

HEALTH BELIEFS AND PRACTICES IN A MEXICAN AMERICAN COMMUNITY:
THE ROLE OF ACCULTURATION AND SOCIOECONOMIC STATUS

by

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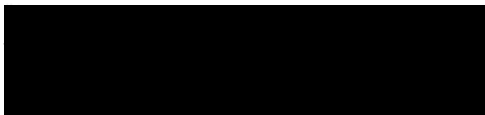
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a. m. d.

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CHAPTER I
INTRODUCTION

"Why do I still use my grandmother's home remedies? Pues, because they are a part of me...since I was a little girl. They are mi cultura and I believe in them."

Mexican and Mexican American life has a rich cultural tradition of folk medicine, from the curandero (folk healer) to remedios caseros (home remedies). This tradition continues to be expressed by Mexican Americans today, even in predominantly Anglo communities geographically removed from Mexico.

When a few individuals with different beliefs and practices enter a largely Anglo community it is anticipated that they will accommodate themselves to the expectations and practices of the larger community. When the number of those who share a different set of ideas and practices is larger, the differences may become problematic.

Mexican folk medicine and Western scientific medicine differ greatly, and as Mexican Americans increasingly use Anglo health services, the different approaches and expectations of each group become accentuated and the potential for conflict and tension increases. There may be a variety of responses to such conflict. Discomfort with Anglo medicine may lead to rejection of modern medical services and increased

use of traditional medicine by Mexican Americans. Lack of cultural sensitivity on the part of Anglo providers may contribute to the discomfort of Mexican American clients. Underutilization, noncompliance and subsequent lowering of health status may follow. On the other hand, increased contact between Anglo health care providers and Mexican American clients might well contribute to a diminished reliance on traditional health beliefs and practices among Mexican Americans and an influx of Mexican Americans into the modern medical setting both as clients and as providers.

It is essential that health providers from a variety of cultural backgrounds become aware of and responsive to the unique, culturally-based health expressions of Mexican American clients so as to minimize the negative results of provider-client interactions. A preliminary step in this process is to identify those cultural differences. But it is not enough to know that cultural differences exist. To fully understand the significance of traditional medicine and the dynamics of its operation for the people who practice it, one must look for explanations of why it persists.

Problem Statement

The following study examines the use of traditional folk medicine among Mexican Americans in Washington County, Oregon, and seeks to answer the question of why traditional health practices persist. To do this, it explores the relationship between health beliefs and practices, culture

and social structure. It looks specifically at the relationship of 1) acculturation and 2) socioeconomic status to traditional health beliefs and practices in the Mexican American community in Washington County.

Review of the Literature

The following review of the literature focuses on studies which have examined social, economic, and cultural factors relating to health-seeking behavior among Mexican Americans. The discussion begins with a brief description of the Mexican American community in the United States. This description is followed by a definition of traditional medicine as opposed to modern scientific medicine. A review of the nature of health-seeking behavior among Mexican Americans is then presented, including evidence of a dual use of traditional and modern health forms. Finally, specific reasons for such health behavior are explored, looking at research regarding the differential impact of two independent variables (acculturation and socioeconomic status) on the health behavior of Mexican Americans.

The Mexican American Community in the United States

The Hispanic population is the fastest growing population in the United States. In the decade from 1970 to 1980, as a result of immigration, natural increase and more accurate census reporting, this group grew from 9,072,602 to 14,600,000, an increase of 61% (U.S. Census, 1980; Jaffe,

Cullen & Boswell, 1980). Traditionally, Hispanics have been concentrated in the Southwestern states, with some migration to the Midwest and Central states. It is only within the past fifteen years that a significant number of Hispanics have settled in Oregon.

"Hispanics" is a general and somewhat ambiguous term, as it includes Spanish, Mexicans, Mexican Americans, Cubans, and others from predominantly Spanish-speaking and/or Latin American countries. Because it is unclear exactly which group or subgroup one is talking about with the term "Hispanics," its use continues to raise controversy (Hayes-Bautista, 1980; Marrero, 1980; Roberts & Lee, 1980; Strug, 1980).

One example of this lack of clarity is apparent in the way national census data are collected in the United States. Clearly one can make a distinction between those of Spanish (i.e., Spain) and those of American (i.e., South and Central American, Mexican and the Caribbean) origin, but the U.S. Bureau of Census does not make that distinction when it enumerates the population. Census data are now collected on the basis of ethnic origin (either Spanish or other) and language (either Spanish or other). Further refinement of this data is limited to noting whether the respondent is of Mexican, Puerto Rican or Cuban origin. "Spanish origin," therefore, includes all Hispanics, whether from Spain or from other predominantly "Spanish" countries.

In addition to failing to clearly differentiate one Hispanic group from another, U.S. census data on Spanish origin population were collected differently in 1970 and 1980. In 1970, estimates of "Spanish" population were made in four ways: 1) one estimate was based on a 5% sample of the U.S. population who were asked if they were of Spanish origin; 2) a second estimate was based on a 15% sample of the U.S. population who were asked if they spoke Spanish in the home; 3) a third estimate was based on the birth place of respondents of a 15-20% sample of the U.S. population; and 4) in the five Southwestern states of California, Colorado, Arizona, New Mexico and Texas, respondents were categorized by Spanish surname. Estimates of the "Spanish" population in Oregon were based on language spoken in the home. The 1970 census estimated there were 2,457 persons in Washington County, Oregon, who used Spanish as a first language (Population Research and Census Center, 1980).

In 1980, all respondents were asked both their origin (Spanish or other) and the language spoken. The total Spanish origin population for Washington County in 1980 was 6,477 and the number of those who spoke Spanish in the home was 3,326 (U.S. Census, 1980).

Because of these different collection methods, it is impossible to accurately compare the absolute numbers or percentage increases from census data in 1970 and 1980. It is clear, however, that there has been a significant increase

in the population of those of "Spanish origin." Of that population, a large majority (4,312 or about 67%) is of Mexican origin (U.S. Census, 1980). Although census data do not clearly distinguish between Mexican American and Hispanics, the subjects used in this study were Mexican American only.

Traditional Medicine

Curanderismo, a term derived from the Spanish verb curar, "to heal," is the system of health care characteristic of traditional Mexican culture. This system is the result of at least

six major historical influences...: Judeo-Christian religious beliefs, symbols, and rituals; early Arabic medicine and health practices (combined with Greek humoral medicine, revived during the Spanish Renaissance); medieval and later European witchcraft; Native American herbal lore and health practices; modern beliefs about spiritualism and psychic phenomena; and scientific medicine. (Trotter & Chavira, 1981, p. 25)

Curanderismo does not deny the basis of much of scientific medicine. It accepts the germ theory as a natural cause of illness, for example. It does, however, go beyond such notions in its understanding of the etiology and appropriate treatment of illnesses. It sees a natural and supernatural etiology for many illnesses and conceives of itself as having domain over the supernatural.

Differences between curanderismo and modern scientific medicine are also found in the extent to which physical and social problems are separated. The separation of physical

and social problems tends to be less marked in curanderismo than in modern medicine. Problems in family, business and social affairs are often found to have a physical manifestation and treatment is applied to the social as well as, or even instead of, the physical problem. Although scientific medicine makes some of the same connections, the medical approach to dealing with problems has traditionally focused on the physical realm. Stress-related illness would be one example. Hypertension may be directly related to social stress, but it is the physical disorder of high blood pressure, rather than the actual cause of the stress, which is most often treated (typically with drugs) by the "scientific" physician.

There are a number of descriptions of traditional Mexican American health beliefs, illnesses and practices in the literature (Abril, 1977; Baca, 1969; Clark, 1959; Creson, McKinley & Evans, 1969; Madsen, 1964; Martinez & Martin, 1966; Rubel, 1960). A composite definition of several of those illnesses and practices are listed below.

Mal de ojo: This is an illness, primarily of children, caused by an individual with "strong blood," who admires a child, but who does not touch the child. It leads to irritability, loss of appetite, and can be fatal. Ojo is treated by massaging the child with an uncracked raw egg, while repeating prayers. The egg is then cracked into a glass of water and placed under the child's bed overnight. If the

egg appears "cooked" or an "eye" appears in the yolk, the diagnosis was correct and the treatment effective.

Empacho: Empacho is an illness of the digestive system, where a "ball" of food becomes "stuck" in the stomach, causing pain and colic. It is usually caused by overeating or eating something one did not want to eat. Treatment consists of massage with oil and herbs and pulling the skin of the back along the spine until it "pops" and releases the obstruction.

Mal de aire: In this illness, air enters into the ear or a muscle of the body and causes pain. Mal de aire is treated by applying heat using ventosa (an alcohol-soaked piece of cotton is burned inside an inverted glass and the glass is then rubbed over the area) or la conita (the tip of a paper cone is inserted into the ear canal. The large end of the paper is lit and, as it burns, it creates warm air which "pops" the ear and allows the aire to escape).

Caida de mollera: Literally translated, this means "fallen fontanel" which is one sign of the illness. Due to a fall or rough handling, the fontanel in a baby may fall. This leads to irritability, inability to eat or suck, diarrhea and dehydration. If untreated, it can be fatal. Traditional treatments include pushing the palate up to reposition the mollera, applying a poultice to the mollera and sucking on the fontanel to "pull it up." Sometimes the baby is held by the heels, and the mollera is dipped in water

while prayers are recited.

Susto: Any sudden, unexpected fright such as nearly being struck by a car, can lead to susto, a condition of sleeplessness, timidity, loss of appetite, and general nervousness. It tends to disrupt interpersonal relationships and prevent a person from effectively carrying on daily affairs. Susto is treated with special prayers, by sweeping the victim with a broom and by applying the sign of the cross to drive out the fears.

Mal puesto: One who suffers mal puesto is embrujado or "bewitched." A curse has been placed on them by a brujo or witch, most often at the request of a third person. Unexpected and often bizarre events may occur but the embrujado always experiences a drastic change in behavior or fortunes. Treatment must be administered by a curandero(a), as lay people are not capable of countering the force of a brujo. Treatment is in essence, a battle between the forces of good and evil.

Health-seeking Behavior

The contemporary use of curanderos is well-documented (Alegria, Guerra, Marinez & Meyer, 1977; Hamburger, 1978; Martinez & Martin, 1966; Trotter & Chavira, 1981). Still, though curanderos are used often, and though there are some illnesses that are seen as treatable only by curanderos, a curandero is not necessarily responsible for interpreting all illness and providing all care. As Trotter and Chavira

discovered, many of the more well-known and commonly experienced folk illnesses are considered to be amenable to treatment by lay healers. Lay referral systems have been documented in the Hispanic community; referral not only to a curandero, but to others, usually knowledgeable women (senoras, medicas) who are recognized as skilled in treating common illnesses but who do not "practice" healing (Ailinger, 1977; Clark, 1959; Kay, 1977).

Not only do people who use traditional treatments use both a curandero and lay healers, but current studies of utilization patterns indicate that Mexican Americans use both traditional and modern Western health care systems (Ailinger, 1977; Alegria et al., 1977; Kay, 1977; Kiev, 1968; Madsen, 1964). As one example, Chesney, Thompson, Guevara, Vela and Schollstaedt (1980) found in their study of 40 Galveston, Texas, Mexican American families that 68% of users relied on both Mexican "folk" and modern scientific medicine.

In some cases, different illnesses will be taken to different providers (Chesney et al., 1980; Kay, 1977; Martinez & Martin, 1966). Kay (1977) provides an extensive taxonomy of illnesses that were described by her subjects. A portion of those conditions are classified as "Mexican diseases," illnesses "which Anglo doctors do not recognize" (Kay, 1977, p. 165), and which are more effectively and appropriately treated by curanderos. These are most often diseases of a "supernatural" etiology. Thus, although

scientific and folk medicine are not mutually exclusive, there may be a pattern of use based on the nature of the problem and the perceived relevance of the form of treatment for that problem. There is also evidence that many Mexican Americans use both health care systems concurrently, often for the same disease (Johnson, 1979).

Explanations of Health-seeking Behaviors

Researchers identify a number of causes for these varied health practices. Folk medicine may be chosen because it offers a "coping mechanism" in a difficult physical environment (Johnson, 1979) or because it serves an "integrative function" in the face of inter-cultural stress (Kiev, 1968). Or it may simply be an expression of the people's "culture," as anthropologists originally presented it. Health care utilization, or health-seeking behavior, among Mexican Americans has been a topic of anthropological research for many years. For many anthropologists, this behavior is only one of many cultural expressions (Clark, 1959; Rubel, 1960; Saunders, 1954). These researchers believed that health behavior distinctive to Mexican Americans (specifically, reliance on traditional or "folk" medicine as a primary source of care) inevitably followed from the cultural conditions of the people. In the context of a dominant Anglo culture, the degree of acculturation of the individual determined the type of health behavior practiced. Thus, if a strong traditional culture or subculture was present, there would be low

utilization of modern medical resources on the part of Mexican Americans. Those least acculturated would practice more traditional medicine, and conversely, a high level of acculturation into the dominant society led to a greater use of modern health services, modern drugs, visits to physicians, hospitals, etc.

Many researchers still make this claim. Nall and Speilberg (1969) believe that it is the degree to which one is integrated into his or her subculture, especially the family as a unit of that subculture, that determines whether the dominant cultural mode of practice will be accepted or rejected. They assert that higher levels of subcultural integration contribute to higher rates of rejection of modern medicine and subsequent high use of traditional medicine. Johnston (1977) claims that it is those who are least acculturated that believe most in magic and the magical qualities of certain health treatments. A number of studies assume that persistent cultural beliefs (a sign of lack of acculturation) perpetuate the use of traditional health practices among Mexican Americans (Abril, 1977; Martinez & Martin, 1966).

Unfortunately, this research often tends to treat Mexican Americans as a culturally homogeneous group. By doing so, it omits a number of other variables which have been found to be significant determinants of health-seeking behavior (Juarez & Garcia, 1976; Trotter & Chavira, 1981; Welch, Comer & Steinman, 1973). Chief among those variables

are socioeconomic status (Weaver, 1973), lack of Anglo facilities in Mexican American communities (Karno & Edgerton, 1969) and lack of Mexican American providers in the modern medical setting (Tamez, 1978). Welch, Comer and Steinman (1973) concluded from their interviews of Mexican Americans in four Nebraska communities that:

the reasons that Mexican Americans do or do not utilize medical care services of various kinds lie more in the same kind of factors that affect people of other ethnic groups: income, age, education, trust in doctors rather than in those considerations peculiar to the Mexican American subculture. (Welch et al., 1973, p. 211)

According to these studies, utilization patterns seem to be more closely related to socioeconomic status and "physical access variables" (transportation problems, lack of Anglo facilities, lack of Mexican American providers) than to degree of acculturation.

Recent research (Chesney, Chavira, Hall & Gary, 1982) suggests that the question of what determines health-seeking behavior is not an either-or issue. Rather than attempt to define either acculturation or socioeconomic status as the key factor, Chesney and his associates (1982) argue that there is a relationship between them, and that both singly and as a unit they affect health behavior. Understanding why people choose to act in any particular way, therefore, requires an understanding of the interrelationships and effects of those independent variables. In their study of 152 South Texas Mexican American families, however, these

authors found that degree of acculturation had a strong correlation with utilization of health services, stronger than that of socioeconomic status. Their data suggest that individuals of high social class and low acculturation are the least likely to use modern medical care. Those of low social class and low acculturation are the next least likely to do so, while those of high social class and high acculturation are the most likely to use modern medical care. Exactly what their unacculturated individuals do when confronted by illness is not made clear. The use of "alternative" health practices is alluded to among the upper class:

The combination of high income and a social network provides a family with alternatives to medical care. These alternatives may exist within the extended family. (Chesney et al., 1982, p. 12)

There is no reference to such alternatives among lower class, relatively unacculturated Mexican Americans. Presumably, these "alternatives" include traditional Mexican American health practices, although they are not described.

These findings and their implications contrast sharply with conclusions drawn by Madsen (1964) in his study in the same Texas county. Madsen suggests that adherence to traditional folk beliefs is more characteristic of lower- than upper- or middle-class Mexican Americans. He also claims that "Anglicization" or acculturation occurs simultaneously with a rise in class status. Thus, acculturation is, for Madsen, a function of one's class position. Acculturation

and class status are interrelated, each acting on the other. But to include socioeconomic status and socioeconomic status criteria as a part of acculturation obscures the impact of the individual variable in both cases. In fact, the assumptions one is forced to accept may be questionable: upper class (high socioeconomic status) Mexican Americans are highly acculturated and highly acculturated Mexican Americans are of high socioeconomic status. This approach also assumes that Mexican Americans who are relatively unacculturated are of lower socioeconomic status and Mexican Americans of lower socioeconomic status can be expected to be relatively unacculturated.

Others have traditionally included indices of socioeconomic status in their measures of acculturation (income, occupation and education) (Leininger, undated; Olmedo & Padilla, 1978). It seems more useful to make a sharp distinction between the two in order to develop a clearer understanding of the relationship between both socioeconomic status and acculturation and health behavior. It is exactly this distinction which is reflected in the conceptual framework underlying this study.

Conceptual Framework

From the literature review above it is clear that the pattern of health-seeking behavior among Mexican Americans is varied and is based on a complex interaction of a number of factors. The theoretical perspective one takes in approaching

the issue is crucial in shaping the questions and the answers at which one arrives. The following conceptual framework presents two approaches to the question under study.

Acculturation

What events occur when two cultural groups meet? What changes, adaptations, resistance can be seen? Answers to these questions have been pursued for years, with anthropologists giving us the most sensitive and in-depth explanations of social and cultural changes. Even if isolated, cultures and peoples are observed to change, to adapt to natural and social forces around them. This process is marked if several cultures are interacting. It increases in degree and complexity. A key concept here is adaptation; a concept which is the base of the most widely-accepted theoretical explanation of cultural change: assimilation.

Assimilation theory deals with the processes that occur when cultural groups or subgroups interact in a setting that mandates change and adaptation. It is, as Burgess and Park have defined it:

a process of interpenetration and fusion in which persons and groups acquire the memories, sentiments, and attitudes of other persons or groups, and, by sharing their experience and history, are incorporated with them in a common cultural life.
(Gordon, 1964, p. 62)

Acculturation is the first step in the process of assimilation and is characterized by the learning of dominant cultural patterns. Once immigrants have the skills of cultural

behavior, they can become assimilated at more complex levels. The process of acculturation occurs in the school, the church, the marketplace, and in special social institutions designed for that purpose (e.g., cultural centers).

Three variations of the assimilation model as it applies to groups entering the United States have been described in the literature (Gordon, 1964). These include the notions of Anglo-conformity, the melting-pot and cultural pluralism.

Anglo-conformity is the most rigid conceptualization of these three, demanding a complete assimilation to "American" (re: White, Anglo-Saxon Protestant) values and life style. It assumes both an "American" character, and the ability of immigrant groups to conform to that character.

The melting-pot theory contends that when a minority culture enters a majority culture the interplay between them leads to a sharing of cultural traits and a blending of characteristics which ultimately results in a new character--a new whole from the many parts of each culture.

A third conceptualization is that of cultural pluralism, where cultural groups are seen as maintaining their cultural integrity within the context of a commonly-shared political and economic system. Family, institutional and ethnic group membership function to support cultural distinctions, and, in the ideal type, there is a presumption of groups being "separate but equal."

Recent research has examined the changes in the way traditional health beliefs and practices are manifest (Crawford, 1979). This research lends support to the second variation of the assimilation theory presented above, the melting-pot model. This conceptualization of assimilation underlies part of the conceptual framework of this study.

In regard to health behavior, if the melting-pot model is assumed, one could expect to see a decline of both traditional health beliefs and practices as the acculturation level increases. Through the process of acculturation, members of the minority group should learn the roles, values and interactional skills expected of them in the majority culture and eventually abandon the traditional forms, attitudes and beliefs they brought with them at the time of immigration. Increased contact between Anglo health systems and the Mexican American community should bring more Mexican Americans into the system. Changes in the Anglo system should also appear, reflecting some of the cultural traits of Mexican Americans (e.g., use of the curandero as a practitioner in the clinic). Remnants of traditional beliefs might persist in a form acceptable to and/or shared by the majority population (e.g., something as taken-for-granted as a "God bless you" following a sneeze is actually a means to ward off evil spirits and prevent ill health).

Assimilation as a theoretical model and acculturation as a process of learning values and behaviors are believed by

some to be limited in their ability to explain what occurs with some immigrant groups. Assimilation implies that one learns the cultural norms and values pertaining to the dominant society and subsequently functions within a given social structure. Some immigrant groups or minority groups, however, do not fit the "mold" of assimilation theory. That is, they may learn cultural norms, but they have not been able to actively participate at higher levels of assimilation once "acculturated." Black Americans are one such group (Blauner, 1972). Mexican Americans seem to be another (Barrera, Muñoz & Ornelas, 1972; Moore, 1970).

It is not the purpose of this study to explain if or why Mexican Americans do not assimilate into U.S. culture. It is rather to identify important factors behind the use or non-use of traditional and modern health practices. The assimilation theory gives one explanation, an explanation that seems to fit with the concept of acculturation and cultural integrity previously discussed in the literature review.

A second "reason" for the continued use of traditional health practices lies in the social structure, i.e., the "set of crystallized social relationships" (Chesney et al., 1982, p. 2) which characterize the lives of Mexican Americans. Of particular importance, as pointed out in the above literature review, is the concept of socioeconomic status.

Socioeconomic Status

U.S. society is characterized by a stratified social structure. Social stratification can be defined as the hierarchical arrangement of individuals and groups in society on the basis of certain social and economic criteria. One major approach to understanding how and why societies are stratified is represented by what Wright, Hachan, Costello and Sprague (1982) call a "gradational" perspective.

This approach is based on Max Weber's work on stratification (Weber, 1947). Social structure, according to Weber, develops from a set of economic and legal conditions as organizations grow in size and complexity. There is a process of rationalization, of creating a "hierarchical organization of functions," a bureaucracy. Bureaucracies are characterized by a division of labor and occupational categorization. In the economic realm, income differentials accrue and opportunities for educational, occupational and social choices expand for those higher on the stratification ladder while contracting for those of lower status. The relationship between these elements is dynamic, with one's status position leading to and, at the same time, being reinforced by specific benefits (e.g., higher income, education).

The position of Mexican Americans in this stratification scheme tends to be at the lower levels, with Mexican Americans earning significantly less than Anglos (Moore, 1970). Mexican Americans also make up a large percentage of those below

the poverty level (U.S. Census, 1980) and those in low-status and low-paying jobs (Moore, 1970).

There are several ways socioeconomic status shapes one's health behavior. First, one's resources may determine the access one has to modern health care, both in terms of the cost of care itself and the ability to get to care (if one is not able to afford a car, access is restricted). Second, the economic status of a community may affect the availability of resources. There may be an actual absence of resources in lower socioeconomic communities, as it is generally not profitable for a physician or hospital to set up private practice in low-income communities. These areas often remain "underserved" by health professionals.

If factors relating to social structure, particularly socioeconomic status, are believed to affect health-seeking behavior, one would expect to see a greater reliance on self-treatment and home remedies among Mexican Americans as a group. There might also be a greater use of providers who make minimal or no charges for services. In the classic tradition of Mexican folk medicine, the curandero has provided such services both in Mexico and in the United States.

From this conceptual framework a general question can be developed: How are the patterns of Mexican American interaction with the larger society reflected in the health-seeking behavior of Mexican Americans? The more specific question of this study is: What part do the level of

acculturation and socioeconomic status play in shaping the health orientation of Mexican Americans? This study assesses the nature of the relationships between these variables. The following hypotheses provide the structure for making such an assessment.

Hypotheses

I A low level of acculturation will be positively related to a more traditional health orientation.

Subhypotheses:

- A. Less acculturated Mexican Americans will know more about traditional illnesses and treatments than more acculturated Mexican Americans.
- B. Less acculturated Mexican Americans will have more experience with traditional illnesses and treatments than more acculturated Mexican Americans.

II A low level of socioeconomic status will be positively related to a more traditional health orientation.

Subhypotheses:

- A. Mexican Americans of lower socioeconomic status will know more about traditional illnesses and treatments than those of higher socioeconomic status.
- B. Mexican Americans of lower socioeconomic status will have more experience with traditional illnesses and treatments than will those of higher socioeconomic status.

CHAPTER II

METHODS

Introduction

One important aspect of this study is descriptive: to what extent do folk beliefs and practices occur in Oregon's Mexican American population? A second component of the study is an examination of the relationships of two independent variables, socioeconomic status and degree of acculturation, with the dependent variable, health beliefs and practices. Data were collected with these two aspects in mind.

Setting

Mexican Americans in Washington County

The 1980 census data portray the population of Washington County as largely urban-based. A total population of 245,808 is divided into 208,266 urban dwellers and 37,525 farm residents (U.S. Census, 1980). Beaverton, the largest urban area in the county (population: 31,926) lies adjacent to and is essentially an extension of Portland (see Figure 1). Other urban centers, small towns to the west and south, draw on the nearby rural population for business and support. To the south are Tigard, Tualatin and Sherwood. To the west, stretched along the Beaverton-Hillsdale and Tualatin Valley Highway, a major thoroughfare through the lush, agriculturally-

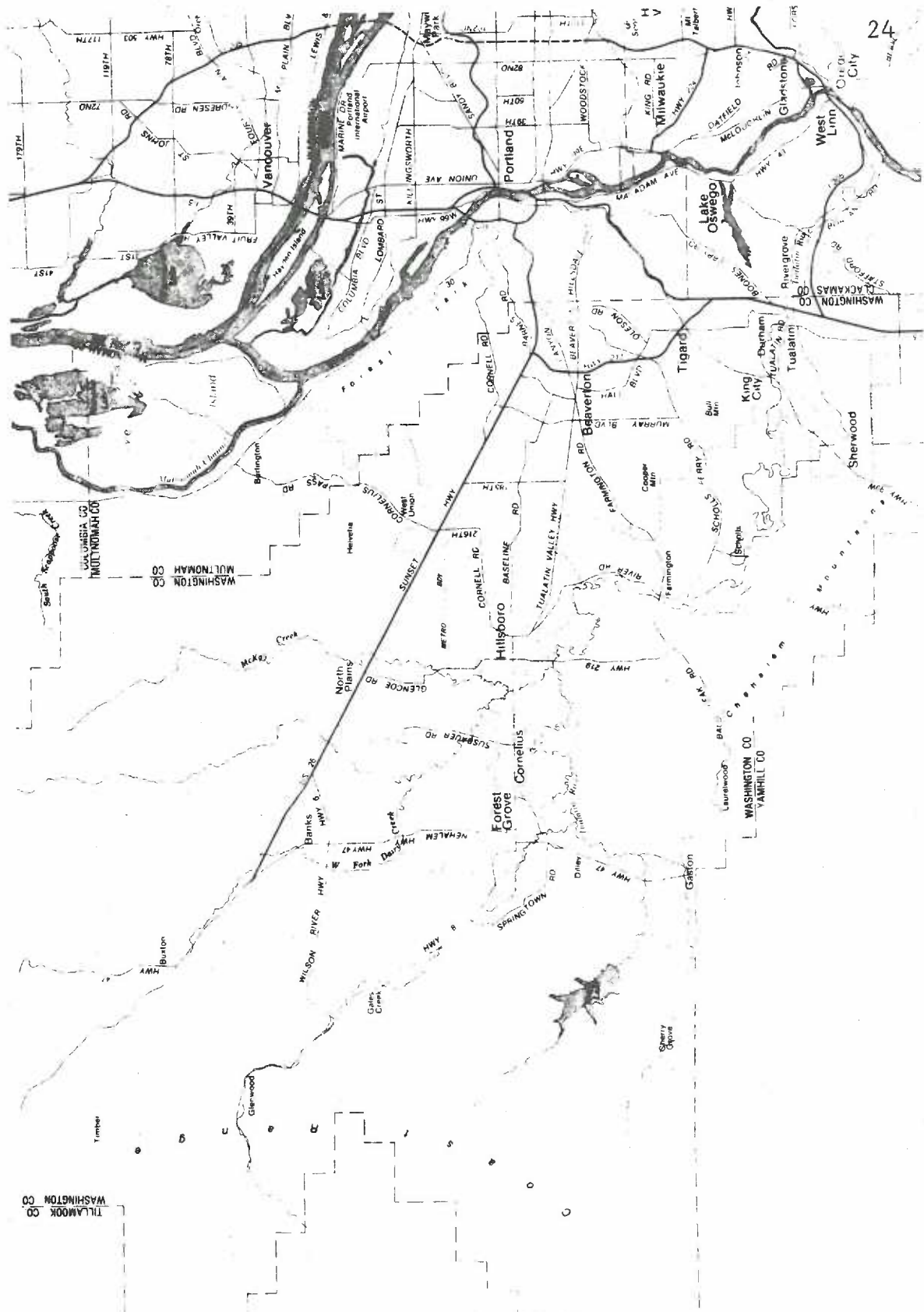


Figure 1. Washington County, Oregon

productive Tualatin Valley, are the towns of Hillsboro, Aloha, Cornelius and Forest Grove. Outlying communities of Banks, Gaston, Cherry Grove and others form a network of urban-rural connections in this area. Bus service from Portland extends as far west as Forest Grove. The Tualatin Valley was among the first areas settled in the Oregon Territory and a sense of the history of old families, homesteads, communities and institutions can still be felt. For example, Pacific University, established in 1849, is found in Forest Grove, 30 miles west of Portland.

Agriculture is a major industry in the valley, with a large number of orchards, vineyards, berry farms, truck farms and nurseries producing food and non-food crops. Agriculture and the need for agricultural labor was the initial force drawing large numbers of Mexican Americans to the Tualatin Valley. In the late 1950's and 1960's, migratory laborers moved from the Southwestern U.S. through Oregon and into Washington, following the crops, traveling to where the harvest was ready and moving on when their labor was no longer needed. Some Mexican American families stayed on, however, finding jobs in local industry, as part of permanent farm crews, or in local service work. In the early 1960's there were reportedly only a few Mexican American families in Washington County (Hernandez, 1982), and these older families have watched as the numbers of permanent Mexican American families have grown. Informal estimates put the permanent

Mexican American population at 8,000 to 10,000, a number which is augmented markedly by the seasonal influx of migrant laborers (estimated to be a 2,000 to 4,000 increase) (McFadden, Smith, Tanaka & Terrion, 1980). As mentioned above, the actual census data place the number of people of Spanish origin in Washington County (6,477) and the number of Mexican Americans (4,312) well below that unofficial figure.

There is a wide range of income among families of Spanish origin in Washington County (see Figure 2). Nonetheless, the majority of this population group falls in the lower income levels. Persons of Spanish origin are also disproportionately represented below the poverty level. The proportion of Spanish origin persons in the total population in Washington County is 2.6%. At the same time, among all people with incomes below the poverty level, 7% are persons of Spanish origin. That is, the ratio of persons of Spanish origin below the poverty level is nearly three times that of their representation in the general population. Further, it is likely that persons of very low income in this group (migrants, undocumented workers, etc.) are underrepresented by census data. If this is the case, the actual numbers living below the poverty level may be even greater than the census figures indicate.

The Spanish origin population in Washington County is a relatively young one, as Figure 3 indicates. Although the

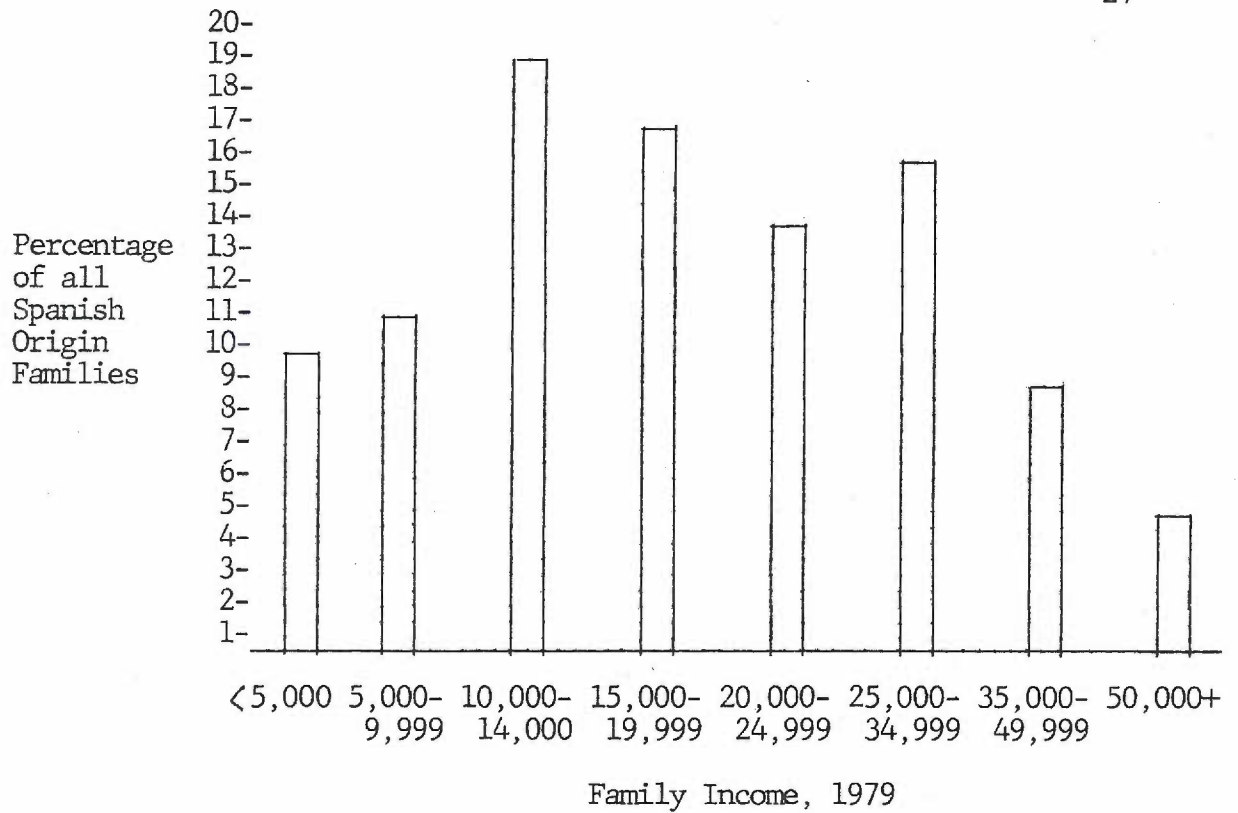


Figure 2. Family Income, 1979: Families of Spanish Origin, Washington County, Oregon

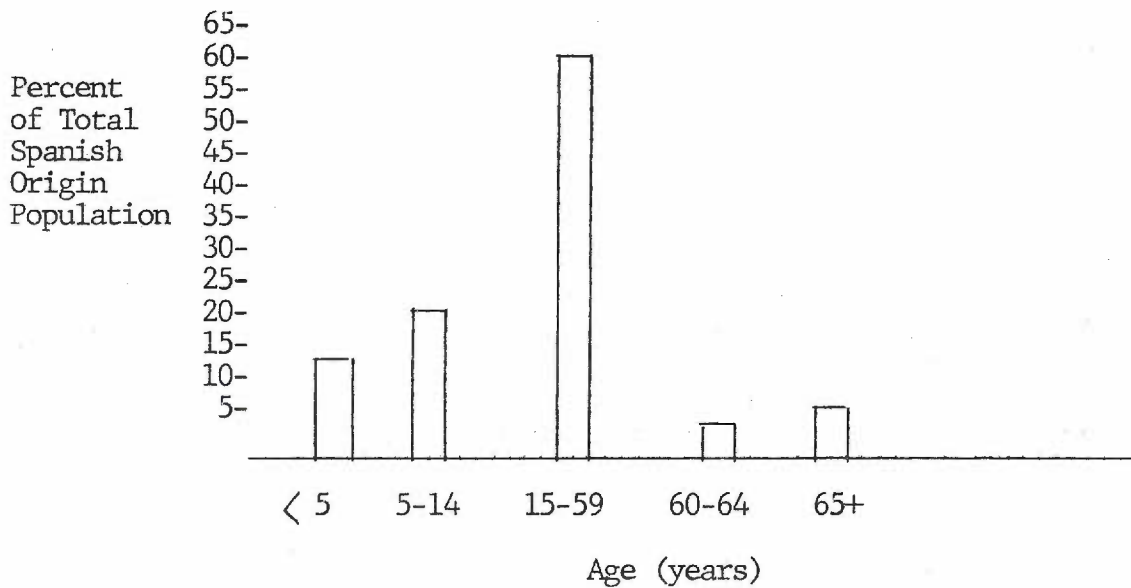


Figure 3. Age of Spanish Origin Population, Washington County, Oregon

majority of the population is between 15 and 59 years of age, a significant number (2,218 persons or 34.2%) are less than 15 years old (U.S. Census, 1980).

Mexican Americans live scattered throughout the county, with no concentration of population in any particular part of any community. The type of housing found varies from trailers to apartments to homes: some poorly built, others small, modest and well-cared for, still others larger and more elaborate. Some Mexican American families are homeowners, others are renters. A large number of migrant laborers live in camps provided by the land-owners for whom they work. There are 13 migrant camps in the county (McFadden et al., 1980). Some provide workers with individual trailer units so that each family has separate kitchen and bathroom facilities. Others are built on the "summer-camp" model of small cabins with one or two small windows. A double bed and set of bunks and a hot plate are provided for each family unit. Bathrooms and water (a community spigot) are shared by the camp and are notorious for their non-functioning. There are no accurate statistics on the percentage of migrants who live in the camps as compared to those who temporarily rent other low-cost housing in the community or those who live with permanently-settled relatives or friends. Nor is there any estimate of the numbers of undocumented workers who are in Washington County.

In response to the needs of workers and their families, a system of social services has evolved in Washington County. Some of those services are oriented toward permanent residents, others toward migrants.

The Educational Service District administers a summer school program for school-age children and a day care program for infants and preschoolers. Transportation to and from the camps, full-day supervised care and instructional programs, and hot lunches are provided for the children. A health program offers daily on-site screening and care for preschoolers. A general screening is done on all children by pediatric nurse practitioners from the Washington County Health Department and the Virginia Garcia Memorial Health Clinic.

The Virginia Garcia Clinic operates year-round, serving both the migrant and the permanent Mexican American population in Washington County. It is staffed by family physicians, a pediatric nurse practitioner, a nursing support staff and a laboratory technician. Funded by the Department of Health and Human Services of the Federal Government, it is constantly under pressure to maintain a certain number of contacts with migrant clients, and to increase the number of clients who are self-paying. One factor that thwarts that effort is that as Mexican Americans become settled in the community and are more comfortable financially, they may

begin to use the services of a private physician rather than the community clinic (Rodriguez, 1982).

Still, the Virginia Garcia Clinic is the only source of health care in Washington County that is structured with the cultural and language characteristics of Mexican American clients in mind, and many Mexican Americans, both permanent and migrant, use its services.

Several Catholic churches in the area serve Mexican Americans. Each Sunday, St. Alexander's Catholic Church in Cornelius has the only Spanish mass in the area. This church is also a mission church of the Mexican Catholic church. At present, a Roman Catholic nun from Jalisco, Mexico, serves as a missionary to the community.

Senior citizens in Hillsboro have helped organize a center serving the elderly Mexican American (Petra Perez Senior Center). A low-cost hot lunch program is provided as well as a referral and advocate system where people who have a need for food, clothing, housing, health care or other support are assisted to find that support.

A focal point for Mexican Americans in Washington County is Centro Cultural, a cultural center located in Cornelius. Recently, a new facility was opened to house offices for Centro administrators and to provide space for community meetings and social activities. The Centro acts as an institutional representative and spokesgroup for the Mexican American community.

Sample

Research was conducted among Mexican Americans in Washington County, Oregon. Thirty Mexican American adults were selected as study subjects. They live throughout the county, from rural areas to the Portland suburb of Beaverton. They are somewhat isolated from other Mexican American communities in the Northwest, and, even in the local area, cannot be described as forming a "community." The majority are relatively recent arrivals to Oregon--within the past 10 to 15 years. They represent all social classes and a wide range of occupations. As a result of these characteristics, findings from this study will have more external validity if generalized to smaller Mexican American communities in the Northwest than to those in the Southwest or those in very large urban areas. This population was chosen for study for two reasons: 1) no such research has been done on Oregon's Mexican Americans; and 2) the group was relatively accessible for study.

Sample Selection

A matter of concern is the degree of heterogeneity in the population on the variables being tested. It is known that a full range of socioeconomic status and acculturation is present. The sample for study was selected in an attempt to reflect that heterogeneity. A snowball technique was used to select subjects. With a snowball technique, one form of accidental sampling, the danger of sampling bias is

increased. The results of a study based on this technique tend to have a low degree of external validity. That is, they cannot be generalized to the larger population with any degree of confidence. Efforts were made in this study to avoid repeated or closed networking of subjects by asking respondents to name several potential subjects. Names given by several respondents were rejected, except in one case. Several subjects suggested talking to "So-and-so," saying, "She knows everything!" She did know a great deal, and the wealth of information gained seemed to outweigh any loss of external validity.

Even though it does decrease the external validity of the study, a snowball technique was believed to be appropriate for two reasons. First, it increased the chance of access to subjects from all social classes and all levels of acculturation. It also allowed selection of subjects who might display a variety of health practices. Second, this study is a correlational rather than experimental study. The hypotheses as constructed can best be tested using a sample that is known to be heterogeneous.

Initially, the only criterion on which sample selection was made was cultural heritage. Subjects were Mexican American by cultural heritage. Either the subjects themselves or their ancestors came from Mexico. No generation limit was set, so subjects ranged from first to fifth generation Mexican American. Subsequent decisions to include a subject were

based on a rough estimate of socioeconomic status, acculturation and/or health practices.

The first subject was selected informally, being a friend of the researcher. She was then asked to name another individual as a potential subject. From there the sample size "snowballed." Subjects were specifically asked to refer others on the basis of whether new informants possessed varied levels of socioeconomic status, acculturation or health practices. This was necessarily an estimation on the part of the subject who was providing a new name.

Contact with potential subjects was usually made by phone. In that call, the purpose of the research was explained and the subject's cooperation requested. In one case, a formal face-to-face introduction was made. Additionally, the researcher attended Spanish mass at St. Alexander's Catholic Church in Cornelius, visited the Petra Perez Senior Center in Hillsboro and the Centro Cultural in Cornelius, explaining the research project and requesting volunteers to be subjects.

Design

A non-experimental ex post facto correlational research design was used in this study. An interview and a questionnaire were combined to collect data. Acculturation, socioeconomic status and demographic variables were measured using a 30-item self-administered questionnaire (see Appendix A).

Health beliefs and practices were measured using an interview schedule (see Appendix B).

Interviews were conducted in the subject's homes or at places of work. Subjects had the option of being interviewed in Spanish or English. The questionnaire, also in either Spanish or English, was given and retrieved at the time of the interview. Some subjects found questionnaire items that were unclear to them. In these few cases, the questions were simply read aloud to the subject. No further explanation of the item was given. In two cases the entire questionnaire was read to respondents when it became evident they were not able to read the questions independently.

It is of interest to note the subjects' use of language during data collection. Eight respondents completed both the questionnaire and interview in Spanish. Seventeen did both in English. Four respondents filled out a Spanish questionnaire but were interviewed in English, and one subject who completed an English questionnaire was interviewed in Spanish. In all but three of the English interviews respondents alternated between Spanish and English or, at the very least, used a number of Spanish words or phrases. Most often these were used when talking about particular illnesses and treatments. At times subjects would try to describe an illness in English and then switch to Spanish in order to fully express themselves. One example would be the subject who stated: "I don't know how you say this in

English, but I have heard of when le hacen ojo." Either there seemed to be no quick translation into English, or the subjects did not conceptualize the illness or treatment in English terms.

Independent Variables

Based on the hypotheses listed above, two independent variables can be identified: degree of acculturation and socioeconomic status.

Acculturation

Attempts to measure degree of acculturation among Mexican Americans have varied, some being unidimensional (Padilla, 1980; Pierce, Clark & Kiefer, 1972; Olmedo, Martinez & Martinez, 1978; Olmedo & Padilla, 1978), some focusing on sociocultural factors (Cuellar, Harris & Jasso, 1980; Mercer, 1976; Samora, 1947), others on semantic differential items (Martinez, 1975; Martinez, Martinez, Olmedo & Goldman, 1976). Still others have included acculturation within the broader concept of "ethnic identity," attempting to describe and explain variance with generational groups (Clark, Kaufman & Pierce, 1976).

The concept acculturation was operationalized in this study using a scale developed by Cuellar and his associates (1980). This scale differentiates "five distinct types of Mexican Americans based on level of acculturation: very Mexican, Mexican-oriented bicultural, 'true' bicultural,

Anglo-oriented bicultural, and very Anglicized" (Cuellar et al., 1980, p. 199). The scale taps sociocultural characteristics and includes both behavioral and preferential or attitudinal items. Questions reflect five different factors: 1) ethnic identity; 2) language; 3) ethnic interactions; 4) cultural heritage; and 5) "generational proximity." Some or all of these factors have been used in a number of other acculturation scales, although the style of questions have differed greatly (Leininger, undated; Olmedo et al., 1978; Samora, 1947).

Coding. Subjects were scored from 1 to 5 with a score of 1 being very Mexican and 5 being very Anglo. The higher the score subjects received on this scale, the more acculturated they were considered to be.

Reliability of acculturation scale. Cuellar and his associates examined three aspects of reliability when developing their acculturation scale. Stability was assessed using a test-retest technique. The scale was administered to 16 clinical subjects "on two separate occasions 5 weeks apart by the same rater," and to a "normal sample of 26...1 month apart." With the first sample, the coefficient of stability "obtained was .72 and was significant at the .01 level." With the second group, "a correlation coefficient of .80, $p < .01$ was obtained" (Cuellar et al., 1980, pp. 203-204).

Inter-rater reliability was established by two raters who independently administered the scale to the same

population "during the same week." A correlation coefficient of .89, $p < .01$ was obtained.

Internal consistency was measured by determining coefficient alpha for hospitalized (alpha = .81) and non-hospitalized (alpha = .88) subjects (Cuellar et al., 1980, p. 203). The present study also used the coefficient alpha to determine internal consistency of Cuellar's acculturation scale as it was applied to the sample of 30 subjects. A coefficient alpha of .93 was obtained in the current study.

Validity of acculturation scale. Validity of the acculturation scale was assessed in Cuellar's study using several procedures.

Criterion-related validity was evaluated in several ways. One procedure involved asking 12 hospital staff members to rate 26 Mexican American patients on a scale from 1 to 5 (1 = very Mexican, 5 = very Anglo). These same 26 patients were then given the acculturation scale being developed and their scores correlated to the staff ratings. The results were a "Spearman rank-order correlation of .75, $p < .01$ " (Cuellar et al., 1980, p. 204).

A second means of testing criterion validity involved administering the acculturation scale and vocabulary subtests of an English (Wechsler Adult Intelligence Scale) and a Spanish (Escala de Inteligencia Wechsler Para Adultos) intelligence test to 32 Mexican American patients. Correlations between the three variables suggested that there was

no significant relation between the acculturation test and the vocabulary subtests, but that "the two subtests were highly correlated ($r = .74, p < .01$)."

Further, "the differences between the two vocabulary subtest scores for each patient correlated significantly" with scores on the acculturation scale ($r = -.36, p < .05$). That is, fluency in English was related to a high acculturation score while Spanish fluency was related to a lower acculturation score.

A third measure of criterion validity was completed by comparing the level of acculturation obtained on the scale with generation and education. As predicted, correlations between acculturation type and generation were significant (Kendall's Tau = .51, $p < .01$), but correlations between acculturation type and education were nonsignificant (Kendall's Tau = .075, $p < .08$).

Concurrent validation was assessed by administering the acculturation scale being developed along with two other acculturation scales (Biculturalism Inventory [BI] and Behavioral Acculturation Scale [BAS]) to 22 Mexican American hospital staff members. These scales were given "on a random basis on three consecutive days," and scores were correlated using Spearman rank-order correlation coefficients. The results were as follows: Cuellar's scale with BI: $\rho = .81, p < .001$; Cuellar's scale with BAS: $\rho = .76, p < .001$; BAS with BI: $\rho = .77, p < .001$.

The final measure of validity used was construct validity measured by the known groups technique. The acculturation scale was given to Mexicans, Mexican Americans and Anglos, and mean scores from each group were compared. "The group from Mexico (n=17) obtained a mean of 1.67, the Mexican American group (n=162) obtained a mean of 2.88, and the Anglo group (n=13) obtained a mean of 4.39" (Cuellar et al., 1980, p. 204). As these scores closely approximate the types defined by the authors, construct validity was supported.

Socioeconomic Status

The perspective taken in this study is that one's socioeconomic status is a function of one's position in the economic structure, in particular one's relationship to the means of production within society. In an industrial, wage-based society such as that of the United States, occupational position is often considered the most accurate way to measure one's relationship to the means of production. But it is not enough to merely classify individuals by type of occupation--skilled, unskilled, white-collar, blue-collar, etc. Subjects in this study were also asked the nature of their work, what type of business or industry they worked for, and the type of worker they were (self-employed, salaried, government, etc.). Based on this information, subjects were assigned a rating using Duncan's Socioeconomic Index (SEI) for 1970 Census Detailed Occupational Codes (Hauser & Featherman, 1977).

Duncan's SEI is an index based on occupational prestige, education and income. It is, however, an average index derived from group data and, as Duncan says,

is by no means a completely effective substitute for individual measures of income or education... Research on the correlates of socioeconomic status should probably not rely on occupation alone as an indicator thereof. (Duncan, 1961, p. 143)

For this reason, education and income are included as criteria in a total socioeconomic status score.

Coding. An occupational rating was assigned from the scores given to occupational categories in Duncan's SEI. These scores range between 1 and 100. For example, a primary school administrator was given an occupation score of 72, while a cook received a score of 15. Education was assessed in terms of actual years of education from 1 to 17+ years. Income was measured as one of six categories: \$0000-3,999; \$4,000-5,999; \$6,000-9,999; \$10,000-14,999; \$15,000-19,999; and \$20,000+.

In order to create an index with these three criteria, income and education were converted to scores based on 100. For example, 15 years of education was equal to a score of 88, while an income of \$10,000-14,999 received a score of 60. Higher scores indicated higher socioeconomic status.

Reliability of socioeconomic status index. Research results have consistently suggested a high level of reliability of Duncan's SEI. In 1943, occupations were given a prestige rating by a population group sampled through the

National Opinion Research Center (NORC prestige scale). Twenty years later the same occupations were again rated, additional occupational categories included, and yet another scale created (Duncan's SEI). Duncan determined scores for occupational prestige on the basis of a multiple regression analysis of education, income and occupation. The correlation between the two ratings over a period of 20 years was .93, indicating a high degree of stability (Duncan, 1968; Reiss, 1961).

Equivalence as a measure of reliability is also supported by the fact that similar results in the use of SEI are consistently reported in a number of independent research projects. Gilbert and Kahl (1982), reviewing the literature on reliability associated with occupational prestige across class, race and ethnic lines, found that

the correlations between the average ratings made by the prosperous and the poor, people in high- and low-prestige occupations, blacks and whites, men and women, residents of the Northeast and the South, and city and country dwellers were all 0.95 or above. Even those who proposed different criteria for judging occupations did not differ in the way they ranked occupations (from Reiss, 1961:189, 193; Treiman, 1977:60-74). (Gilbert & Kahl, 1982, p. 44)

Reliability of education and income as measures of socioeconomic status has also been supported in the sociological research literature. Drawing on work done by Siegel and Hodge (1968), Hauser and Featherman note a high reliability correlation between education and income.

Siegel and Hodge matched respondents' reports of completed schooling, personal income and occupational status (Duncan's SEI equivalents to census major occupation groups of titles) to the 1960 decennial census of population with subsequent reports by the same persons of these items to either the Post Enumeration Survey or the Current Population Survey. While the Siegel-Hodge estimates of test-retest reliability of socioeconomic items were calculated over slightly different populations..., we find no impairment of the comparison of relative reliabilities. Siegel and Hodge report a reliability correlation of .8726 for occupation, while the corresponding coefficients for education and income are .9332 and .8468, respectively (Siegel and Hodge, 1968: 37). (Hauser & Featherman, 1977, p. 56)

In the present study on Mexican Americans, a reliability coefficient (Cronbach's alpha) of .735 was obtained for the combined socioeconomic index.

Validity of socioeconomic status index. Validity of the measures of socioeconomic status used in this study may best be assessed using the notions of concurrent and construct validity. As Miller points out, "numerous prestige studies exist, and correspondence between independent samples of respondents is quite high" (Miller, 1970, p. 173). Construct validity is supported by the wealth of literature developing the theoretical and observed relationships among indicators of socioeconomic status (The reader is referred to Bendix & Lipset, 1963; Hauser & Featherman, 1977; Laumann, 1970, for a general overview of stratification literature and further reference in this area).

Dependent Variable

The dependent variable in this study, health beliefs and practices orientation, is multidimensional. It includes several types of information relating to: 1) concept of disease; 2) beliefs about traditional diseases; 3) knowledge of traditional remedies; 4) health-seeking behavior; and 5) perception of differences between modern and traditional health practices.

The standard interview schedule used to measure these dimensions was made up of 14 questions, but discussion invariably led to other spontaneous questions. The items on this scale were written so that they could be combined into one index of health beliefs and practices. Some questions were closed-ended, but others were open-ended, allowing subjects to state their own understandings and attitudes.

Coding. The coding of questions on the Health Orientation measure varied and was quite complex (see Appendix B for the interview schedule). Several items (questions 2, 3 and 13) were coded on a scale ranging from 1 to 4. A score of 1 indicated a very Anglo rating and a score of 4 indicated a very Mexican rating. For question 2 (What can you do to keep from getting ill?) four categories were developed from a content analysis of responses. Those categories included: 1) one can take care of him or herself, exercise, eat right, etc.; 2) one can follow the doctor's orders; 3) one can live a good moral life; and 4) one can

take a fateful attitude: nothing can be done, health and illness are gifts from God. This fourth category also incorporated responses which reflected a sense of superstition. As one example, one respondent mentioned the wearing of an ojo de venado to prevent mal ojo (this is a hard-shelled seed or nut worn on a string around the neck).

A content analysis of answers to question 3 (How important is faith in God in staying well and recovering from illness?) led to developing the following categories: 1) it has nothing to do with it; 2) it is somewhat important, but what I do is more important; 3) it is important. I work together with God to stay healthy; and 4) it is very important. God gives health, and prayer is essential to good health.

For item 13, subjects were asked the principal reason they did or did not use traditional treatments. Responses, on the basis of an analysis of their content, reflected the following beliefs: 1) I don't use them. I don't believe in them and know nothing about them; 2) personally, I wouldn't use them, but my mother, aunt, etc., thinks they work, so I let her use them; 3) they work; and 4) these treatments are part of my culture. I grew up with them and I believe in them.

Questions 4 through 7 asked subjects about their knowledge and experience with traditional illnesses and treatments. This set of questions and question 12 (Do you know of any illnesses that Anglo doctors can't treat?) were enumerated and subjects were given that score for these items. Scores

on these questions ranged from 0 to 21, depending on the question.

Questions 8 (Do you know anyone who knows more about these special illnesses and how to treat them?) and 14 (Are your children immunized?) were coded as yes or no, where yes = 0 and no = 1.

Items 10 and 11 dealt with both the actual (The last time you or someone in your family was ill, what was done first to handle the illness?) and the hypothetical (For what type of illness would you use a home remedy...?) health-seeking behavior of the subject. The code developed for these two questions uses a grid (see Figure 4) derived from the model of illness treatment decision-making developed by James Young on a Mexican population (1980). Young's model is based on the actual behavior of his population, and his findings suggest that factors such as gravity of illness, previous experience with a particular illness and/or treatment and faith in one's healer (traditional or modern) influenced the decision made by subjects in his study. Question 11 attempted to reveal those factors in this study's population, but during data collection, subjects were observed to hesitate and to have difficulty answering that question unless probed for examples, or even given examples. The data collected on this question showed little variation and little depth. Because data were so limited, the responses to question 10 and 11 were combined. For the most part, the responses

coded were from question 10. A higher score on this question reflected a greater traditional health orientation.

	Score								
	1	2	3	4	5	6	7	8	9
First Choice	MD	MD	MD	ST	ST	ST	CU	CU	CU
Second Choice	MD	ST	CU	MD	ST	CU	MD	ST	CU

Where: MD = modern medical care
 ST = self treatment or home remedy
 CU = curer/relative or neighbor knowledgeable in traditional illnesses and treatments

Figure 4. First and Second Choice of Treatment: Actual Case

A second score was given to items 10 and 11. This score reflected a distinction between whether the self-treatment done was traditional or nontraditional in nature. If a traditional treatment was given as an example, the subject received a score of 1. If a nontraditional treatment (such as aspirin, or other over-the-counter drugs) was used, subjects were given a score of 0.

Finally, responses to questions 1 (How do you decide if you are ill?) and 9 (What does a healer do for people who are ill?) were not incorporated into the over-all health orientation score. Instead, data gathered on these items were treated as descriptive and categories of responses were looked for. Very little information was obtained and these questions are not elaborated on further.

For each individual, scores on items 2 through 8 and 10 through 14, coded as described above, were summed to form the health orientation scale score. Scores ranged from 4 to 68.

Reliability of health orientation scale. The limited time-frame of this study (approximately three weeks were available for data collection) was the primary factor determining the form of reliability testing used on this instrument. The technique believed most feasible for this particular study was Cronbach's alpha to assess the internal consistency of the instrument. The results of this test, which is a statistical manipulation of data and can be quickly determined, was high over-all (alpha = .77). The correlation of several individual items fell below the level of significance, however. The corrected item-total correlation for question 10 (choice of treatment) was .28; for question 12 (did the subject know a healer?) the correlation was .15; and for question 14 (were children immunized?) a very low correlation of .07 was obtained. These low ratings indicate little variability on these three questions and suggest they may not be as useful as other scale items in measuring the variable of health orientation.

Interrater reliability was assessed at the level of data coding rather than data collection. Not doing interrater reliability at this stage is a drawback since the interview format is particularly susceptible to rater variation.

Questions can be rephrased, added to or glossed over at the discretion of the investigator. This is likely to be more of a problem if there are two or more investigators, though interviews are also prone to variation with a single data collector. Each respondent is different and a standard question may easily lead to others not written on the schedule, especially with open-ended questions. Two factors were considered in foregoing interrater reliability testing. First was the time constraint of the project. The second factor was the fact that having two raters administer the same interview or a similar instrument to measure health beliefs could create an excessive level of fatigue in the subject, which would be an additional threat to the test's validity.

The use of a test-retest technique to assess instrument reliability, in terms of its stability over time, was precluded for the same reasons.

Since reliability testing of the health orientation scale was limited to the coefficient alpha, there may be some question as to whether the instrument would yield similar results if administered at a later date or if given by a second interviewer.

Validity of health orientation scale. Validity of the health orientation measure was assessed in several ways. First, prior to actual use, content validity was established by submitting the questions to a panel of experts, including

two anthropologists, a research methodologist and an historian (Mexican American). The panel was asked to evaluate the instrument in terms of its comprehensiveness: did it adequately cover all dimensions of the variable to be measured? Questions were added or deleted and the content of some questions was restructured as the panel believed necessary or useful in order to gather the data sought.

Face validity was assessed by having the interview schedule reviewed by the same panel and by two members of the local Mexican American community. Language and the structure of the instrument were addressed: were questions clear? Were they culturally relevant? Was the translation accurate and relevant to the local community? Changes were made to increase the clarity and readability of the questions.

A third type of validity was considered in the development of the health orientation measure. Construct validity of the measure was supported by the fact that the instrument was conceptually based on the taxonomy of illness and treatment developed by anthropologist Margarita Kay (1977). Kay used the techniques of ethnographic semantics to identify the aspects of the Mexican American culture that related to health and illness. Careful consideration was given to her categories of illness and treatment when the questions were written for the health orientation scale. Questions were based on Kay's findings that some illnesses are perceived to be unique to Mexican Americans, that it is believed there

are illnesses which Anglo doctors cannot treat, and that different people have different levels of skill when it comes to diagnosing and treating traditional illnesses. Optimally, a further test of construct validity would be to interview several known groups (Anglo and Mexican) and compare the group scores on this scale. Again, due to time limitations, this technique was not used.

Additional Variables

Additional data were collected on the background and demographic characteristics of the sample: age, sex and length of time in the U.S. These variables may be directly related to either knowledge of folk medicine and/or health behavior, or they may be extraneous variables. Age and length of time in the U.S., for example, may be indicators of generational status. Based on theoretical constructs which posit that first generation residents will be more closely tied to Mexico and Mexican traditions, these data can be used to lend support to correlations found between acculturation levels and health use patterns. Generational status was based on the place of birth of the subject as well as where his or her parents and grandparents were born. If subjects were born in Mexico they were first generation. If they were born in the U.S. but either parent was born in Mexico, they were second generation. Third generation subjects were those born in the U.S. of parents who were both born in the U.S. and grandparents who were all born in Mexico.

U.S.-born subjects with U.S.-born parents and at least one grandparent born in Mexico were fourth generation. If all grandparents and parents of a U.S.-born subject were born in the U.S., this person was a fifth generation Mexican American.

Sex, in contrast to age and length of time in the U.S., may be an extraneous variable since women have traditionally been the supervisors of their family's health in the Mexican American culture. Differences between men's and women's levels of beliefs and practices were noted.

Procedures for Data Collection

This section briefly discusses the process through which data were collected, with special attention given to factors presenting a threat to the reliability and validity of the study.

The way in which data were collected contains a number of potential "sources of measurement error." These include situation contaminants, response set biases, variations in the administration of the measure (Polit & Hungler, 1978), and instrument relevance to the study group. These potential sources of bias will be expanded upon in the following discussion of the procedure of data collection. The method of sampling and its threat to external validity were discussed above (pp. 31-32) and are not dealt with here.

After subjects agreed to participate in the study, a time and place to complete the interview and questionnaire

were selected and the meeting was carried out. "Situation contaminants" can be particularly troublesome at this point. Subjects may feel uncomfortable if they are in an unfamiliar place. The use of recording devices (machines as well as note-taking) may be distracting. The perception of the researcher as a formal authority figure, or even the simple presence of the researcher, may influence responses. Attempts were made to minimize the affect of these situational factors as much as possible. The choice of the site of the interview was left largely up to the subject, so that he or she could be most comfortable with the surroundings. At times, this presented a new problem, as when a demanding baby or a phone call or office visit interrupted the interview.

A second situational contaminant in this study was presented by the use of a tape recorder. Even if a researcher is quite experienced, it is difficult to do a field interview and accurately recall all the information one hears unless some means of recording is used. Ethnographers suggest a number of techniques to help "remember" data (Spradley, 1979). These include recording, full note-taking, jotting down key words and filling in information later, and writing out notes from memory as soon as possible after the interview. In this study a tape recording of interviews was done. This technique was chosen since the researcher had little experience with the ethnographic interview, since a second language was involved, and in order to allow for more

accurate quotes to be taken later. A small recorder was set up in the interview area while the subject was completing the self-administered questionnaire. Since a tape recorder can be an obtrusive method of collecting data, precautions were taken to reduce its impact. Permission was asked of subjects to use the recorder. They were assured that only people connected with the study would listen to the tape and that no other subjects would hear it. They were also given the option of keeping the tape themselves after the study was completed. No one took that option.

In all but one case permission was granted to record the interview. The one exception occurred when the subject began talking as soon as the study had been explained. It did not seem appropriate to stop her in order to set up the machine. Extensive notes were taken during the interview and expanded on immediately afterward. Due to technical problems, two other interviews were not properly recorded.

The presence of the researcher during data collection itself was not considered particularly problematic. First, data on socioeconomic status, acculturation and demographic characteristics were collected by means of a self-administered questionnaire. While the subject was completing the questionnaire, the researcher was occupied with preparing the tape recorder, checking notes, playing with the baby, etc. The remainder of the encounter, and the majority of the time, was spent in the interview.

Perceptions of the researcher as an outside authority figure may have influenced responses, however. Field researchers often encounter subjects who hesitate to give information about beliefs and attitudes for fear of retaliation of the "authorities" or fear of ridicule. This issue is of particular importance in light of recent National Immigration Service raids of canneries and camps and the deportation of undocumented workers from the Northwest.

Although most information was given readily, a few subjects offered a bit of a disclaimer, almost an apology "Estas son nuestras creencias..." (These are our beliefs), as if the investigator might think them unsophisticated or unscientific. Efforts were made, through the style of approach to subjects to put them at ease and to encourage their complete and accurate participation in the study. Emphasis was put on the value of their knowledge and experiences. The contribution each of them could make to the study was stressed. Care was taken to clearly state who the researcher was and what the purpose of the research was. At the conclusion of the interview respondents were given an opportunity to ask questions about the research. Those questions tended to focus on what would happen with the results. Subjects seemed pleased that a final copy of the study would be given to the library in the Centro Cultural. The impact of the "researcher as authority was also decreased by the fact that subjects were introduced via

people they already knew and trusted--friends, family members, etc.

Response set biases are closely related to the problem of subjects defining the researcher as different than they. Subjects may believe the researcher has certain perceptions of them and certain expectations of their answers to questions. They may, as a result of this, "give the answers which they think are expected." They may also feel somewhat defensive or uncomfortable answering questions regarding folk medicine, since it is an area outside the life experience of the researcher. Attempts to mitigate this problem included paying attention to the way questions were phrased. Questions were written in an effort to be nonjudgmental and nonthreatening to the subject. The manner of asking questions was also geared toward emphasizing a real personal interest in finding out about folk medicine and the special information each respondent possessed.

A third source of measurement error involves variations in the administration of the measurement tool; that is, is each subject "measured" in the same way? Standardization of the instrument is one of the best ways to control for variations in its presentation to subjects. As was noted earlier in the discussion regarding the development of the scale for health orientation, the interview format is particularly difficult to standardize. This interview schedule contained standard questions and all subjects were asked

all questions on the schedule. In addition, those questions were asked of all subjects in the same manner, using the same words and phrases. An independent rater evaluated 5 randomly selected tapes, checking for the consistency of questioning and the presence of leading questions. The rater also listened for interviewing style: was the subject allowed to answer questions fully without being cut off? Was the interaction friendly and interactive rather than formal and stilted? In all 5 cases, all of the interview questions were asked. Several leading questions were noted, but they were not numerous, and the style of interviewing was assessed as one which encouraged the subject to give information freely.

Finally, the issue of instrument relevance to this study group is important. Because the sample represents a cultural subgroup, questions and the method of asking those questions needed to be formulated with the characteristics of the cultural group in mind. This process was carried out (with the help of a panel of experts) when questions were written. A further effort to increase the relevance of the instrument, and thus the validity of the data collection, was made by translating the questionnaire and interview into Spanish and providing subjects with the choice of one language or the other.

Coding and Analysis of Data

Coding of data was completed by the researcher using categories described previously. An assessment of the reliability of those ratings was made by having a second person independently rate a randomly selected set of 5 interviews. Prior to the interrater test, the rater was informed of the theoretical assumptions of the study, the method of data collection, and the contents of the tapes to be heard. The rater was also instructed as to the coding categories and their relationship to each question. An initial tape was listened to jointly by both raters and questions were clarified or further explanations made at that point. An overall interrater reliability of 1.00 was obtained when the coding scores of both raters were compared. Several individual items varied, but the discrepancies of one item were balanced by a difference in the opposite direction on another item. For example, with the same subject one rater gave question 5 a score of 4, while the second rater gave it a score of 5. The following question (6) was given a score of 10 by the first rater and a score of 9 by the second. Thus, when a total score was compiled, both raters arrived at the same score.

Analysis of the data collected in this study included a description of the sample population, a statistical analysis of relationships between variables, using Pearson's r and Kendall's Tau, and a narrative discussion of examples of traditional health beliefs and practices.

CHAPTER III
RESULTS AND DISCUSSION

Introduction

Results from this study are presented below in two distinct parts: the characteristics of the sample are described, especially as related to the study variables, (i.e., socioeconomic status, acculturation level, knowledge of traditional illness, examples of traditional illnesses and treatments, etc.), and statistical correlations between variables are noted. A discussion of the importance of findings is incorporated into the presentation of results.

Descriptive Data

This study surveyed 26 women and 4 men between the ages of 18 and 70. No attempt was made to have the sample be representative of the age characteristics of the entire population. There was a wide and fairly evenly spaced range of ages, with half the sample being under 40 years of age. The majority of subjects (n=16) were first or second generation Mexican Americans. Although there was a slight decrease in the average age with increasing generations until the fifth, this was not significant. Twenty-five people had lived in the U.S. for more than 20 years. All those living in the U.S. less than 20 years (two of these for less than a year) were first generation Mexican American.

The sample was highly educated with five subjects having over 16 years of education. Six respondents had 13 to 16 years of education, nine had 9 to 12 years, and only 10 had completed 8 years or less of education.

A wide range of income was noted, but the majority of the subjects had an income of less than \$10,000 per year (see Figure 5). This finding did reflect the income status of the general population. An equally wide range of occupations was observed, from housewife to affirmative action officer, from retail clerk to farm owner. Six subjects were housewives, which has no ranking on Duncan's SEI. Several of these women were single mothers or were widowed. To maintain consistency in coding those who identified themselves as housewives, and because other women subjects were ranked on the basis of their own occupations, husband's occupation was not used to rank women subjects. Of the 24 subjects who were not housewives, SEI scores ranged from 7 to 84, with a mean of 56.125, a standard deviation of 22.11, and median of 62.5 (see Figure 6).

Overall socioeconomic scores when these three variables were combined and adjustments made for missing data ranged from 2.67 to 92.67, with a mean of 51.51, a standard deviation of 27.02, and a median of 52.5 (see Figure 7).¹

¹Socioeconomic status scores for the six subjects without Duncan's SEI rating were estimated using data on education and income.

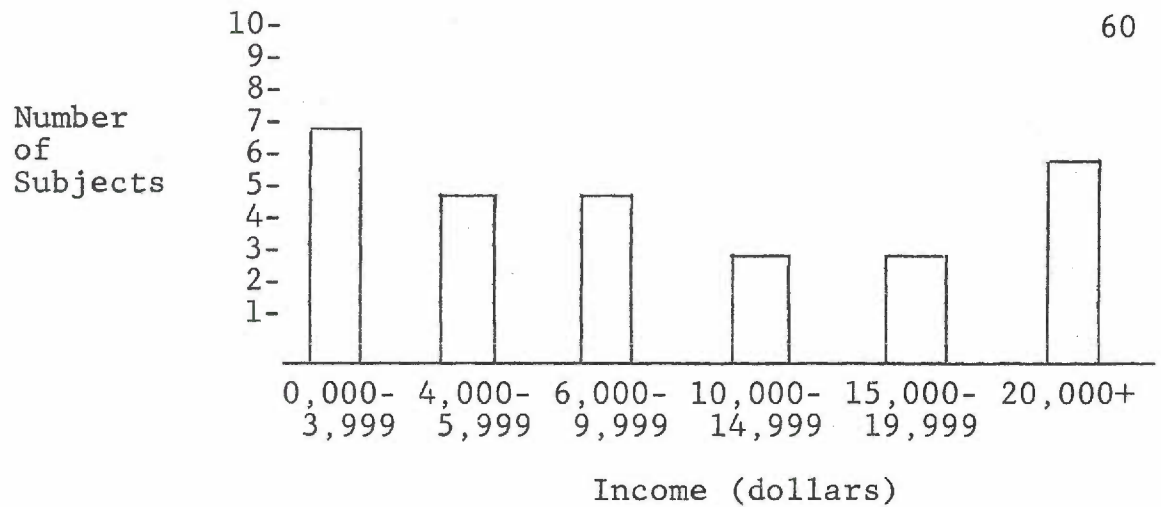


Figure 5. Income of Subjects

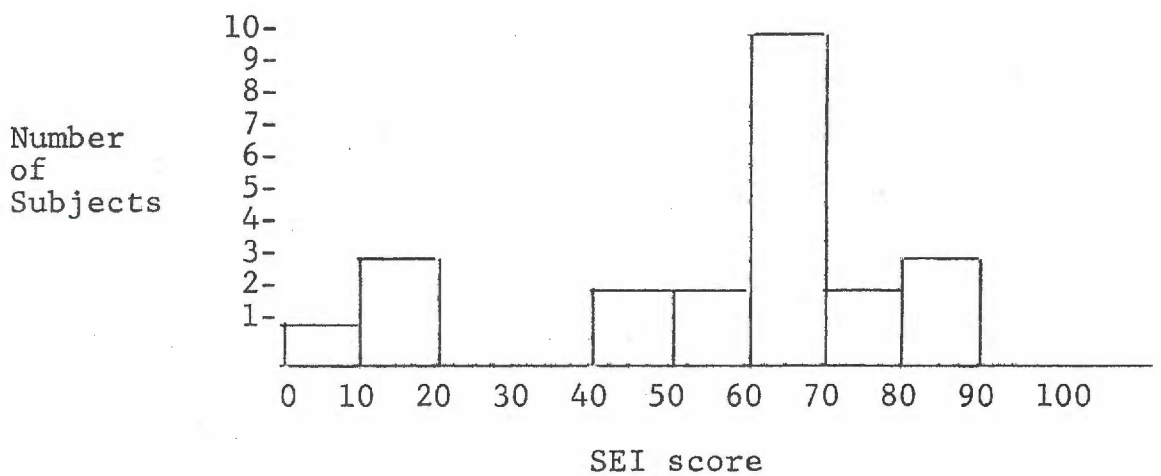


Figure 6. Frequency: Duncan's Socioeconomic Index Scores

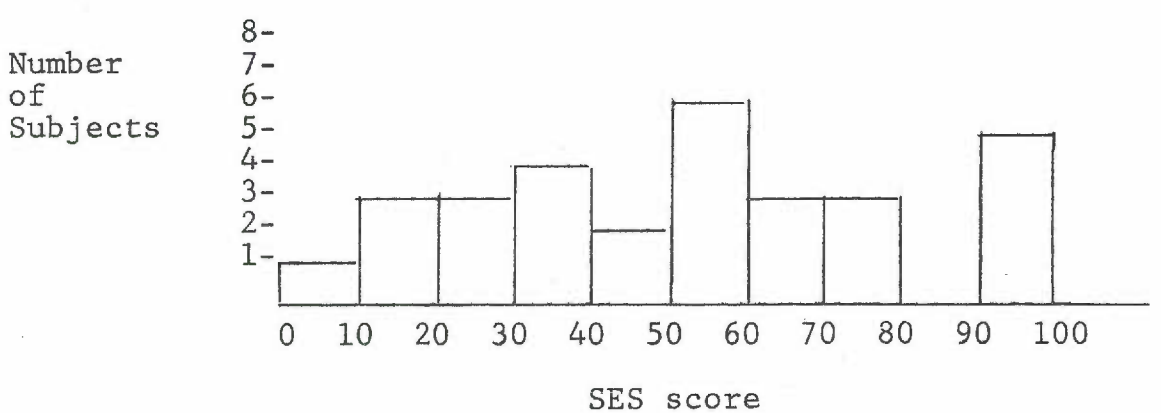


Figure 7. Frequency: Socioeconomic Status

The level of acculturation in this sample varied from 27 to 83 on a scale from 20 to 100 with 100 indicating a high level of acculturation. The mean was 54.3 and the standard deviation 14.58 (see Figure 8). The sample was thus largely bicultural, but again a wide range of scores from very Mexican to very Anglo were obtained.

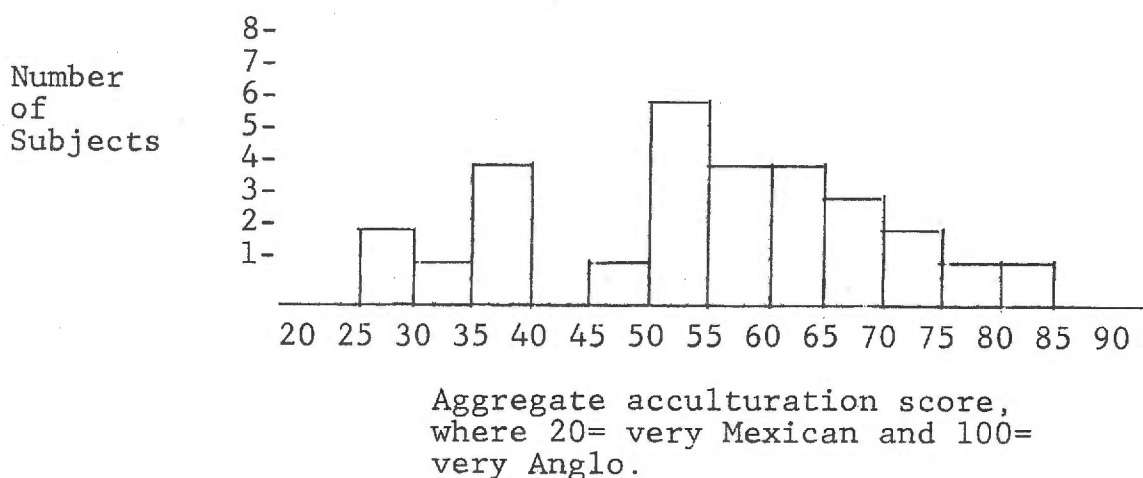


Figure 8. Frequency: Level of Acculturation

Most of the subjects were reared exclusively in the United States ($n=21$), but had parents who were very Mexican in terms of ethnic identity. These subjects had also associated with mostly Mexicans or Mexican Americans throughout their lives (see Table 1). Present associations and ethnic self-identity tended to be bicultural with a slight orientation toward Mexican or Mexican American identity. The vast majority expressed moderate ($n=12$) to extreme ($n=15$) pride in the cultural group to which they belong. No one expressed negative feelings toward the cultural group.

Table 1

Ethnic Origin of Subjects' Parents, Associates and Self

	Exclusively Mexican, Mexican Am.	Mostly Mexican, Mexican American	Equally Mexican, Anglo	Mostly Anglo, other	Exclusively Anglo or other
Ethnic Origin					
Mother	n=15	n=0	n=13	n=2	n=0
Father	n=15	n=0	n=11	n=3	n=1
Peers before age 6	n=15	n=8	n=4	n=2	n=1
Peers age 6 to 18	n=11	n=7	n=9	n=2	n=1
Present Associates	n=2	n=4	n=21	n=1	n=2
Self Identity	n=7	n=3	n=15	n=4	n=1

Responses to several items on the health orientation measure were of note. Nineteen of the subjects stated that they took active measures in order to stay well (i.e., ate well, exercised, slept well, worked, etc.), compared to only three who held a fateful attitude about staying well.

Faith in God as a means of keeping healthy or recovering one's health was found to be very important to this group. Twenty-one responses suggested that faith in God was either necessary or sufficient in order to maintain good health. Only three people said it had nothing to do with good health.

The respondents' knowledge about and experience with traditional illnesses and treatments varied. One clear finding from this study is that traditional beliefs and practices are present in a large part of this sample. More traditional treatments than illnesses are known, and people have a wider range of experience with treatments than with illnesses. In only two cases (both male subjects) did the respondents deny any knowledge of traditional illnesses. And even one of those subjects was able to recall a traditional treatment that his mother had used, although he could not fully describe it. Other subjects identified from one to seven "traditional illnesses" and from three to 21 "traditional treatments." The illnesses that subjects claimed to know about tended to be those most commonly referred to in the literature: mal de ojo (27 subjects mentioned this illness), empacho (n=24), susto (n=19), caida de mollera (n=17), mal puesto (n=14), and mal de aire (n=13). Respondents noted other illnesses which were not necessarily unique to Mexican Americans but which reflected an etiological conceptualization outside the realm of modern scientific medicine. Included among such disorders are perria (a sty on the eyelid) which is believed by some to be a result of seeing a dog urinate, and warts on the finger which may be caused by pointing at a rainbow. An additional example of this conception of the etiology of illness is that one may suffer a cold if his or her feet get wet (as in a pool of water) but

the top of the head is left dry. A similar result is seen if one takes a warm shower and then immediately goes outside into the cool air.

As described by the respondents, treatments can be separated into two classes: teas and herbs, and others (massages, poultices, special non-herbal drinks or concoctions, and prayers). A number of such treatments were described. Bee stings, some believe, can be treated by applying cigarette tobacco moistened with saliva or by rubbing the area with the saliva of a pregnant woman. The perria or sty on one's eyelid may be rubbed with the round part of a key to remove it. If one is sofocado or bloated, rubbing saliva in the navel may relieve the discomfort.

A variety of poultices to be applied to the neck, forehead, chest, back and/or feet for the treatment of colds and las anginas (sore throats) were listed: warmed banana peels, tomatoes, potatoes, onions, alcohol, hot olive oil. Coughs can be treated with a mixture of onion juice and sugar: an onion is cut so that it looks somewhat like a crysanthemum. It is left overnight in a place where dew can form on it and the juice can seep out of it. This juice is then mixed with sugar and a teaspoon is given when needed for cough.

Hiccups in babies can be cured by attaching a piece of red yarn to the middle of the baby's forehead.

Minor cuts are often treated by rubbing pitch from a pine tree, cobwebs, garlic, onion or cactus juice in the wound.

Prayer and religious symbolism (especially the Trinity) appear often in the folk treatments mentioned in this sample group. One treatment for warts, for example, involved reciting prayers while tying knots in a thread and rubbing each knot on the wart. The thread is then buried in a moist place and the warts will disappear in about six weeks. Prayers are also said in the egg treatment for mal ojo and for susto. Although most subjects knew only that prayers were said, several mentioned that they should be recited three times, three days in a row, or for three weeks.

Respondents were also asked about their experience with illnesses and treatments. Twenty-five subjects claimed to know someone who had suffered from a traditional illness, or to have experienced one themselves. These subjects stated they had experienced from one to five such illnesses, with 14 subjects having dealt with four or five. Again, the more commonly known illnesses were mentioned most often.

The majority of folk treatments mentioned by subjects in this study use ordinary materials, often foodstuff, easily accessible and inexpensive: onions, potatoes, oils, plants and leaves for teas, saliva, string, etc. Many of the traditional teas rely on plants that are native to the Southwestern U.S. and, because of the climate in Oregon, must be imported. One subject commented on how easy it had been to care for her family when she lived in Texas: "We had everything we needed on the hillside behind our house.

I don't ever remember going to the doctor when I was a kid." In Oregon, it is more difficult to find customary herbs, which may lead to the use of medicines instead.

More important than the numbers of illnesses and treatments known and/or experienced, however, was the pattern of health-seeking behavior present. The majority of subjects indicated their first choice of treatment would be self-care (21 of 30 cases). This could involve use of over-the-counter drugs (aspirin, laxative, antacid, etc.) or a home remedy of a more traditional nature. Self-care given as examples in this study was about half traditional remedies and half non-traditional (14:16). The preponderance of traditional treatments was in the form of teas and herbs, but more esoteric treatments were also used. One subject claimed to regularly use an egg treatment for her daughter's ojo and had done so the evening before our interview. Another had recently applied a poultice of onions, vinegar and baking soda to her son's stomach to treat his nausea and vomiting, and a third had, a week before the interview, been given burned pinto beans as a cure for empacho. Traditional treatments were not limited to traditional illnesses, but could be and were applied to any ailment.

When asked why they continued to use traditional treatments the quick response was often "Because they work!" Fourteen of the subjects gave this answer, while another eight responded that they used traditional methods of care

because they were a part of the Mexican American culture and they believed in them. One woman very simply stated, "Yo creo mas en cosas naturales como hierbitas o plantas que en medicinas" (I believe in natural things like herbs and plants more than in medicines). At least eight subjects claimed that the cost of modern medical care kept them from going to the doctor and led to their using traditional treatments instead. As one subject put it, "Mexicans are very stubborn when they are sick. They don't want to pay an arm and a leg when they can treat it themselves."

A relatively large number of subjects (n=6) claimed not to use the treatments now. For some of these people, cost was again a factor, but awareness and adaptation have also caused a change in their health behavior. Quotes from two respondents illustrate this point: "I don't use traditional treatments because I'm just so far removed from it...It could be part acculturation, part having a more scientific approach in solving my medical problems," and "I think I'm more aware of...Well, there's a doctor available, and I have the money to visit a doctor if I need to. This we didn't have before, so we had to use home remedies."

Five of the six respondents who did not use folk treatments were familiar with some forms of traditional treatments, four of the six had had some experience with such treatments in the past, and one indicated that she might use them in the future.

Frequently, when subjects referred to traditional treatments and illnesses, but especially treatments, they spoke of examples in the past. Many childhood experiences with illness and treatment were described and, as one subject said, "De estas creencias, ... habia mucho mas antes" (There were many more of these beliefs before).

Many of the Mexican Americans in this sample possess a great deal of cultural knowledge about health and illness which they would be likely to pass on to their children if they lived in a situation of ongoing cultural integrity. Instead, they live as a minority group in an Anglo culture. That cultural setting has influenced how they share their health beliefs and knowledge with their children. Their response to the task of developing a cultural awareness in their children has been mixed. Respondents in this study spoke of parents who refused to practice the traditional methods or to teach them to the children. The parents' logic seemed to be that by denying the clearly "Mexican" characteristics of their culture, it would be easier for their children to succeed in an Anglo society. Other subjects expressed sadness, but resignation, that their children had rejected the traditional beliefs: (I) "Do you think it's true? (ojo)" (R) "Well, yes, in some cases, but my daughters don't believe in that! They say it's a bunch of baloney."

The responses of children were also mixed. Some laughingly asserted there was no substance to their mother's or

grandmother's beliefs and they (the children) were trying to convince their mothers of how silly they were. Others expressed a certain degree of sadness that they had not been taught the old ways. As one woman said, "My mother is wonderful with las plantas (the plants) and hierbitas (herbs), but she is afraid that people will think she is evil so she only gives advice and treats the family. I wish she would show us more...cause when she's not with us, who's going to do it for us?"

A final item on the health orientation measure was whether the subjects' children were immunized. All subjects with children had had their children immunized for infectious diseases. Only one person said his children would probably not have been immunized if there had been no legal requirement. Immunization is clearly a preventive measure based on a social concept of illness transmission. Mexican Americans have been characterized by some as being oriented towards taking "precautionary" rather than "preventive" measures in terms of health care (Samora, 1978). Thus, childhood immunization would seem to be a good indicator to distinguish traditional from modern health orientation. This may not be the case in Oregon, however, since the state legally requires immunization and enforces that requirement by restricting access to schools for those children who are unimmunized or underimmunized.

Statistical Correlations

This study set out to examine the relationship of health orientation to acculturation and to socioeconomic status. Bivariate correlations were computed between each independent variable and the dependent variable. Both parametric (Pearson's product moment) and non-parametric (Kendall's Tau) statistics were used. In a study such as this, with a small n , one or two widely divergent responses could alter the correlation found with the parametric statistic. By using Kendall's Tau, which rank orders the subjects, the distorting impact of outlying individual responses is reduced. Similarity of results obtained with the two statistical procedures can thus be interpreted as an indication of statistical validity.

The findings from analysis of the data lend support to one of the hypotheses: a low level of socioeconomic status will be positively related to a more traditional health orientation (see Table 2). There appears to be a strong relationship between socioeconomic status and health orientation in the direction predicted. That is, the lower one's socioeconomic status, the more traditional one's health orientation and vice versa. The product moment correlation between socioeconomic status and health orientation was $-.4692$, $p=.004$ and Kendall's Tau was $-.3318$, $p=.006$. As Table 3 illustrates, however, one of the subhypotheses-- that those of lower socioeconomic status will have more

experience with traditional illness--is not supported ($r = -.2678$, $p=.076$; Kendall's Tau = $-.1926$, $p=.084$).

Table 2
Relationship of Socioeconomic Status and
Acculturation with Health Orientation

	Pearson's r	Kendall's Tau
Socioeconomic Status with Health Orientation	$-.4692$ $p=.004$	$-.3318$ $p=.006$
Acculturation with Health Orientation	$-.3018$ $p=.052$	$-.2007$ $p=.063$

Level of acculturation was not so strongly correlated with health orientation ($r = -.3018$, $p=.052$; Kendall's Tau = $-.2007$, $p=.063$). The direction of the relationship is one in which a lower level of acculturation would also relate to a more traditional health orientation. The statistical correlations, however, were not at a significant level. Despite the level of significance in the relationship of acculturation with health orientation, the difference between that correlation and the correlation of socioeconomic status with health orientation was nonsignificant ($t_{(27)} = .9545$).

When health orientation is broken down into its components and the relationship between the independent variables and specific elements of health orientation is examined, the relationship continues in the same direction. In some cases

Table 3

Relationship of Health Orientation Items to
Socioeconomic Status and Acculturation

	Pearson's r	Kendall's Tau
Socioeconomic Status to trad. illness knowledge	-.4093 p=.012	-.2556 p=.032
Socioeconomic Status to trad. treatment knowledge	-.3867 p=.017	-.2740 p=.019
Socioeconomic Status to trad. illness experience	-.2678 p=.076	-.1926 p=.084
Socioeconomic Status to trad. treatment experience	-.4998 p=.002	-.3760 p=.003
Socioeconomic Status to faith in God	-.5747 p=.001	-.4320 p=.002
Socioeconomic Status to efforts to stay well	-.2625 p=.084	-.1314 p=.197
Socioeconomic Status to knowledge of trad. healer	-.1971 p=.148	-.1323 p=.205
Acculturation to trad. illness knowledge	-.2190 p=.123	-.1160 p=.201
Acculturation to trad. treatment knowledge	-.2627 p=.080	-.2019 p=.065
Acculturation to trad. illness experience	-.0792 p=.339	-.0484 p=.365
Acculturation to trad. treatment experience	-.2023 p=.142	-.1713 p=.099
Acculturation to faith in God	-.4801 p=.004	-.3734 p=.006
Acculturation to efforts to stay well	-.3280 p=.041	-.2915 p=.030
Acculturation to know- ledge of trad. healer	-.3732 p=.021	-.2888 p=.032

it is reduced in strength. In several cases its strength is increased (as with socioeconomic status and faith in God as a means of staying healthy or overcoming illness; socioeconomic status and experience with traditional treatments) (see Table 3).

Only three health orientation factors were found to have a statistically significant relationship with acculturation. These were: 1) faith in God, 2) what one does to stay well, and 3) one's knowledge of a healer. The strongest correlation was found between the respondents' faith in God as a means of staying healthy and their acculturation level (see Table 3). Here a negative correlation supports the assertion that the more acculturated the individual, the less he or she believes that faith in God influences one's state of health.

Significance was also obtained between level of acculturation, what the subject did to stay well and whether the subject know anyone who was knowledgeable in traditional illnesses and treatments (see Table 3).

If one tended to take active measures to stay well such as exercise, a good diet, etc., they also tended to be more acculturated than those who took a fateful attitude toward preventing illness. The less acculturated, rather than more acculturated, subjects were more likely to know someone who understood traditional illnesses and treatments.

Of all components of socioeconomic status, the highest correlations were obtained between income and health

orientation, although occupation and education were also significantly related to health orientation (see Table 4). Again, the direction is an inverse one, the higher one's income, occupational level or education, the less likely one is to have a traditional health orientation. This finding lends support to a claim that the cost of health care may directly influence one's decision to continue using traditional remedies.

Table 4
Relationship of Socioeconomic Items with
Health Orientation

	Pearson's r	Kendall's Tau
Income with Health Orientation	-.4423 p=.008	-.2754 p=.027
Education with Health Orientation	-.3956 p=.015	-.3190 p=.009
Occupation with Health Orientation	-.3474 p=.048	-.2697 p=.037

The only variable, other than socioeconomic status and its components, which had a statistically significant relationship with health orientation was sex ($r = .4144$, $p=.011$; $\text{Tau} = .3037$, $p=.035$). Here the relationship was positive, with women tending to obtain higher health orientation scores than men, and thus expressing a more traditional health orientation than men. Even though this correlation

was quite high, it should be viewed with some caution, since only 4 of the 30 subjects were men.

There was no significant relationship with age, amount of time the subject had been in the U.S., where the subject was born and health orientation.

A high correlation was obtained among acculturation, age, amount of time the subject had been in the U.S. and where the subject was born (see Table 5). These results reflect the fact that, as might be expected, less acculturated subjects tend to have been born in Mexico, to have lived in the U.S. for a shorter period of time and to be older than those more acculturated.

Table 5
Relationship of Acculturation with Age,
Time in U.S., and Place of Birth

	Pearson's r	Kendall's Tau
Acculturation with Age	-.4258 p=.011	-.3761 p=.003
Acculturation with Time in U.S.	.3971 p=.015	.1137 p=.191
Acculturation with Place of Birth	-.7801 p=.001	-.6034 p=.001

A final area in which significant relationships were obtained was that of socioeconomic status and its components to acculturation (see Table 6). Interestingly, the relationship obtained between occupation and acculturation was

nonsignificant. Those who were relatively highly acculturated did not necessarily hold a correspondingly high occupational level.

Table 6
Relationship of Acculturation to Socioeconomic Status
and Components of Socioeconomic Status

	Pearson's r	Kendall's Tau
Acculturation to Socioeconomic Status	.4708 p=.004	.3653 p=.003
Acculturation to Income	.3896 p=.018	.3124 p=.014
Acculturation to Education	.4863 p=.003	.3801 p=.003
Acculturation to Occupation	.3230 p=.062	.1562 p=.149

When scores of socioeconomic status, acculturation and health orientation are cross-tabulated, a pattern appears which supports the correlations described above, but which also sheds some light on the interrelationship between these three variables.

Table 7 is derived by establishing high and low aggregates of scores on the three major variables. The range of high and low and the point separating the two were determined on the basis of the mean score for the group on the frequency distribution of each variable.

Table 7

Crosstabulation of Health Orientation,
Socioeconomic Status and Acculturation

	<u>Socioeconomic Status</u>			
	High		Low	
	High Acculturation	Low Acculturation	High Acculturation	Low Acculturation
High Health Orientation	n=3	n=3	n=4	n=6
Low Health Orientation	n=9	n=1	n=1	n=3

If the study's hypotheses were to be supported by findings from this sample, there would be a clustering of subjects in two categories: 1) High Health Orientation:Low Socioeconomic Status:Low Acculturation, and 2) Low Health Orientation:High Socioeconomic Status:High Acculturation. Such a clustering is evident when subjects have a low health, i.e., non-traditional, orientation (see Table 7). When there is a high health orientation, i.e., more traditional, however, subjects are about equally distributed over the entire range of socioeconomic status and acculturation levels.

These findings suggest that health orientation may be more closely connected to socioeconomic status than to acculturation, but the complex interrelationship of the three variables should not be overlooked. The fact that a wide range of socioeconomic status and acculturation is seen

among Mexican Americans who have a traditional orientation toward health suggests that another factor, perhaps not investigated in this study, may be at work in shaping health orientation.

There does seem to be some support for Madsen's (1964) findings that Mexican Americans of high socioeconomic status are also highly acculturated and tend not to use traditional health modes (n=9), but examples are also present which support Chesney et al.'s (1982) results that those least likely to use modern health facilities are Mexican Americans of high socioeconomic status and low acculturation (n=3). These conclusions must be viewed as suggestive at best, since the number of cases in each category is too low to make definitive statements about the relationships between variables.

CHAPTER IV
SUMMARY AND IMPLICATIONS

Summary

The purpose of this study was to explore reasons why traditional health beliefs and practices persist among Mexican Americans in Oregon. To do so, it examined the relationship of acculturation with health orientation and the relationship of socioeconomic status with health orientation.

A sample of 30 adult Mexican Americans from Washington County, Oregon, was selected using a snowball sampling technique. Subjects were interviewed about their health orientation. They were also asked to complete a self-administered questionnaire regarding their acculturation level and their socioeconomic status.

The first major hypothesis of this study was that a low level of acculturation would be positively related to a more traditional health orientation. It was not supported by the data gathered in this study. A relationship of acculturation with health orientation in the predicted direction was obtained, but it was not statistically significant.

There were two subhypotheses of the first major hypothesis:

1) less acculturated Mexican Americans would know more about traditional illnesses and treatments than more acculturated Mexican Americans, and

2) less acculturated Mexican Americans would have more experience with traditional illnesses and treatments than more acculturated Mexican Americans.

Neither of these was supported. Both high and low health orientation scores were found at all acculturation levels.

The study's second major hypothesis was that a low socioeconomic status would be positively related to a more traditional health orientation. This hypothesis was supported. There were two subhypotheses to the second major hypothesis:

1) Mexican Americans of lower socioeconomic status would know more about traditional illnesses and treatments than those of higher socioeconomic status, and

2) Mexican Americans of lower socioeconomic status would have more experience with traditional illnesses and treatments than those of higher socioeconomic status. The second subhypothesis was not supported.

Implications

There are several implications of this study for health professionals. First, since many Mexican Americans clearly rely on traditional forms of health care, it is essential that health care workers become familiar with those cultural

beliefs and practices. They should, as Kay argues, "know what the housewives are doing" (Kay, 1973, p. 194). It has been suggested that professional health care workers increase their cultural sensitivity, become bilingual, use good interpreters, and in other ways encourage communication and the sharing of cultural health forms between client and provider. This study would make these same suggestions and their importance should not be underestimated.

Increasing the professional's knowledge of the special health orientation of Mexican American clients opens the way for shared understandings of illness and treatments. Reducing the cultural ethnocentrism of modern health professionals eases the discomfort of Mexican American clients. Mexican Americans who use traditional medicine may become more receptive of new, more modern techniques if their current beliefs are not disparaged, but are treated with sensitivity and respect. Compliance with medical therapy may increase. Health professionals, in turn, may become more open to traditional conceptions of health and illness, even incorporating traditional treatments or caregivers into their practice.

A second implication for health professionals is that Mexican Americans should not be stereotyped on the basis of their cultural background. Most subjects in this study presented a pattern of dual usage, both traditional and modern health methods. In no case were traditional health

forms used exclusively. The use of traditional health practices does not, therefore, imply a rejection of modern health care. No cultural mandate was found that would prevent Mexican Americans from incorporating modern methods into their health care pattern.

A third implication for health professionals, related to the one above, is that problems of communication, compliance and cooperation between client and provider may not be due to cultural differences alone. It is sometimes assumed that differences between members of one cultural group and another are solely culturally-based. That is, it is because the client is Mexican American and the provider is Anglo that there are difficulties in communication between the two. In fact, characteristics such as age, education, social status, family vs. self-orientation, etc., may, at times, and with particular individuals, be more relevant to the client-provider relationship than cultural characteristics. This study's findings support the contention that the Mexican American community in Washington County is not homogeneous, and it would be an error to equate certain social and economic characteristics with the cultural groups themselves.

A final implication for health professionals lies in how the health care system might be organized so as to better serve Mexican Americans. The results of this study indicate that variations in socioeconomic status were more relevant to health orientation than was level of acculturation. This

suggests that efforts to include Mexican Americans more fully in the modern health care system should focus on changes in the individual's or group's access to health care. The economic and social structures of how health care is provided (i.e., hospital vs. home care; medical technology's emphasis on crisis care, etc.) could be changed as one means of making modern health care more easily accessible to low-income groups.

There are also several implications for the Mexican American community. First, it may not be necessary for Mexican Americans to deny cultural health customs in order to have a high degree of acculturation. As a cultural and ethnic minority in an Anglo society, Mexican Americans face the ongoing dilemma of how to adapt to the demands of Anglo institutions (schools, work, marketplace, etc.) and yet maintain their cultural integrity. A certain degree of conformity or adaptation appears necessary and some argue that a rejection of Mexican lifestyle, language and customs is a prerequisite to success in an Anglo-dominated world. Others resist this move toward assimilation and stress the need for Mexican Americans to retain their cultural patterns as they develop political and ethnic strength. Results from this study suggest that one's level of acculturation is a poor predictor of whether or not one will retain traditional Mexican American health customs, and that the continued use of traditional health practices does not preclude a high level

of acculturation.

Second, Mexican Americans should be aware that as their socioeconomic status rises, use of these traditional customs is likely to decrease. Findings on the relationship of socioeconomic status with health orientation lend support to the argument that one's position in the socioeconomic structure of society may be a better criterion than acculturation for predicting a continued use of traditional or folk health customs.

The traditional customs practices are not credible to all Mexican Americans. If it is believed that the customs are of cultural value to the Mexican American community as a whole, active steps might be taken to preserve them, passing them down from one generation to the next, despite individual or group improvement in socioeconomic status.

Many of the traditional health beliefs and practices used by Mexican Americans are effective. They "work" for a number of reasons: some have a physiological basis (warm massage applied to sore muscles); some have a psychological basis (the social act of praying and blessing to remove fears). Some of these traditional practices, like some medical practices, may be harmful, however, and it is here that there are implications for health professionals, researchers and Mexican Americans. It would be useful for researchers to investigate the nature of Mexican American health customs in order to determine their effectiveness

and safety. Health professionals could use this information as they incorporate cultural models into their practice and as they teach clients about appropriate self-care. Mexican Americans, both as health professionals and as clients could utilize effective and safe cultural forms of care.

Suggestions for Further Research

There are several implications of this study for further research. The first of these is related to the type of data analysis used and to the research design and method selected.

Using bivariate correlations, this study found a significant relationship of socioeconomic status with health orientation, and a nonsignificant relationship of acculturation with health orientation. But findings based on bivariate correlational analyses do not reflect the relative strengths of several independent variables on a single dependent variable. The question of what degree of variation in health orientation may be due to socioeconomic status and what to acculturation remains unanswered. A multiple regression analysis could reveal these differences and allow one to make more substantive statements about the affect of one variable as compared to the other, on health orientation. If this type of analysis were done, the sample size would need to be expanded to assure validity.

The issue of external validity is an important one in this study, as there is a very small sample, and the sample

was selected in a non-random fashion. Further research might expand the numbers of the sample and explore the possibilities of a more random selection procedure.

The fundamental focus of this study is on cultural expressions and changes within those expressions. Neither of those two dynamics (for they are not static entities) easily lends itself to quantitative analysis. A more appropriate research design and method might be a full ethnographic study with participant observation by the investigator. This approach would increase the likelihood that cultural meanings would be expressed and interpreted in the context of daily life, not removed and measured with a one-time interview or questionnaire. A fuller, richer description of the actual beliefs and practices present in the Mexican American community, and a clearer understanding of the pattern of health-seeking behavior could be obtained.

A second implication for further research has a theoretical focus. As this study suggested, socioeconomic status may be a primary factor in determining health-seeking behavior among Mexican Americans. The way in which socioeconomic status is conceptualized and measured in this study (occupation, education and income), however, may be limited in its ability to fully reveal the social and economic position of Mexican Americans in an Anglo society. Occupation, for example, is categorized on the basis of a subjective prestige scale (Duncan's Socioeconomic Index),

which says nothing about the nature of the occupation itself--one's degree of control or autonomy in the workplace, one's degree of self-determination in and out of the occupational structure. Nor does Duncan's Socioeconomic Index speak to the issue of whether members of an ethnic minority group in a particular occupation differ from Anglos in that same occupation. Does a Mexican American doctor share the same over-all status as an Anglo doctor, for example, and, if not, what is the nature of differences between the two? Using Duncan's Index, each would receive the same quantitative ranking, but would that really reflect the actual status held by each? Additional research might look more closely at the complexities of the social and economic position of Mexican Americans in the United States as one way of isolating cultural, social, economic and even political factors which shape group and individual health-seeking behavior.

Finally, it is important to note that Mexican Americans are not the only group which is economically constrained from using modern health resources. Self-care and home remedies are a predominant "first step" in the health care of a majority of the population of this country--Mexican American or otherwise--and limited economic resources are often behind that step. Nursing research might well focus some of its attention on the structural and ideological characteristics of the U.S. health care system which perpetuate lack of access and subsequent reliance on home remedies.

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APPENDIX A
Questionnaire:
English and Spanish

This questionnaire asks a series of questions about your background, work, education and cultural attitudes and preferences. Your complete and accurate answers will make the results of this study more reliable and useful. Please answer each question to the best of your ability. Please put your name and address on this paper only. Your answers to the questions that follow will be identified with a code number, and your responses will be confidential. Thank you for your help. You are very kind to share your time and this information with me.

Name _____

Address _____

street

city

state

10. What is your approximate annual income before taxes?

- \$0000-3,999 \$10,000-14,999
 \$4,000-5,999 \$15,000-19,999
 \$6,000-9,999 \$20,000+

11. What language do you speak?

- Spanish only
 mostly Spanish, some English
 Spanish and English about equally
 mostly English, some Spanish
 English only

12. What language do you prefer?

- Spanish only
 mostly Spanish, some English
 Spanish and English about equally
 mostly English, some Spanish
 English only

13. How do you identify yourself?

- Mexican
 Chicano
 Mexican American
 Spanish American, Latin American, Hispanic American, American
 Anglo American or other

14. Which ethnic identification does (did) your mother use?

Mexican

Chicana

Mexican American

Spanish, Hispanic, Latin American, American

Anglo American or other

15. Which ethnic identification does (did) your father use?

Mexican

Chicano

Mexican American

Spanish, Hispanic, Latin American, American

Anglo American or other

16. What was the ethnic origin of the friends and peers you had as a child up to age 6?

almost exclusively Mexicans, Chicanos, Mexican Americans

mostly Mexicans, Chicanos, Mexican Americans

about equally Mexicans, Chicanos, or Mexican Americans and Anglos or other ethnic groups

mostly Anglos, Blacks, or other ethnic groups

almost exclusively Anglos, Blacks or other ethnic groups

17. What was the ethnic origin of the friends and peers you had as a child from age 6 to 18?

almost exclusively Mexicans, Chicanos, Mexican Americans

mostly Mexicans, Chicanos, Mexican Americans

about equally Mexicans, Chicanos, or Mexican Americans and Anglos or other ethnic groups

mostly Anglos, Blacks, or other ethnic groups

almost exclusively Anglos, Blacks, or other ethnic groups

18. Whom do you now associate with in the outside community?

almost exclusively Mexicans, Chicanos, Mexican Americans

mostly Mexicans, Chicanos, Mexican Americans

about equally Mexicans, Chicanos, or Mexican Americans and Anglos or other ethnic groups

mostly Anglos, Blacks, or other ethnic groups

almost exclusively Anglos, Blacks, or other ethnic groups

19. What is your music preference?

only Spanish

mostly Spanish

equally Spanish and English

mostly English

only English

20. What is your TV viewing preference?

- only programs in Spanish
- mostly programs in Spanish
- equally Spanish and English programs
- mostly programs in English
- only programs in English

21. What is your movie preference?

- Spanish-language movies only
- Spanish-language movies mostly
- equally English and Spanish movies
- English-language movies mostly
- English-language movies only

22. Where were the following members of your family born?

Mexico U.S. Other

Your father			
Your mother			
Your father's mother			
Your father's father			
Your mother's mother			
Your mother's father			

23. Where were you raised?
- in Mexico only
 - mostly in Mexico, some in U.S.
 - equally in U.S. and Mexico
 - mostly in U.S., some in Mexico
 - in U.S. only
24. What contact have you had with Mexico?
- raised for one year or more in Mexico
 - lived for less than one year in Mexico
 - occasional visits to Mexico
 - occasional communications (letters, phone calls, etc.) with people in Mexico
 - no exposure or communications with people in Mexico
25. What is your food preference?
- exclusively Mexican food
 - mostly Mexican food, some American
 - about equally Mexican and American food
 - mostly American food
 - exclusively American food
26. In what language do you think?
- only in Spanish
 - mostly in Spanish
 - equally in English and Spanish
 - mostly in English
 - only in English

27. Can you read Spanish? Yes No

Can you read English? Yes No

Which do you read better?

I read only Spanish

I read Spanish better than English

I read both Spanish and English equally well

I read English better than Spanish

I read only English

28. Can you write in Spanish? Yes No

Can you write in English? Yes No

Which do you write better?

I write only Spanish

I write Spanish better than English

I write Spanish and English equally well

I write English better than Spanish

I write only English

29. If you consider yourself a Mexican, Chicano, Mexican American, member of La Raza or however you identify this group, how much pride do you take in this group?

extremely proud

moderately proud

little pride

no pride, but do not feel negative toward the group

no pride, and feel negative toward the group

30. How would you rate yourself?

- very Mexican
- mostly Mexican
- bicultural
- mostly anglicized
- very anglicized

9. Haga un circulo alrededor del numero que indica cuántos años fue Ud. a la escuela:

0 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17+

10. Aproximadamente, ¿cuánto gana Ud. cada año, antes de los impuestos?

___ \$0,000-3,999 ___ \$10,000-14,000

___ \$4,000-5,999 ___ \$15,000-19,999

___ \$6,000-9,999 ___ \$20,000+

11. ¿Qué idioma habla Ud.?

___ solamente Español

___ más Español, menos Inglés

___ igual en Español y en Inglés

___ más Inglés, menos Español

___ solamente Inglés

12. ¿En qué idioma prefiere hablar?

___ solamente Español

___ más Español, menos Inglés

___ igual en Español y en Inglés

___ más Inglés, menos Español

___ solamente Inglés

13. ¿Cómo se identifica Ud.?

___ Mexicano

___ Chicano

___ México Americano

___ Español Americano, Latino Americano, Hispánico Americano, Americano

___ Anglo Americano u otro

14. ¿Cuál identificación étnica tiene (tenía) su madre?

___ Mexicana

___ Chicana

___ México Americana

___ Española, Latina Americana, Hispánica Americana,
Americana

___ Anglo Americana u otro

15. ¿Cuál identificación étnica tiene (tenía) su padre?

___ Mexicano

___ Chicano

___ México Americano

___ Español, Hispánico, Latino Americano,
Americano

___ Anglo Americano u otro

16. ¿Cuál era el origen étnico de sus amigos y compañeros hasta la edad de seis (6) años?

___ exclusivamente Mexicanos, Chicanos, México Americanos

___ en su mayoría Mexicanos, Chicanos, México Americanos

___ casi igual (Mexicanos, Chicanos, México Americanos) u otros grupos étnicos

___ en su mayoría Anglo Americanos, Negros u otros grupos étnicos

___ exclusivamente Anglo Americanos, Negros u otros grupos étnicos

17. ¿Cuál era el origen étnico de sus amigos y compañeros hasta la edad de 6 a 18?

exclusivamente Mexicanos, Chicanos, México Americanos

en su mayoría Mexicanos, Chicanos, México Americanos

casi igual (Mexicanos, Chicanos, México Americanos) u otros grupos étnicos

en su mayoría Anglo Americanos, Negros u otros grupos étnicos

exclusivamente Anglo Americanos, Negros u otros grupos étnicos

18. ¿Con quién se asocia ahora en la comunidad?

exclusivamente Mexicanos, Chicanos, México Americanos

en su mayoría Mexicanos, Chicanos, México Americanos

casi igual (Mexicanos, Chicanos, México Americanos) u otros grupos étnicos

en su mayoría Anglo Americanos, Negros u otros grupos étnicos

exclusivamente Anglo Americanos, Negros u otros grupos étnicos

19. ¿Cuál música prefiere?

solamente música en Español

por la mayor parte en Español

casi igual en Español como Inglés

por la mayor parte en Inglés

solamente Inglés

20. ¿Qué tipo de programas de televisión prefiere?

- ___ solamente programas en Español
 ___ por la mayor parte programas en Español
 ___ igual programas en Español como Inglés
 ___ por la mayor parte en Inglés
 ___ solamente programas en Inglés

21. ¿Qué tipo de películas prefiere?

- ___ solamente películas en Español
 ___ por la mayor parte películas en Español
 ___ igual películas en Inglés y Español
 ___ por la mayor parte en Inglés
 ___ solamente películas en Inglés

22. ¿En donde nació

México E.E.U.U. Otro País

su padre?

su madre?

la madre de su
padre?

el padre de su
padre?

la madre de su
madre?

el padre de su
madre?

	México	E.E.U.U.	Otro País
su padre?			
su madre?			
la madre de su padre?			
el padre de su padre?			
la madre de su madre?			
el padre de su madre?			

23. ¿En donde creció Ud.?

___ en México

___ la mayor parte del tiempo en México y la menor parte en los Estados Unidos

___ la misma cantidad de tiempo en los Estados Unidos y en México

___ la mayor parte del tiempo en los Estados Unidos y la menor parte en México

___ en los Estados Unidos

24. ¿Qué contacto ha tenido usted con México?

___ criado un año o más en México

___ criado menos de un año en México

___ visitas ocasionales a México

___ comunicaciones ocasionales (cartas, llamadas telefónicas, etc.) con gente de México

___ ningún contacto o comunicación con gente de México

25. ¿Qué tipo de comida prefiere?

___ solamente comida Mexicana

___ por la mayor parte comida Mexicana, parte Americana

___ lo mismo Mexicana y Americana

___ por la mayor parte comida Americana

___ solamente comida Americana

26. ¿En qué idioma piensa Ud.?

- solamente en Español
- la mayor parte en Español
- igual en Inglés y Español
- la mayor parte en Inglés
- solamente en Inglés

27. ¿Puede leer en Español? Sí No

¿Puede leer en Inglés? Sí No

¿En cuál lenguaje lee mejor?

- leo Español solamente
- leo mejor Español que Inglés
- leo igual en Inglés que en Español
- leo mejor Inglés que Español
- leo Inglés solamente

28. ¿Puede escribir en Español? Sí No

¿Puede escribir en Inglés? Sí No

¿En cuál lenguaje escribe mejor?

- escribo solamente en Español
- escribo mejor en Español que en Inglés
- escribo igual en Español y Inglés
- escribo mejor en Inglés que en Español
- escribo solamente en Inglés

29. Si se considera usted cómo Mexicano, Chicano, México Americano, miembro de La Raza, o cualquiera que sea su identidad con este grupo, ¿que tan orgulloso se siente de ser un miembro de este grupo?

___ extremo orgullo

___ orgulloso moderadamente

___ poco de orgullo

___ nada de orgullo, per tampoco no se siente negativo respecto a este grupo

___ nada de orgullo y tengo sentimientos negativos hacia miembros de La Raza

30. ¿Qué clasificación se daría a usted mismo?

___ muy Mexicano

___ en gran parte Mexicano

___ bicultural en gran parte

___ en gran parte Americanizado

___ muy Americanizado

APPENDIX B

Health Beliefs and Practices
Interview Schedule

English and Spanish

I would like to ask you some questions about health and illness and treatments for illness. Please use examples from your own experience and what you know, think, have heard and learned to help you answer these questions.

1. How do you decide when you are ill? What information or feelings help you make that decision?

2. What can you do to keep from getting ill?

3. How important is faith in God in staying healthy or in overcoming illness? How does it work?

4. Many people have written about traditional Mexican American illnesses. Do you know of any illnesses that are special to Mexican Americans? That is, illnesses that Mexican Americans recognize but that Anglos don't?

- 4a. Tell me what you know about these illnesses, their causes and what they look like.

5. Have you, others in your family, or any of your friends ever had any of these illnesses? Which one(s)?

6. Many people have written about traditional Mexican American treatments for illness. Do you know of any home remedies or traditional treatments that are used by Mexican Americans? List those that you know.

7. Have you, others in your family, or any of your friends ever used any of these treatments to take care of illness? List those that you or others have used.

8. Do you know of anyone who knows more about these special illnesses and how to treat them than most other people? Describe that person to me.

13. What is the principal reason you continue to use traditional treatments? Or not to use them?

14. Are your children immunized? Why or why not?

Do you remember any other experiences regarding traditional healing practices and ideas that we have not discussed?

- 4a. Dígame lo que Ud. sabe de estas enfermedades, sus causas, y cómo nos parecen.
5. ¿Ha tenido Ud. o han tenido otros de su familia o sus amigos unas de estas enfermedades? ¿Cuáles?
6. Muchas personas han escrito de los tratamientos tradicionales para enfermedades. Conoce Ud. unos remedios caseros o tratamientos usados por los México-Americanos? ¿Qué y cómo son?
7. ¿Ha usado, han usado otros de su familia o sus amigos unos de estos tratamientos? ¿Cómo son?
8. ¿Conoce a alguien quién sepa más qué otros de estas enfermedades y estos tratamientos? Describame esta persona.

9. ¿Qué es lo que hace esta persona por un(a) enfermo(a)?
10. La última vez, qué Ud. o una persona en su familia se enfermó, ¿qué hizo primero para curarse?
- 10a. ¿Qué hizo entonces?
- 10b. ¿Cómo se curó o qué fue lo que le curó?
11. ¿Para qué tipo de enfermedad usaría:
- 11a. un remedio casero?
- 11b. los consejos de un pariente o de un vecino?
- 11c. el medico?
12. ¿Conoce Ud. unas enfermedades que no pueden curar los medicos Anglos?

13. ¿Cuál es la razón principal que sigue Ud. con tratamientos tradicionales? ¿O no sigue Ud. con los tratamientos tradicionales?

14. ¿Tienen sus hijos todas las vacunas? ¿Porque? o ¿Porque no?

APPENDIX C
Informed Consent Form

Oregon Health Sciences Center

I, _____, agree to participate as a subject in the research project entitled "Health Beliefs and Practices in a Mexican American Community: The Role of Acculturation and Socioeconomic Status." This research is being conducted by Ardys McNaughton Dunn under the supervision of Marie Scott Brown, R.N., Ph.D. It seeks to determine the relationship between socioeconomic status, acculturation and the health beliefs and practices of Mexican Americans.

I will complete a questionnaire about my cultural preferences and attitudes and my socioeconomic status. I will also be interviewed once concerning my attitudes toward health and my health practices. Together the interview and questionnaire will take about 1½ hours of my time.

My participation in this study will help health planners and practitioners better understand the needs and concerns of Mexican American clients so their health care may be made more effective and culturally relevant. The information obtained will be kept confidential. My name will not appear on the records and confidentiality will be assured by use of code numbers.

I understand I may refuse to participate, or withdraw from this study at any time without affecting my relationship

with, or treatment at, the Oregon Health Sciences University.

I have read the foregoing and agree to participate in
this study.

Date _____

Subject's signature

Witness' signature


AN ABSTRACT OF THE THESIS OF

Ardys M. Dunn

For the MASTER OF NURSING

Date of Receiving this Degree: June 10, 1983

Title: HEALTH BELIEFS AND PRACTICES IN A MEXICAN AMERICAN
COMMUNITY: THE ROLE OF ACCULTURATION AND SOCIO-
ECONOMIC STATUS

Approved: 

Marie Scott Brown, Ph.D., Thesis Advisor

This study examines the relationship of socioeconomic status and degree of acculturation to health beliefs and practices among Mexican Americans in Oregon.

A survey study of 30 adult subjects of Mexican American heritage was done. The sample was drawn from the Mexican American community in Washington County, Oregon, using a snowball sampling technique.

Subjects were given a 30-item self-administered questionnaire which measured the independent variables, socioeconomic status and degree of acculturation. The dependent variable, health beliefs and practices orientation, was measured using an interview schedule. Interviews were conducted in the subjects' homes or other agreed-upon locations, at the preference of the subject. Both questionnaire and interview were administered in Spanish or English, again at the preference of the subject. There was one contact with each subject at which time the questionnaire was distributed and retrieved and the interview conducted. Data collection was done in August and September 1982.

A simple bivariate correlation was done to assess the relationship of socioeconomic status and level of acculturation to health beliefs and practices orientation. Variables were cross-tabulated and frequencies noted. Reliability and validity tests of the instruments and of the method of analysis were conducted using the coefficient alpha and an interrater coding of data.

Results revealed that Mexican Americans in Washington County, Oregon, continue to believe in and to use traditional or folk health practices. A significant correlation was obtained between socioeconomic status and health orientation, with Mexican Americans of lower socioeconomic status tending to have a more traditional health orientation. The relationship of level of acculturation to health orientation was nonsignificant.

Findings from this research have implications for health professionals in their decisions of how to best structure and allocate health resources for Mexican Americans, for the individual health care provider in adapting his or her practice to the needs of Mexican American clients, and for Mexican Americans functioning as members of a cultural minority group in an Anglo society.