume alcohol and tobacco as frequently as their United States born counterparts. Several federal studies were designed to examine the changes in behavior as Hispanics moved from poor, rural communities in South and Central America to urban areas in the United States. Researchers found that as Hispanics learned English and became assimilated into United States culture, some of their worst habits were "picked up," for example, increase in illegal

drug use, such as 25 times greater cocaine use. Much like the findings in the present study, cigarettes and alcohol consumption also increased. Spiritual support measures could be developed, tested, and evaluated.

### Access

Poverty, lower levels of formal education, and access barriers to health care predispose many United States minority populations to disproportionate mortality and morbidity (Council on Scientific Affairs [CSA], 1991). Hispanics face cultural and language barriers in addition to socioeconomic ones. Differences in culture and language from that of most health care workers have been shown to contribute to a lack of use of preventive care by Hispanics. When researchers manipulated variables by minimizing cultural and language obstacles, use of health services increased (CSA, 1991). These language and cultural barriers are heightened by few Hispanic health providers (5% physicians) proportionate to population (8%). In nursing, Hispanics represent 1.3% of the total population of nurses (Health Resources and Services Administration [HRSA], 1990). These statistics emphasize the need for all health personnel to be knowledgeable about Hispanic health care needs. Designing, testing, and implementing a primary prevention (health promotion) culturally based model of nursing practice to Latino

populations by Latinos and non-Latinos measuring effect on access warrants further investigation.

#### Further Study

The first recommendation for further study generated from testing Roy's model is to continue the development of the concept of "spirituality" and its relationship with other health variables, especially in Hispanic/Latino populations such as Mexican-Americans. This approach is particularly needed in promoting the health of this population. As revealed by the findings of this study, spiritual well-being and the frequency of church attendance predicted perceived health status. The second recommendation is to continue the development of health promotion and well-being (nuestro bienestar) concepts in Mexican-Americans and other ethnic populations with a culturally based methodology. The third recommendation is the pursuit and development of instruments which are reliable in a Spanish-speaking population. Indeed, this is an exciting time for the development and testing of nursing theory to guide nursing education, practice, and research to impact populations who are culturally, ethnically, and linguistically diverse.

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APPENDIX A  
AGENCY APPROVAL

TEXAS WOMAN'S UNIVERSITY  
COLLEGE OF NURSING  
DENTON, TEXAS 76204

DALLAS CENTER  
1810 INWOOD ROAD  
DALLAS, TEXAS 75235

HOUSTON CENTER  
1130 M. D. ANDERSON BLVD.  
HOUSTON, TEXAS 77030

AGENCY PERMISSION FOR CONDUCTING STUDY\*

THE South Park Medical Care Center

GRANTS TO Dahlia Rojas, R.N., M.S.

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

THE RELATIONSHIP BETWEEN PERCEIVED PHYSICAL AND  
SPIRITUAL HEALTH AND SELECTED HEALTH PRACTICES  
OF MEXICAN-AMERICAN WOMEN

The conditions mutually agreed upon are as follows:

1. The agency (may) (may not) be identified in the final report.
2. The names of consultative or administrative personnel in the agency (may) (may not) be identified in the final report.
3. The agency (wants) (does not want) a conference with the student when the report is completed.
4. The agency is (willing) (unwilling) to allow the completed report to be circulated through interlibrary loan.
5. Other that the study does not interfere with the provision of services or otherwise discourages patients from returning to the clinic

Date: 2/26/90

Dahlia Rojas  
Signature of Student

[Signature]  
Signature of Agency Personnel

Joeth McFarlane  
Signature of Faculty Advisor

\* Fill out and sign three copies to be distributed as follows: Original-Student;  
First copy - agency; Second copy - TWU College of Nursing.

/bc



APPENDIX B  
ENGLISH AND SPANISH INFORMED CONSENTS

**FORMA DE CONSENTIMIENTO**

**"PERCEPCIONES DE SALUD Y ALGUNOS COSTUMBRES/HABITOS DE  
LA SALUD ENTRE MUJERES MEXICO-AMERICANAS"**

Yo autorizo a Dahlia Rojas, R.N., o su asistente, a enlistarme como sujeto en su estudio sobre la salud y los habitos de salud entre mujeres Mexico-Americanas. El cuestionario toma entre 15 a 20 minutos y la participacion es voluntaria. El estudio a sido explicado por Dahlia Rojas, o su asistente. Se me ha ofrecido responder todas mis preguntas en cualquier punto. Si tengo preguntas, puedo telefonearla al numero 820-3061.

Entiendo que este estudio envuelve los siguientes posibles riesgos: 1. Me puedo sentir incomoda al contestar algunas de las preguntas.

2. Una perdida de confidencialidad puede ocurrir.

Entiendo que este estudio tiene los siguientes beneficios potenciales: 1. Tal vez me conocere mejor.

2. Tal vez ayudare a otras enfermeras a aprender mas acerca mujeres como yo.

Puedo salirme del estudio en cualquier momento sin que me afecte el cuidado que recibo en mi clinica. Tambien entiendo que en el caso de una herida fisica, aunque esto es raro, como resultado de mi participacion, Texas Woman's University no sera capaz de ofrecerme compensacion financiera, ni de absorber el costo de tratamiento medico. De cualquier manera el cuidado medico necesario de emergencia se me proveera.

Entiendo que las respuestas son confidenciales y seran reportadas en un grupo. A mi cuestionario se le dara un numero sin mi nombre. Entiendo que al entregar este cuestionario indica mi consentimiento como sujeto.

APPENDIX C  
ENGLISH AND SPANISH INSTRUMENT PACKAGE

# \_\_\_\_\_

DATE \_\_\_\_\_

"HEALTH PERCEPTIONS & SELECTED HEALTH PRACTICES AMONG  
MEXICAN-AMERICAN WOMEN"

This is your copy of the health questionnaire. It is in 4 parts. Please answer the questions as best as you can. There are NO right or wrong answers. I am interested in your answers, so please don't talk about the questionnaire with anyone else until you have finished. All information obtained in this study will be kept confidential. Do NOT write your name on this questionnaire.

Most of the questions can be answered by simply placing an "X" in the blank next to the response that fits you best. For example,

Do you live in Bexar County? X Yes      \_\_\_\_\_ No

Begin with Question #1 and answer all of the questions.

I appreciate your cooperation in this research study.

**THANK YOU!**

**PART I**

Choose one answer for each question.

- \_\_\_\_ 1. How would you rate your OVERALL health at the present time?  
           \_\_\_\_\_ Excellent      \_\_\_\_\_ Good      \_\_\_\_\_ Fair      \_\_\_\_\_ Poor
- \_\_\_\_ 2. Is your health now better, about the same, or not as good as was three (3) years ago?  
           \_\_\_\_\_ Better      \_\_\_\_\_ Same      \_\_\_\_\_ Not as good
- \_\_\_\_ 3. Do your health problems stand in the way of your doing the things you want to do?  
           \_\_\_\_\_ Not at all      \_\_\_\_\_ A little      \_\_\_\_\_ A great deal
- \_\_\_\_ 4. Would you say that your health is better, about the same, or not as good as most people your age?  
           \_\_\_\_\_ Better      \_\_\_\_\_ Same      \_\_\_\_\_ Not as good

Go to Part II on the next page.

\_\_\_\_ 4-13

## PART II

YOUR HEALTH HABITS

1. Please write down all food and drinks that you ate and drank in the last 24 hours and how much of each. Be as complete as you can. Remember to include any snacks eaten. For example, 2 fried eggs, 1 flour tortilla, 1 glass of orange juice, 8 oz.

Yesterday

BREAKFAST: Foods &amp; Drinks

LUNCH: Foods &amp; Drinks

SUPPER: Foods &amp; Drinks

SNACKS: Foods &amp; Drinks

Today

BREAKFAST: Foods &amp; Drinks

LUNCH: Foods &amp; Drinks

SUPPER: Foods &amp; Drinks

SNACKS: Foods &amp; Drinks

## PART II CONTINUED

# \_\_\_\_\_

2. How many hours of sleep do you usually get at night? \_\_\_\_\_  
 \_\_\_\_\_ 6 hours or less \_\_\_\_\_ 7 hours \_\_\_\_\_ 8 hours \_\_\_\_\_ 9 hours or more

3. How often do you drink wine, beer or liquor (whiskey, gin, rum, vodka, tequila)? \_\_\_\_\_

	NEVER ALMOST NEVER	LESS THAN ONCE A WEEK	ONCE OR TWICE A WEEK	MORE THAN TWICE A WEEK
WINE ?	_____	_____	_____	_____
BEER?	_____	_____	_____	_____
LIQUOR?	_____	_____	_____	_____

When you drink wine, beer or liquor, how many drinks do you usually have at one sitting (at one time)?

	I NEVER DRINK IT	1 OR 2 DRINKS	3 OR 4 DRINKS	5 OR MORE DRINKS
WINE?	_____	_____	_____	_____
BEER?	_____	_____	_____	_____
LIQUOR?	_____	_____	_____	_____

4. Have you EVER smoked cigarettes regularly?

\_\_\_\_\_ Yes \_\_\_\_\_ No

IF YOU HAVE NEVER SMOKED CIGARETTES, GO TO the next page.

Do you smoke any cigarettes at the present time?

\_\_\_\_\_ Yes \_\_\_\_\_ No

For PRESENT smokers

In an average day, how many cigarettes do you smoke?

\_\_\_\_\_ less than 5 cigarettes  
 \_\_\_\_\_ 1/2 pack  
 \_\_\_\_\_ 1 pack  
 \_\_\_\_\_ 1 1/2 packs  
 \_\_\_\_\_ 2 packs or more

How many years have you been smoking cigarettes?

\_\_\_\_\_ years  
 \_\_\_\_\_ months

For PAST smokers

When you were smoking, how many cigarettes did you usually smoke?

\_\_\_\_\_ less than 5 cigarettes  
 \_\_\_\_\_ 1/2 pack  
 \_\_\_\_\_ 1 pack  
 \_\_\_\_\_ 1 1/2 packs  
 \_\_\_\_\_ 2 packs or more

How many years did you smoke cigarettes before you stopped?

\_\_\_\_\_ years  
 \_\_\_\_\_ months

## PART II CONTINUED

5. Here is a list of active things that people do in their free time. How often do you do each of these things? \_\_\_\_\_

	About 3 times/week	Once a week	Once a month	Never
Active sports like volleyball	_____	_____	_____	_____
Take long walks	_____	_____	_____	_____
Swim	_____	_____	_____	_____
Do physical exercises ("work out" aerobics)	_____	_____	_____	_____
Work in the garden	_____	_____	_____	_____
Dance	_____	_____	_____	_____
Something else? Describe: _____	_____	_____	_____	_____

6. Describe what other things you do to keep or have better health. \_\_\_\_\_

\_\_\_\_\_

7. How tall are you? (without shoes on) \_\_\_\_\_ feet \_\_\_\_\_ inches  
\_\_\_\_\_ I don't know

8. How much do you weigh? (without heavy clothes) \_\_\_\_\_ pounds  
or \_\_\_\_\_ kilos

\_\_\_\_\_ I don't know

Go to Part III on the next page.

=====

## PART III

# \_\_\_\_\_

For each of the following statements, CIRCLE the Choice that BEST indicates the extent of your Agreement or Disagreement as it describes your personal experience.

CIRCLE one of the following for each statement:

Strongly Agree	Disagree
Moderately Agree	Moderately Disagree
Agree	Strongly Disagree

1. I don't find much satisfaction in private prayer with God.

strongly agree	moderately agree	agree	disagree	moderately disagree	strongly disagree
X	X	X	X	X	X

2. I don't know who I am, where I came from or where I'm going.

strongly agree	moderately agree	agree	disagree	moderately disagree	strongly disagree
X	X	X	X	X	X

3. I believe that God loves me and cares about me.

strongly agree	moderately agree	agree	disagree	moderately disagree	strongly disagree
X	X	X	X	X	X

4. I feel that life is a positive experience.

strongly agree	moderately agree	agree	disagree	moderately disagree	strongly disagree
X	X	X	X	X	X

5. I believe that God is impersonal and is not interested in my daily situations.

strongly agree	moderately agree	agree	disagree	moderately disagree	strongly disagree
X	X	X	X	X	X

6. I feel unsettled about my future.

strongly agree	moderately agree	agree	disagree	moderately disagree	strongly disagree
X	X	X	X	X	X

\_\_\_\_ EWB  
\_\_\_\_ RWB



## Part III continued

7. I have a personally meaningful relationship with God.

strongly agree	moderately agree	agree	disagree	moderately disagree	strongly disagree
	X	X	X	X	X

8. I feel very fulfilled and satisfied with life.

strongly agree	moderately agree	agree	disagree	moderately disagree	strongly disagree
	X	X	X	X	X

9. I don't get much personal strength and support from my God.

strongly agree	moderately agree	agree	disagree	moderately disagree	strongly disagree
X	X	X	X	X	X

10. I feel a sense of well-being about the direction my life is headed in.

strongly agree	moderately agree	agree	disagree	moderately disagree	strongly disagree
X	X	X	X	X	X

11. I believe that God is concerned about my problems.

strongly agree	moderately agree	agree	disagree	moderately disagree	strongly disagree
X	X	X	X	X	X

12. I don't enjoy much about life.

strongly agree	moderately agree	agree	disagree	moderately disagree	strongly disagree
X	X	X	X	X	X

13. I don't have a personally satisfying relationship with God.

strongly agree	moderately agree	agree	disagree	moderately disagree	strongly disagree
X	X	X	X	X	X

14. I feel good about my future.

strongly agree	moderately agree	agree	disagree	moderately disagree	strongly disagree
X	X	X	X	X	X

\_\_\_\_ EWB \_\_\_\_ RWB

## Part III continued # \_\_\_\_\_

15. My relationship with God helps me not to feel lonely.

strongly agree	moderately agree	agree	disagree	moderately disagree	strongly disagree
X	X	X	X	X	X

16. I feel that life is full of conflict and unhappiness.

strongly agree	moderately agree	agree	disagree	moderately disagree	strongly disagree
X	X	X	X	X	X

17. I feel most fulfilled when I'm in close communion with God.

strongly agree	moderately agree	agree	disagree	moderately disagree	strongly disagree
X	X	X	X	X	X

18. Life doesn't have much meaning.

strongly agree	moderately agree	agree	disagree	moderately disagree	strongly disagree
X	X	X	X	X	X

19. My relation with God contributes to my sense of well-being.

strongly agree	moderately agree	agree	disagree	moderately disagree	strongly disagree
X	X	X	X	X	X

20. I believe there is some real purpose for my life.

strongly agree	moderately agree	agree	disagree	moderately disagree	strongly disagree
X	X	X	X	X	X

Go to Part IV on the next page.

EWB \_\_\_\_\_  
 RWB \_\_\_\_\_  
 SWB \_\_\_\_\_

# \_\_\_\_\_  
**PART IV**

1. What is your marital status at this time?  
       \_\_\_\_\_ Never Married    \_\_\_\_\_ Married    \_\_\_\_\_ Separated  
       \_\_\_\_\_ Divorced    \_\_\_\_\_ Widowed    \_\_\_\_\_ living with boyfriend
2. How many people counting your family members live with you now?  
       None    1    2    3    4    5    6    7    8    9    10 or more
3. Are you pregnant now?  
       \_\_\_\_\_ Yes    \_\_\_\_\_ No    \_\_\_\_\_ I'm not sure  
       If yes, when is your baby due to be born?  
       \_\_\_\_\_ month\date\year
4. What is your religion?  
       \_\_\_\_\_ Protestant    Which Church group \_\_\_\_\_  
       \_\_\_\_\_ Catholic  
       \_\_\_\_\_ Jewish  
       \_\_\_\_\_ Other, What? \_\_\_\_\_  
       \_\_\_\_\_ None
5. About how often do you go to church services?  
       \_\_\_\_\_ Never or almost never  
       \_\_\_\_\_ Once or twice a year  
       \_\_\_\_\_ Every month or so  
       \_\_\_\_\_ Once or twice a month  
       \_\_\_\_\_ Every week  
       \_\_\_\_\_ More than once a week  
       \_\_\_\_\_ Every day
6. Where were you born?  
       \_\_\_\_\_ in the United States  
       \_\_\_\_\_ in Mexico  
       \_\_\_\_\_ in some other country, Which one? \_\_\_\_\_  
       If born outside the U.S., how long have you lived in the  
       United States? \_\_\_\_\_ years
7. What is your age? \_\_\_\_\_ years

## Part IV continued # \_\_\_\_\_

8. How many grades did you finish in school? CIRCLE the last grade you finished.

Grade School	1	2	3	4	5	6	7	8
High School	9	10	11	12	GED			
Vocational\Technical School	1	2	3	4				
College				1	2	3	4	

9. About how much was the total income of your family from any source last year (before taxes)? Include the income of all other members of your immediate family who received income last year. If you live alone, consider yourself a 1-member family.

\_\_\_\_\_ under \$5,000/year

\_\_\_\_\_ \$5,000-\$10,000/year

\_\_\_\_\_ \$10,001-\$15,000/year

\_\_\_\_\_ \$15,001-\$20,000/year

\_\_\_\_\_ \$ 20,001-\$25,000/year

\_\_\_\_\_ \$ more than \$25,000/year

This is the last question. Now that you have finished, return questionnaire to the person who gave it to you. **THANK YOU!**

# \_\_\_\_\_

Fecha \_\_\_\_\_

"PERCEPCIONES DE SALUD Y ALGUNOS COSTUMBRES\HABITOS DE LA SALUD  
ENTRE MUJERES MEXICO-AMERICANAS"

Esta es su copia del cuestionario sobre su salud. Esta en 4 partes. Responda, por favor, a las preguntas lo mejor posible. No hay respuestas correctas o incorrectas. Yo estoy interesada en sus propias respuestas. Por eso, prefiero que no comente las preguntas con otra persona hasta que haiga terminado. Toda la informacion acumulada para este estudio se guardara confidencial. NO escriba su nombre es este cuestionario.

Se puede responder a la mayoria de las preguntas sencillamente con una "X" en la linea al lado de la respuesta que le responde mejor a Ud. Por ejemplo:

Vive Ud. en en condado de Bexar?   X   Si        No

Empiece con la pregunta #1 y asegurese de responder a cada pregunta.

Le agradezco su cooperacion en esta importante investigacion.

MUCHAS GRACIAS!

**PARTE I**

Escoja una respuesta al siguiente.

1. En general, Ud. considera que su salud al presente es:  
       Excelente        Buena        Regular        Mala
2. Ahora esta su salud mejor, igual, or no tan buena como era hace tres (3) años?  
       Mejor        Igual        No tan buena
3. Considera Ud. que sus problemas de salud no permiten que Ud. haga las cosas que quiere hacer?  
       No, nada        Un poco        Por la mayor parte
4. Considera Ud. que su salud es mejor, misma o peor que la de mayoria de la gente de su edad?  
       Mejor        Mas o menos lo mismo        Peor

## PARTE II

SUS COSTUMBRES/HABITOS

1. Por favor escriba todos alimentos y bebidas consumidas en las ultimas 24 horas y que las cantidades de cada una. Sea lo mas detallada posible. Recuerdese de contar las meriendas entre comidas.

Por ejemblo, 1 juevo frito, 1 tortilla de harina, 1 vaso de jugo de naranja de 8 onzas.

AYER

DESAYUNO: Comidas y Bebidas

HOY

DESAYUNO: Comidas y Bebidas

ALMUERZO: Comidas y Bebidas

ALMUERZO: Comidas y Bebidas

CENA: Comidas y Bebidas

CENA: Comidas y Bebidas

MERIENDAS: Comidas y Bebidas

MERIENDAS: Comidas y Bebidas

# \_\_\_\_\_  
**PORTE II**

2. Cuantas horas duerme Ud. por la noche por lo regular? \_\_\_\_\_  
 \_\_\_\_\_ 6 horas o menos \_\_\_\_\_ 7 horas \_\_\_\_\_ 8 horas \_\_\_\_\_ 9 horas o mas
3. Con que frecuencia bebe Ud. vino, cerveza o licor (whiskey, ginebra, ron, vodka, tequila, etc.)? \_\_\_\_\_

	NUNCA/ CASI NUNCA	MENOS DE 1 VEZ POR SEMANA	1 o 2 VECES POR SEMANA SEMANA	MAS DE 2 VECES POR
VINO?	_____	_____	_____	_____
CERVEZA?	_____	_____	_____	_____
LICOR?	_____	_____	_____	_____

cuando bebe vino, cerveza o licor: cuantas copas toma Ud., en general?

	NUNCA LO BEBO	1 o 2 COPAS	3 o 4 COPAS	5 o Mas COPAS
VINO?	_____	_____	_____	_____
CERVEZA?	_____	_____	_____	_____
LICOR?	_____	_____	_____	_____

4. Ha fumado Ud. cigarrillos, regularmente?  
 \_\_\_\_\_ Si \_\_\_\_\_ No

SI **NUNCA** HA FUMADO CIGARRILLOS, PASE a la proxima pagina.

Fuma Ud. cigarrillos en el presente?  
 \_\_\_\_\_ Si \_\_\_\_\_ No

FUMADORES EN EL PRESENTE  
 En un dia normal, cuantos  
 cigarrillos fuma Ud.?

\_\_\_\_\_ menos de 5 cigarrillos  
 \_\_\_\_\_ media cajetilla  
 \_\_\_\_\_ 1 cajetilla  
 \_\_\_\_\_ 1 cajetilla y media  
 \_\_\_\_\_ 2 cajetillas o mas

Cuantos años ha fumado?  
 \_\_\_\_\_ años  
 \_\_\_\_\_ meses

EX-FUMADORES (dejaron de fumar)  
 En un dia normal, cuantos  
 cigarrillos fumaba antes?

\_\_\_\_\_ menos de 5 cigarrillos  
 \_\_\_\_\_ media cajetilla  
 \_\_\_\_\_ 1 cajetilla  
 \_\_\_\_\_ 1 cajetilla y media  
 \_\_\_\_\_ 2 cajetillas o mas

Durante cuantos años fumo?  
 \_\_\_\_\_ años  
 \_\_\_\_\_ meses

# \_\_\_\_\_

**PARTE II**

5. Aquí esta una lista de actividades que hace la gente en su tiempo libre. Con que frecuencia hace Ud. cada una de estas cosas? \_\_\_\_\_

	Mas o menos 3 veces a la semana	Una vez a la semana	Una vez al mes	Nunca
Deportes activos (volleybol)	_____	_____	_____	_____
Caminatas largas	_____	_____	_____	_____
Nadar	_____	_____	_____	_____
Ser ejercicios fisicos (aerobics)	_____	_____	_____	_____
Trabajar en el jardin	_____	_____	_____	_____
Bailar	_____	_____	_____	_____
Alguna otra actividad? que?	_____	_____	_____	_____
_____	_____	_____	_____	_____
_____	_____	_____	_____	_____
total _____	_____	_____	_____	_____

6. Describa cuales otras actividades o costumbres tiene Ud. para mantener y mejorar su salud. \_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

11. Cual es su estatura? (sin zapatos) \_\_\_\_\_ pies \_\_\_\_\_ pulgadas  
\_\_\_\_\_ No se \_\_\_\_\_

12. Cuanto pesa? (sin ropa pesada) \_\_\_\_\_ libras o \_\_\_\_\_ kilos  
\_\_\_\_\_ No se \_\_\_\_\_

Siga a la Parte III en la proxima pagina.  
-----



## PARTE III

# \_\_\_\_\_

En cada uno de los siguientes enunciados ponga un **CIRCULO** en la preferencia que **MEJOR** describa el grado de su Acuerdo o Desacuerdo conforme a su experiencia personal.

Despues de leer los siguientes enunciados ponga un Circulo a una de estas respuestas:

Mucho de Acuerdo	En Desacuerdo
Medianamente de Acuerdo	Medianamente en Desacuerdo
De Acuerdo	Mucho en Desacuerdo

1. No encuentro mucha satisfaccion en mi oracion personal con Dios.

mucho	medianamente	de	desacuerdo	medianamente	mucho
acuerdo	acuerdo	acuerdo		desacuerdo	desacuerdo
x	x	x	x	x	x

2. No se quien soy, de donde vengo, ni a donde voy.

mucho	medianamente	de	desacuerdo	medianamente	mucho
acuerdo	acuerdo	acuerdo		desacuerdo	desacuerdo
x	x	x	x	x	x

3. Creo que Dios me ama y se preocupa por mi.

mucho	medianamente	de	desacuerdo	medianamente	mucho
acuerdo	acuerdo	acuerdo		desacuerdo	desacuerdo
x	x	x	x	x	x

4. Siento que la vida es una experiencia positiva.

mucho	medianamente	de	desacuerdo	medianamente	mucho
acuerdo	acuerdo	acuerdo		desacuerdo	desacuerdo
x	x	x	x	x	x

5. Creo que Dios no es una persona y no esta interesado en mi vida diaria.

mucho	medianamente	de	desacuerdo	medianamente	mucho
acuerdo	acuerdo	acuerdo		desacuerdo	desacuerdo
x	x	x	x	x	x

6. Me siento insegura de mi futuro.

mucho	medianamente	de	desacuerdo	medianamente	mucho
acuerdo	acuerdo	acuerdo		desacuerdo	desacuerdo
x	x	x	x	x	x

## Parte III

# \_\_\_\_\_

7. Tengo una relacion personal con Dios que esta llena de sentido.

mucho	medianamente	de	desacuerdo	medianamente	mucho
acuerdo	acuerdo	acuerdo		desacuerdo	desacuerdo
x	x	x	x	x	x

8. Me siento muy realizada y satisfecha con la vida.

mucho	medianamente	de	desacuerdo	medianamente	mucho
acuerdo	acuerdo	acuerdo		desacuerdo	desacuerdo
x	x	x	x	x	x

9. No recibo mucha fortaleza y apoyo de Dios.

mucho	medianamente	de	desacuerdo	medianamente	mucho
acuerdo	acuerdo	acuerdo		desacuerdo	desacuerdo
x	x	x	x	x	x

10. Me siento bien con el rumbo que lleva mi vida.

mucho	medianamente	de	desacuerdo	medianamente	mucho
acuerdo	acuerdo	acuerdo		desacuerdo	desacuerdo
x	x	x	x	x	x

11. Creo que Dios se preocupa por mis problemas.

mucho	medianamente	de	desacuerdo	medianamente	mucho
acuerdo	acuerdo	acuerdo		desacuerdo	desacuerdo
x	x	x	x	x	x

12. No disfruto mucho de la vida.

mucho	medianamente	de	desacuerdo	medianamente	mucho
acuerdo	acuerdo	acuerdo		desacuerdo	desacuerdo
x	x	x	x	x	x

13. No tengo una relacion personal satisfactoria con Dios.

mucho	medianamente	de	desacuerdo	medianamente	mucho
acuerdo	acuerdo	acuerdo		desacuerdo	desacuerdo
x	x	x	x	x	x

14. Espero con alegria el futuro.

mucho	medianamente	de	desacuerdo	medianamente	mucho
acuerdo	acuerdo	acuerdo		desacuerdo	desacuerdo
x	x	x	x	x	x

## Parte III

# \_\_\_\_\_

15. Mi relacion con Dios me ayuda no sentirme sola.

mucho acuerdo	medianamente acuerdo	de acuerdo	desacuerdo	medianamente desacuerdo	mucho
x	x	x	x	x	x

16. Siento que mi vida esta llena de conflictos y desdicha.

mucho acuerdo	medianamente acuerdo	de acuerdo	desacuerdo	medianamente desacuerdo	mucho
x	x	x	x	x	x

17. Me siento mas realizada cuando estoy en comunicacion interna con Dios.

mucho acuerdo	medianamente acuerdo	de acuerdo	desacuerdo	medianamente desacuerdo	mucho
x	x	x	x	x	x

18. La vida no tiene mucho significado para mi.

mucho acuerdo	medianamente acuerdo	de acuerdo	desacuerdo	medianamente desacuerdo	mucho
x	x	x	x	x	x

19. Mi relacion con Dios contribuye a sentirme bien.

mucho acuerdo	medianamente acuerdo	de acuerdo	desacuerdo	medianamente desacuerdo	mucho
x	x	x	x	x	x

20. Creo que hay un proposito verdadero en mi vida.

mucho acuerdo	medianamente acuerdo	de acuerdo	desacuerdo	medianamente desacuerdo	mucho
x	x	x	x	x	x

Siga a la Parte IV en la proxima pagina.

EWB \_\_\_\_\_

RWB \_\_\_\_\_

SWB \_\_\_\_\_

## PARTE IV

1. Cual es su estado civil en este momento?
- ☐ Nunca Casada    ☐ Casada    ☐ Separada  
☐ Divorciada    ☐ Viuda    ☐ vivo con mi novio
2. Cuantas personas contando sus familiares viven con Ud. ahora?
- 0   1   2   3   4   5   6   7   8   9   10 o mas
3. Esta Ud. embarazada ahora?
- ☐ Si    ☐ No    ☐ No estoy segura  
 Si Ud. esta embarazada,  
 cuando nace su bebe? \_\_\_\_\_ (mes,dia,año)
4. Cual es su religion?
- ☐ Protestante    Cual denominacion \_\_\_\_\_  
☐ Catolica  
☐ Judia  
☐ Otra religion,    Cual? \_\_\_\_\_  
☐ Ninguna
5. Con que frecuencia asiste Ud. a los servicios de su iglesia?
- ☐ Nunca o casi nunca  
☐ Una o dos veces al año  
☐ Cada mes mas o menos  
☐ Una o dos veces al mes  
☐ Cada semana  
☐ Mas que una ves a la semana  
☐ Cada dia
6. Donde nacio Ud?
- ☐ en los Estados Unidos  
☐ en Mexico  
☐ en otro pais que se llama \_\_\_\_\_  
 Si Ud. nacio en otro pais, cuantos años tiene de vivir en Estados Unidos? \_\_\_\_\_ años
7. Cual es su edad? \_\_\_\_\_ años

## Parte IV

# \_\_\_\_\_

8. Hasta que grado asistio Ud. en la escuela.? ENCIERRE EN UN CIRCULO el ultimo grado que Ud. termino.

Primaria 1 2 3 4 5 6

Secundaria 7 8 9

Preparatoria 10 11 12 GED

Escuela tecnica 1 2 3 4

Universidad 1 2 3 4

9. Aproximadamente, cual fue el ingreso familiar total, antes del pago de impuestos, y de todas las fuentes de ingreso durante el año pasado?

Incluya todos los ingresos durante el año pasado. Si Ud. vive sola, considerese como familia con un solo miembro.

\_\_\_\_\_ menos de \$5,000 por año

\_\_\_\_\_ \$5,000-\$10,000 por año

\_\_\_\_\_ \$10,001-\$15,000 por año

\_\_\_\_\_ \$15,001-\$20,000 por año

\_\_\_\_\_ \$20,001-\$25,000 por año

\_\_\_\_\_ mas de \$25,000 por año

Esta fue la ultima pregunta. Ahora que ha terminado, regrese el cuestionario a la persona que se la dio. MUCHAS GRACIAS!

APPENDIX D  
WRITTEN PERMISSION FROM AUTHORS

Craig W. Ellison, Ph.D.  
81 Front Street  
Nyack, N.Y. 10960  
(914) 358-1710

July 7, 1989

Dahlia Zuffiga Rojas, R.N., M.S.  
Certified Family Nurse Practitioner  
6214 Dryad  
Houston, TX 77035

PERMISSION FOR USE AND REPRINTING OF ARTICLES AND INDEXES BY  
CRAIG W. ELLISON:

Dear Ms. Rojas,

Permission is granted to individuals requesting the use of the Spiritual Well-Being Scale and/or the Spiritual Maturity Index for research purposes only, providing written summary of research results are sent to Dr. Craig Ellison and proper credit is given in any publication of said research.

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Sincerely,



Craig W. Ellison, Ph.D.  
Professor of Counseling & Urban Programs  
Psychologist

STATE OF CALIFORNIA—HEALTH AND WELFARE AGENCY

GEORGE DEUKMEJIAN Governor

## DEPARTMENT OF HEALTH SERVICES

2151 BERKELEY WAY  
BERKELEY CA 94704

(415) 540-2396



September 8, 1989

Dahlia Rojas, R.N., M.S.  
219 E. Railroad  
San Juan, Texas 78589

Dear Ms. Rojas,

I enclose here the information you requested regarding our Index of Health Practices. You are most welcome to use this instrument in your study and there is no charge for these materials. We do ask that you cite the source of this tool appropriately in any publications that may result from your work.

A number of different versions of the Health Practices Index have been developed at HPL over the years. I include here scoring instructions for the original version and for the revised version which was used in the article by Dr. Wiley and myself which you read.

I also enclose two questionnaires. Card and column locations of items used in the Health Practices Index refer to the English language questionnaire (1965 Survey). The Spanish language questionnaire is NOT a translation of the English 1965 Survey, but rather of a second Survey we conducted in 1974. I include it here, however, because the questionnaire items used in the Index appear, in Spanish, in this questionnaire in a form virtually identical to that of the 1965 English items. (We do not have any Spanish language versions of the 1965 Survey questionnaire).

No formal reliability or validity studies of this index or its component items has been done. I do enclose two articles describing the reliability and validity studies conducted on other items from the 1965 questionnaire. I also include one of the earliest published articles using the Health Practices Index which provides some information on the development of the index.

I hope these materials will be helpful to you. If you need further information or have any questions about the creation or use of this Index please feel free to contact me.

Best of luck in your research.

Sincerely,

A handwritten signature in dark ink, appearing to read 'Terry Camacho'.

Terry Camacho  
Research Analyst  
Human Population Laboratory

Enclosures





5301 Old York Road • Philadelphia, Pennsylvania 19141 • (215) 456-2900

BEHAVIORAL RESEARCH  
215-456-2000

October 11, 1989

Dahlia Rojas, R.N., M.S.  
Doctoral Candidate, TWU  
6020 Danny Kaye, #304  
San Antonio, TX 78240

Dear Ms. Rojas,

You're free to use and reproduce the MAI as you wish. If you wish to use only the Self-Rated Health subindex, you may not wish the entire package as noted on the enclosed form. Please let me know if you do.

Sincerely,

*M. Powell Lawton*  
M. Powell Lawton, Ph.D.  
Director of Research

MPL/ba  
encl.

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