PATTERNS OF FOOD SELECTION AMONG FIRST, SECOND AND THIRD GENERATIONS OF MEXICAN AMERICANS: IMPLICATIONS FOR PROGRAMMING

Dissertation for the Degree of Ph. D.

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ALYICIA TIRADO

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ABSTRACT

PATTERNS OF FOOD SELECTION AMONG FIRST, SECOND AND THIRD GENERATIONS OF MEXICAN AMERICANS: IMPLICATIONS FOR PROGRAMMING

By

Alyicia Tirado

The topic of health and nutrition is one of nationwide concern. The findings of the Nationwide Household Food Consumption Survey, undertaken by the U.S. Department of Agriculture, revealed that more diets were graded poor in 1965 than in 1955, when the previous nationwide survey was made. The U.S. Senate Committee on Nutrition and Human Needs also revealed that the most serious problem with the U.S. population is their lack of knowledge of nutrition and food values.

In order to help the population to achieve better diets, many programs have been developed both at the national and state level. The programs call for the education of families regarding nutrition, including information on what constitutes a healthy diet. Home economics as well as the Cooperative Extension Service are also expanding their formal and nonformal educational programs to reach those families where malnutrition is known to exist, i.e., the urban poor, the rural poor, and the migrant workers.

Teaching these families, particularly families which may be different from the teacher's own values, cultural heritage, or

socioeconomic background, might prove to be an exciting yet difficult task. This task requires an honest understanding of the value system of these families as well as a reorientation of the values of the teacher. Furthermore, this task requires that educators acquire a knowledge of the cultural, social, and economic factors underlying the existing food habits of the ethnic group. Although cultural values gradually change for most cultural groups, the concept of foods and traditional festive dishes usually prevails. This is especially true with the Mexican American group.

The study undertaken was designed to assess the food habits of Mexican Americans in the Lansing area. Consideration was also given to different generation groups of Mexican Americans in an effort to identify any differences in their food habits. In addition the study describes the variables influencing eating patterns of this group. These data should provide information for redirecting the teaching of foods to Mexican Americans.

The study was conducted within the Lansing area. A random sample of Mexican American households was selected from Mexican American neighborhoods within the area that fulfilled sampling technique requirements. The households chosen were representative of three Mexican American neighborhoods.

The study was exploratory in design. In consisted of the administration of a constructed interview/questionnaire by four trained and bilingual interviewers to Mexican American residents in different cluster areas previously selected. The instrument developed by the researcher, consisted of forty-two questions, available to

respondents in both English and Spanish versions. The respondents were given the opportunity to choose which version they preferred.

The methods of analysis used to evaluate the statistical significance of the findings of this investigation consisted of Chi-Square, Analysis of Variance, and Correlation Metrics.

Several valid conclusions are suggested as a result of the study:

1. No major significant relationship was found regarding the food habits of Mexican Americans and the different generation groups. It was found that Mexican Americans within the selected sample tend to select with same daily frequency, both Anglo and Mexican food items within their diets.
2. Among the variables under study a significant relationship was found between the generation groups and their educational level, occupation, age, language usage among friends, and the importance they place on holiday celebrations.
3. The correlation coefficient results seem to imply that there are some correlations among variables and the generation groups, although the coefficients were low:
   a. the highest coefficient obtained showed a negative correlation among age and educational level, implying that the more age, the lower the educational level, or the less age, the higher the educational level,
   b. a negative correlation was found between age and generation group, implying that the lower the generation group, the greater the respondent's age,

c. a positive correlation was found between generation group and educational level, implying that the higher the generation group, the higher the educational level,

d. a positive correlation was found between Mexican food and American food, implying that the more they eat Mexican food, the more they eat American food, or a balanced portion of both.

The study also provided some insights into the Mexican American family system as to the size of family, number of generations per household, residential history, educational level, occupation, folk beliefs, community involvement, language usage, food purchasing practices, preparation of food within the household, food habits, and their views of the future.

Research of this nature, where a general insight of the family system is pursued, could be of further assistance not only to those teaching the Mexican Americans but also to the social agencies working with these families. These findings could very well be applied to redirect the objectives of both educational and assistance programs to alleviate the needs identified by the research project.

This study then has significant implications for redirecting both formal and nonformal educational programs geared toward helping the Mexican Americans. Furthermore, if nutritional improvements are needed the study of their food habits is imperative. Where inadequacies exist, dietary modifications, rather than change in food habits are the key to acceptance of intervention.

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By

Alyicia Tirado

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A Papito y Dr. Sweetland,

Que En Paz Descansen.

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CHAPTER I

THE PROBLEM

Introduction

For some years now, Mexican American educators, parents and community groups have been seeking new and innovative ways to provide better educational opportunities for Spanish speaking students. It is generally accepted that a major obstacle to educational achievement among students from this population is the difference in language and cultural background between themselves and the schools. The general feeling among those concerned is that finding the solution to problems in dominant-minority relations is no longer regarded as the responsibility of the minority groups themselves. Along with the conviction that hostility is costly to all has come the realization that policies, programs, and techniques are the business of all.

To meet these demands the educational system is placing more emphasis upon the study of different ethnic groups, both at the post secondary level and in the K through 12 grades. This has been possible through the enactment of Title VII of the Elementary and Secondary Education Act and of the Bilingual Education Act by Congress in January 1968. The Acts provided the framework and financial resources to promote experimentation and planning of bilingual and bicultural educational programs. As a result, new curricula are

being developed to include the study of ethnic groups, and/or bilingual bicultural programs where fundings are being made available. The purpose is to have every student develop an appreciation of his group's cultural heritage. It is believed that this will strengthen the student's self-image and provide him with an intrinsic motivation to achieve. It would also encourage him to appreciate the culture and contributions of other ethnic groups.

The literature in the field of bilingual/bicultural programs reveals that bilingual students are culturally different from monolingual students. It also demonstrates that the values held in the home are different from those held in the community. This underscores the need for studies of the family system and the culture of different ethnic groups before serious attempts are made to work with these groups.

A current review of research literature in home economics reveals a lack of data about formal and nonformal education as it relates to different ethnic groups. The literature is especially scarce in the area of nutritional programs and studies of food habits as they relate to the different ethnic groups.

Food habits are considered significant by nutrition experts and "rank alongside language, or reading habits in importance in the everyday life of most people."[1] Frequently efforts are made by educators and government agencies to increase the nutritional value of the diet of an ethnic group. Consequently, this includes changes

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[1]Anne Burgess and R. F. A. Dean, eds., Malnutrition and Food Habits: Report of an International and Interprofessional Conference (New York: Macmillan, 1962), p. 76.

in the traditional dietary pattern of the cultural group. The implementation of such measures, therefore, requires that the people be educated in nutrition. Furthermore, it requires the educators to acquire a knowledge of the cultural, social, and economic factors underlying the existing food habits of the ethnic group. Although values held at home gradually change for most cultural groups, the concept of foods and traditional festive dishes sometimes prevails. This is especially true with the Mexican American group.[2]

Through personal experience as a volunteer worker, the author was able to identify gaps in the nonformal education program being offered to Spanish-speaking groups in the Lansing area. The problem seemed to originate in the failure to understand a number of concepts concerning culture and the food habits of the ethnic groups concerned. The situation was most evident in the introduction of new dishes. The new dishes were usually unacceptable to the group due to different ethnic preferences related to food color, seasoning and/or texture. Although cost of the dish was taken into consideration, the lessons failed to provide an understanding of other cultural values relative to the food habits of the group.

The study undertaken was designed to assess the food habits of Mexican Americans in the Lansing area. Consideration was also given to different generation groups of Mexican Americans in an effort to identify any differences in their food habits. In addition the study describes the variables influencing eating patterns of this

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[2]Edward Murgia, Assimilation, Colonialism and the Mexican American People (Austin: University of Texas Printing Division, 1975), p. 3.

group. These data should provide information for redirecting the teaching of foods to Mexican Americans.

Statement of the Problem

The literature of food habits can be traced back to the 1940s when the topic was being widely studied by the National Research Council of the National Academy of Sciences.[3] This study came about as a result of wartime shortages and the rationings needed during World War II.

In more recent years, the year 1969 proved to be significant in the study of food habits. This year marked the period after the hearings of the United States Senate Committee on Nutrition and Human Needs. The hearings became a precedent on the study of food habits throughout the United States. Nevertheless, at present, only scattered reports can be found on the food habits of the ethnic groups in the United States.

The Agricultural Research Service of the United States Department of Agriculture conducts nationwide household food consumption surveys every ten years. This survey helps to identify the nutritional needs of the United States population. The findings, however, are presented in general terms describing the total population. Thus, very little is known about the food habits of the different ethnic groups. Based on the findings in the last survey, more diets were graded poor in 1965 than in 1955, when the previous nationwide survey

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[3] The Problem of Changing Food Habits, Bulletin No. 108 (Washington, D.C.: National Research Council, 1943), pp. 2-3.

was made.[4] On the basis of the findings, an Expanded Food and Nutrition Education Program was developed by the United States Department of Agriculture to help families achieve better diets. Through the program, home economists as well as paraprofessionals visit homes on a referral basis by the Department of Social Services. The objective is to assist low income families improve their eating habits.

Though results of the 1975 Nationwide Food Consumption Survey are not yet available to the public, concern for the nutritional level of the American public exists. The United States Department of Health, Education, and Welfare has already included the study of food habits as a national nutritional priority for 1978.

Accordingly, the Michigan Office of Nutrition recently held a conference exploring Michigan's nutrition priorities.[5] Recommendations will then be made to the Governor for future development of a statewide nutritional plan. The goal is to improve the nutritional standards of our society. One of the topics under consideration in the conference Exploring Michigan's Nutrition Priorities was that of ethnic lifestyles. In this category the lifestyles and nutritional needs of both migrant groups and native American Indians were studied. A migrant was defined as "an individual residing in a state whose principal occupation is in agriculture on a seasonal basis, and who

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[4]Sadge F. Adelson, "Changes in Diets of Households, 1955-1965, Implications for Nutrition Education Today," Journal of Home Economics 60 (June 1968):448.

[5]Michigan Office of Nutrition, Exploring Michigan's Nutrition Priorities (Lansing: [n.p.], 1976), pp. 1-9.

has been so employed within the last 24 months."[6] This category, however, excluded the Mexican American population that is not currently working in agriculture-related jobs. The 1970 United States Census for the Lansing SMSA revealed that only 1.5 percent of Mexican Americans within the Lansing area were employed as farm laborers. This fact indicates the need to study the much larger nonmigrant group of Mexican Americans.

Today much of the data available on Mexican Americans are limited to individual studies. Most of these have been conducted by several agencies and educators in various sectors of the country. Topics range from sociological studies to health related investigations. Nevertheless, only a few studies deal with the nutritional aspects and/or food habits of this group. Provisions are needed to include this group in both national and local governmental studies, as in the Nutritional Priorities Program for 1978. Meanwhile, research of this nature is needed to help bridge the information gap pertaining to different ethnic groups.

Relevant data are now needed if all areas in the educational system are to provide their input to new bilingual/bicultural progress. Furthermore, the data could also provide the base for the development of instruction and materials both in formal and nonformal education. Home economics teachers as well as government officials working with different ethnic groups would benefit from studies of the family systems of these groups. Accordingly, research

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[6]Ibid., p. 9.

will be needed to identify major cultural values and needs of the different ethnic groups.

The present investigation, then, is aimed primarily at studying the differences occurring in the food habits among selected first, second, and third generations of Mexican Americans in the greater Lansing area. There are two secondary objectives: (1) identifying the variables related to these differences in the food habits among members of different generation groups, and (2) identifying the generation group that differs the most from the established patterns of the Mexican diet.

Purpose of Study

The purpose of this study is to gather current information and data concerning the food habits of different generation groups among selected Mexican Americans in the greater Lansing area. The intent is to:

1. Provide information that could be used in future development of instruction and materials related to the lifestyles and food habits of the Mexican Americans
2. Provide data that would help to increase the scope of professionals working with Mexican American groups
3. Provide information and guidelines for future studies of the food habits of an ethnic group
4. Help others to understand and appreciate the food habits of an ethnic group
5. Recognize and appreciate the contribution of different members of the various generation groups to the Mexican American diet

Because of its uniqueness, the work undertaken is a pilot study. It is a study that seeks to establish a research model that could be used after careful study and revision in studying the food habits of other ethnic groups. Its function is thus to serve as a benchmark for later studies using different and perhaps more complete data.

Definition of Terms

The following terms are defined as they are used in this study:

1. Mexican American: the phrase shall be used in reference to Americans of Mexican descent
2. Anglo: this term shall be used in reference to white persons who are not Mexican Americans or members of other Spanish surname groups
3. Generation group: this term shall refer to the group from which a Mexican American person originates based on his birthplace and his parents' birthplace
   a. first generation: person born in Mexico whose parents were born in Mexico, and who later moved to the United States
   b. second generation: person born in the United States, whose parents (either father, or mother, or both) were born in Mexico but later moved to the United States
   c. third generation: person of Mexican descent born in the United States, with parents also born in the United States of Mexican descent.

4. Food Habits: this term shall refer to the standardized patterns of meal selection which are directly influenced by cultural food likes and dislikes and the processes of their formulation and change
5. Cluster sample: this phrase shall be used in reference to a sample taken from a particular concentration of Mexican Americans within the Lansing area
6. Culture: this term shall refer to the total system of values, beliefs, meanings, and methods that gives cohesion and direction to a group, and which remains relatively constant while the composition of the group changes[7]
7. Acculturation: this term shall be used to describe the historical-social process of two cultural groups in which readaptation and modification in the mode of life of either or both groups takes place, and from which emerges a unique third cultural group, with characteristics from both groups[8]
8. Assimilation: this term shall refer to the social process whereby the merging of two cultures occurs, and where those who share the merger become indistinguishable from each other[9]

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[7]Xavier del Buono, "The Relationship of Bilingual/Bicultural Instruction to the Achievement and Self Concept of Seventh Grade Mexican American Students" (Unpublished Ph.D. dissertation, Michigan State University, 1971), p. 10.

[8]Marcos de Leon, "The Hamburger and the Taco: A Cultural Reality," in Educating the Mexican American, eds. H. S. Johnson and W. J. Hernandez W. (Valley Forge: Judson Press, 1970), pp. 33-45.

[9]Inis L. Claude, National Minorities: An International Problem (Cambridge: [n.n.], 1955), p. 79.

9. Social mobility: this term shall refer to the transition of an individual from one social stratum to another

Limitations of the Study

This study is a survey of the food habits among different generation groups of selected Mexican Americans within the greater Lansing area. No attempt will be made to evaluate the nutritional status of the population. The findings will be limited to selected variables under study. This limitation is primarily due to the lack of a reliable standardized questionnaire for studying the food habits of an ethnic group. A description of the food habits of the different generation groups and the variables influencing any differences within the group will be reported.

The study limits its consideration to Mexican Americans who reside within selected concentrations of identified Mexican American neighborhoods. These concentrations were noted after examining the total geographical distribution of Mexican Americans in the Lansing area. Specific cluster samples were taken mainly from the heaviest concentration area of Mexican Americans within the total study area. However, persons living outside the major concentration area, but where a significant smaller concentration of Mexican Americans was found, were included in the sample. They were included in an effort to study the range of variation that could result as a condition of acculturation and spatial mobility.

Delimitations of the cluster samples are necessarily small due to time limitations and lack of research funds.

The reader is cautioned not to make generalizations about the food habits of Mexican Americans in other areas based on the conclusions reached in this study. The findings of this investigation are confined to the population from which the sample was drawn.

Methodology

This study is designed to be exploratory. The central part of the study consists of a constructed interview/questionnaire which was administered by four trained and bilingual interviewers to Mexican American residents in different cluster areas previously selected within Lansing. The instrument, developed by the researcher, consists of 42 questions available to respondents in both English and Spanish versions. The respondents were given the opportunity to choose the version they preferred. The information collected was then statistically analyzed. The findings are reported in a descriptive and correlational form.

A more detailed description of the design of the study will be given in Chapter III. The following hypotheses will be explored:

1. Mexican Americans in the third generation group will tend to show a stronger tendency toward selection of food items not so common to the Mexican diet than Mexican Americans in the first and second generation groups.
2. Mexican Americans in the third generation group will show a thorough knowledge of the Mexican culture and a great desire for improvement of the Mexican American community.
3. Basic differences of third generation Mexican Americans from first and second generation Mexican Americans will be related

to education, residential history, language usage, peer group composition, contact with Anglos and/or other ethnic groups, community involvement, celebration of holidays, frequency of meals eaten outside the home, beliefs of food avoidances, and their views of the future.

4. The tendency among third generation Mexican Americans toward selection of different food items from those established as common to Mexican American diet will be directly correlated to educational level, generation group, number of generations within the household, contact with Anglos, use of Mexican centers, sex, and age.

Organization of Subsequent Chapters

Chapter I contains a general introduction to the study, a statement of the problem, the purpose of the study, definition of terms, limitations of the study, and a general description of the methodology of the study.

A two-part comprehensive review of related literature is presented in Chapter II. The review in Part I includes the writings and research in the study of foods and the studies of food habits. Part II includes a brief description of the Mexican American group and their food habits. This section covers specific elements in the study that seem to influence in one way or another Mexican American food habits.

The design for the study is presented in Chapter III. The design includes a description of the setting, the population sample,

a discussion of the constructed interview/questionnaire, the source of the data, and the design and statistical model of the study.

In Chapter IV, the author presents the findings from the study. Chapter V presents the author's analysis of the findings in the form of conclusions, implications, and recommendations.

CHAPTER II

REVIEW OF RELATED LITERATURE

Introduction

The second chapter of this study presents a review of related literature in the areas under investigation. The chapter deals primaily with the importance of studies of foods, the study of food habits, and a brief introduction to the cultural traits of the Mexican American people. The objective is to provide background information to support the study undertaken.

The literature related to the study of food habits of different ethnic groups is very limited at the present time. In lieu of this, an attempt was made to gather information on the food habits of an ethnic group--the Mexican Americans.

The literature related to the studies of foods and the studies of food habits is presented in part one of this chapter. Part two presents a brief review of the Mexican American group and their food habits.

PART I

The Importance of Food Studies

Health authorities agree that modern medicine and many environmental conditions play an essential part in building and

protecting health. Furthermore, they also agree that a nutritious diet is essential in building and keeping a strong, healthy body. Therefore they feel that the important role of food cannot be overemphasized.[1]

In the present decade, food and nutrition problems have reached worldwide proportions. Developed as well as underdeveloped countries are trying to establish guidelines and solutions in their fight against hunger and malnutrition. Concern covers farming of foods, world food supplies, distribution and preservation of foods, development of acceptable new "foods," effects of malnutrition, changes in food habits, and the nutritional needs of different family members. It is now evident that in many countries malnutrition is largely responsible for high mortality rates.[2] The amount of resources and number of personnel being used in the study of foods and nutrition is therefore understandable.

In the United States the problem is not based so much on the availability of food, but rather in the lack of knowledge of nutrition.[3] Robert H. Finch, former Secretary of Health, Education and Welfare, said in his testimony before the Senate Committee on Nutrition and Human Needs:

> One cause of malnutrition in this country is ignorance of what constitutes good nutrition and what foods will lead to it . . . knowledge of nutrition is necessary if consumers are to

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[1] Nutrition Source Book (Chicago: National Dairy Council, 1970), p. 1.

[2] Burgess and Dean, op. cit., p. 3.

[3] National Dairy Council, op. cit., p. 1.

> use their food dollars to best advantage. We must, in addition, prevent malnutrition which results from simple lack of basic knowledge of food values.[4]

At the same hearings, Dr. Jean Mayer, Professor of Nutrition at Harvard University, enumerated three groups of Americans among whom malnutrition is known to exist. According to Mayer, the first group was the urban poor, the second group was the rural poor, and the third group was the migrant workers of the West.[5]

One of the many results of the Senate Hearing was the passage of Public Act 226 of 1969, the Critical Health Problems Education Act. This Public Act required the Department of Education to develop curricula guidelines for ten critical health areas including nutrition. In Michigan, a Nutrition Education Task Force of the Michigan Dietetic Association and the Michigan Public Health Association members was organized in August 1974.[6] Their task was to develop, in cooperation with the Department of Education, a Teacher Reference Guide for the teaching of nutrition. The goal was to integrate nutrition into all subject areas, thereby increasing the exposure of nutrition to the general student body. The curriculum guide is currently available in Michigan in ten pilot testing centers. Previously, nutrition was taught only as part of the core curriculum in home economics.

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[4]Ibid.

[5]U.S., Congress, Senate, Committee on Nutrition and Human Needs, Problems and Prospects, Hearing, 90th Cong., 2nd Sess., December 18,19, 1968 (Washington: Government Printing Office, 1969), p. 13.

[6]Exploring Michigan's Nutrition Priorities, op. cit., p. 2.

Home economics, as well as the Cooperative Extension Service, is also expanding its formal and nonformal educational programs to reach these families where malnutrition is known to exist, i.e., the urban poor, the rural poor, and the migrant workers. Programs in this category are:[7-11]

1. Infant/Child Nutrition Programs
   a. School Lunch/Breakfast
   b. Child Care Food Program
   c. Residential Care Meals Program
   d. Summer Food Service Program
   e. Supplemental Food Programs: WIC and FOCUS:HOPE

2. Nutrition Counseling
   a. In-hospital teaching
   b. Nutrition task forces
   c. School programs and home economics classes
   d. Local groups and community organizations
   e. Health Department

3. Alternate Care Facilities
   a. Nursing homes
   b. Foster care homes
   c. Day care services
   d. Children's camps
   e. Detention homes
   f. Boarding schools
   g. Institutions for the ill and retarded
   h. Correctional institutions, including jails, prisons, and camps

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[7]Ibid., pp. 2-10.

[8]Mary McAnaw Welsh, "A Campus Goes to the Community," Journal of Home Economics 68 (March 1976):11-13.

[9]Daryl C. Rankine and Betty Taylor, "Teacher the Elderly: Are Community Nutrition Programs Meeting the Needs of the Elderly," Journal of Home Economics 67 (November 1975):37-40.

[10]Lillian B. Mathews, "Improving the Self-Image of the Socially Disabled," Journal of Home Economics 67 (May 1975):9-12.

[11]Opal H. Mann and Betty Fleming, "Focus II: New Directions for Extension Home Economics," Journal of Home Economics 67 (March 1975): 22-26.

4. Consumer Nutrition Education
   a. Expanded Food and Nutrition Education Program
   b. Adult education classes
   c. Media: radio, TV, magazines, newspapers, and leaflets

5. Adult Nutrition Programs
   a. Home economics adult education classes
   b. Food Stamps and Outreach programs
   c. Senior Meals
   d. Supportive services: transportation, outreach, recreation, shopping assistance, nutrition education, information and referral, health and welfare counseling, and escort services.

The orientation of these programs usually takes a "problem-solving approach" rather than a "subject-matter approach" to the areas of concern.[12] By using this method, home economists are allowing the program to "assist families to anticipate problems rather than to react to problems after they have reached critical stage."[13]

Teaching these families, particularly families which may have different cultural heritage, or socioeconomic background from the teacher's, might prove to be an exciting yet difficult task.[14] This task requires an honest understanding of the value system of these families as well as a reorientation of the values of the teacher. Home economists as well as college students in home economics are now getting more involved in community activities and local organizations. In doing so, they are attempting to obtain a better grasp and understanding of the values and needs of these families. The belief is

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[12]Ibid., p. 22. [13]Ibid., p. 25

[14]Patricia Bell Scott, "Teaching About Black Families Through Black Literature," Journal of Home Economics 68 (March 1976):22-23.

that these experiences will lead to the planning of meaningful learning experiences oriented to the values of these groups.[15] It will also contribute to the development of instructional materials relevant to their values system.

In Michigan, the state government's concern for the health status of the population is evident throughout most government programs. The Office of Nutrition, which was established in January 1975, by Executive Order, has advocated a number of nutrition programs. It has also assessed various programs and helped in the development of services and education programs.[16] Through their activities and programming, the staff of this organization have found that there are individuals and population groups in Michigan with nutritional problems that have a potentially harmful effect on their health status. Michigan, however, collects only data regarding the nutritional status of the population as a whole. These data make it very difficult to identify those groups who have nutrition related problems; their relation to geographic, ethnic, economic, gender and age factors; and the severity of the problems.[17]

On the recommendations of the Office of Nutrition, and in accordance with the proposal of the U.S. Office of Health, Education and Welfare, the year 1978 has been designated to study nutritional priorities. Throughout this program, in-depth studies of the food

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[15]Patricia Sailor and Wilma Crumley, "Self-Image: How the Poor See Themselves," Journal of Home Economics 67 (May 1975):4-8.

[16]Exploring Michigan's Nutrition Priorities, op. cit., pp. 2-10.

[17]Ibid., p. 3.

habits of the population will be undertaken, with special emphasis being placed on low-income consumers and children. It is hoped that the study will help to: (1) identify the nutritional status of the population, (2) assess needs of these groups, and (3) provide suggestions for development of educational programs on a continuous basis to meet the needs identified by the study.

By the same token, the study of Mexican American food habits will be the main objective of this research project. It is hoped that the study will contribute information pertaining to the diet of this ethnic group. This information will prove valuable to those working with the Mexican Americans in redirecting the instruction and related materials to be used with this group.

The Study of Food Habits

The problem of changing food habits was but one of the many faced by President Roosevelt's administration. This problem came as a result of shortages and the rationing needed during World War II. The problem was not only that of rationing, but also that of educating the population to use the "relief food," i.e., surplus staples. The government's concern was for the "side effects" of the program and the authoritarian methods necessitated in the distribution of surplus food during wartime. These gifts of "relief," while temporarily stemming famine, could have had disastrous repercussions for the health of those receiving the gifts. Also the authoritarian methods used in enforcing nutritional standards could have endangered democratic participation in other community activities.[18]

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[18]Margaret Mead, "The Problem of Changing Food Habits," The Problem of Changing Food Habits, Bulletin 108 (Washington, D.C.: National Research Council, 1943), pp. 20-21.

President Roosevelt, concerned by these and other related problems, called upon a group of experts in the social and health science to study the problems of food habits. They were also asked to bring about recommended innovations which would be both nutritionally and socially desirable for the population. Their task was to devise ways in which the health of the people could be maintained by the most skillful use of existing food supplies, and to present an increased utilization of knowledge of nutrition in such a way that it did not become associated with the wartime period of deprivation.

The principal discipline represented among the Committee members was cultural anthropology. In their report they stated that there was more work being done on the biochemical and physiological side of nutrition, and not so much on the psychological and cultural patterns of nutrition. Faced with this situation, they presented a series of possibilities for future studies in which more emphasis would be given to the behavioral sciences. Food habits could then be studied within the framework of a group's cultural tradition and its behavioral patterns regarding food. The committee recommended studies on:

> (1) survey of food eaten by adults combined with observations and experimental attempts to change that pattern; (2) ways in which food habits are inculcated in the growing child; (3) meal patterns, alterations in the time of a meal, and subsequent effect on nutritional status of the family; (4) shopping habits and their effect upon family food habits; (5) the relationship between methods of food preparation and nutrient loss; (6) implications of standardized food programs and individual needs and preferences; (7) sequence studies on the dietary behavior of a group to determine how to change food habits and the results of such changes; (8) attitudes on food matters and the situational impact of news, world events, and contemporary conditions; (9) studies combined with psychosomatic medicine,

> investigating character development and the role which food plays in it; (10) basic alteration in the culturally defined style of what is a meal and what is food; (11) studies of community organizations and their influence in the dissemination of food information.[19]

The recommendations were a basis for the manual, Cultural Patterns and Technical Change, which was published by UNESCO four years later.[20] The manual was a basis for many conferences and studies subsequently held and undertaken all over the world. The manual was also used wherever community developers, home economists, and a small number of anthropologists were dealing with the specific problems of improving the nutrition and health of millions of people.[21] Surprisingly enough, although the manual was being used as a basis for many studies, only minor use was made of the manual's recommendations for cultural studies of food. Special emphasis at this time was either upon distribution of bulk foods or on highly technical studies. There was little responsibility for the social and psychological consequences for those whose diet was supplemented with these foods.

At the same time, it is important to realize that while this Manual for the Study of Food Habits is not yet out of date and that few of its recommendations have been put into effect, the advancement of technology has nevertheless brought about new topics that could

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[19]Mead, op. cit., pp. 21-29.

[20]Margaret Mead, ed., Cultural Patterns and Technical Changes (Paris: UNESCO, 1953), pp. 1-3.

[21]Margaret Mead, Food Habits Research: Problems in the 1960s, National Academy of Science Publications No. 1225 (Washington, D.C.: National Research Council, 1964), pp. 1-3.

supplement the original list published in 1943.[22] Mead recommended that a number of other possible topics also be included in the original list which would be of particular benefit to researchers.[23] These topics include the following: (1) Toxic Foods; (2) Kwashiokor, Breast Feeding and Weaning; (3) Growth, Maturation, and Aging; (4) Food Additives, Contamination, Pollution, and Radiation; (5) Teeth and the Significance of Diet for Studies on Human Evolution; (6) Unusual Situations and Studies of Men under Stress; (7) Individual Therapy and Psychosomatic Disorders; (8) Social Psychological Studies; (9) Taste Factor; (10) Culturally Acceptable Supplementary Foods.

Problems in Studying Food Habits

While the task of studying food habits has not been easy, many concerned investigators are working together in an effort to present ideas on the most effective ways for such study.[24] The call is for a joint team effort where other disciplines, both in the social and health sciences, could work together to provide an open system that would be responsive to new knowledge in every relevant field.

Cassell, in a joint session with social scientists and health workers, presented a case study example of South Africa in

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[22]Mead, op. cit., pp. 8-18.

[23]Ibid.

[24]John Cassell, "Social and Cultural Implications of Food and Food Habits," American Journal of Public Health 47 (1957):732-40; See also Mary Sweeney, "Changing Food Habits," Journal of Home Economics 34 (1942):457-62; George H. Fathawer, "Food Habits--An Anthropologist's View," Journal of the American Dietetic Association 37 (October 1960):335-38; Burgess and Dean, op. cit., p. 51.

which the cooperation of both professional groups was necessary for the effectiveness of the program.[25] The main goal was to improve the health situation of the Zulu tribesmen through a nutrition and health program. A careful study of the tribe's attitudes was needed throughout the program to better understand the acceptance and/or rejection of innovations. The cooperation of social scientists was needed for the continuous evaluation of the tribe's behavior.

Cassell stressed the fact that little effective application of social science concepts has been made to many nutrition programs. Two major reasons may account for this:

> The first is the lack of effective communication between the two sciences; the second the degree to which health workers are "culture bound" and tend to reject concepts and patterns of behavior different from their own.[26]

Cassell recommended that health workers:

> (1) have a detailed knowledge of people's beliefs, attitudes, knowledges, and behavior before introducing any innovation in the area; (2) evaluate the psychological and social functions of their practices, beliefs, and attitudes, (3) define the subcultural group with which they are working. In the latter case, programs based on premises true for one group, will not necessarily be successful in a neighboring group.[27]

Fathawer, speaking before the Ohio Dietetic Association, stressed the need for understanding and respecting the culture of others when studying their food habits. His views, from the anthropological side, dealt with the understanding of culture: values, attitudes, habits, and customs. Moreover, he recommended:

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[25]Cassell, op. cit., p. 732. [26]Ibid.

[27]Ibid.

> . . . fully understanding the dietary culture of any group, through study of the patterning of meals and the meaning of each meal in the lives of the people. The patterns of choosing, preparing, and consuming food must be fitted into the total pattern of the culture.[28]

There is always danger that the expert will introduce changes largely on the basis of his own cultural experiences. This may lead to a failure to recognize the total patterning of the culture which is being modified. As a consequence, a change introduced to produce improvement may result in unforeseen difficulties.

The same point was made by Sweeney. She recommended that the study of food habits be bound to other aspects of living such as: distribution and consumption, caste, status classification, infant care and educational procedures, symbols of maturation, patterns of interpersonal relations, as well as the material equipment of living, style of housing, furniture, kitchen utensils, heating, storage, and refrigeration. She alerted other home economists regarding the nutritional emphases as to what constitutes a balanced diet:

> We are not only stating the best scientific knowledge available but also creating a new cultural pattern. This pattern, which insists on a certain basic diet for everyone of a given age, sex and work category, may be disregarding a quite different set of "natural" considerations, and the needs of different individual constitutions.[29]

Sweeney also recommended joint efforts with anthropologists and psychologists in the task of changing food habits so that the problem can be placed in perspective and handled with increasing scientific accuracy.

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[28]Fathawer, op. cit., p. 338.

[29]Sweeney, op. cit., p. 462.

The nature of food habits as an applied field was also the main concern in Malnutrition and Food Habits: Report of an International and Interprofessional Conference.[30] In this report, emphasis was also placed not only upon joint efforts with applied fields, but also upon industrial research. The idea lies in using (after private agreement with the agency and the client), the information gathered in their market research. Most of this information is not used by the companies, and could be very well utilized in the study of food habits of a certain group, thereby substantially reducing research costs.

Mead also made additional recommendations for future multidisciplinary studies of food habits. The basic need, she concluded, lies in the need for a multidisciplinary code for describing a dietary pattern. Such a code would allow for the description of food in all of its different aspects: (1) in physiological sensory terms; (2) in terms of its chemistry; (3) in nutritional terms, and (4) in cultural terms--(a) agricultural, (b) economic, (c) sociocultural, (d) educational, (e) related to food handling, and (f) related to dietary patterning.[31]

The fact that a code already existed, she claimed, would encourage scientists working the field to draw on the organized knowledge made available through these means, and to enrich and refine its resources by the addition of knowledge as it developed through new research.

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[30]Burgess and Dean, op. cit., p. 132.

[31]Mead, Food Habits Research, p. 19.

Cultural Factors Influencing Food Habits

Nutrition experts believe that there are a number of factors that affect and/or influence the food habits of a cultural group. These include: religion, myths, experience, economics, education, health, work and play habits, profits, competition, and no doubt numerous other factors, some of which we are not aware of.

Many practical matters also affect food habits, i.e., processing, transportation, storage facilities, and availability. These represent enormous problems in feeding populations, both on a local and worldwide level.

Availability and Economics

The key factors that determine food habits of a group are a controversial issue to many scholars. Queen, in the Journal of the American Dietetic Association, brought up some ideas regarding the topic when challenged by a colleague's statement that "food habits are determined by culture, not by economics." Queen's main thesis was that Man in primitive cultures ate what was around him, thus establishing his food habits with respect to availability of food within his system. Other factors influencing and widening the choices of food items Queen said are: "transportation, food items introduced by immigrants, and changes in distribution of income."[32]

The same thesis was presented by Clark writing on food habits as a practical nutrition problem. He agreed that Man's food habits were based not only on food items that were grown and/or raised

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[32]George S. Queen, "Culture, Economics and Food Habits," Journal of the American Dietetic Association 33 (1957):1052.

around him, but also that the same food items were used to supplement his health needs too. This was the case with herbs and medicinal plants used for preparations and remedies by primitive groups.[33]

In other instances, the food items have been introduced after careful research work by scientists and nutritionists in their effort to improve the dietary standards of a cultural group. One such food item has been Incaparina, a food adequate in quality protein and low enough in cost so that it can be procured by those in need.[34]

Another example of improving the nutritional quality of a popular food, which by itself is grossly inadequate, comes from Colombia, South America. Panella, an unrefined type of sugar, is consumed simply or mixed with water and fed to children. For many individuals, it constitutes the main source of calories. A new product has been developed that looks and tastes like panella but which contains a significant amount of concentrated soy protein extract. Both of these new products, incaparina and the soy protein panella, were modifications of indigenous food, modifications to improve a serious and common problem in public health--lack of protein.[35]

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[33]F. LeGros Clark, "Food Habits as a Practical Nutrition Problem," World Review of Nutrition and Dietetics 9 (New York: Karger and Basel, 1968):59.

[34]F. J. Stare and M. F. Trulson, "The Implantation of Preference," Food and Civilization: A Symposium, eds. Farber, Wilson, and Wilson (Springfield: Charles Thomas Publishers, 1966), p. 224.

[35]Ibid.

On the other hand, in more developed societies such as the United States and other developed countries technological advancements have made possible the introduction of thousands of new items on the market over a period of years. Due to new food items the food habits of the population are continually changing in unpredictable ways. At the same time, development of nutrition as the science of food in relation to health has motivated the public to be far more aware of the influence of food on health. This is particularly true in recent years because of the influence nutrition has had on the acceleration or lessening of the development of the most common cause of death in the United States, coronary heart disease.

One such influence has been a drop in calorie consumption. This is accounted for by a sharp curtailment of cereals, breads, and potatoes.[36] Sugar intake increased from 1910 to 1930 and since then has remained stationary. Fats have shown an increase and also a modification of type: margarine (regular and low-calorie), oil (vegetable byproducts), and shortenings now are in common use. These preferences seem to be evident in many parts of the world as standards of living are raised. While the total per capita calorie consumption is less now than a generation or more ago, it is not sufficiently less to prevent weight gain of the average American due to less physical activity. Thus, a new trend is developing in which routine physical activities are increased and calorie consumption decreased. In

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[36]Adelson, op. cit., p. 448; see also, "It's a Revolution in Eating Habits," Business Week 201 (September 6, 1952):38.

addition, food items with a high cholesterol content are controlled in the daily diet. Many volunteers are participating along with medical centers in experiments designed to determine whether changes in diet can lessen the incidence of heart attacks, high blood pressure, and arteriosclerosis. It is quite possible that certain basic concepts of what is considered sound eating habits may have to be changed.

Food Prejudices and Avoidances

Food experts believe that food prejudices and taboos are of great importance among the many factors affecting food habits. This is true in both developed and underdeveloped countries. The Institute of Food Technologists studied the problem of food prejudices and taboos at their 25th Annual Meeting. The symposium studied the many aspects related to and/or influencing such prejudices.[37]

The problem of food avoidances reaches worldwide proportions whether it be in underdeveloped or advanced societies. The technological and economic factors in the production and distribution of foods are fundamentally related to social, political, and religious attitudes, many of which prevent people from utilizing available foods.[38] This is the case of many religious and/or cultural groups, such as the Orthodox Jews, Buddhists, Hindus, and Christians. In these groups, theological thinking emphasizes that the dietary rules are part of the concept of holiness and self-discipline of the individual.

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[37]Frederick J. Simsons, "The Geographic Approach to Food Prejudices," Food Technology 20 (March 1966):274; see also, Samuel I. Korff, "The Jewish Dietary Code," Food Technology 20 (July 1966):76-78.

[38]Ibid.

Another group that has had both religious-philosophical and health-related reasons for food avoidances are the vegetarians, a group that recently has had a strong influence among certain segments of the U.S. population and elsewhere in the world. Other avoidances within cultural groups are of a social character that are part of the group's folklore. Of particular importance are the so-called temporary food avoidances when individuals, during certain periods within their life cycle, do not consume certain foods. Temporary food avoidances are mainly concerned with vulnerable groups: women during pregnancy and breast-feeding, and children during the period of weaning, infancy, and puberty.[39]

Food avoidances, whether based on religious beliefs, health-related reasons, or social folklore, must be carefully studied before attempts are made to change the food habits of a cultural group.

Flavor and Culture

Another area of concern in the study of food habits is the problem of flavor and culture. The Institute of Food Technology recently held a symposium on the topic, in which the discussions centered on specific cultural groups and their flavor preferences. Pangborn, Chairman of the symposium, stated that:

> Throughout history, Man has increased his enjoyment of staple foods by adding flavor in the form of salt, sugar, acids, bitters, oils, herbs, species, and peppers. The distinctiveness of different cuisines lies not so much in

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[39]Simsons, op. cit., p. 274.

> the flavor differences of potatoes, bread, rice, corn, cassava, and pasta, but in the accompanying flavorings.[40]

Flavor preferences differ considerably from country to country and from one region to another within the same country. However, on some occasions, immigrants interchange their food habits, producing interesting blends within a country.

This preference for specific flavors is commonly the cause for the rejection of newly introduced dishes and/or ideas by nutritionists and health workers. New foods and flavors cannot be introduced to a country or to a cultural group without analyzing the cultural preferences of the country.

Grivetti, also a member of the symposium, added that before the more subtle aspects of flavor can be evaluated, one must understand how traditional foods are produced and processed at the kitchen, village, town, and urban level and what effects these cooking methods have upon color, aroma, and texture of a food item.[41] Also, the improvement of odor and taste must be understood in combination with the cultural, economic, and environmental parameters with which they are associated. Only then might the perplexing problem be answered--why "one man's meat is another man's poison."

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[40]Rose Pangborn, "Cross-Cultural Aspects of Flavor Preference," Food Technology 29 (June 1975):34.

[41]Louis E. Grivetti, "The Importance of Flavors in the Middle East," Food Technology 29 (June 1975):38.

Food Distribution within the Household

One other factor that influences the food habits of a cultural group is the distribution of food within the household. It is widely known that foods available in a country, whether locally produced or imported, are not equally distributed among the population. Unequal distribution of food may be found between different regions of a country, rural and urban areas, and between socio-economic groups.

Food available at the household level is also unequally distributed among the members of a household. Whether it is due to food avoidances and taboos, or to the prestigious position of one member of the household (usually the male), the problem is one of importance and should be carefully examined when studying the food habits of a group. The distribution of food within a household has both physiological and socio-cultural bases. Important socio-cultural factors that influence the food distribution are: the social position of the household member who has the first choice of food, sequence in which meals are served, attitude toward food, the food as an expression of prestige, and the obligations of hospitality.[42]

Den Hartog deals extensively with the problem as a nutrition officer with the Food and Agriculture Organization. In a recent publication, he stated that studies on food behavior have mainly covered such topics as food avoidances, food preferences, and changing food habits. The system of food distribution at the household level has received relatively less attention. In his paper, he discussed

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[42] A. P. den Hartog, Unequal Distribution of Food Within the Household (Rome: Food and Agriculture Organizations, Food Policy and Nutrition Division, 1973), p. 1.

evidence from food consumption surveys regarding the occurrence of a proportionally unequal distribution of food within the household and those socio-cultural factors which influence this distribution.[43]

The major concern for nutritionists and health officers is that where the shortfall brings consumption below energy and nutrient requirements, adverse consequences may ensue. This is especially true for the vulnerable groups: young children, and pregnant and lactating women.

The area of food distribution within the household is personally recommended by Esquef, a member of the Food and Agriculture Organization, in reviewing the proposal for the project here undertaken.[44] She added to this aspect stating also that the selección de alimentos (selection of foods), should be studied jointly with the topic of food distribution, since it is also important to know how the food items are chosen and brought to the home. The person who chooses the food items is the first one channeling what the family and/or group will eat. Other areas also recommended for study are: food storage and/or preservation, and actual preparation of food.

It is therefore important when studying the food habits of a group to know who is responsible for the supply and distribution of foods, with special reference to the position of the different members

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[43]Ibid., pp. 1-3.

[44]Based on personal correspondence between Lydia de Esquef, Nutrition Officer of the Food and Agriculture Organization, and the writer, February to April, 1974.

of the household: men, women, pregnant women, infants, and children. It is also important to know what are the various factors influencing food distribution.

Research Studies in Food Habits

The literature on food habits research is limited at the time. There are two major types of research related to habits, i.e., those in which the researcher has control over a group, and those in which a series of actual experiments are conducted; and those in which a survey is undertaken from a population sample.

One of the pioneers in the area of research on food habits is the well-known socio-psychologist Kurt Lewin. Lewin developed a test based upon intensive interviewing. His test was validated on some 2,300 school children and five groups of housewives of different ethnic groups in Cedar Rapids, Iowa. The objectives of the study were twofold: (1) to investigate some aspects of why people eat what they eat, and (2) to study methods of changing food habits. Several methods of changing food habits were compared experimentally. One experiment compared the effect of a group decision with the effect of a lecture. Another experiment compared the effect of a group decision with the effect of a request.[45]

In reporting his findings, Lewin postulated a "channel theory," suggesting that food moves step by step to the table through one or two main channels: a buying and a farming channel. Entrance

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[45]Kurt Lewin, "Forces Behind Food Habits and Methods of Change," The Problem of Changing Food Habits, Bulletin 108 (Washington, D.C.: National Research Council, 1943), p. 35.

of a food into a channel and its moving from one section of a channel to another are affected by what Lewin called a "gate-keeper."

It is important to know which member of the household controls the various channels: the husband, wife, or domestic personnel. In Lewin's survey, children are never mentioned as controlling any of the channels, although they undoubtedly influence the decisions indirectly through their rejection of food put before them. A system of values within the family is the basis of some of the forces which determine decisions about food, and this system brings about conflicts of varying intensities.

In Lewin's experiments on changes of food habits, a group method, and group decision, was compared with a lecture method and request. These experiments suggest that it may be possible to bring about, in a relatively short time, definite changes in food habits, even in food items for which habits would be expected to show great resistance to change.

The study of Koos investigated the use of friendship patterns in nutrition education.[46] The findings of the research revealed that the nutrition patterns of the families studied appear to be influenced by two sets of factors--those inherited from the past and those operative in the environment. The relative weights of the two vary from family to family and from nationality to nationality, but a few are found consistently. The study also revealed the fact that

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[46]Earl L. Koos, "A Study of the Use of Friendship Pattern in Nutrition Education," The Problem of Changing Food Habits, Bulletin 108 (Washington, D.C.: National Research Council, 1943), p. 74.

friendship patterns operate for the most part within the confines of existing organizations, rather than in a "block plan." This suggests that strong local organizations can be utilized as channels for the diffusion of information.

Another study reported by Chassy, Van Veen, and Young deals with food habits, food consumption patterns, and the influences and/or changes resulting from the effect of education, occupation, and change in economic level.[47] The hypothesis tested was that in the process of industrialization, food habits change progressively, becoming increasingly more complex or varied, and that such changes are related to other similar changes (i.e., simple to complex), in the social and economic milieu. In the correlation analysis, the findings showed an increasing complexity of food habits. At lower levels, the pattern included relatively few foods, while at higher levels, there were more food groups mentioned. The food scale also correlated significantly with occupation, educational background, and with the standard of living.

Predictors of Food Consumption

A method widely used by dietitians and those in the food industry is that of "forecasting." Here the dietitian is able to predict the percentages with which the clients will choose a certain food item over another one. This method is largely based on accurate

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[47]Judith P. Chassy, A. G. Van Veen, and F. W. Young, "The Application of Social Science Research Methods to the Study of Food Habits and Food Consumption," American Journal of Clinical Nutrition 20 (1967):56.

record keeping and the combination and/or popularity of the food items on the menu.

The study of Pilgrim and Kamen dealt with psychological and nutritional measures by which food acceptance can be predicted. The study was undertaken with 400 enlisted men in the U.S. armed forces. The authors' findings revealed that three-fourths of the variation in percentage of enlisted military personnel who take the foods at the serving table is predictable from knowledge of food preferences, the subjective satiety or "fillingness" of the food, and the amount of two major nutrients--fat and protein--which the food contains.[48]

Another study on eating habits patterns was done by Caster with high school students eating at the same boarding school.[49] The major objective was to ascertain to what extent nutrient intakes were determined by consistent individual eating habit patterns. Statistical analyses demonstrated significant differences between individuals in their nutrient intakes. In addition, there were day-to-day effects dependent upon the menu. Generally, individual differences were determined by the relative amount of different food groups consumed.

Changes in Diets in the U.S.

The Agricultural Research Service of the U.S. Department of Agriculture carried out a nationwide household food consumption

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[48]Francis Pilgrim and Joseph M. Kamen, "Predictors of Food Consumption," Science 139 (February 1963):502.

[49]W. O. Caster, "Eating Habit Patterns," Abstracts--Fifth International Congress of Nutrition (Washington, D.C.: [n.p.], September 1-7, 1960).

survey in 1965.[50] The results were then compared to those of 1955, when a previous nationwide survey had been made. The 1965 survey showed that 50 percent of the households in the United States had diets that were rated "good" in the spring of 1965. These diets met the Recommended Dietary Allowances set by the Food and Nutrition Board of the National Academy of Sciences, National Research Council. The allowances were for protein, the two minerals, calcium and iron; and the four vitamins, Vitamin A, thiamine, riboflavin, and ascorbic acid. About 20 percent of the households had diets that were rated "poor." These were diets that provided less than two-thirds of the allowance for one or more of the nutrients studied. About 30 percent of the households had diets that ranged between "good" and "poor."

Based on the findings, more diets were graded poor in 1965 than in 1955, when the previous nationwide survey had been made. Decreased use of milk and milk products, vegetables and fruits--the main sources of calcium, ascorbic acid and Vitamin A--was mainly responsible for the change in dietary levels. The survey provided no indicator of nutritional status. Therefore, no information is available on hunger or malnutrition in the U.S. from this survey.

On the basis of these findings, an expanded nutrition education program has been developed by the U.S. Department of Agriculture to help families achieve better diets.

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[50]Adelson, op. cit., pp. 448-55.

Studies on Food Habits of Different Ethnic Groups

As stated in Chapter I, there is a need for research on the food habits of the different ethnic groups. Some of the research reported here dates back to 1943 when the Committee on Food Habits issued a series of memoranda dealing with the food habits of several subcultural groups in the United States. The studies discussed in this section represent the findings of a thorough search of the literature on food habits of various ethnic groups.

Subcultural Groups within the U.S. The study by Joffee provided background information on the food habits of different ethnic groups within the United States. It also provided information on how to approach the groups on the matter of food habits.[51] Joffee covered specific areas such as: (1) the historical and cultural background of the group; (2) traditional methods of securing food; (3) habits of handling food, attitudes toward food, cooking and service; (4) an appraisal of the customary diet; and (5) how the diet may be altered and what means can be utilized to further improvement. The study covered the following groups: Italians, Hungarians, Czechs, and the American Blacks.

One limitation to Joffee's study lies in the fact that no actual research with a population and/or sample was undertaken. Rather, she based her findings on information gathered from volunteer informants knowledgeable in the different ethnic groups.

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[51] Natalie F. Joffee, "Food Habits of Selected Subcultures in the United States," The Problem of Changing Food Habits, Bulletin 108 (Washington, D.C.: National Research Council, 1943), p. 97.

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The study of Cussler and DeGive provided an outline of studies of food habits in the rural Southeast. A series of three studies was undertaken to ascertain the interrelations between the socio-culture and nutrition in three contrasting communities. The general method included intensive open-ended interviews cross-checked by other extensive interviews, as well as surveys of available technical data. A major finding was that "there is a valid relation between cultural values and such a component aspect of the culture as the food pattern."[52]

Passin and Bennett studied social process and dietary changes among German farmers and their American families.[53] The historic and contemporary diets of the area of Stringtown, Illinois, were analyzed in terms of the concept of core ("old-time farm grub," traditional concept); secondary core (the new foods plus the older foods which are no longer in the core); and alternative (few foods from old secondary core plus a number of luxury items). The study indicated that changes in food habits were seen to result from commercialization, urbanization, and contact between groups (Germans and Old Americans). As a consequence of the social change, the authors found differing segments instead of a fairly homogeneous farmer population. Differences in food habits, as well as differences in resistance to change in food

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[52]Margaret T. Cussler and Mary S. DeGive, "Outline of Studies on Food Habits in Rural Southeast," The Problem of Changing Food Habits, Bulletin 108 (Washington, D.C.: National Research Council, 1943), p. 112.

[53]Herbert Passin and John W. Bennett, "Social Process and Dietary Change," The Problem of Changing Food Habits, Bulletin 108 (Washington, D.C.: National Research Council, 1943), p. 113.

habits, were seen to be closely related to the contemporary social structure. It is of interest to note that a stronger tendency toward change of goals and ambitions was found within the younger population. This situation with the younger generations was also reflected in their lack of taste for the old German food.

Studies on the Food Habits of the American Indian. It is of interest to note the limited number of publications investigating the food habits of the American Indians. William Patterson, editor of Food Management, wrote in a recent article, regarding the scarcity of literature on the American Indian:

> I never thought more about Indians once I stopped listening to the Lone Ranger. In fact, it wasn't until February 28, 1973, that I even sensed Indians still had a problem. That was the day of the second Indian uprising at Wounded Knee.[54]

This seems to be more or less a general problem, for only two other publications were found dealing with the American Indians' food habits.[55] One other source, and an excellent one, is the April 1974 issue of Food Management. It includes four articles dealing specifically with the nutritional needs, food habits, health problems, and other needs of the American Indians.[56]

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[54]William B. Patterson, "Wasichus Fantasies: Editor's Page," Food Management 9 (April 1974):3.

[55]W. J. Darby and others, "A Study of the Dietary Background and Nutriture of the Navajo Indian," Journal of Nutrition 60, Supplement 2 (November 1956):2; see also S. Abraham and D. C. Miller, "Serum Cholesterol Levels Among American Indians," Public Health Department, No. 74 (1959), p. 392.

[56]Patterson, op. cit., p. 3; see also Elizabeth Cohen, "After Wounded Knee: The American Indian," Food Management 9 (April 1974): 34-40; Thomas Farr, "Indian Food," Food Management 9 (April

Cohen wrote on the feeding of the American Indians at hospitals, schools, breakfast programs, and the USDA Commodities Program.[57] There is also a brief report on the present situation of the American Indian on the reservation. According to Cohen, census reports showed that about one-half million Indians live on reservations, 40 percent are unemployed, 40 percent live below federal poverty levels, and 50 to 80 percent of the Indian families have an alcoholic among them. Food is also scarce for the American Indian and there is a high rate of tuberculosis, a disease caused by malnutrition. Federal and state governments, as well as church-affiliated organizations, have established many programs in recent years to educate and feed native peoples of all ages. Another proven and successful program has been the USDA Surplus Commodity Program through which the American Indian has subsisted for many years.

Darby and others, also reported on the nutritional status of the Navajo Indians. The findings are the result of thorough research on the dietary background and nutriture of the Navajos. At the time, Darby also commented on the lack of information regarding the food habits of the American Indian. He stated:

> No objective effort seems to have been made to appraise the adequacy of the traditional or present-day diet, to define trends occurring in dietary practices, or to assess the nutriture of "the people."[58]

1974):44-49; "Casebook No. 07214--Feeding the American Indian: USDA Foods and Indian Knowhow," Food Management 9 (April 1974):55.

[57]Cohen, op. cit., p. 34.

[58]Darby, op. cit., p. 3.

The study included information on the background and food production of the Navajo Indians, their dietary patterns, the physical and biochemical findings of the investigation, and the interpretations of the findings.

One major finding, according to Darby and others, is the fact that the Navajo has abandoned his primitive diet:

> He no longer depends on the hunt, on Indian corn, on the gathered wild plants, berries, and fruits for his food. He lives by combining home-produced meat and a few other products with flour, shortening, coffee, potatoes, sweets, some milk and fruits, and a limited variety of other foods purchased at the trading post. . . . The Navajo seldom shows clinical evidence of gross nutritional deficiency. . . . He has no problems of anemia or of protein malnutrition.[59]

As a last word, Darby and others recommended that other chemical and nutritional investigations of the wild or native foods of the American Indian could be expected to contribute to the better use of arid lands throughout many regions of the world. This recommendation, although made in 1956, is still very sound. For it is a fact that the world supply is not sufficient to feed the world's population, and that there are many suffering from starvation at the present time.

Studies of the Food Habits of the Mexican American. Research literature concerning the food habits of Mexican Americans is very limited at the present time. Many articles found in the review of literature of food habits seemed to be oriented more toward the health practices and beliefs of the group, and not so much toward reporting the dietary practices of the Mexican Americans.

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[59]Ibid., p. 75.

Other studies, such as that of Goldkind, examined only selected food items and how their use was affected by acculturation patterns.[60] Goldkind, in his study, included the following variables regarding measures of acculturation: (1) position in the occupational structure, (2) activity in volunteer organizations, (3) contact with Anglos, and (4) ethnic cultural traits. For the research, Goldkind interviewed male heads of households within the Lansing area. The findings in the area of food habits showed a high index of Mexican food consumption (tortillas, chile, and frijoles) related to a high index of Mexican residence and/or to a low index of pre-Lansing contact with Anglos. There was also a significant relationship between some service in the armed forces and a greater preference for Anglo food. In addition, there was significant relationship between more pre-Lansing contact with Anglos and less consumption of chile and frijoles. This was true where a closer past contact with Anglos led to a decrease in the preference for and use of Mexican foods.

Heller studied the regional patterns of dietary deficiencies of Mexican Americans living in New Mexico and Arizona.[61] According to Heller, this group adheres to a limited food pattern which was adapted from the Indian diet of the area. A majority of the people living in this area limited their diets to corn, beans, chili peppers, lard, flour, and coffee. Fruits and vegetables were eaten only when

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[60]Victor Goldkind, "Factors in the Differential Acculturation of Mexicans in a Michigan City" (unpublished Ph.D. dissertation, Michigan State University, 1963), pp. 6, 101.

[61]Celia Heller, "Regional Patterns of Dietary Deficiency: The Spanish American of New Mexico and Arizona," Annals of the American Academy of Political and Social Science 22 (Janaury 1943):49-51.

in season, and even then, not frequently. The author stated that the people did not limit their diet due to ignorance but primarily due to economic reasons. A simple analysis revealed that the diet was low in protein, both in kind and in amount, and in calories. Calcium was furnished by beans, but very little milk was consumed. Iron was adequate, but anemia was commonly found in the clinics. Heller concluded that education in the new findings and knowledge of nutrition and food preparation was an important factor in improving the diets of the people.

Another article in the area of food habits by Humphrey dealt with the dietary practices of Detroit's Mexican Americans.[62] The article summarized the character of dietary practices in a region where the Mexican population was sparse and dispersed. Humphrey found generally that the older habits seemed to exist to a lesser degree than in Texas. As a result, consumption of food, particularly those foods affecting children's health, greatly increased. American food was used when quick preparation was necessary and when ethnic foods were not in good supply. However, statements made do not appear to be substantiated by research.

Other research articles of interest to those studying the nutritional status of Mexican Americans are those by Aranda et al.[63]

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[62]Norman D. Humphrey, "Some Dietary Practices of Detroit Mexicans," Journal of American Folklore 58 (July 1945):255.

[63]Robert Aranda and others, "A Preliminary Study of Nutritional Status in Mexican American Pre-School Children," in Mexican American Education--A Selected Bibliography, compiled by Albert D. Link (ERIC-CRESS Supplement No. 2; Washington, D.C.: U.S. Government Printing Office, 1970), p. 1.

The research in these publications focused on some twenty-six Mexican American families in East Los Angeles having children in the Head Start programs. The reports dealt specifically with the family characteristics and the physical health of the family. Some food restrictions during pregnancy were also discussed.

Lewis investigated the nutritional status of Mexican American pre-school children in East Los Angeles and San Diego.[64] The questionnaire data collected from mothers of pre-school children were presented in terms of a description of families, prenatal care, clinical examinations, dietary intakes, and biochemical determinations. The study indicated that these children had adequate intakes of protein, riboflavin, ascorbic acid, and niacin but that iron intakes were low.

Another study concerning the food habits of Mexican Americans was done by Bowden.[65] She studied the nutritional beliefs and food practices of Mexican American mothers among low-income agricultural working families. Some thirty-five mothers whose children attended the Hanford (California) Child Day-Care Center were interviewed at home to determine family characteristics and food-buying and menu-planning practices. It was noted by Bowden that advanced planning of meals was not the rule, with the majority of mothers deciding on menus

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[64]Jane S. Lewis and others, "Nutritional Status of Mexican American Pre-School Children in East Los Angeles and San Diego" (paper presented at the annual meeting of the American Institute of Nutrition, Chicago, 1971).

[65]Shirley Bowden, "Nutritional Beliefs and Food Practices of Mexican-American Mothers" (unpublished Masters dissertation, Fresno State College, 1968), pp. 1-2.

just before meal preparations. The research also showed that approximately one-half of the families produced some type of food at home, and one-third preserved some food by canning. Menu evaluations also revealed deficiencies in milk, fruits, and vegetables. The report also included data on health needs and living standards of these Mexican American families.

Barrios wrote on the implications of nutrition education in Sacramento County, California, for Americans of Mexican descent. Her article came about as a result of the findings of the Special Senate Hearing on Nutrition and Human Needs (December 1968), in which Dr. Jean Mayer singled out the Mexican migrant worker of the West as among those groups in which malnutrition is known to exist.[66] A very descriptive review of the Mexican American food habits was given making this article a valuable one for studying the food habits of this group. Furthermore, a review of the classic "Basic Four" was made, and recommendations were given to establish a "Basic Four" chart geared to the nutritional needs of Mexican Americans. These basic needs would include food items common to the Mexican American diet, plus basic nutrition information of other food items that should be included for health reasons. Barrios' ideas were presented especially for nutrition and health officials working with Mexican Americans and as a basis for improvement of nutrition education programs.

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[66]Ruth Barrios, "Nutrition Education in Sacramento County for Mexican Americans," AZTLAN, Chicago Journal of Social Sciences and Arts 2 (1970-71):57.

One other article of special interest discussed research on the nutritive value of the Mexican tortilla.[67] This investigation was conducted by Cravioto and others. It represented a complete analysis of the nutritive value of this food item. The major finding of the research was that the method used by Mexicans of soaking the corn in lime water for a day before preparing the masa for the tortillas helps to increase the calcium content of the tortilla by 2,010 percent, the phosphorus content 15 percent, and the iron content 37 percent. Cravioto stated that Mexicans have achieved an adequate calcium intake by this food practice, since average daily consumption of 280 grams of tortilla furnishes more than 500 mg. of calcium.

This review of the food habits of Mexican Americans gives the reader a perspective on the food practices of this group. It is interesting to note that most of the research review deals with Mexican Americans in the U.S. Southwest. Little is known regarding the food habits of Mexican Americans who have moved to northern areas. The present research project has focused on studying the food habits of Mexican Americans in the Lansing area. It has also sought to identify the variables influencing changes, if any, in the food patterns of this group.

Overview

While the task of studying food habits has not been easy, many concerned investigators are working together in an effort to

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[67] R. O. Cravioto and others, "Nutritive Value of the Mexican Tortilla," Science 102 (1945):91.

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present ideas on the most effective way to study food habits.[68] The call is for a joint team effort. Thus other disciplines, both in the social and health sciences, could work together to provide an open system. This open system would be responsive to new knowledge in every relevant field. The consensus is that studies of food habits as an applied field provide a more accurate in-depth knowledge of a cultural group. This also allows for better understanding of the cultural values influencing the selection of food items. At the same time they provide valuable information when planning instruction and related materials to be used with these cultural groups. Applied studies also permit the research topic to be handled with increased scientific accuracy. This is considered an imperative need in a world where technology is constantly changing.

The review of related literature indicated the many variables influencing the food habits of different cultural groups. Major findings in the literature review seem to indicate that:

1. Food habits are first established with respect to availability of food items within the system.[69]
2. Factors influencing and widening the choices of food items within the system are directly related to:
   a. transportation systems,[70]
   b. food items introduced by immigrants,[71]

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[68]Mead, "Problem of Changing Food Habits," p. 21; see also Cassel, op. cit., p. 732; Fathawer, op. cit, p. 335; Sweeney, op. cit., p. 475; Burgess and Dean, op. cit., pp. 3-8.

[69]Queen, op. cit., p. 1052; see also Clark, op. cit., p. 56; Lewin, op. cit., p. 54.

[70]Queen, loc. cit. [71]Ibid.

c. economics: changes in income distribution and/or standards of living,[72]

d. changes in levels of education and occupation,[73]

e. commercialization and urbanization,[74]

f. food prejudices, avoidances, and cultural values related to either social, political and/or religious beliefs,[75]

g. flavor and seasonings accepted by the cultural groups,[76]

h. distribution of food within the household, with special reference to the position of the different members of the household,[77]

i. selection and purchasing of food items,[78]

j. food storage facilities and/or preservation methods,[79]

k. methods used in the actual preparation of food,[80]

l. new food items in the market,[81]

m. peer's group acceptance of new food items,[82]

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[72]Ibid.; see also Chassy, op. cit., p. 63; Heller, op. cit., pp. 49-51.

[73]Chassy, loc. cit.; see also Goldkind, op. cit., p. 108.

[74]Passin and Bennett, op. cit., p. 117; see also Chassy, loc. cit.

[75]Simmons, op. cit., p. 275; see also Cussler and DeGive, op. cit., p. 111.

[76]Pangborn, op. cit., p. 35. [77]Den Hartog, op. cit., p. 1.

[78]Esquef, op. cit., p. 1; see also Lewin, pp. 36, 54.

[79]Esquef, loc. cit. [80]Ibid.

[81]Stare and Trulson, op. cit., p. 236.

[82]Lewin, op. cit., p. 55.

n. peer group composition, and contact with other cultural groups,[83]

o. local organizations and/or groups the family belongs to,[84]

p. health and restrictions in the diet,[85]

q. age: younger generations show stronger tendency toward change of culturally accepted food items,[86]

r. nutritional knowledge, and menu planning practices of the homemaker.[87]

The factors influencing the food habits of a cultural group are numerous and varied. The limited amount of research data supporting these influencing factors underscores the need for future research projects. Projects of this kind could help to redirect the instruction of different ethnic groups to meet the needs identified by research work; to establish new guidelines with respect to the study of food habits; and to improve the existing knowledge on the food habits of cultural groups.

PART II

The Mexican American Group and Their Food Habits

The study undertaken is aimed primarily at gathering current information and data concerning the food habits of a cultural group. The group selected represents the Mexican American population within the Lansing area.

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[83]Goldkind, op. cit., p. 116; see also Passin and Bennett, op. cit., p. 122.

[84]Koos, op. cit., p. 79. [85]Aranda, op. cit., p. 1.

[86]Passin and Bennett, loc. cit. [87]Bowden, op. cit., pp. 1-2.

Food Preferences

As previously stated, the literature on the food habits of the Mexican Americans is very limited at present. The information available in this area, as well as most other information regarding this ethnic group, mostly describes the Mexican American in the Southwest. Thus a minimal amount of information is available on the Mexican Americans who now reside within the North, East, and/or the Midwest of the United States.

One account of the first experiences of the Mexicans with the Anglo diet is by Peón. Peón, in his book, Cómo Viven Los Mejicanos en los Estados Unidos, related the daily incidents of migrant workers during their work season in the United States in 1943. The book, which goes into special details of everyday life, also provided a description of the meals served to the migrant workers. Peón recalled that the first item completely eliminated from the diet was the powdered chile--"el chile en polvo mezclado con rebanadas de jitomate."[88] The diet consisted mainly of Anglo items, i.e., boiled eggs, butter, fruits, bread, coffee with cream, corn flakes, hot cakes, peanut butter, jelly, honey, condensed milk, fish, beef, pork, ham, and turkey. These items were offered at almost every meal in "good and generous amounts": "Se Nos ponian sobre la mesa grandes platones cargados de enormes cantitades de alimentos."[89]

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[88]Maximo Peón, Cómo Viven los Mejicanos en los Estados Unidos, ed. B. Costa (Mexico, 1, D.F.: AMIC, 1966), p. 101.

[89]Ibid.

This abundance of food, probably more than what could be afforded back home, must have influenced some of the workers who later stayed in the United States. Whether this is accurate or not is not known for there is a lack of research in this area, as was previously explained.

The most recent article on the food habits of Mexican Americans is one by Barrios.[90] The article covered mainly the diet of Mexican Americans in the Southwest, and the food items listed are those of Mexican origin that currently constitute the diet.

At this point, then, the main concern is that of studying the present Mexican American diet and the deviations found, if any, from the original Mexican diet. Griffith, in her book American Me, stated that, while traditions are in flux in the Mexican American homes, the custom of eating native foods is one of the most permanent ones. In most families, even to the third or fourth generation, one finds the traditional Mexican foods being served daily: tortillas, frijoles, hot peppers, tacos, enchiladas, tamales, and frijoles. "Some people say you can never die if you have chile, tortillas, and beans. Even if you don't have chile, you can live on beans and tortillas."[91]

This "basic trinity" is often supplemented by the worst features of the American diet--especially the highly milled starches like rice, macaroni, and spaghetti. The tortilla, or little cake--a thin, flat, cornmeal cake--was first made by the Aztecs. Tamales are

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[90]Barrios, op. cit., pp. 57-74.

[91]Beatrice Griffith, American Me (Boston: Houghton Mifflin Company, 1948), pp. 95, 135.

ground corn mixed with pork or chicken, spiced with chili, wrapped in cornhusks, and steamed. Enchiladas are meat pies made of tortillas wrapped around the meat and vegetables and cooked in a peppery sauce.

In addition, Mexicans are very fond of chocolate. In fact, chocolate comes from an Aztec word, chocolatl.[92] It was the Mexican Indians who taught Europeans how to prepare delicious drinks and sauces from the cacao bean. Even today, Mexicans cook fowl and meat in spiced chocolate sauces better known as Mole Poblano.[93] The most significant difference, Griffith added, between the Mexican American diet and the original Mexican diet, from a nutritional standpoint, is the use of white flour tortillas--now white flour is used in most Mexican homes instead of corn, for flour is cheap and easy to use and the American-born children prefer it. The corn tortillas are still preferred by the parents and used largely for holiday occasions and with special dishes such as tacos and enchiladas.

Basically the native Mexican diet is often a healthful one since milk, fresh vegetables, and fruits are all desired foods, but their importance is not realized by many families, for, as in other low income groups, they are the first foods to be eliminated when money is scarce. Cheese is an important factor in Mexican dishes, but it too is often limited when wages are low, as is whole milk. The amount of meat eaten varies with the income, but this scarcity is purely an economic one, for most of the favorite Mexican dishes

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[92] Foreign Foods: Favorite Recipes of Home Economics Teachers (Montgomery, Alabama: Favorite Recipes Press, Inc., 1967), p. 216.

[93] Elizabeth Ortiz, "La Cocina Mejicana," Gourmet, September 1971, pp. 27-30.

require meat, either beef, chicken, mutton, pork, or sea food. Eggs, too, rarely get onto the tables of the underprivileged families unless there are chickens in the back yard. The limitations of their use are basically no different from those of the poor Anglo class.

Diets of the poor are deficient. A high incidence of nutritional anemia is frequently found among Mexican American adults and children from low income areas. Food habits are tenacious in their struggle for cultural survival, and frijoles, arroz, maiz, and tortillas are thought of as the common menu items for all generations. They are also staples in the diets of poor Mexican Americans because they are cheap, tasty, and filling.

Another factor closely related in many cases to deficient diets is food avoidances or health beliefs. These are usually associated with pregnancy and/or births. Food items that are often restricted are spicy seasonings, some vegetables, and fruits, as well as chocolate.

In lieu of the lack of other pertinent data in the area of food habits of the Mexican American, this research work will be mainly geared to ascertaining the present diet and food habits of Mexican Americans in a Midwestern city. The study is also aimed at identifying the factors influencing their food habits. This information could then be used for the development of instruction and related materials by those teaching the Mexican Americans.

Overview of the Mexican American Group

The process of assimilation and acculturation is briefly discussed in this section of Part II, for it is considered necessary

to provide a clear understanding of the social change the Mexican American group has undergone. Of significance is their way of responding to the American ideology of advancement which has been different from the response of other immigrant groups.

In studying the Mexican American, it is frequently found that this group constitutes one of the most heterogeneous ethnic groups ever to be studied. In contrast, when studying other immigrants, such as the Northern Europeans, one finds them to be a more homogeneous group responding to the American ideology of advancement in a different way than do the Mexican Americans. In these instances, the members of these immigrant groups have integrated themselves so well into the American cultural patterns that they have become indistinguishable from each other.[94] In most cases, the process of assimilation has been a reality among them.

On the contrary, Mexican Americans are responding to the American ideology of advancement in another manner. What typically took place in earlier generations of other immigrant groups is now occurring among later generations of Mexican Americans. This process is being faced by the Mexican Americans in a unique way, distinctively their own. They are not rejecting traditional culture and language, as children of other immigrant groups have done, but rather attempting to combine, in their words, "the best of two worlds." This "world" is therefore the result of two cultures: that which they and/or their parents brought from Mexico, and the Anglo culture which predominates

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[94]R. A. Schermerhorn, "Minorities: Europeans and Americans," in Minorities in a Changing World, ed. Milton L. Barron (New York: Alfred A. Knopf, Inc., 1967), pp. 5-14.

in the United States. It is from this background that the Mexican American emerges.

De León, in his article, "The Hamburger and the Taco: A Cultural Reality," dealt with the theory of social change.[95] He used the theory to better express his understanding of acculturation of the Mexican Americans. In his work, he noted that Anglo and Mexican concepts of life interact or blend into one another, thus creating a third concept, that of the Mexican American. This third concept involves the person's own unique interests, desires, wishes, sets of values, attitudes, aspirations, and language. As a result of this interaction, acculturation takes place.

The forces of acculturation and mobility, working over a period of two, three, or more generations have brought about the present situation of the Mexican American group. Most of the changes have been slow and barely perceptible to many studying or writing on the Mexican Americans. Although at this time there is a flow of people out of the barrio or Mexican American neighborhoods, a good number remain within their established community. Reasons for this situation are not well established, especially when there is an astonishing lack of hard data and research which would firmly establish the reasons for the cultural isolation this group has encountered.

Therefore this social change, or the forces of acculturation and mobility, will also be included in the course of this investigation. These two major variables have been partially identified by

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[95]Marcos de León, "The Hamburger and the Taco: A Cultural Reality," in Educating the Mexican American, eds. Henry S. Johnson and William J. Hernandez M. (Valley Forge: Judson Press, 1970), pp. 35-37.

by previous research data as influencing factors in the change of food habits. These findings have been presented by Queen, Passin and Bennett, Goldkind, and Chassy. It is hoped that by studying these variables, a clearer view of the selected Mexican American's food habits will emerge. It is believed that these variables could be the ones influencing one way or another the food habits of this group.[96]

Chapter III will then present the design of the study and a complete review of the entire set of variables to be examined.

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[96]A thorough review of the Mexican American family system has been included in Appendix A to benefit the reader. The review of literature reveals that Mexican Americans possess a set of values different from those of Anglo Americans. Especially different are those values related to the family and the home. The reader is recommended to review Appendix A for a comprehensive understanding of this ethnic group.

CHAPTER III

DESIGN OF THE STUDY

Setting

This investigation focuses on the Mexican Americans within the greater Lansing area. This group was selected due to the size of its population within this area, for its proximity to the Michigan State University campus, and for the researcher's interest in Spanish speaking people.

According to the 1970 U.S. Census of Population and Housing, the population of the Lansing Standard Metropolitan Statistical Area (SMSA) was 378,423 inhabitants (see Table 3.1). Among these, the Spanish speaking group is included by the U.S. Census Tract Report in the "white" category. Of the 361,077 listed as whites in 1970, 8,302 are Spanish speaking. In this category the U.S. Census Tract includes those of Spanish heritage who would fall within either category: Spanish language, Spanish surname, Puerto Rican birth or parentage, and Spanish mother tongue. In addition, the U.S. Census Tract listed separately those born in Mexico and/or with mixed parentage in the "Mexico: Foreign Born" category, rather than in the category of Spanish heritage, with an additional total of 2,079 (see Table 3.2).

Persons born in Mexico are therefore listed under "Mexico: Foreign Born," while those descendants of Mexican heritage not born in Mexico are listed under a separate category, that of Spanish

Table 3.1.--Total Population--Lansing SMSA.

1970 U.S. Census Tract Report: Total SMSA Lansing, Michigan*		
All Persons		378,423
White.....	361,077	
(Spanish...8,302)		
Negro.....	14,699	

*U.S. Census of Population and Housing, Lansing, Michigan SMSA, 1970, pp. 1 and 45.

Table 3.2.--Total Population--Foreign Born in Lansing SMSA.

1970 U.S. Census Tract Report: Total Foreign Born SMSA Lansing, Michigan*		
Total Foreign Born		9,493
Country of Origin:		
Mexico.....	2,079	
Foreign Born.....	429	
Foreign or Mixed Parentage.....	1,650	

*U.S. Census Tract Report, Michigan, Table 81, pp. 294, 1970.

heritage. This classification makes it almost impossible to estimate the size of the Mexican American population within a given area.[1]

The U.S. Census Tract does provide information as to where the concentrations are of those of Spanish heritage. This provided a good base with which to identify and select a random sample of Mexican Americans within the Lansing SMSA.

Although it is certain that there are other simpler ways in which to select a sample, the U.S. Census Tract was chosen in an effort to eliminate bias as much as possible from the sample frame. In fact, the different Community Service Centers that work with the Mexican Americans in the area have a very complete list of those residents of Mexican descent within the area. Yet it was felt that persons not visiting and/or using the centers might be excluded from such lists, thereby necessitating the use of the census.

It is essential to know why and how the study area has been selected and defined. If only a portion of the subject population was included in the study, one must also examine the sampling procedures. Such considerations will help to determine the appropriate methods of analysis. They will also aid in establishing the degree of generality that can be attributed to the questionnaire results. In other words, unless field investigation methods are known, one cannot be sure if the conclusions are restricted to only the questionnaire respondents, or are applicable to the entire population.

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[1]In a visit to Cristo Rey Community Center, it was learned that there are presently 13,000 Spanish speaking persons in the Lansing area of which 60 percent to 75 percent are Mexican Americans.

Definition of the Population Sample

The Sampling Frame

In any study the type of sample design that is utilized is influenced by a number of considerations. If bias in the selection is to be avoided, and if the precision of the results is to be calculable, then random methods of selection must be employed. The precise form of these methods will be influenced by the characteristics of the population, objectives of the analysis, and the significance of practical considerations such as time, labor, and research costs.

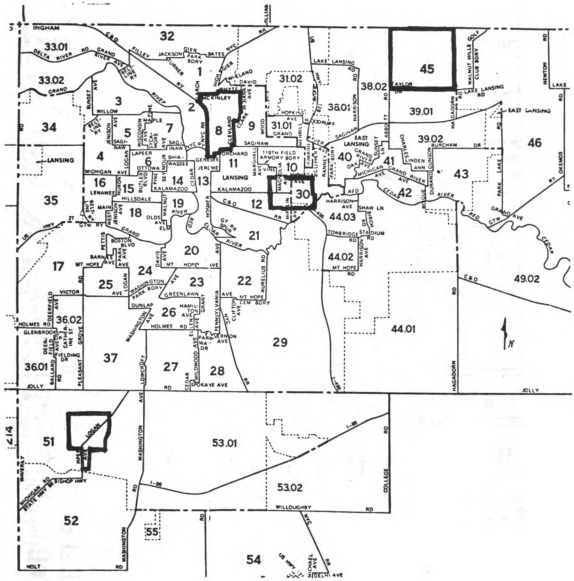
It is also apparent that regardless of the design, the sample can only be as precise and representative as the sampling frame is accurate and complete. In the current context, it was noted that the U.S. Census Tract could not provide enough information on the population elements. However, it did provide an idea of the geographic distribution of persons of Spanish heritage within the greater Lansing area. The next step was to obtain a list of names and addresses to insure accurate plotting of locations and neighborhoods on the Lansing base map. The 1975 Lansing Telephone Directory proved suitable and was therefore chosen in an effort to construct a "fair" sample frame. All persons having Spanish surnames listed in the telephone directory were plotted on the street map of the greater Lansing area. This map was obtained from the Lansing City Hall, Office of Planning.

Households having Spanish surnames were found to be dispersed throughout the city. However, several concentrations of Spanish surname households were identified on the Lansing street map as Mexican American neighborhoods. This coincided with the 1970 U.S.

Census Tract Report, specifically Tract 0008, in which the largest concentration of Spanish surname households were found. The Cristo Rey Community Center is located within this census tract (see Figures 3.1, 3.2).

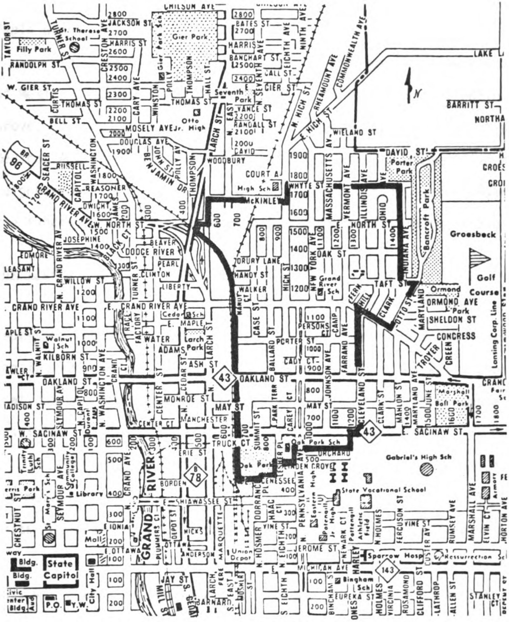
In addition to mapping those persons having Spanish surnames in the greater Lansing area as part of the sample design, investigative field trips were made to all areas where a sizeable Spanish surname household cluster was found. This follow-up field investigation permitted the inclusion of Spanish surnames not listed in the telephone directory to be plotted on the map. One method that proved beneficial was that of reading the names as indicated on their respective mailboxes in front of their houses. Consequently, the list of households of those with Spanish surnames doubled following field work checks.

In an effort to insure accuracy regarding the Mexican American neighborhoods, a series of visits was planned to various agencies working with Mexican Americans in the Lansing area. This included visits to the Model Cities Office (now the Building in Lansing Development, BILD), and the Cristo Rey Community Center for corroboration purposes. The visits to these agencies not only served to identify the neighborhoods of those of Mexican descent, but also eliminated from the data Spanish surnamed persons who were not Mexican Americans but whose names appeared in the telephone directory. For example, this was found to be the case with some Cuban and Puerto Rican families who were excluded from the study as a result of follow-up field investigation.



Source: U.S. 1970 Census of Population and Housing, Lansing, Michigan SMSA, Bureau of the Census (Wash., D.C.: U.S. Government Printing Office, 1972).

Figure 3.1. Spatial Location of Selected Mexican American Neighborhoods Within the Greater Lansing Area.



Source: Graphic Street Guide of Greater Lansing and East Lansing (Grand Rapids, Michigan: Metro Graphic Arts, 1974), p. 11.

Figure 3.2. Cluster Area: North Side.

Four main Mexican American neighborhoods were identified and delimited following this investigation. These included: North Side, Maple Grove, Urbandale, and Towar Gardens (see Figure 3.1).

In proportion to the total frame, the heaviest concentration of Mexican Americans was found in the North Side section, while Maple Grove, Urbandale, and Towar Gardens showed a lesser concentration of Mexican Americans. These four areas were therefore identified as key neighborhoods in the sample frame. When all aspects were considered, the findings proved acceptable as an appropriate sampling frame.

The Type of Sample

With the knowledge that the final sample could never fully represent the entire population of Mexican Americans in the greater Lansing area, it was resolved that the best procedure was the one that could produce the most objective and representative sample possible. Accordingly, a cluster design was selected.

Cluster sampling was attractive in a number of respects but the most important was its spatial efficiency.[2] With the selected units located in the same vicinity, the field work could be highly concentrated in a small geographic area. From a practical viewpoint, this was a crucial consideration. Given the pattern of distribution of the four areas (Figure 3.1), it was also a logical selection, since they were all fairly widespread throughout the city. The use of clusters reduces the area of coverage to realistic proportions, while

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[2]Moser Claus. Survey Methods in Social Investigation, 2nd ed. (New York: Basic Books, 1972), pp. 89-103.

in this case also maintaining the essential neighborhoods of Mexican Americans.

In an effort to insure objectivity, each cluster was created around a specific block. The total procedure for the creation of the clusters can be summarized in a number of steps:

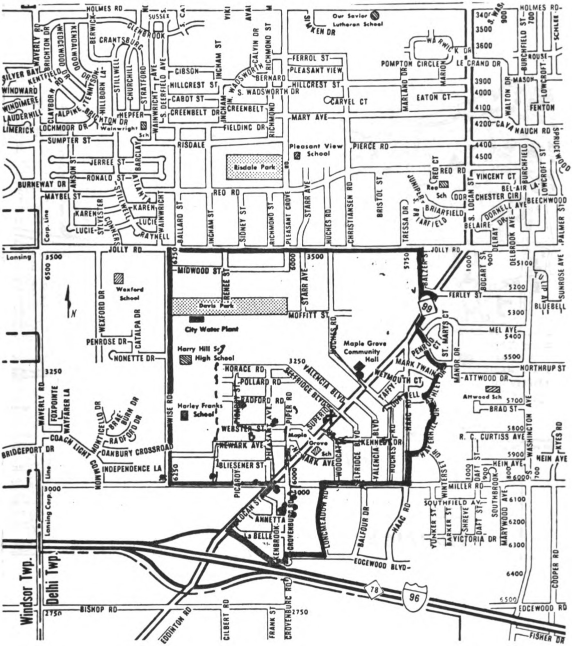
1. First, through the use of the city street map covering the specific areas, a total number of Mexican American residents per block was found. As previously explained, these were gathered from the 1975 Lansing Telephone Directory and visits to the community to identify Spanish surname households. Specifically, the key block for each cluster sample was that having the highest number of residents of Mexican American descent. City blocks were utilized as the basic unit for sampling purposes. All Mexican American households in that block were automatically included as part of the cluster. A minimum of 12 years of age for respondents was established to better identify the patterns of meal selection outside the home setting. Undoubtedly, for a younger person this selection might be made by an adult member of the family.
2. The other blocks of the cluster were chosen from neighboring blocks with the highest concentration of Mexican Americans, with a minimum requirement of two or more Mexican American households per block.
3. Although four neighborhoods of Mexican Americans were identified, only three were included in the study. This was based on minimum requirements for adjacent blocks, where at least two or more Mexican American households per block must be

identified. In the area of Towar Gardens, the findings showed a scattered distribution of Mexican American households throughout the area. No blocks in Towar Gardens were found having at least two Mexican American residents per block with an adjacent block having at least the same number. Therefore, the requirements for a cluster sample in this area were not met. Other residences were located in Dewitt Township, a section outside the study area. This is an unavoidable circumstance when clusters are employed. However, since random procedures were used to generate the clusters, one can assume that the sample is representative of all areas.

Sample Size

Although there are general formulae available for estimating the required sample size, they were not used in this analysis. Instead, the decision was based upon practical considerations. The constructed interview/questionnaires were to be administered in a personal interview by a selected group of interviewers who previously had had contact and/or work with Mexican Americans in the Lansing area. The interviewers were to be trained, supervised, and financed by the researcher. The best procedure was to consider the concomitant restrictions with respect to time, labor, and money, and then on that basis, to select as large a sample as possible.

Without the estimation formulae, the current sample assumed the dimensions depicted in Table 3.3. Several aspects of this diagram are significant. First, a total of 103 interviews were attempted; of these, one interview was eliminated because two persons of the

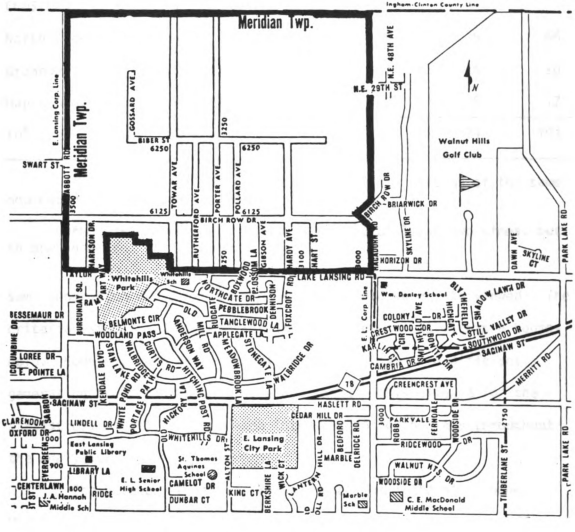


Source: <u>Graphic Street Guide of Greater Lansing and East Lansing</u> (Grand Rapids, Michigan: Metro Graphic Arts, 1974), p. 24.

Figure 3.3. Cluster Area: Maple Grove.

Source: Graphic Street Guide of Greater Lansing and East Lansing (Grand Rapids, Michigan: Metro Graphic Arts, 1974), p. 19.

Figure 3.4. Cluster Area: Urbandale.



Source: Graphic Street Guide of Greater Lansing and East Lansing (Grand Rapids, Michigan: Metro Graphic Arts, 1974), p. 13.

Figure 3.5. Cluster Area: Towar Gardens.

Table 3.3.--Composition of the Sample Clusters.

	Completed Interviews	Interviewer Ineligible*	Nobody Home**	Refused	Total
CLUSTERS:					
North Side	51	1	6	8	66
Urbandale	7	0	7	6	20
Maple Grove	4	0	8	5	17
TOTAL	62	1	21	19	103

*The interviews were ineligible because 2 persons of the same household and same generation were interviewed.

**Most the these places were contacted at least two times, but no one answered.

same generation group and of the same household were interviewed. The criteria established allowed for different interviews within a household. However, each interview was representative of a different generation group within that same household. This allowed for the statistical significance of each interview to be the same throughout the analysis.

The category entitled "Nobody Home" consisted of 21 homes. Whenever possible, usually two and sometimes three, attempts were made to contact these people. The contacts were attempted as work in each of the clusters progressed. For this reason, the time between contacts was relatively short. In most cases, the person could have been out at the time or at work. A precise explanation for this group would require additional field investigation.

As in any survey, some people cooperated and other refused. The total of 19 "Refused" was considered surprisingly large,

especially among the areas of Urbandale and Maple Grove. In these areas, there were as many or more "Refused" questionnaires as those completed (see Table 3.3). In the current case, a substantial number of the refusals were linked to either illness or an apparent mistrust for the interviewer's objectives.

Under these conditions, the 62 completed interviews represent an acceptable number. Table 3.3 illustrates the relative contribution of each cluster.

Source of the Data

The criteria used for gathering the data for this study was based solely on a constructed interview/questionnaire developed by the researcher. The main purpose of the instrument was to help identify the food habits among different generations of Mexican Americans with the Lansing area. Secondly, it would serve to determine the variables influencing any differences among the generation groups. No other adequate instrument could be found. Nevertheless, a thorough research of literature was made in an effort to find a suitable instrument with which to study the food habits of different generations of an ethnic group in an urban setting. Thus the present questionnaire was developed.

The study itself is a pilot study on the changes of food habits among different generations of an ethnic group, in this instance the Mexican Americans in the Lansing area. It is hoped that studies of this type will: (1) provide information that could be used in future development of instruction and materials related to the lifestyles and food habits of the Mexican Americans; (2) provide

information and guidelines for future studies of the food habits of an ethnic group; (3) help in an understanding and appreciation of the food habits of the Mexican Americans. As a pilot study, it could also be used, after careful study and revision, with other ethnic groups to reach the same objectives.

The specific variables studied are:

1. Age

2. Generation Group
   a. Birthplace
   b. Main residence
   c. Parents' birthplace

3. Residence in Lansing and the north
   a. Number of years of residence in Lansing
   b. Number of years elsewhere in the U.S.

4. Type of contact with Anglos in the Lansing area
   a. Work
   b. Community and/or neighborhood
   c. School

5. Community involvement
   a. Participation in activities within the community
      1. Church
      2. School
      3. Chicano activities

6. Marital status
   a. If married, generation group of spouse
      1. Birthplace of spouse
      2. Birthplace of parents' spouse

7. Occupational level

8. Educational level

9. Language habits in the use of English and Spanish
   a. With family
   b. With friends

10. Food preferences
    a. Daily
    b. Holidays

c. Meals at home
d. Meals outside the home

11. Views of the future

A copy of the constructed interview/questionnaire, in both English and Spanish versions, is included in Appendix B.

Design of the Study

The design of this study is exploratory. It consisted of the administering of a constructed interview/questionnaire. The interview was conducted by four trained and bilingual interviewers, interviewing to Mexican American residents in the different cluster areas previously selected. The instrument consists of 42 questions, available to respondents in both English and Spanish versions, allowing the respondent to choose the version he preferred. The instrument was administered during May and June 1975. Information collected during this period forms the basis of the subsequent analysis.

The intent of this instrument is to identify:

1. the difference occurring in the food habits among first, second, and third generation Mexican Americans in the Lansing area;
2. the variables related to these differences in the food habits among members of different generation groups;
3. the generation group most different in relationship to the established patterns of food selection in the Mexican diet.

The Null Hypotheses

1. Hypothesis I: There is no difference in the patterns of food selection among Mexican Americans in the different groups.
2. Hypothesis II: There is no difference among different Mexican American generation groups in their knowledge of the Mexican culture and their desire for improvement of the Mexican American community.
3. Hypothesis III: There is no difference among the different Mexican American generation groups and selected variables under study, i.e., education, residential history, language usage, peer group composition, contact with Anglos and/or other ethnic groups, community involvement, celebration of holidays, frequency of meals eaten outside the home, beliefs of food avoidances, and views of the future.
4. Hypothesis IV: There is no correlation of variables among different Mexican American generation groups and their patterns of food selection.

Statistical Model

The method of analysis for the findings of this investigation consists of four different parts: (1) cross-tabulation of variables by cluster area and generation group, (2) Chi-Square analysis for significant relationships, (3) analysis of variance, and (4) correlation metrics.

The first part, the cross-tabulation of variables by cluster areas and generation groups, was done through the usage of the SPSS Computer Program (Statistical Package for the Social Sciences). The results were raw percentage data by cluster area and generation groups. A second analysis was made due to smaller sample size in the Maple Grove and Urbandale areas. Another reason for this second analysis was that no significant difference was found among the same generation groups of the three areas. This second analysis treated all three cluster samples as one group. Thus, the cluster area was not a major part of the cross-tabulation. Instead, the generation group was used as the main variable in the cross-tabulation with all other variables. The analysis showed more consistency among the same generation groups, with more precise figures with which to work.

In the second part of the analysis, the Chi-Square statistic was utilized to test for significant relationships of all variables, based on Pearson's Chi-Square Test of Association. This too was done using the SPSS Computer Program. The level of confidence for the rejection of all hypotheses was .10, an acceptable alpha level for an exploratory study of this kind.

The third and fourth analyses were those of variance and of correlation metrics. The analyses used the ANOVA program of the SPSS Computer Program. The dependent variables for these analyses were Mexican food, American food, and use of Mexican centers. The independent variables used in the analyses were then limited to those which were considered to be of some significance in previous analyses. These were generation group of the respondent, sex, actual age,

educational level, contact with Anglos, number of generations per household, and participation and use of Mexican centers.

Summary

The study of food habits among three generations of Mexican Americans in the greater Lansing area was the major objective of this investigation. It was also aimed at identifying the variables influencing any differences among the generation groups of Mexican Americans.

The selection and use of cluster sampling proved most effective for the study. Cluster sampling made possible the drawing of a valid sample in a smaller area, thereby reducing the research costs. The sample consisted of Mexican American residents in one of the three randomly selected cluster areas within Lansing, i.e., one on the North Side, a second in Maple Grove, and a third area in Urbandale.

The instrument used for data collection consisted of a constructed interview/questionnaire developed especially for the study. It consisted of forty-two questions covering some specific variables. These variables included: age, generation group, marital status, educational level, occupational level, residential history, contact with Anglos, community involvement, language habits, food preferences, and views of the future. The instrument was available to respondents in both English and Spanish versions.

Four null hypotheses were formulated concerning the food habits and influencing variables of Mexican Americans in three generation groups in the Lansing area.

The statistical analysis consisted of four parts: (1) the cross-tabulation of variables by generation group, (2) the use of Chi-Square analysis to test for significant relationships, (3) the use of analysis of variance, and (4) the application of correlation metrics. All analyses utilized the SPSS Computer Program.

CHAPTER IV

ANALYSIS OF THE DATA

Introduction

The methods of analysis used to evaluate the statistical significance of the findings of this investigation consist of Chi-Square, Analysis of Variance, and Correlation Metrics. The generation groups of the respondents (first, second, and third generation) were treated as dependent variables for the Chi-Square analysis. The dependent variables were chosen based on the assumption that the generation group of the respondent would affect the independent variables, i.e., food habits, language usage, education, residential history, contact with Anglos and/or other ethnic groups, knowledge of the Mexican culture, celebration of holidays, community involvement, peer group composition, frequency of meals eaten outside the home, reduction in beliefs of food avoidance, and their views of the future. These independent variables were identified by previous research as significant in the study of food habits. All data used were collected from responses to the constructed interview/questionnaire administered to the selected sample. In the Analysis of Variance, Mexican food, American food, and use of Mexican centers were treated as dependent variables, while generation group, number of generations per household, and contact with Anglos constituted the independent variables:

sex, age, and educational level were held as covariates. For the Correlation Metrics, the first analysis, i.e., that of Multiple Correlation, used the generation group of the respondent and Mexican food as the dependent variables, with age, American food, contact with Anglos, number of generations per household, sex, educational level, and use of Mexican centers were held as independent variables. In the Partial Correlation Analysis all variables were treated as dependent variables in relationship to each other.

The Selected Sample

The selection of the sample within the Lansing area was discussed in Chapter III. As explained earlier, the sample was obtained from randomly selected cluster areas where a high index of Mexican-American households were found. The sample assumed the dimensions depicted in Table 3.3, in which 103 interviews were attempted. Of these, sixty-two interviews were completed. The sixty-two completed interviews represent an acceptable number for this study.

Findings of the Study

Chi-Square Analysis

The SPSS Chi-Square sub-program is based upon Pearson's Chi-Square test of association. The analysis helps to determine whether a systematic relationship exists between two variables. It does not measure the degree of association; it only indicates the likelihood of having a distribution as different from statistical independence by chance alone as the observed distribution. This is obtained according to the following formula:

$$X^2 = \Sigma i \frac{(fo^i - fe^i)^2}{fe^i}$$

Composition of the Sample

A general summary of findings of this investigation are presented in Table 4.1 for descriptive purposes. The table includes the mean and standard deviation of selected variables considered important for the study. The average represents a total sample of sixty-two cases.

Table 4.1.--Summary Table of Selected Variables.

Variable	Mean	Standard Deviation
Generation Group	2.10	0.76
Sex	1.40	0.49
Age	31.89	14.52
Educational Level	3.71	1.98
No. of Generations/ per Household	1.97	0.44
Use of Mexican Centers	2.02	1.57
Mexican Food	17.39	2.20
American Food	7.89	1.57
Contact with Anglos	1.40	0.49

Sex and Generation Group. Of a total sample of sixty-two, thirty-seven were females and twenty-five were males. The distribution by generation group, the main dependent variable under study, is presented in Table 4.2.

Table 4.2.--Sex of Respondents by Generation Group.

Generation Group	F	M	Total
1st	9	6	15
2nd	15	11	26
3rd	13	8	21
	37	25	62

The generation group with the largest representation was that of the second generation group with twenty-six respondents, followed by the third generation group with twenty-one, and fifteen respondents in the first generation group. This distribution is reflected in the sample mean for the generation groups, in which 2.10 was the average for the sample.

The sample mean for the sex variable was 1.40, indicating that more women (coded as 1) were interviewed than men (coded as 2).

In an effort to find any possible significance among variables, the Chi-Square analysis was used with these two variables. The alpha level selected for this analysis was .10, an acceptable alpha level for exploratory studies of this kind.

The significance level at .10 with two degrees of freedom is 4.60, the Raw X^2 of .0865 was below the significance level. This indicates that no significant relationship exists between the three generation groups and the sex of the respondents.

Age. The respondents were asked to state their specific age on the questionnaire in order to determine possible relationships

between variables. The age groups of the sample range from thirteen years to seventy-eight years. A summary of the age range is presented in Table 4.3.

Table 4.3.--Age of Respondents by Generation Group.

Generation Group	13-20	21-30	31-40	41-50	51-60	61-up	Total
1st	2	3	3	3	1	3	15
2nd	4	12	6	2	2	0	26
3rd	9	7	1	2	1	1	21
	15	22	10	7	4	4	62

The mean sample age for the group was 31.89 years. The Chi-Square analysis indicated that at an alpha level of .10 with ten degrees of freedom, the significance level was 15.99. The Raw X^2 of 16.567 is above the significance level. This indicates that a significant relationship exists between the generation groups and the age of the respondents.

Educational Level. The educational level of the respondents was also studied. They were asked to state the exact years of schooling they had had. The answers were then grouped in categories, i.e.:

Category 1 Grade 4 or less
2 Grades 5-6
3 Grades 7-8
4 Grades 9-10
5 Grades 11-12
6 Vocational education and/or post-secondary education
7 1-2 years of college

Category 8 3-4 years of college
9 graduate school

A summary of this information is presented in Table 4.4 by generation groups. The sample mean for the education of the group is 3.71, indicating that the educational level of the group falls within Category 3 but very close to Category 4. Thus the educational level of the sample ranges from Grade 8 to Grade 9.

The Chi-Square results are as follows. The significance level at .10 with fourteen degrees of freedom is 21.06. The Raw X^2 of 27.38 is above the significance level. This indicates that a significant relationship exists between the three generation groups and their educational level.

Number of Generations Per Household. There were two main objectives in determining the number of generations living within a household: first to determine the extent to which the concept of the "extended family" prevails among the Mexican Americans in the Lansing area; and second to determine how other generation groups influence the food habits of the respondents.

Table 4.5 depicts the information gathered in the questionnaire, in which the highest frequency was found in the category of two generations per household. This was in most cases a household where the parents lived with their children. Only seven cases were found in which there was only one generation within household. In the following category, with three generations per household, only five cases were found. These were households where grandparents lived with their children and grandchildren. This small figure of

Table 4.4.--Educational Level by Generation Group.

Generation Group	Grade 4 or Less	Grades 5-6	Grades 7-8	Grades 9-10	Grades 11-12	Vocational Educational and/or Post Secondary Education	1-2 yrs. College	3-4 yrs. College	Total
1st	7	2	2	3	0	0	1	0	15
2nd	3	5	3	3	5	3	3	1	26
3rd	1	1	7	1	8	2	0	1	21
	11	8	12	7	13	5	4	2	62

Table 4.5.--Number of Generations in Household by Generation Group.

Generation Group	1 Generation	2 Generation	3 Generation	Total
1st	2	12	1	15
2nd	3	22	1	26
3rd	2	16	3	21
	7	50	5	62

only five cases for the category of three generations per household indicates that the concept of the "live-in extended family" does not prevail within the selected sample of Mexican Americans in the Lansing area.

The sample mean for the selected variable is 2.02; this corroborates the previous discussion in which the major finding was that there are usually two generations per household.

The Chi-Square analysis indicates that at an alpha level of .10 with four degrees of freedom, the significance level is 7.78. The Raw X^2 of 1.84 is below the significance level. This indicates that no significant relationship exists between the generation groups and the number of generations per household.

The second objective, that of determining how other generation groups influence the food habits of the respondent, is discussed in detail in a subsequent part of this chapter where analysis of variance and correlation metrics are specifically discussed. Due to the fact that in the total sample only five households were found in which a total of three generation groups were living together, one is inclined to speculate that little influence will exist between the

two variables. Marital status and the number of children per household in the different generation groups were also investigated and included as part of this variable. The findings are found in Tables 4.6 and 4.7.

Of the sixty-two respondents, nineteen stated they were single, thirty-seven were married, two were separated at the time, and four were widows. There were no divorced persons within the selected sample. The Chi-Square analysis indicates that at an alpha level of .10 with six degrees of freedom, the significance level is 10.6. The Raw X^2 of 10.6 is the same as the significance level. This indicates that a significant relationship exists between the different generation groups and the marital status of the respondent.

The origin of the spouse was also investigated for significant relationships among generation groups and origin of spouses and/or generation group of spouse (Table 4.8). The Chi-Square analysis indicates that at an alpha level of .10 with six degrees of freedom, the significance level is 10.6. The Raw X^2 of 6.49 is below the significance level. This indicates that no significant relationship exists between the generation group and the origin of spouses. This is contrary to the findings of other research works (see Appendix A). Francesca[1] and Mittelbach, Moore and McDonield[2] reported that marriage

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[1]Sister M. Francesca, "Variations of Selected Cultural Patterns Among Three Generations of Mexicans in San Antonio, Texas," American Catholic Sociological Review 19 (1958):24-31.

[2]Frank G. Mittelbach, Jean W. Moore, and Ronald McDonield, "Mexican American Study Project: Intermarriage of Mexican Americans," Report No. 6 (Los Angeles: University of California, Graduate School of Business, 1966), pp. 40-47.

Table 4.6.--Marital Status by Generation Group.

Generation Group	Single	Married	Separated	Widowed	Total
1st	1	12	0	2	15
2nd	8	15	2	1	26
3rd	10	10	0	1	21
	19	37	2	4	62

Table 4.7.--Origin of Spouse of Respondents by Generation Group.

Generation Group	No Answer	Born in Mexico	Born in U.S.	Anglo	Not Applicable	Total
1st	0	5	8	1	1	15
2nd	0	7	10	1	8	26
3rd	1	3	7	1	9	21
	1	15	25	3	18	62

Table 4.8.--Generation Group of Spouse by Generation Group.

Generation Group	Spouse's Generation Group			Total
	1st	2nd	3rd	
1st	5	4	4	13
2nd	6	5	6	17
3rd	3	4	3	10
	14	13	13	40

patterns vary according to generation, sex, social status, and age; also, the incidence of out marriage was reported to increase with each succeeding generation.

In regard to the number of children per household, the categories with the highest frequencies were those with two, three, and four children per household. From this, it was deduced that sample family size tends to be small (Table 4.9).

Table 4.9.--Number of Children in Household by Generation Group.

Generation Group	Number of Children									Not Applicable	Total
	0	1	2	3	4	5	6	7	8		
1st	4	1	1	2	4	2	0	0	0	1	15
2nd	1	3	4	3	5	1	1	1	0	7	26
3rd	0	1	3	5	1	1	0	0	1	9	21
	5	5	8	10	10	4	1	1	1	17	62

The Chi-Square analysis indicates that at an alpha level of .10 with sixteen degrees of freedom, the significance level is 23.54. The Raw X^2 of 15.63 is below the significance level. This indicates that no significant relationship exists between the generation groups and the number of children per household.

Use of Mexican Centers. The participation in and use of Mexican centers was part of a series of questions examining community involvement of Mexican Americans within the selected sample. The frequency with which they participated was one of the aspects studied relative to the different generation groups.

The main objectives were to determine how frequently the various generation groups used the Mexican centers and how this would influence the food habits of the respondents. The answers were then coded as: (1) more than once a week, (2) once a week, (3) more than once a month, (4) once a month, and (5) less than once a month.

The sample mean for the above categories was 2.02, indicating that the category with the highest frequency is No. 2, i.e., once a week.

The Chi-Square analysis indicates that at an alpha level of .10 with ten degrees of freedom, the significance level is 15.99. The Raw X^2 of 7.837 is below the significance level. This indicates that no significant relationship exists between the generation groups and the frequency with which they use the Mexican centers.

The second objective, that of determining how this frequency level might influence food habits, is discussed in detail later on in this chapter, where analysis of variance and correlation metrics are dealt with in a more specific manner.

Mexican Food. The major independent variable under study was Mexican food. The effort therefore focused on determining the existing food habits of Mexican Americans in the Lansing area. For this purpose, a list of selected food items common to the Mexican diet was included in the questionnaire. The respondents were then asked to state the frequency with which they ate the items. The list of Mexican food included eleven items: tortillas, tacos, chile con carne, enchiladas, menudo, tamales, chili and/or hot peppers, frijoles, rice, corn meal mush, and avocados (in season).

The eating frequencies investigated for the food items were as follows: (1) more than once a day, (2) once a day, (3) more than once a week, (4) once a week, (5) more than once a month, (6) once a month, (7) on holidays only, (8) hardly ever, and (9) never.

The sample mean for the Mexican food variable was 17.39 per respondent for the above list of food items. This indicates that each of the eleven food items received an average rating of 1.58. A rating that falls between the categories 1 and 2 is therefore in the "daily" categories. This information is presented in greater detail in the discussion of Hypotheses II and IV in this chapter where the statistical significance of each food item is discussed. Table 4.13 also covers the above information. At the moment, it is important to note that the Mexican food items received an overall consumption mean within the daily categories.

American Food. American food was also an important variable studied in determining the food habits of the Mexican American in the Lansing area. For this purpose, a list of selected food items common to the Anglo diet was included in the questionnaire. As with the Mexican food items, the respondents were asked to state the frequency of consumption for the food items. The list of American food included five important items: hamburgers, hot dogs, pizza, cold and/or hot sandwiches, and French fries. The eating frequencies for the food items were the same: (1) more than once a day, (2) once a day, (3) more than once a week, (4) once a week, (5) more than once a month, (6) once a month, (7) on holidays only, (8) hardly ever, and (9) never.

The sample mean for the American food variable was 7.89 per respondent for the above list of food items. This indicates that each of the five food items received an average rating of 1.578, a rating of almost the same frequency as for Mexican food. This rating also falls between categories 1 and 2, i.e., in the "daily" categories. As with the Mexican food variable, this information is examined in greater detail in the discussion of Hypotheses II and IV later on in this chapter, the statistical significance of each food item being covered. Table 4.13 also covers the above information. At the moment, it is important to note that the American food items also received an overall consumption mean within the daily categories.

Purchasing and Preparation of Food Items. Information was also gathered on the purchasing of food items and in the preparation of meals within the household. Although no significant relationship was found between the generation groups and their patterns of food purchasing and/or preparation of meals, this information is included to benefit the reader and those working with and/or teaching the Mexican American.

It is interesting to note that the preparation of meals falls heavily on the woman of the house. The "self" category received the highest rating of 22 (the sample had a total of 37 females), the "spouse" category a total of 17, and the "mother" category a sum of 12. The "father" and "children" categories had a total of 2 each. Only 6 respondents stated that the "parents" prepared the meals together.

Those who assist in the preparation of meals were mainly "children," with a total of 20, "self" and "spouse" categories following with a total of 10 each. Twenty respondents indicated that they did not have any assistance at all. The other two were assisted by relatives.

The purchasing of the food items was done mainly be the "couple" (or both "parents"), for a total of 27. The other categories with a high rating was the "self" category with 14, followed by the "spouse" category with 8, and the "mother" category with 7. The "others" helping were the children of the house. The fact that the food purchasing was done mainly be the couple represents a drastic change from the so-called "traditional role of men," in which their participation in household affairs was limited. The "grandparents" category was not chosen by anyone in any of the three questions. There was no significant relationship between the three generation groups in any of the three questions.

Contact with Other Ethnic Groups. The last variable discussed in the Summary Table 4.1 is contact with other ethnic groups. The main objectives in using this variable were to determine the extent of contact Mexican Americans in the selected sample had with other non-Mexican families and to determine how this would influence their food habits.

Of the sixty-two respondents, thirty-nine said they had contact with other non-Mexican families, e.g., Blacks, Anglos, Blacks and/or Anglos (twelve stated they had contact with both ethnic groups), Cuban, Puerto Rican, and others. For the statistical

analysis, the categories were then regrouped in two categories: (1) Blacks and/or Anglos, and (2) Spanish-speaking families.

The sample mean of 1.40 indicates that most of the respondents' contact with other non-Mexicans is within those in Category 1, Blacks and/or Anglos, while there is less contact with other Spanish-speaking families.

This variable is discussed in greater detail in Hypotheses III and IV, where both Chi-Square analysis and analysis of variance are utilized to ascertain the statistical significance of the "contact" variable.

Hypothesis I

The first null hypothesis tested was: "There will be no difference in the patterns of food selection among Mexican Americans in the different generation groups."

The analysis of the responses to the related questions of the above is presented in Table 4.10. In the overall analysis, there were no differences in the analyses between the generation groups and their patterns of food selection. The alpha level selected for this analysis was .10.

The analysis for this hypothesis was based on recorded answers to six specific questions of the questionnaire. The questions dealt specifically with food habits, e.g., dishes served for holidays, food preferences at home and in restaurants, favorite dishes enjoyed the most, and frequency of consumption of selected food items from both the Mexican and Anglo diet.

Table 4.10.--Summary Table for Hypothesis I.

Hypothesis I	Raw X^2	df	Significant Table Value at .10	Reject and/ or Retain
Q. 31 a	9.06	8	13.36	Reject
Q. 32	3.25	4	7.78	Reject
Q. 34	10.28	6	10.64	Reject
Q. 36 a	3.16	4	7.78	Reject
36 b	2.37	4	7.78	Reject
36 c	1.28	4	7.78	Reject
36 d	4.85	4	7.78	Reject
36 e	1.39	4	7.78	Reject
Q. 37	14.44	12	18.55	Reject
Q. 38				
Tortillas	16.25	12	18.55	Reject
Tacos*	19.23	12	18.55	Retain
Chile con Carne	10.15	12	18.55	Reject
Enchiladas	11.19	12	18.55	Reject
Menudo*	23.13	14	21.06	Retain
Tamales	16.17	12	18.55	Reject
Chile and/or Hot Peppers	13.37	14	21.06	Reject
Frijoles	18.11	14	21.06	Reject
Rice	13.14	16	23.54	Reject
Corn Meal	16.96	16	23.54	Reject
Hamburgers	5.54	12	18.55	Reject
Hot Dogs	11.38	12	18.55	Reject
Pizza	20.63	14	21.06	Reject
Sandwiches	10.97	12	18.55	Reject
French Fries	14.38	14	21.06	Reject
Canned Fruit	17.79	14	21.06	Reject
Fresh Fruit	11.98	12	18.55	Reject
Dried/Candied Fruit	8.33	10	15.99	Reject
Avocado	16.76	14	21.06	Reject
Milk	7.13	12	18.55	Reject
Chocolate	10.71	14	21.06	Reject
Soft Drinks	9.55	10	15.99	Reject

*These were the only two food items with significance levels at .10 higher than the tabled for their respective degrees of freedom.

(See questionnaire in Appendix B for specific questions.)

Question 31: "Food preference for holidays"

The question asked for personal food preferences at holiday celebrations. The choice of dishes were coded as Mostly Mexican, Mostly Anglo, Both Equally Well, and Other.

The Chi-Square results are as indicated in Table 4.10. The significance level at .10 with eight degrees of freedom was 13.36, the Raw X^2 of 9.06 was below the significance level. This indicates that no significant relationship exists between the three generation groups and their food preferences for holidays, where nearly all of them preferred Mexican food.

Question 32: "Food preferences at home"

The question asked for personal food preferences at home. The answers were coded as Mexican food, American (Anglo) food, Both Equally Well, and Other.

The Chi-Square results are as indicated in Table 4.10. The significance level at .10 with four degrees of freedom is 7.78, the Raw X^2 of 3.25 is below the significance level. This indicates that no significant relationship exists between the three generation groups and their food preferences at home where nearly all respondents prefer either the Mexican food or the Anglo and Mexican food equally well.

Although no statistical significance was found, Table 4.11 is presented for the reader since it contains valuable descriptive information regarding food habits of the group.

Table 4.11.--Food Preferences at Home by Generation Groups.

Generation Group	Mexican Food	Anglo Food	Both Equally Well	Total
1st	9	0	6	15
2nd	13	1	12	26
3rd	8	0	13	21
	30	1	31	62

Question 34: "Dishes Enjoyed the Most"

The question asked the respondent to list the five dishes generally enjoyed the most. The answers were coded as Only Mexican, Mostly Mexican including some Anglo dishes, Only Anglo, Mostly Anglo including some Mexican dishes, and Both Equally Well.

The Chi-Square results are as indicated in Table 4.10. The significance level at .10 with six degrees is 10.64, the Raw X^2 of 10.28 is below the significance level. This indicates that no significant relationship exists between the three generation groups and their favorite dishes, for most of them (forty) prefer Mexican dishes, thirteen prefer Mostly Mexican including some Anglo dishes, one prefers only Anglo dishes, and eight prefer Both Equally Well.

Question 36: "Type of place visited when eating out"

The question asked the respondent to identify the places he visited when eating out. The selection was arranged as follows: Fast-Food establishments, Restaurants: Mexican, American, Latino and other.

The Chi-Square results are as indicated in Table 4.10. The significance level at .10 with four degrees of freedom is 7.78, the Raw X^2 of the different categories is as follows: Fast-Food establishments, 3.63; Mexican restaurants, 2.373; American restaurants, 1.284; Latino restaurants, 4.854; and Others, 1.397. All Raw X^2 are below the significance level of 7.78. This indicates that no significant relationship exists between the generation groups and the types of restaurants visited. Of the sixty-two respondents, only six persons stated that they never go out to dinner, indicating that most of the respondents of the selected sample do go out to eat, either in restaurants or fast-food establishments.

Question 37: "Dishes enjoyed the most when eating out"
The question asked the respondent to list the dishes enjoyed the most the last time he ate out. The answers were coded: Mexican dishes, Mostly Mexican including some Anglo dishes, only Anglos, Mostly Anglo including some Mexican dishes, Both Equally Well, and Other.

The Chi-Square results are as indicated in Table 4.10. The significance level at .10 with twelve degrees of freedom is 18.55. The Raw X^2 of 14.44 is below the significance level. This indicates that no significant relationship exists between the generation groups and the dishes enjoyed most when eating out. Of the sixty-two responses, fifteen were not applicable for this question (six did not eat out, and nine did not answer this specific question). Of the remaining forty-seven, twenty-two enjoyed most the Mexican dishes.

Question 38: "Eating frequency of selected items"
The question asked the respondents to state the frequency with which they ate a selected list of food items. Items selected represented most typical items from the Mexican diet and the Anglo diet. The list included twenty-two items. The frequencies ranged from most frequent to least frequent: more than once per day, once a day, more than once per week, once a week, more than once a month, once a month, on holidays only, hardly ever, and never.

In reviewing Table 4.10 one notes that all Raw X^2 values of the selected food items in the list, with the exception of tacos and menudo (tripe stew), are below the significance level in their respective degrees of freedom. This indicates, with the exception again of tacos and menudo, that no significant relationship exists between the generation groups and their eating frequency of the selected food items.

The significance level for tacos at .10 with twelve degrees of freedom is 18.55. The Raw X^2 of 19.23 is above the significance level. This indicates that a statistical significant relationship exists between the selected food item and the generation groups, for the first and second generations consume these items with a higher daily frequency than do those in the third generation groups.

The categories More than once a day and On holidays only were not chosen by anyone in the selected sample. The category Once a week received the highest frequency total for all possible answers, from

which one can deduce that tacos are still a food item quite common to the Mexican American diet (Table 4.12).

Table 4.12.--Tacos Eating Frequencies.

Generation Group	Once a Day	More Than Once a Week	Once a Week	More Than Once a Week	Once a Month	Hardly Ever	Never	Total
1st	4	2	6	1	1	0	0	14
2nd	1	5	9	7	2	1	1	26
3rd	0	2	11	2	3	3	0	21
	5	9	26	10	6	4	1	61*

*One observation is missing of a total N of 62.

The other food item with a Raw X^2 higher than the significance level at .10 is menudo. The significance level at .10 with fourteen degrees of freedom is 21.06. The Raw X^2 of 23.13 is above the significance level. This indicates that a significant relationship exists between the selected food item and the generation groups, for the first generation group showed more frequent consumption than did the two other generation groups.

The weekly and the monthly categories and the hardly ever/never categories received the highest total within the group, indicating that while the group still eats menudo, the frequency is much lower (Table 4.13).

Although no statistical significance was found for most of the food items and the different generation groups, Table 4.14 is nevertheless included since it provides valuable descriptive

Table 4.13.--Menudo Eating Frequencies.

Generation Group	Once a Day	More than Once a Week	Once a Week	More than Once a Month	Once a Month	On Holidays Only	Hardly Ever	Never	Total
1st	3	1	5	0	2	0	1	2	14
2nd	0	0	8	3	6	1	4	4	26
3rd	0	0	2	3	6	0	3	7	21
	3	1	15	6	14	1	8	13	61*

*One observation is missing of a total N of 62.

Table 4.14.--Frequencies of Food Consumption of Selected Food Items.

Food Item	More Than Once a Day	Once a Day	More Than Once a Week	Once a Week	More Than Once a Month	Once a Month	On Holidays Only	Hardly Ever	Never	Total[3]
Tortillas	18	23	13	4	1	1	0	1	0	61
Tacos[1]	0	5	9	26	10	6	0	4	1	61
Chile con carne	0	4	6	16	9	13	0	9	4	61
Enchiladas	0	1	3	13	6	15	0	15	8	61
Menudo[2]	0	3	1	15	6	14	1	8	13	61
Tamales	0	1	0	6	5	14	18	14	3	61
Chile and/or Hot Peppers	6	21	10	5	1	3	0	8	7	61
Frijoles	12	19	17	6	2	1	0	3	1	61
Rice	2	9	22	11	10	2	1	3	1	61
Corn Meal Mush	2	10	4	3	2	4	1	12	23	61
Hamburgers	0	6	10	23	9	5	0	6	2	61
Hot Dogs	0	3	10	16	9	3	0	11	9	61
Pizza	0	1	4	11	7	12	2	13	11	61
Cold and/or Hot Sandwiches	0	21	11	11	4	2	0	3	7	61

Table 4.14.--Continued.

Food Item	More Than Once a Day	Once a Day	More Than Once a Week	Once a Week	More Than Once a Month	Once a Month	On Holidays Only	Hardly Ever	Never	Total[3]
French Fries	2	8	15	20	6	5	0	2	3	61
Canned Fruit	1	10	10	11	5	3	0	7	14	61
Fresh Fruit	1	31	15	9	2	1	0	0	2	61
Dried/Candied Fruit	0	6	1	5	1	0	0	6	42	61
Avocado (in season)	1	11	19	19	4	2	0	2	3	61
Milk	14	33	3	3	2	0	0	1	5	61
Hot Chocolate	3	5	4	7	4	1	0	13	24	61
Soft drinks	16	31	5	5	0	1	0	0	3	61

[1]See Table 4.12 for complete information on this food item.

[2]See Table 4.13 for complete information on this food item.

[3]One observation is missing of a total N of 62.

information regarding the food habits of the group. The items have been grouped by frequency of eating and not by generation group since no statistical significance was found among the generation groups with the exception of tacos and menudo. These two food items were the only ones discussed separately by generation groups in previous table analyses.

In reviewing Table 4.14 one should note the high daily frequency for tortillas, chile and/or hot peppers, frijoles, cold and/or hot sandwiches, fresh fruit, milk, and soft drinks. These totals are very significant in studying the Mexican American diet, for both Mexican and Anglo food items are mixed within the daily diet. The same occurs in the weekly category where tacos, chile con carne, rice, hamburgers, hot dogs, sandwiches, French fries, canned fruit, fresh fruit, and avocados are mixed with the diet. This presents a change from the typical Mexican diet, since the Mexican-American group brings together a diet of selected food items from both the Mexican and Anglo cultures.

In summary, for Null Hypothesis I there was a total of six related questions used in the analysis for significance between the variables. The Raw X^2 for all related questions at .10 alpha level was below the significance levels, with the exception of two food items, tacos and menudo. In these two cases, significant relationships were found between the three generation groups and the food items. On the basis of the findings where no other major significant relationship was found between the variables and the related questions, the null hypothesis was retained.

Hypothesis II

The second null hypothesis tested was: "There is no difference among the different Mexican American generation groups in their knowledge of the Mexican culture and their desire for improvement of the Mexican American community."

The variables studied for the analysis of this hypothesis included the following: celebration of holidays both Mexican and Anglo, reading of newspapers and/or magazines either Anglo and/or Mexican American, participation in Mexican American centers in the community, participation and/or points of view as related to demonstrations by the Mexican Americans to elicit attention and/or assistance from the government, and views of the future for both themselves and their families. These factors were considered key issues in determining involvement in the community and knowledge of the Mexican culture.

Citizen involvement in the community was studied since previous research works have identified this variable as a key factor that can aid in community improvement. Accordingly, spontaneous change in a community is successful only when the people themselves want the change.[3] A desire for change and betterment is considered a major factor in the introduction of improved nutrition programs. In addition, this desire is an indirect approach to better welfare, usually including better health, which is directly related to diet and food. Such a situation facilitates citizen willingness to participate in nonformal education programs in foods and nutrition.

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[3]Burgess and Dean, op. cit., pp. 54-62.

The analysis of the responses to the above hypothesis is presented in Table 4.15. In the overall analysis, there were no differences in the analysis between the generation groups and their knowledge of the Mexican culture or their desire for improvement within the Mexican American community. The alpha level selected for this analysis was .10.

The analysis for this hypothesis was based on recorded answers to eight specific questions of the questionnaire (see Appendix B for specific questions).

Question 23,23a: "Subscriptions to newspapers or magazines" The question asked whether the person had any subscription(s) to newspapers and/or magazines that were delivered to his home; if so, he was asked to identify them. The answers were then coded as Anglo, Mexican American, or Both.

Of the sixty-two respondents, thirty-two answered positively to this question and thirty said they did not received any newspapers or magazines. Of those who received newspapers or magazines, fifteen subscribed to Anglo papers and/or magazines, seven subscribed to Mexican-American publications, and ten subscribed to both types and were therefore classified as Both categories.

The Chi-Square results are as indicated in Table 4.15. The significance level for the first part of the question (23) at an alpha level of .10 with two degrees of freedom is 4.60; the Raw X^2 of .2038 is below the significance level. For the second part of the question (23a), the significance level at .10 with six degrees of freedom is 10.64, while the Raw X^2 of .6030 is below the significance level.

Table 4.15.--Summary Table for Hypothesis II.

Hypothesis II	Raw X^2	df	Significant Table Value at .10	Reject or Retain Ho
Question 23	.204	2	4.60	Reject
Question 23 a	.603	6	10.64	Reject
Question 24	1.508	2	4.60	Reject
Question 24 a	3.147	4	7.78	Reject
Question 25	.125	2	4.60	Reject
Question 25 a	9.708	14	21.06	Reject
Question 25 b	7.837	10	15.99	Reject
Question 26	3.329	2	4.60	Reject
Question 26 a	4.477	2	4.60	Reject
Question 26 b	1.797	2	4.60	Reject
Question 27	.079	2	4.60	Reject
Question 27 a	8.124	8	13.36	Reject
Question 27 b	8.061	8	13.36	Reject
Question 28	6.899	8	13.36	Reject
Question 29	21.65	14	21.06	Retain
Question 40	5.60	8	13.36	Reject

This indicates that no significant relationship exists between the generation groups and the types of newspapers and/or magazines to which they subscribe.

Question 24,24a: "Reading of Mexican-American newspapers"
The question asked the respondents if they have read specific Mexican-American newspapers, i.e., El Renacimiento, Ya Mero, and La Experiencia Chicana: A Midwest Perspective, and with what frequency.

Of the sixty-two respondents, forty-five stated that they have read some of these Mexican-American newspapers, seventeen said they have never read any of these papers. When asked if they read them regularly, twenty-three answered positively, and twenty-two said no to this question.

The Chi-Square results are as indicated in Table 4.15. The significance level for the first part of the question (24) at an alpha level of .10 with two degrees of freedom is 4.60; the Raw X^2 of 1.508 is below the significance level. For the second part of the question (24a), the significance level at .10 with four degrees of freedom is 7.78; the Raw X^2 of 3.147 is below the significance level. This indicates that no significant relationship exists between the generation groups and their regularity in reading Mexican-American newspapers.

Question 25,25a,25b: "Participation in Mexican-American centers in the community"

This question asked for information on participation and/or visits to Mexican-American centers in the community, what types of activities participated in, and with what frequency.

Of the sixty-two respondents, forty-nine stated that they participate in activities at the Mexican-American centers, thirteen said they did not participate at all. Of those who participated, the highest total, twenty-one, were involved in the religious activities of the centers, while the remainder (with almost equal distribution), participated in other cultural, social, and educational activities at the centers. The frequency of particiaption for most of the respondents was in the weekly category.

The Chi-Square results are as indicated in Table 4.15. The significance level for the first part of the question (25) at an alpha level of .10 with two degrees of freedom is 4.60; the Raw X^2 of .125 is below the significance level. For the second part of the question (25a), the significance level at .10 with fourteen degrees of freedom is 21.06, the Raw X^2 of 9.708 is below the significance level. For the third and last part of the question (25b), the significance level at .10 with ten degrees of freedom is 15.99; the Raw X^2 of 7.837 is below the significance level. These indicate that no significant relationship exists between the different generation groups with respect to their participation at Mexican-American centers within the community.

Question 26,26a,26b: "Participation in demonstrations"

The question asked the respondents their opinion on recent

demonstrations by Mexican Americans trying to elicit attention from the government, if they have participated, and if they would participate in future demonstrations of the same type.

Of the sixty-two respondents, forty-six said they felt that such demonstrations would help the Chicanos obtain recognition and be heard by government officials, while sixteen disagreed. Fourteen respondents said they have actually participated, and forty-six said they were willing to participate in future demonstrations.

The Chi-Square results are as indicated in Table 4.15. The significance level for the total question at .10 with two degrees of freedom is 4.60. The Raw X^2 for the first part of the question is 3.329, a score below the significance level. The Raw X^2 for the second part of the question is 4.477, a score also below the significance level of 4.60 with two degrees of freedom. This indicates that no significant relationship exists between the different generation groups and their participation and/or willingness to participate in demonstrations in order to attract the attention of government and related agencies.

Question 27,27a,27b: "Favorite Mexican artist"
The major purpose of this question was to ascertain the existing knowledge that Mexican Americans in the Lansing area have regarding famous artists in Mexico, and to elicit opinions about the artist as to why he is liked so much.

Of the sixty-two respondents, forty-eight said they have a favorite Mexican artist, indicating in this way that although they are in Michigan, they have a knowledge of cultural and/or social activities back in Mexico. Question 27a asked the respondents the name of the artists. Their answers were then coded by the artist's occupation: writer, painter, singer, actress/actor, and/or others. Of these categories, the two with the highest scores were singer with twenty-seven, and actress/actor with sixteen, followed by painter with two, and others with three. As expected from the answers to the previous question, the reason these persons were liked was related to their performance and style. Only one person stated a different opinion, and that was "because the artist relates to Mexican Americans."

The Chi-Square results are as indicated in Table 4.15. The significance level for Question 27 at .10 with two degrees of freedom is 4.60. The Raw X^2 for this first part of the question is .079, a score below the significance level. The significance level for parts 27a and 27b at .10 with eight degrees of freedom is 13.36. The Raw X^2 for 27a is 8.124, and for 27b, 8.061; both scores being below the significance level. This indicates that no significant relationship exists between the different generation groups and their knowledge of Mexican artists or the cultural and/or social activities that are offered back in Mexico.

Question 28: "Days of fiesta, both Mexican and American"
The objective for this question was to determine the degree of knowledge and/or preference that Mexican Americans have about both Mexican and Anglo holidays, either religious,

social, and/or patriotic. The answers were then coded by the country of the origin of the holiday--either Mexican and/or Anglo holidays.

Of the sixty-two respondents, twenty-three listed fiesta days of Mexican origin only, while thirty-four listed holidays of both Mexican and Anglo origin, such as the Fourth of July and "el día de la Virgen de la Guadalupe." The choices ranged among religious, social, and patriotic holidays. Only five respondents failed to answer the question.

The Chi-Square results are as indicated in Table 4.15. The significance level at .10 with eight degrees of freedom is 13.36. The Raw X^2 is 6.899, a score below the significance level. This indicates that no significant relationship exists between the different generation groups and their knowledge and/or preference for either Mexican or Anglo holidays.

Question 29: "Importance of holidays"
This question, a continuation of Question 28, dealt with ascertaining the importance of such holidays to the respondents. The answers to this question were widely spread within the following preferences: gathering with friends and relatives, religious importance, enjoyed music and dances, enjoyed Mexican family dishes, and "no work these days" in the other category.

Of the sixty-two respondents, only fifty-seven stated their preferences for the holidays. The categories with highest preferences

were (1) gathering of friends and relatives, (2) religious importance, and (3) music and dances. The Other category was too widely spread for discussion of significance here.

The Chi-Square results are as indicated in Table 4.15. The significance level at .10 with fourteen degrees of freedom is 21.06. The Raw X^2 is 21.65, a score above the significance level. This indicates that a statistical significant relationship exists between the different generation groups and the importance they place on the celebration of holidays (Table 4.16).

Question 40: "Views of their future"

This question asked the respondent to think about the future for himself and his family, and to express those things he would like to accomplish or obtain. The answers were coded as desire for personal improvement, concern for family improvement, concern for personal and family improvement, concern for community improvement, concern for personal, family, and community improvement, and other.

Of the sixty-two respondents, fifty-nine answered the question. The category with the highest score was concern for personal and family improvement, with nineteen points, next and with almost the same score were desire for personal improvement and concern for family improvement with fifteen and fourteen points respectively. Only four respondents expressed concern for personal, family, and community improvement. The other seven respondents in the Other category expressed concern about the present economic situation, unemployment, and the role that government plays in these factors.

Table 4.16.--Importance of Holidays.

Generation Group	Gathering of Friends and Relatives	Music and Dances	Family Dishes and Social Activities	Religious Importance	All the Above	Other	Total
1st	0	5	2	4	0	1	12
2nd	7	3	1	5	1	8	25
3rd	10	2	2	3	1	2	20
	17	10	5	12	2	11	57

The Chi-Square results are as indicated in Table 4.15. The significance level for this question at .10 with eight degrees of freedom is 13.36. The Raw X^2 of 5.602 is below the significance level. This indicates that no significant relationship exists between the different generation groups and their concerns and/or desires for their future.

In summary, Null Hypothesis II had a total of eight related questions used in the analysis for significance between the variables. The Raw X^2 of all related questions at a .10 alpha level is below the significance level, with the exception of Question 29 regarding the importance of holiday celebration to the respondents. In this case, a significant relationship was noted between the generation groups and their opinions as to the importance of holiday celebrations. On the basis of the findings in which no other major significant relationship was found between the variables and the related questions, the null hypothesis was retained.

Hypothesis III

The third null hypothesis tested was: "There is no difference among the different Mexican American generation groups and the selected variables under study, e.g., education, residential history, language usage, peer group composition, contact with Anglos and/or other ethnic groups, community involvement, celebration of holidays, frequency of meals eaten outside the home, beliefs about food avoidances, and views of the future."

The analysis for this hypothesis was based on recorded answers to specific questions dealing with the variables under study. The variables included in this hypothesis are those identified by previous research works as influencing factors in the change of food habits. Consideration was given to these variables in an effort to relate the changes in the food habits of Mexican Americans to earlier research works with other ethnic groups. The analysis is presented in Table 4.17. The alpha level selected for this study was .10.

Question 6: "Occupation"

The question asked the respondent to state his occupation. The answers were grouped as follows: professional, large business, semi-professional, small business, clerical sales, skilled labor, semi- or unskilled labor, service occupation, housewife, retired, unemployed, military, student, and other.

A summary of the finding is presented in Table 4.18. The Chi-Square results are as indicated in Table 4.17. The significance level at .10 with twenty degrees of freedom is 28.41. The Raw X^2 of 29.51 is above the significance level. This indicates that a significant relationship exists between the three generation groups and the type of occupation in which they are engaged. One should also note that from the selected sample nobody stated that he worked as a farm laborer, a category commonly associated with Mexican Americans.

Question 7: "Educational Level"

This question asked the respondent for the exact years of

Table 4.17.--Summary Table for Hypothesis III.

Hypothesis III	Raw X^2	df	Significant Table Value at .10	Reject or Retain Ho
Question 6	29.51	20	28.41	Retain
Question 7	27.38	14	21.06	Retain
Question 11	15.85	12	18.55	Reject
Question 12	14.96	10	15.99	Reject
Question 13	27.52	34	40.35	Reject
Question 14	12.79	10	15.99	Reject
Question 19	12.21	8	13.36	Reject
Question 20	20.39	8	13.36	Retain
Question 21	12.06	8	13.36	Reject
Question 22	11.02	10	15.99	Reject
Question 24	1.508	2	4.60	Reject
Question 24 a	3.147	4	7.78	Reject
Question 25	.125	2	4.60	Reject
Question 25 a	9.708	14	21.06	Reject
Question 25 b	7.837	10	15.99	Reject
Question 26 a	3.329	2	4.60	Reject
Question 26 b	4.477	2	4.60	Reject
Question 26 c	1.797	2	4.60	Reject
Question 28	6.899	8	13.36	Reject
Question 28 a	8.747	8	13.36	Reject
Question 29	21.65	14	21.06	Retain
Question 35	7.418	8	13.36	Reject
Question 36 a	3.163	4	7.78	Reject
Question 36 b	2.373	4	7.78	Reject
Question 36 c	1.284	4	7.78	Reject
Question 36 d	4.854	4	7.78	Reject
Question 36 e	1.397	4	7.78	Reject
Question 36 f	13.26	12	18.55	Reject
Question 39	3.04	2	4.60	Reject
Question 40	5.602	8	13.38	Reject
Question 42 a	14.83	16	23.54	Reject
Question 42 b	13.72	18	25.99	Reject
Question 42 c	24.00	18	25.99	Reject

Table 4.18.--Occupation of Respondents by Generation Group.

Generation Group	Professional, big business	Semi Professional Small business	Clerical, Sales	Skilled Labor	Semi- or Unskilled Labor	Service Occupation	Housewife	Retired	Unemployed	Military	Student	Other	Total
1st	1	0	1	2	2	0	6	2	0	0	1	0	15
2nd	0	1	2	8	0	2	6	0	3	0	2	2	26
3rd	0	1	3	5	0	0	5	0	2	0	5	0	21
	1	2	6	15	2	2	17	2	5	0	8	2	62

schooling that he had completed. The answers were grouped in the following categories: Grade 4 or less, Grades 5-6, Grades 7-8, Grades 9-10, Grades 11-12, vocational and/or post-secondary education, 1-2 years of college, and 3-4 years of college.

Table 4.4 presents a summary of educational levels by different generation groups.

The Chi-Square results are as indicated in Table 4.17. The significance levle at .10 with fourteen degrees of freedom is 21.06. The Raw X^2 of 27.38 is above the significance level. This indicates that a significant relationship exists between the three generation groups and their educational level.

Question 11: "Residential History"

The next four questions (11, 12, 13, 14) deal specifically with the residential history of the respondents. The objective of these questions was to determine in what way the mobility patterns and residential history of the different generation groups would influence their food habits. Previous studies have found that a longer residence in Mexico was significantly related to higher consumption of Mexican food and vice versa, longer residence in the North led to a decrease in the preference for and use of Mexican food.[4] Question 11 specifically asked for the length of time in Lansing. The answers were

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[4]Goldkind, op. cit., p. 101.

grouped by the actual numbers of years. A summary of the respective answers is presented in Table 4.19.

Table 4.19.--Length of Time in Lansing by Generation Groups.

Generation Group	1-5 Years	6-10 Years	11-15 Years	16-20 Years	21-25 Years	26-30 Years	31-35 Years	Total
1st	2	8	1	1	3	0	0	15
2nd	4	3	7	3	4	4	1	26
3rd	4	4	7	3	2	1	0	21
	10	15	15	7	9	5	1	62

The Chi-Square results are as indicated in Table 4.17. The significance level at .10 with 12 degrees of freedom is 18.55. The Raw X^2 of 15.85 is below the significance level. This indicates that no significant relationship exists between the three generation groups and their residential history.

Question 12: "Reason for Coming to Lansing"

This question asked the specific reason for coming to Lansing. As with the previous question, the main objective was to find out more information about the residential history of the respondents.

The summary of this information is presented in Table 4.20. The Chi-Square results are as indicated in Table 4.17. The significance level at .10 with 10 degrees of freedom is 15.99. The Raw X^2 of 14.96 is below the significance level. This indicates that no significant relationship exists between the three generation groups

Table 4.20.--Reason for Coming to Lansing by Generation Group.

Generation Group	No Answer	Parents Looking for a Job	Have Relatives Here	Looking for a Job (Self)	Was Offered a Job Here	Was Born Here	Other	Total
1st	0	2	1	7	1	0	4	15
2nd	0	5	3	9	0	4	5	26
3rd	1	7	2	2	0	6	3	21
	1	14	6	18	1	10	12	62

and their reasons for coming to Lansing. One should note that most of the population sample came to Lansing looking for employment, whether it be for themselves or their parents.

Question 13: "Years in Present Home"

This question asked the respondent in what year he moved to his present home. The main objective was to obtain more information about the mobility patterns of the different generation groups. The answers were then coded by actual number of years.

The analysis showed that of 61 respondents (1 failed to answer), 29 have lived in their present homes for a period of 1 to 5 years; 12 respondents for a period of 6 to 10 years; 13 respondents for a period of 11 to 15 years; and 7 respondents have lived in their homes for a period of 17 to 21 years. The fact that the average for their length of time in Lansing was twelve years seems to indicate that the group moves with some frequency, although as can be seen in the next question, most of the respondents moved within their same neighborhood in the Lansing area.

The Chi-Square results are as indicated in Table 4.17. The significance level at .10 with thirty-two degrees of freedom is 40.30. The Raw X^2 of 27.52 is below the significance level. This indicates that no significant relationship exists between the three generation groups and the length of time in their present home.

Question 14: "Place of residence before moving to present home"

This question is the last in the series related to mobility and residential history. It asked for information about the

previous place of residence (town and/or state). Answers were coded as follows: born in Lansing; Lansing area, same neighborhood; Lansing area, different neighborhood; outside of Lansing but within Michigan; outside of Michigan but within the U.S.; and Mexico.

Of a total of 60 respondents (two respondents did not provide information to this question), twenty-seven stated that they had moved within the Lansing area, same neighborhood; nineteen moved within the Lansing area, different neighborhood; three respondents moved directly from Mexico to Michigan; and the rest of the respondents either were born here or had moved within the United States.

The Chi-Square results are as indicated in Table 4.17. The significance level at .10 with ten degrees of freedom is 15.99. The Raw X^2 of 12.79 is below the significance level. This indicates that no significant relationship exists between the three generation groups and their previous places of residence.

Questions 19 and 20: "Language Usage at Home and with Friends" These two questions asked the respondent to state in what language he spoke with relatives and friends. The researcher was interested in ascertaining if there was any difference among the language usage and the place the conversation was carried on within the different generation groups.

Tables 4.21 and 4.22 present the results of these findings.

Table 4.21.--Language Usage at Home by Generation Groups.

Generation Group	Only Spanish	Only English	Both Equally Well	Both but More Spanish	Both but More English	Totals
1st	6	0	4	3	2	15
2nd	5	3	13	3	2	26
3rd	3	4	7	1	6	21
	14	7	24	7	10	62

Table 4.22.--Language Usage Among Friends by Generation Groups.

Generation Group	Only Spanish	Only English	Both Equally Well	Both but More Spanish	Both but More English	Totals
1st	8	1	0	3	3	15
2nd	7	5	12	0	2	26
3rd	2	5	7	3	4	21
	17	11	19	6	9	62

A summary of these findings is presented in Table 4.17. The Chi-Square results are as indicated. The significance level at .10 with eight degrees of freedom is 13.36. The Raw X^2 for Question 19 (Language usage at home) is 12.21, a figure below the significance level. This indicates that no significant relationship exists between the three generation groups and the language they use at home.

On the other hand, Question 20, pertaining to language usage among friends, shows a Raw X^2 of 20.39, a figure above the significance level of 13.36 with eight degrees of freedom. This indicates that a significant relationship exists between the three generation groups and language usage among friends.

One can also observe in Tables 4.21 and 4.22 that those in the second generation group more frequently chose the category "both equally well" for their language usage among relatives and among friends, while those in the first generation group ranked highest in the category "only Spanish." Conversely, those in the third generation group ranked higher in the "only English" and "both but more often English" categories. This seems to imply that there is a significant relationship between the generation groups and their language usage among friends.

Question 21: "Best friends in the Lansing area"

This question asked the respondent to list his best friends and to indicate their ethnic identity. The main objective for the question was to determine the extent to which Mexican Americans have contact with other ethnic groups and to relate any influences these groups might have in their food habits.

The answers were then coded as follows: only Mexican American, mostly Mexican American plus some Anglo friends, mostly Anglo friends plus some Mexican Americans, both equally well, and Mexican American plus other Spanish-speaking friends.

The group with the largest category was that of "only Mexican Americans," with thirty-three, followed by "mostly Mexican American plus some Anglo friends" with fifteen. It is important to note that although in Question 20 on language usage English was chosen as the language most commonly used when talking to friends, most of the friends are now being identified as Mexican Americans. This implies that the use of English is common among the respondents when talking to their Mexican American friends. It is also important to note that the category "plus other Spanish-speaking friends" was chosen by only one respondent.

The Chi-Square results are as indicated in Table 4.17. The significance level at .10 with eight degrees of freedom is 13.36. The Raw X^2 of 12.06 is below the significance level. This indicates that no significant relationship exists between the three generation groups and the ethnic background of their friends.

Question 22: "Contact with other non-Mexican families"

The objective of this question was very similar to that of the previous one (Question 21), in which the respondent was asked to identify the families (rather than friends) with whom he has contact and/or friendly relations within the area. The answers were then coded as follows: Black, Anglo, Cuban, Puerto Rican, and other.

The group with the highest total was the "Anglo" category, with twenty-two each, followed by the category "Black and/or Anglos," with twelve; Puerto Rican, one; and "others," one. Twenty-three respondents stated that they did not have contact with non-Mexican families. The category for Cubans was not chosen by anyone, although there is a large Cuban population in the greater Lansing area. Further study on this subject would be needed before any other comments could be made.

The Chi-Square results are as indicated in Table 4.17. The significance alpha level at .10 with ten degrees of freedom is 15.99. The Raw X^2 of 11.02 is below the significance level. This indicates that no significant relationship exists between the three generation groups and their contact with other non-Mexican families.

Most of the following variables under study have been previously discussed in connection with Hypotheses I and II. The questions will therefore be dealt with only briefly. For further reference, the reader is referred to appropriate sections where the matter is discussed in greater detail.

Question 24,24a: "Reading of Mexican American newspapers" This question was part of a series dealing with community involvement. Respondents were asked if they had read specific Mexican American newspapers (see Hypothesis II) and with what frequency. The main objective was to determine if the respondents were reading these papers frequently enough to keep informed on Chicano-related matters.

Twenty-three respondents stated they read the papers regularly, and twenty-one said no to this question. The Chi-Square

results indicated that no significant relationship was found between the generation groups and their frequency in reading these newspapers.

Question 25,25a,25b: "Participation in Mexican American centers in the community"

This question asked for information on participation and/or visits to Mexican American centers in the community, what types of activities participated in, and with what frequency (see Hypothesis II).

Of the sixty-two respondents, forty-nine stated that they participated in activities at the Mexican American centers, thirteen said they did not participate at all. Of those who participated, twenty-one (the highest total), were involved in the religious activities of the centers, while the remainder (with almost equal distribution), participated in other cultural, social, and educational activities at the centers. The frequency of participation for most of the respondents was in the "weekly" category.

The Chi-Square results indicated no significant relationship between the different generation groups with respect to their participation at Mexican American centers within the community.

Question 26a,26b,26c: "Participation in demonstrations"

The question asked the respondents their opinion on recent demonstrations by Mexican Americans trying to elicit attention from the government, if they have participated, and if they would participate in future demonstrations of the same type (see Hypothesis II).

Of the sixty-two respondents, forty-six said they felt that such demonstrations would help the Chicanos obtain recognition and be heard by government officials, while sixteen disagreed. Fourteen respondents said they have actually participated, and forty-six said they were willing to participate in future demonstrations.

The Chi-Square results indicated that no significant relationship exists between the different generation groups and their participation and/or willingness to participate in demonstrations in order to attract the attention of government and related agencies.

Question 28,28a: "Days of fiesta, both Mexican and American" The objective of this question was to determine the degree of knowledge and/or preference that Mexican Americans have about both Mexican and Anglo holidays, either religious, social, and/or patriotic (see Hypothesis II).

Of the sixty-two respondents, twenty-three listed fiesta days of Mexican origin only, while thirty-four listed holidays of both Mexican and Anglo origin, such as the "Fourth of July" and "el día de la Virgen de la Guadalupe." The choices ranged among religious, social, and patriotic holidays. Only five respondents failed to answer the question.

The Chi-Square results indicate that no significant relationship exists between the different generation groups and their knowledge and/or preference for either Mexican and Anglo holidays.

Question 29: "Importance of holidays"

This question, a continuation of Question 28, dealt with

ascertaining the importance of such holidays to the respondents. The answers to this question were widely spread within the following preferences: gathering with friends and relatives, religious importance, enjoyed music and dances, enjoyed Mexican family dishes, and "no work these days" in the "other" category (see Hypothesis II).

Of the sixty-two respondents, only fifty-seven stated their preference for the holidays. The categories with highest preferences were gathering of friends and relatives, religious importance, music and dances. The "other" category was too widely spread for discussion of significance here.

The Chi-Square results indicate that a significant relationship exists between the different generation groups and the importance they place on the celebration of holidays.

Questions 35 and 36: "Frequency of meals eaten outside the home" Questions 35 and 36 dealt specifically with the respondent's frequency of meals eaten outside the home. The main objective was to investigate how eating outside the home would influence and/or change the food habits of the respondent within the different generation groups (see Hypothesis I).

The respondents were asked first to state the place where they ate their lunch. Secondly, they were asked to state the place where they usually go when eating out.

Of the sixty-two respondents in Question 35, forty-two stated that they ate their lunch meal at home; eight had their lunch at work,

but prepared it at home (brown-bag); two respondents ate their lunch in the cafeterias found in their places of work; three said they ate in school cafeterias, and seven stated other places, depending on personal matters.

Question 36 asked the respondents to state the type of place (or restaurant) most commonly visited when eating out. The selection was arranged accordingly: fast-food establishment, restaurants: Mexican, American, Latino, and Other.

The Chi-Square results are as indicated in Table 4.17. All Raw X^2 values to the above questions are below the significance level. This indicates that no significant relationship exists between the generation groups and the places where they eat their lunch, and/or the type of establishment visited when eating out.

It is important to note the high number of respondents eating their lunch meal at home. It is also significant to note the fact that only six persons stated that they never go out to dinner, indicating that most of the respondents do go out to eat, although not for the lunch meal.

Question 39: "Beliefs of Mexican folklore (health/food)"
The question asked the respondent if he could identify any food items in the Mexican folklore that should be avoided by certain persons at certain specific times, to protect their health. The respondents were then asked to state whether or not they believed the statements.

Of the sixty-one respondents (one observation is missing), twenty-six stated that they knew of some food items that should not be consumed for some specific reasons, and thirty-five said they did not know of any food avoidances.

When asked whether they believed their statements or not, seventeen of the twenty-six who stated they knew of some food avoidance said they believed them.

The Chi-Square analysis to determine the extent of the relationship between the variable and the generation group is as indicated in Table 4.17. The significance level at .10 with two degrees of freedom is 4.60. The Raw X^2 of 3.04 is below the significance level. This indicates that no significant relationship exists between the generation groups and their beliefs of health-related Mexican folklore.

Question 40: "Views of the future"

The question asked the respondent to think about the future for himself and his family, and to express those things he would like to accomplish or obtain. As previously explained, research literature indicates that a desire for future change and improvement facilitates the introduction of programs that would help in community development. This is considered an indirect approach to better welfare since this could lead to better diets.

Of the sixty-two respondents, fifty-nine answered the question. The category with the highest score was "concern for personal and family improvement" with nineteen points, next with almost the same total were "desire for personal improvement" and "concern for family

improvement" with fifteen and fourteen points each respectively. Only four respondents expressed concern for "personal, family, and community improvement." The seven respondents in the "other" category expressed concern about the present economic situation, unemployment, and the role that government plays in these factors.

The Chi-Square results are as indicated in Table 4.17. The significance level for this question at .10 with eight degrees of freedom is 13.36. The Raw X^2 of 5.602 is below the significance level. This indicates that no significant relationship exists between the different generation groups and their concerns and/or desires for their future.

Question 42a,42b,42c: "Views of their present, past, and future lives"

The respondents were given a picture of a ladder with the following instructions: "Suppose the top of the ladder were the best life for you, and the bottom was the worst life for you, where on the ladder do you feel you stand at the present? Now, where on the ladder would you say you stood five years ago? Where on the ladder do you think you will stand five years from now?"

The main objective of these questions was to investigate how the respondents in the different generation groups felt about their present, past, and future lives. Their answers were then coded according to the specific "step" or numbers chosen. Choices ranged from "10" at the top of the ladder to "0" at the bottom.

In Question 42a, "present" situation, the category with the highest score was "5" representing the middle of the ladder, with nineteen points; followed by categories "7" and "10," with twelve points each. Other choices ranged almost equally throughout the other categories.

In Question 42b, on the "past" situation, the category with the highest score was again "5," with other categories receiving more or less the same amount of points throughout the ladder. The last question, Question 42c, on the "future" situation, received the highest scores at "10," with nineteen points, and "8" with thirteen points. Other categories with significant scores range among "6," "7," and "9."

Although it was not part of the questionnaire, nearly all respondents took some time to comment on the "present" and "past" categories. They stated that the reasons why the present situation was no different from their past was due to economic uncertainties and the large number of layoffs from work in the Lansing area. The present economic situation was therefore the major concern of the group. Despite this problem, many expressed confidence in the future, or in their own words, "things will come at their time," thus we see Category 10 receiving the highest score for the future.

The Chi-Square results are as indicated in Table 4.17. All Raw X^2 values for the three parts of this question are below the significance level, indicating that no significant relationship exists between the different generation groups and their views of their present, past, and future lives.

In summary, for Null Hypothesis III, there was a total of twenty related questions for analysis of relationships between the variables. The Raw X^2 for sixteen questions at an alpha level of .10 is below the significance level. The only questions that showed a significant relationship between variables and the different generation groups are as follows: Occupation (Question 6), Educational level (Question 7), Language usage among friends (Question 20), and Importance of holiday celebrations (Question 29). On the basis of this finding, where only four variables showed a significant relationship, the null hypothesis is accepted.

Hypothesis IV

The fourth major hypothesis tested was: "There is no correlation of variables among the different Mexican American generation groups and their pattern of food selection."

For the statistical analysis of this hypothesis, two major SPSS programs were used, those of ANOVA (Analysis of Variance) and correlation metrics (multiple correlation and partial correlation). In the analysis of variance, Mexican food (MEXIF), American food (AMERIF), and use of Mexican centers (MCENT) were treated as dependent variables, while generation group (GENGP), number of generations per household (GENS), contact with Anglos (CONTAC), and sex were treated as independent variables; age and educational level (EDLEVEL) were held as covariates.

For the multiple regression analysis, the generation group and Mexican food were treated in separate analyses, as the dependent

variables, while age, sex, educational level, contact with Anglos, American food, use of Mexican centers, and number of generations per household were held as independent variables.

Analysis of Variance: Basic Ideas. The first analysis of Hypothesis IV consisted of analysis of variance, a statistical technique that assesses the effects of one or more independent variables, measured upon a continuous dependent variable that is usually assumed to be measured at an interval level. As a result, the total number of cases is divided into categories based on their values for each of the independent variables, and the differences between the means of these categories on the dependent variable are tested for statistical significance. The analysis allows the researcher to assess the relative effect upon the dependent variables of each of the independent variables and their combined effects and interactions.

The basis of the analysis of variance is the decomposition of variation or sum of squares corrected for the mean (SS). It may be written as,

$$SS_Y = SS_A + SS_{error}$$

where SS_A represents the portion of the sum of squares (SS) in Y due to Factor A (dependent variable), and SS_{error} is the variation within each of the categories which is not accounted for by A (dependent variable). This is often written as SS_{error} or $SS_{residual}$. Intuitively, the relative magnitude of SS_A will become greater as the differences among the means of Y in various categories of A increase and as the variations in Y within the categories of A decrease.

In analysis of variance, the effects of A are often expressed, therefore, by the sum of squared differences of the Factor A.

A descriptive statistic measuring the strength of the effects of A on Y is the ratio,

$$eta^2 = \frac{SS_A}{SS_Y}$$

The value of eta^2 will be 1.0 only if there is no variability witin each category of A and if there is some variability between categories. The value of eta^2 will be zero only if there is no difference among the means of the categories. Therefore, $eta^2 = 0$ indicates that there is no effect of A, and there is no difference among the means of the categories. It is advisable then, to test the null hypothesis for $eta^2 = 0$. For this the F test is commonly used, where,

$$F = \frac{\text{Mean Square A}}{\text{Mean Square Error}}$$

This equation follows the F distribution with (K-1) and (N-K) degrees of freedom, where K is the number of categories in A, and N the number of cases.

Analysis of Variance (ANOVA): Mexican Food. The first ANOVA carried out was the variable, Mexican food (MEXIF), with the variables generation group (GENGP), number of generations per household (GENS), contact with Anglos (CONTAC), and sex, as shown in Table 4.23. Approximately 17 percent of the variations in MEXIF can be accounted for by the independent variables considered, and the result is nonsignificant.

Table 4.23.--Analysis of Variance: MEXIF by GENGP, GENS, CONTAC, Sex.

Source of Variation	Sum of Squares	DF	Mean Square	F	Significance of F
Main Effects	48.971	6	8.162	1.827	.110 NS
GENGP	21.682	2	10.841	2.426	.096 NS
GENS	18.106	2	9.053	2.026	.146 NS
CONTAC	.867	1	.867	.194	.999 NS
Sex	8.316	1	8.316	1.861	.175 NS
Residual	245.738	55	4.468		
Total	294.710	61	4.831		

294.710 = 48.971 + 245.738

48.971: 16.6% due to factor

245.738: 83.4% not accounted for

The F ratio for testing $eta^2 = 0$ is:

$$F = \frac{8.162}{4.468} = 1.83$$

which is also not significant at the .05 level of significance with $F(3,58) = 2.76$. Therefore the null hypothesis $eta^2 = 0$ is accepted.

Examining the pattern of the independent variables in relation to the criterion variable table shows that GENGP and GENS are more important than CONTAC and sex, although all of them are nonsignificant at the 5 percent level of significance.

When the variables age, educational level, and Mexican centers are inlcuded in the analysis of variance (see Table 4.24), the proportion of the variation in MEXIF that can be accounted for increases to 18 percent, but the analysis remains statistically nonsignificant.

Table 4.24.--Analysis of Variance: MEXIF by GENGP, GENS, CONTAC, Sex with Age, EDLEVEL, MCENT.

Source of Variation	Sum of Squares	DF	Mean Square	F	Significance of F
Main Effects	52.101	9	5.789	1.241	.291 NS
GENGP	21.682	2	10.841	2.324	.106 NS
GENS	18.106	2	9.053	1.940	.152 NS
CONTAC	.867	1	.867	.186	.999 NS
Sex	8.316	1	8.316	1.782	.185 NS
Age	.060	1	.060	.013	.999 NS
EDLEVEL	2.788	1	2.788	.598	.999 NS
MCENT	.281	1	.281	.060	.999 NS
Residual	242.609	52	4.666		
Total	294.710	61	4.831		

294.710 = 52.101 + 242.609

18% due to factor

82% not accounted for

Multiple Classification Analysis (MCA): Mexican Food. This analysis includes the same variables as the previous analysis plus age, educational level, and use of Mexican centers held as covariates. The information is in Table 4.25. The grand mean of MEXIF is 17.39, a mean which has been previously explained in the first section of this chapter as it relates to the frequency with which persons included in the study sample eat Mexican food. The numbers in Column 1 are means for each category, expressed as deviation from the grand mean. In calculating these values, there are no adjustments for other factors or for covariates. The numbers in Column 2 indicate the adjusted mean values for each category, again expressed as deviations from the grand mean, when the other factor is adjusted. The numbers in Column 3 represent deviations from the mean, adjusted for the independent variables and covariates. None of the values in this table differed from the grand mean in a significant way, as expressed by the statistic Z, which to be significant must be greater than 2.58 at a 5 percent level of significance.

Another descriptive statistic of interest in this table is the partial beta. If a new variable is created for each factor by assigning the Multiple Classification Analysis (MCA) scores to each category, the resultant standardized partial-regression coefficient is a partial beta. It is informative to compare the original eta with the partial betas resulting from first controlling for the other factors and then, in addition, controlling for the covariates. In this case, they do not differ in a significant way. Finally, the multiple R at the bottom of the table indicates the overall relationship between the

Table 4.25.--Multiple Classification Analysis: MEXIF by GENGP, GENS, CONTAC, Sex with Age, EDLEVEL and MCENT.

Grand Mean = 17.39

Variable & Category	Unadjusted			Adjusted for Independents			Adjusted for Independents & Covariates		
	Devtn	Z	Eta	Devtn	Z	Beta	Devtn	Z	Beta
	(1)			(2)			(3)		
GENGP									
1	.95	.43		.95	.43		.83	.38	
2	-.04	-.02		.03	.01		.06	.03	
3	-.63	-.29		-.72	-.33		-.67	-.30	
			.27			.29			.26
GENS									
1	.61	.28		.29	.13		.46	.21	
2	-.23	-.10		.22	.10		-.24	-.11	
3	1.41	.64		1.85	.84		1.72	.78	
			.23			.26			.25
CONTAC									
1	-.12	.05		-.04	-.02		.01	.00	
2	.17	.08		.06	.03		-.01	.00	
			.07			.02			.00
Sex									
1	-.31	-.14		-.32	.14		-.33	-.15	
2	.45	.20		.47	.21		.49	.22	
			.17			.18			.19
Multiple R Squared						.166			.177
Multiple R						.408			.422

criterion variable and the independent variable. R^2 represents the proportion of variation in the independent variable explained by the additive effects of the independent variables. As can be seen, approximately 17 percent of the variation in MEXIF is explained by the independent variables and 18 percent by the independent variables and the covariates.

Analysis of Variance (ANOVA): American Food. The next analysis of variance carried out was with American food; generation group, number of generations per household, contact with Anglos, and sex were the independent variables. Only 2 percent of the variation in American food can be accounted for with these variables, as seen in Table 4.26.

Table 4.26.--Analysis of Variance: AMERIF by GENGP, GENS, CONTAC, Sex.

Source of Variation	Sum of Squares	DF	Mean Square	F	Significance of F
Main Effects	3.135	6	.522	.195	.999 NS
GENGS	.642	2	.321	.120	.999 NS
GENS	1.689	2	.844	.316	.999 NS
CONTAC	.000	1	.000	.000	.999 NS
Sex	.804	1	.804	.301	.999 NS
Residual	147.075	.055	2.674		
Total	150.210	.061	2.462		

150.21 = 3.135 + 147.075

2% due to factors | 98% not accounted for

The F ratio for testing $eta^2 = 0$ is

$$F = \frac{.522}{2.675} = .1951$$

which is not significant and therefore the null hypothesis $eta^2 = 0$ is accepted.

When age, educational level, and Mexican centers are added as covariates, the percent of variation in AMERIF that can be accounted for increased to 3 percent. The analysis remains statistically nonsignificant as can be seen in Table 4.27.

Multiple Classification Analysis (MCA): American Food. The grand mean of American food is 7.89 which indicates the frequency of consumption of American food as explained in the first section of this chapter. None of the values differed from the grand mean in a significant way, as expressed by the statistic Z (Table 4.28). The multiple R Square shows that only 2.1 percent of the variation in AMERIF is explained by GENGP, GENS, CONTAC, and sex and that this proportion is increased to 3.5 percent when age, EDLEVEL, and MCENT are taken into consideration. There is no significant difference between the etas and betas and there is practically no difference from zero, implying that there is no difference among the means of the categories.

Analysis of Variance (ANOVA): Mexican Centers (MCENT). The third analysis of variance carried out regarded the use of Mexican centers with the variables generation groups, number of generations per household, contact with Anglos, and sex. Only 14.5 percent of

Table 4.27.--Analysis of Variance: AMERIF by GENGP, GENS, CONTAC, Sex with Age, EDLEVEL, MCENT.

Source of Variation	Sum of Squares	DF	Mean Square	F	Significance of F
Main Effects	5.226	9	.581	.208	.999 NS
GENGP	.642	2	.321	.115	.999 NS
GENS	1.689	2	.844	.303	.999 NS
CONTAC	.000	1	.000	.000	.999 NS
Sex	.804	1	.804	.288	.999 NS
Age	.112	1	.112	.040	.999 NS
EDLEVEL	1.096	1	1.096	.393	.999 NS
MCENT	.884	1	.884	.317	.999 NS
Residual	144.983	52	2.788		
Total	150.210	61	2.462		

150.210 = 5.226 + 144.983

3% due to factor

97% not accounted for

Table 4.28.--Multiple Classification Analysis: AMERIF by GENGP, GENS, CONTAC, Sex with Age, EDLEVEL, MCENT.

Grand Mean = 7.89

Variable & Category	Unadjusted			Adjusted for Independents			Adjusted for Independents & Covariates		
	Devtn	Z	Eta	Devtn	Z	Beta	Devtn	Z	Beta
GENGP									
1	.11	.07		.09	.06		.17	.11	
2	-.12	-.08		-.13	-.08		-.14	-.09	
3	.07	.04		.10	.06		.05	.03	
			.07			.07			.08
GENS									
1	.40	.25		.48	.31		.35	.22	
2	-.03	-.02		-.03	-.02		-.03	-.02	
3	-.29	-.18		-.37	-.24		-.23	-.15	
			.10			.12			.09
CONTAC									
1	-.02	-.01		-.02	-.01		-.07	-.04	
2	.03	.02		.03	.02		.11	.07	
			.02			.01			.06
Sex									
1	.06	.04		.10	.06		.09	.06	
2	-.09	-.06		-.15	-.10		-.14	-.09	
			.05			.08			.07
Multiple R Square						.021			.035
Multiple R						.144			.187

the variation in MCENT can be accounted for by these variables (Table 4.29).

Table 4.29.--Analysis of Variance: MCENT by GENGP, GENS, CONTAC, Sex.

Source of Variation	Sum of Squares	DF	Mean Square	F	Significance of F
Main Effects	22.299	6	3.716	1.588	.167 NS
GENGP	1.294	2	.647	.277	.999 NS
GENS	.703	2	.351	.150	.999 NS
CONTAC	15.037	1	15.037	6.427	.014 S
Sex	5.265	1	5.265	2.250	.136 NS
Residual	128.685	55	2.324		
Total	150.984	61	2.475		

150.984 = 22.299 + 128.685

14.5% due to factor; 85.5% not accounted for

The F ratio for testing the null hypothesis $eta^2 = 0$ is

$$F = \frac{3.716}{2.324} = 1.60$$

which is not significant; the null hypothesis = 0, is accepted.

The only significant variable in explaining MCENT is contact with Anglos, which is significant at 1 percent, as can be seen also in Table 4.30, where the values of eta and beta differ from zero.

Multiple Classification Analysis (MCA): Mexican Centers. The grand mean of the Mexican centers is 2.02, a figure that indicates the frequency with which the sample participates in Mexican center activities as explained in the first section of this chapter. None

Table 4.30.--Multiple Classification Analysis: MCENT by GENGP, GENS, CONTAC, Sex.

Grand Mean = 2.02

Variable & Category	Unadjusted			Adjusted for Independents		
	Devtn	Z	Eta	Devtn	Z	Beta
GENGP						
1	.12	.07		.29	.18	
2	-.17	-.11		-.21	-.13	
3	.13	.08		.05	.03	
			.09			.13
GENS						
1	-.16	-.10		.05	.03	
2	.04	.03		.07	.04	
3	-.22	.14		-.77	-.49	
			.06			.15
CONTAC						
1	.36	.23		.38	.24	
2	-.54	-.34		-.56	.35	
			.28			.30
Sex						
1	.31	.20		.25	.16	
2	-.46	-.29		-.37	-.24	
			.24			.20
Multiple R Squared						.148
Multiple R						.384

of the values differed from the grand mean in a significant way, as expressed by the statistic Z. The multiple R Squared at the bottom of Table 4.30 shows that less than 15 percent of the variation in MCENT is explained by GENGP, GENS, CONTAC, and Sex.

Table 4.31.--Variables Summary Table.

Variables	Multiple R Squared	Multiple R
MEXIF by GENGP, GENS, CONTAC, Sex	.166	.408
MEXIF by GENGP, GENS, CONTAC, Sex with EDLEVEL, Age and MCENT	.177	.422
AMERIF by GENGP, GENS, CONTAC, Sex	.021	.144
AMERIF by GENGP, GENS, CONTAC, Sex with Age, EDLEVEL, and MCENT	.035	.187
MCENT by GENGP, GENS, CONTAC, Sex	.148	.384

Multiple Correlation Analysis. The last statistical analysis carried out was a step-wise multiple regression with Mexican food as the dependent variable and the others as independent variables. The purpose was to determine the maximum proportion of variation in MEXIF that can be explained by the other variables considered. As can be seen from Table 4.32, only 21 percent of the variation in MEXIF could be explained by all the other variables.

When the same analysis was undertaken with GENGP as the dependent variable, 32 percent of this variable was explained by the other eight variables combined, as can be seen in Table 4.33.

Table 4.32.--Dependent Variable--Mexican Food.

Variables Entered	Multiple R	R Squared
1. GENGP	.26743	.07152
2. AMERIF	.37550	.14100
3. SEX	.41566	.17277
4. GENS	.44217	.19552
5. EDLEVEL	.45226	.20454
6. MCENT	.45630	.20821
7. CONTAC	.46070	.21225
8. AGE	.46173	.21320

Table 4.33.--Dependent Variable--Generation Group.

Variables Entered	Multiple R	R Squared
1. AGE	.36936	.13643
2. MEXIF	.48205	.23237
3. CONTAC	.51229	.26244
4. AMERIF	.52764	.27841
5. GENS	.54127	.29297
6. SEX	.55680	.31003
7. EDLEVEL	.56588	.32022
8. MCENT	.56708	.32158

Partial Correlation Coefficients. Partial correlation measures the relationship between two variables. In this instance, the eight variables GENGP, AMERIF, SEX, GENS, EDLEVEL, MCENT, CONTAC, and AGE were analyzed in relationship to each other. The most significant relationships found were that there were the following correlations (see Table 4.34):

Table 4.34.--Partial Correlation Coefficients.

	GENGP	SEX	AGE	EDLEVEL	GENS	MCENT	MEXF	AMERIF
SEX	-.018							
AGE	-.369	.052						
EDLEVEL	.323	.138	-.516					
GENS	.107	-.239	.061	-.236				
MCENT	.012	-.240	-.004	-.088	.001			
MEXF	-.267	.171	.128	-.158	.047	-.082		
AMERIF	-.004	-.046	-.031	.084	-.100	.080	.265	
CONTAC	-.236	.196	.200	-.197	-.164	-.282	.065	.017

Significant R = $\pm$ .25.

1. A negative correlation between AGE and GENGP, implying the more AGE, the lower the GENGP, or less AGE, the higher the GENGP;
2. A positive correlation between GENGP and EDLEVEL, implying the higher the GENGP, the higher the EDLEVEL;
3. A negative correlation between MEXIF and GENGP, although it is very low, possibly implying that the higher the GENGP, the less amount they eat of MEXIF;

4. A negative correlation between GENGP and CONTAC, implying the higher the GENGP, the less amount of CONTAC with Anglos;
5. A negative and high correlation between AGE and EDLEVEL, implying the more AGE, the lower the EDLEVEL, or the less the AGE, the higher the EDLEVEL;
6. A negative correlation between EDLEVEL and GENS, implying the higher the EDLEVEL, the less number of GENS per household;
7. A negative correlation between MCENT and CONTAC, implying the more MCENT, the less amount of CONTAC with Anglos;
8. A positive correlation between MEXIF and AMERIF, implying that the more the sample eats MEXIF, the more they eat AMERIF, a balanced portion of both as can be seen in Table 4.14.

In summary, Null Hypothesis IV was rejected on the basis of the findings in which no statistical significance was found in the analysis.

Summary

Within the basic framework of this study and the population sample selected, the hypotheses tested provided certain insights into the relationships of the different Mexican American generation groups and the related variables studied. In the Chi-Square analysis, it was found that when the generation groups were used as the dependent variables to measure significant relationships, only a small number of variables were found to be significant. Major independent

variables found significant were occupation, educational level, language usage among friends, and importance of holiday celebrations.

In the analysis of variance and multiple classification analysis, no major statistical significance was found between variables.

The partial correlation coefficients analysis indicated that some correlation exists between variables. The most significant finding was that there is negative and high correlation between age and educational level, implying that the more age, the lower the educational level.

CHAPTER V

SUMMARY, CONCLUSIONS, IMPLICATIONS, RECOMMENDATIONS

Summary

The topic of health and nutrition is one of nationwide concern. The findings of the Nationwide Household Food Consumption Survey, undertaken by the U.S. Department of Agriculture, revealed that more diets were graded poor in 1965 than in 1955, when the previous nationwide survey was made. The U.S. Senate Committee on Nutrition and Human Needs also revealed that the most serious problem with the U.S. population is their lack of knowledge of nutrition and food values.

In order to help the population to achieve better diets, many programs have been developed both at the national and state level. The programs call for the education of families regarding nutrition, including information on what constitutes a healthy diet. Home economics as well as The Cooperative Extension Service are also expanding their formal and nonformal educational programs to reach those families where malnutrition is known to exist, i.e., the urban poor, the rural poor, and the migrant workers.

Teaching these families (particularly families which may be different from the teacher's own values, cultural heritage, or

socioeconomic background) might prove to be an exciting yet difficult task. This task requires an honest understanding of the value system of these families as well as a reorientation of the values of the teacher.

Understanding of the food habits of a group is most important in teaching or working with ethnic groups. Frequently efforts are made by educators and government agencies to increase the nutritional value of the diet of an ethnic group. The implementation of such measure requires that educators acquire a knowledge of the cultural, social, and economic factors underlying the existing food habits of the ethnic group. Although cultural values gradually change for most cultural groups, the concept of foods and traditional festive dishes usually prevails.

Through personal experience, the author was able to identify gaps in the nonformal education programs being offered to Spanish-speaking groups in the Lansing area. The problem seemed to originate in the failure to understand a number of concepts concerning culture and the food habits of the ethnic group.

The study undertaken was therefore designed to assess the food habits of an ethnic group, that of the Mexican Americans. It is hoped that studies of this nature will help to:

1. provide information that could be used in future development of instruction and materials related to the lifestyles and food habits of the Mexican Americans,
2. provide data that would help to increase the scope of professionals working with Mexican American groups,

3. provide information and guidelines for future studies of the food habits of an ethnic group,
4. help others to understand and appreciate the food habits of an ethnic group,
5. recognize and appreciate the contributions of different members of the various generation groups to the Mexican American diet.

The study was conducted within the Lansing area. A random sample of Mexican American households was selected from Mexican American neighborhoods (within the area) that fulfilled sampling technique requirements. The households chosen were representative of three Mexican American neighborhoods.

The study was exploratory in design. It consisted of the administration of a constructed interview/questionnaire by four trained and bilingual interviewers to Mexican American residents in different cluster areas previously selected within Lansing. The instrument developed by the researcher, consisted of forty-two questions, available to respondents in both English and Spanish versions. The respondents were given the opportunity to choose which version they preferred. Information collected formed the basis of the present analysis. The reader should note that the findings of this investigation are confined to the population from which the sample was drawn.

The findings of the study have been presented fully in Chapter IV, and a brief summary of these findings will serve here.

Conclusions

The following conclusions are set forth within the limitations of this study and within the framework of the selected sample. Therefore, they cannot be generalized beyond the population sample of the study. Several valid conclusions are suggested as a result of the study since they supplement the preceding information.

The first hypothesis under study was aimed at investigating the food habits of Mexican Americans in different generation groups.

I. Mexican Americans in the third generation group will tend to show a stronger tendency toward selection of food items not so common to the Mexican diet than do Mexican Americans in the first and second generation groups.

Hypothesis I had a total of six related questions. All six questions were used in the analysis for significance between the variables. The Raw X^2 for all related questions at .10 alpha level was below the significance levels. The analysis demonstrated that no significant relationship was found among the different generation groups and their food habits, with the exception of tacos and menudo. In these two cases a significant relationship was found between the three generation groups and the food items. On the basis of the findings where no other major significant relationship was found, the hypothesis was rejected.

It would be both desirable and beneficial to comment on one other major finding of the questions of this hypothesis. The analysis indicated that Mexican Americans within the selected sample tend to select with the same daily frequency both Anglo and Mexican food

items. This implies that their present diet is a combination of food items from both cultural groups.

The second hypothesis was aimed at investigating the differences among the generation groups in regard to knowledge of the Mexican culture and actual participation in community activities. Citizen involvement in the community was studied since previous research works have identified this variable as a key factor that can aid in community improvement. A desire for improvement and/or change is considered a major factor in the introduction of nutrition programs. It was also believed that a higher degree of participation in Mexican American community activities and knowledge of the Mexican culture could influence the food habits of the different generation groups.

II. Mexican Americans in the third generation groups will show a thorough knowledge of the Mexican culture and a desire for improvement of the Mexican American community.

Hypothesis II had a total of eight related questions used in the analysis for significance between variables. The Raw X^2 of all related questions at .10 alpha level was below the significance level. An exception to this was Question 29. This question investigated the importance of holiday celebration to the respondents. In this case, a significant relationship was noted between the generation groups and the importance they placed on holiday celebrations.

On the basis of the findings where no major significant relationship was found between the different generation groups and the related questions, the hypothesis was rejected.

The third hypothesis was aimed at investigating the factors influencing the differences among Mexican American generation groups. The selected variables under study represented variables that have been previously identified as influencing factors in the food habits of other cultural groups.

III. Basic differences of third generation Mexican Americans from first and second generations of Mexican Americans will be related to:

a. education
b. residential history
c. language usage
d. peer group composition
e. contact with Anglos and/or other ethnic groups
f. community involvement
g. celebration of holidays
h. frequency of meals eaten outside the home
i. beliefs of food avoidances
j. views of the future

Hypothesis III had a total of twenty related questions used in the analysis for relationship between the variables. The Raw X^2 for sixteen questions at .10 alpha level was below the significance level. Among the variables under study, a significant relationship was found between the generation groups and their educational level, occupation, language usage among friends, and the importance they place on holiday celebrations.

On the basis of these findings, where only four variables showed a significant relationship, the hypothesis was rejected.

The fourth hypothesis was based on the correlation of variables among the different generation groups of Mexican Americans and their patterns of food selection.

IV. The tendency among third generation Mexican Americans toward selection of different food items from those established as common to Mexican American diet will be directly correlated to:
   a. educational level
   b. generation group of the respondent
   c. number of generations within a household
   d. contact with Anglos
   e. use of Mexican centers
   f. sex
   g. age

The analysis of variance and correlation metrics was used in the statistical analysis of this hypothesis.

The analysis of variance showed no statistical significance among the selected variables and the different generation groups. On the correlation of variables by generation groups, the results seem to imply that there is some correlation among variables and the generation groups, although the coefficients were low. The highest coefficient obtained showed a negative correlation between age and educational level, implying that the greater the age, the lower the

educational level; or the lower the age, the greater the educational level.

Other selected coefficients that seem to imply some correlation are (1) a negative correlation between age and generation group, i.e., the lower the generation group, the greater the respondent's age; (2) a positive correlation between generation groups and educational level, i.e., the higher the generation group, the higher the educational level; and (3) a positive correlation between Mexican food and American food, i.e., implying that the more they eat Mexican food, the more they eat American food, or a balanced portion of both.

Based on these results it can be concluded that the food habits of Mexican Americans within the selected sample do not differ between the generation groups and that they tend to select with the same daily frequency both Anglo and Mexican food items within their diets.

Implications

Mexican Americans in all generation groups within the selected sample showed that their diet consisted mainly of Mexican and Anglo food items chosen with the same daily frequencies. The study also provided some insights into the Mexican American family system as to the size of family, number of generations per household, residential history, educational level, occupation, folk beliefs, community involvement, language usage, food purchasing practices, preparation of food within the household, food habits, and their views of the future.

Research of this nature, where a general insight of the family system is pursued, could be of further assistance not only to those teaching the Mexican Americans but also to the social agencies working with these families. These findings could very well be applied to redirect the objectives of both educational and assistance programs to alleviate the needs identified by the research project.

This study then has significant implications for redirecting both formal and nonformal educational programs geared toward helping the Mexican Americans. It is therefore believed that the findings of this investigation could be used in the following cases:

I. Areas Related to Food Habits: studies of this type in which the total cultural group value system is studied in relationship to the family are needed to see the nutritional pattern in perspective as part of the total culture, and to:
   A. Identify those elements in the food habits of the ethnic group that can be changed without disorganization of the whole.
   B. To discover the interests and needs of the Mexican American people themselves and the means whereby these may lead to improvement of the nutritional status.
   C. To identify local foods which are already known and liked, and which, if eaten more often could be nutritionally remedial.
   D. To introduce new foods in forms that will harmonize with the Mexican American food habits, if possible by enlisting

the help of the people themselves in the creation of suitable recipes.

E. To reinforce common foods of good nutritional value.

F. To encourage beneficial ethnic food practices, and to discourage harmful food practices.

G. To foresee and avoid, as far as possible, undesired side effects or consequences of changes in food habits.

H. To direct nutrition services and educational programs to those most in need within the Mexican American group.

I. To provide reliable data, where problems could be documented statistically.

J. To bring about change in the community based on the condition that the Mexican American people want to change:

   1. The Mexican American group showed a desire for change for better standards of living, better future, and a better chance for their children.

   2. Given these premises, previous research works stated that the group would be receptive to change. Thus, if needed, the Mexican American people could be brought gradually to accept dietary change toward nutritional improvement.

K. As a tool device, to evaluate present nutrition intervention programs, since changes in nutritional status and/or food habits could be more quickly identified.

L. As a reference source for those already working with the Mexican American group.

II. Formal and Nonformal Education: studies of this kind could be better used in:

A. Constructing well defined educational objectives in relation to the nutritional improvement desired within the Mexican American group.

B. Planning of meaningful learning experiences tailor-made to the local situation.

C. Redirecting the teaching of cultural aspects of foods, particularly in relation to Mexican Americans.

D. Planning periodic evaluation by scientific methods of the nonformal educational programs and the progress of them. For this, the educator should consider defining measurements or signs of progress which will be applicable and informative at each stage of the program.

E. Planning curriculum material taking into consideration the individuals concerned, not only as individuals, but as members of the Mexican American group.

F. Reviewing textbooks and curriculum guides on the different cultural groups.

G. Developing and building one's own new instructional materials oriented to the specific characteristics of the Mexican American group. One such example could be a "Basic Four Chart," developed especially for Mexican Americans, relating to the food habits identified by this research project.

H. Developing short nonformal programs to teach families on other issues identified by the research, such as

unemployment and inflation. These issues were identified by the research project as ones of general concern. Therefore, home economists or Cooperative Extension workers could develop short programs on these subjects. These could also include general consumerism information to lessen the impact of rising costs of food as it relates to food purchasing, meal planning, and better use of food stamps.

I. Identifying the target group to which the educational program is to be presented. This study showed that all family members participate, one way or another, in the purchasing and/or preparation of foods. Thus, programs should focus on the total family--not on homemakers or on women alone.

J. As reference material to be used in training student-teachers, teachers, and/or paraprofessional aides working directly with Mexican Americans, such as the Expanded Food and Nutrition Education Program.

K. Identifying places (or group meetings) in which the Mexican American participates. These places could be further explored as possible sites for nonformal educational programs.

L. Identifying community resources and resource persons for educational programs. These can be used to enhance understanding and participation in Mexican American educational programs. It will also be helpful in generating local support.

M. As practical experience (practicum: to teach and share their skills) for students interested in working with different ethnic groups. The students would learn the dynamics of family life of other cultural groups from real life as well as from textbooks.

Recommendations

It is hoped that the information presented throughout the report helped in the accomplishment of the established objectives. However, there is no doubt that improvements could be made in future studies of this nature. Therefore, the following recommendations have been made.

1. One specific area where such improvement could be made is in the realm of Mexican American food habits. Provisions should be made to ask the respondent for the specific food items consumed within the last few meals. If possible, the questionnaire should provide for a 24-hour dietary recall of food items consumed for previous meals, and snacks. Although the list of selected food items proved to be a very good selection, the categories could be rearranged so as to ask for the exact number of meals in which a specific food item is consumed, whether it be on a daily or weekly basis. This could help in the statistical analysis where stronger relationships are desirable.
2. In addition, wherever financial assistance is available, it would be of interest to extend the questionnaire to Mexican Americans residing within the same community, but in middle

class residential areas. This was impossible during the course of this study due to monetary constraints.

3. It would be beneficial to explore further the food habits of two target groups in new government programs, i.e., the children and the elderly. Previous research work have identified that older people frequently reject services available or offered to them. It is quite possible that in a community where language is a barrier, the rejection rate could be greater. Provisions should be made to investigate some of their problems related to food, such as:
   a. where do they shop for food
   b. do they participate in food-related programs
   c. what are their allowances for food
   d. what government benefits do they receive
   e. do they receive and use their food stamps
   f. what are their transportation problems
   g. do they have any health problems for which they need expert nutritional advice in planning their diet

   The nutritional status of children across the nation is another area of major concern for government programs. Children more than other groups require adequate food intakes for normal growth and development, especially in the first two years of life. Therefore, future studies could further investigate:
   a. age of children in the household
   b. how many are in school
   c. food programs from which they are benefiting

d. frequency of visits to clinics and/or health department

e. children's food habits--how the child learns what to eat, and what to avoid

f. food distribution within the household and food allowances for children

4. Some basic points should be clarified before future research projects are considered. There is a need to ascertain whether the research will be one where the researcher will be adding on, experimenting, and/or improving existing knowledge of various types. This will help to determine the type of study to be undertaken.

5. The development of the constructed/interview questionnaire is recommended for future studies. This device proved very helpful in the collection of the data. It provided the researcher with specific answers to the questions under study. Furthermore, it guaranteed that all respondents were exposed to the same questions, even though four different interviewers were employed in data collection. The training of these assistants, as well, is considered a critical part in the success of the project.

6. The survey technique is also recommended for future studies of food habits. There are three types of surveys that could be used for this type of study:

   a. the fact-finding survey--where one deals with the concrete nutritional, environmental, and economic factors,

   b. attitude surveys--or factor analyses dealing with the attitudes involved,

c. field observations or "motivational studies"--to discover more abstract factors influencing consumption of food.

7. It is also recommended that the community be informed of the objectives of the researcher, therefore seeking support. Frequently, new and innovative programs are not welcomed with open arms because members of the community have not been properly informed.

It is in the best interest and also the responsibility of those working with any ethnic group to devote some time studying the values of that group. Studies demonstrate that the values held in the home of culturally different students are not synonymous with values of the community. This underscores the need to study the values at home and the culture of the different ethnic groups before serious attempts are made to work with these groups. Furthermore, if nutritional improvements are needed the study of food habits is imperative. Where inadequacies exist, dietary modifications, rather than change in food habits are the key to acceptance of intervention.

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APPENDICES

APPENDIX A

THE MEXICAN AMERICAN FAMILY SYSTEM

THE MEXICAN AMERICAN FAMILY SYSTEM

The study of the Mexican American family structure provides an insight into the many cultural and historical facets of this ethnic group. The family structure, as well as the Mexican American population, has been changing slowly over a period of years. At present, the structure of the Mexican American family is not well understood within the Anglo society. Until recent years, the family system of this group has been described using as a reference the Mexican family system. Recently, however, there has been an effort among Mexican American writers and educators to present a more accurate account of this group's family system and the variations from the traditional Mexican family.

As with any cultural group the diversity of experiences unique to every family makes it even more impossible to describe a Mexican American family "type." Instead, there are some factors basic to all Mexican families which result in a multitude of family patterns of living and of coping with each other, as well as with their Anglo environment. Oscar Lewis,[1] in his well known book, Five Families, presented a sample of cross-section of families in Mexico--from a small peasant village in the country, a slum tenement in Mexico City, a new working class housing development, and an upper class residential district. He stated, "Although each family presented here is

unique in a little world of its own, each in its own way reflects something of the changing Mexican culture and must therefore be read against the background of recent Mexican history."[1] It is essential to maintain this type of perspective when studying Mexican American families for they also represent a large and diverse group of people as they continue to adjust to changing situations within their system.

Basic Family Organization

According to Hernandez the organization of the Mexican American family is patriarchal, that is, "the father is the head of the family and is the ultimate authority." Hernandex continues on by stating that,

> He is the provider . . . traditionally, all men are considered superior to women. . . . A girl looks forward to the day she will fulfill her role as a woman through motherhood. . . . The boys are brought up to emulate the father, the girls to follow in the mother's pattern. Thus, there is an early division of labor within the home based on sex differences.[2]

Of importance in the education of children within the home are the communication patterns within the family. These patterns within the family tend to be one-way type. From parents to children, never vice versa. They have strict orders for the children explained better with a common saying: "Cuando los mayores hablan, los niños se callan"--children should be seen and not heard. Children are

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[1]Oscar Lewis, Five Families (New York: Basic Books, Inc., Publishers, 1959), p. 6.

[2]Luis F. Hernandez, A Forgotten American (Washington, D.C.: U.S. Office of Education, Department of Health, Education and Welfare, 1970), p. 20.

taught to share, cooperate, and work together for the good of all family members. Boys are especially directed to look after and protect their sisters outside of the immediate home environment. This may be a brother's responsibility even when the sister is several years older.

Webster also stated that,

> The woman within the home has absolute authority over the family structure, especially so, upon the children . . . the authority given to the woman is only within the home, to the outsiders the man is always seen as the head of the family: "el hombre de la casa."[3]

Cabrera presents another facet of recent development within the Mexican American family system. He added,

> But contrary to this in many homes in the Southwest today the mother works and she has a decisive voice, if not the chief one, in family decisions, management of finances, and care of the children. Wives often supplement family income with outside employment--just as the Anglo American wives do.[4]

Cabrera also comments on the children's relationship within the home, ". . . the Mexican American family with younger children do vary. Children are individualistic and are just as spoiled and as saucy with their parents as their Anglo American counterparts."[5]

Extended Family and Community Involvement

In addition, Hernandex adds, "In most Mexican families there is the so-called extended family, which may consist of grandparents,

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[3]Lucia L. Webster, La Familia Mejicana y lo Afectivo (Monterrey, N.L., Mexico: [N.N.], 1970), pp. 2-10.

[4]Arturo Cabrera, Emerging Faces: The Mexican American (San Jose, California: Wm. C. Brown Co., Publishers, 1971), p. 56.

[5]Ibid.

maiden aunts, unmarried males or compadres . . ."[6] While historians give prominence in explaining the concept of the extended family, other writers as Dworkin, Samora and Lamanna, Peñaloza, and Stoddard have found in their research work that the concept of the extended family has changed within the Mexican American family system. Dworkin, for example, found in a study of attitudes that foreign-born Mexican Americans retained strong family ties in Mexico, contrary to the attitudes of native born Mexican Americans that denied having such ties.[7] Peñaloza found that in Southern California urban centers, the traditional extended family group is no longer found to any significant extent.[8]

Stoddard in discussing the subject revealed that the Mexican American Study Projects in Los Angeles and San Antonio report similar findings, where only 3.5 percent of families in Los Angeles and 2.8 percent in San Antonio qualified as "extended households."[9] However, Samora and Lamanna while studying the Mexican Americans in east Chicago, found that compadrazco relationships, extended family ties,

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[6]Hernandez, op. cit., p. 20.

[7]A. G. Dworkin, "Stereotypes and Self-Images Held by Native Born and Foreign Born Mexican Americans," Sociology and Social Research 49 (1965):221.

[8]Fernando Peñaloza, "The Changing Mexican American in Southern California," Sociology and Social Research 51 (1967):415-16.

[9]Ellwyn R. Stoddard, Mexican Americans (New York: Random House, 1973), p. 101.

and strong attachments to localities of origin in the Southwest of Mexico were most important factors in immigration to the area.[10]

One factor that seems to be directly related to these changes in the concept of the extended family is that of mobility. According to Stoddard,

> Studies of families forced to relocate from their Texas, California, or New Mexico hometowns, show that the constant movement and the complexities of urban housing and life in general debilitated the multigenerational family.[11]

Another study by Ulibarri on mobile Mexican American families, confirms the fact that the extended family is disappearing. However, one must bear in mind that this specific study represents only a smaller group of Mexican Americans.[12] It is a known fact that Mexican Americans are now residing within urbanized areas and their mobility patterns are different from the much smaller mobile groups. Nevertheless, Cabrera agreed that the concept of the extended family as was seen in the past is changing, he stated, "the extended family, so cherished in concept by romanticists, if observed at all in today's families must be but a shadow of what it was in its historic heydey."[13] More so, what seems to be happening is a change in the type of association. Though at present, one cannot find the close

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[10]J. Samora and R. A. Lamanna, Mexican Americans in a Midwest Metropoli: A Study of East Chicago, Report No. 8 (Los Angeles: University of California, 1967), pp. 30-37.

[11]Stoddard, loc. cit.

[12]H. Ulibarri, "Social and Attitudinal Characteristics of Spanish Speaking Migrant and Ex-Migrant Workers in the Southwest," Sociology and Social Research 50 (1966):363.

[13]Cabrera, op. cit., p. 57.

live-in type of association, one still finds close contact among relatives. Cabreras also stated that,

> . . . extension of family permits an individual to feel secure and sufficient within his group. There is less need for involvement in community and civic affairs as a way of satisfying social and personal expression. The amenities of family life draw people together.[14]

It is quite common then, for a family to spend most of their time together.

Hernandez adds that,

> . . . the family unit provides a foundation for the Mexican American youngster of emotional and material security . . . therefore, the family will always come first . . . many concepts and organizations originating in school . . . are Anglo American middle-class values, and as such have little meaning to the Mexican American youngster--at least until he has progressed well across the continuum of acculturation.[15]

Recently, however, there has been an awakening within Mexican American youth for participation in community affairs, where they have taken primary leadership. This awakening was triggered by the actions and concerns of war veterans upon return to their homeland. It was this group that pursued many possibilities for improving their economic status, set new goals, and sought better jobs. However, younger generations, calling themselves Chicanos has taken a more militant approach toward solving their problems than any other group has in the past. This new movement rejects an inferior role in the American society and the conditions they share, i.e., segregation, poor schooling, deteriorating housing, and other discriminatory

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[14]Ibid.

[15]Hernandez, op. cit., p. 20.

practices. Their ideals are seen as too radical by some of the much older family members causing friction among them.

Family Size and Marriage

The size of the Mexican American family is another major factor that must also be considered when studying their family systems. Traditionally, the size of the Mexican American family has been described as a large family, and where family planning is not typical. It must be noted that the incidence of this relationship is high between socioeconomic rather than nationality classes. Low income families throughout the United States tend toward larger families than they can support economically. Cabrera revealed that inspection of vertically mobile middle-class Mexican Americans will show their family size patterns to be much the same as middle-class Anglos.[16] Bennett reported that the average family size for respondents in a Lansing's population sample was 5.8 members.[17] The 1970 U.S. Census for the Lansing SMSA shows an average of 4.53 persons per household of Spanish speaking persons.

Hernandez added that in large Mexican American families with low income the oldest child is still expected to contribute to the family income at a very early age. In situations where one parent is absent, for whatever reason, this responsibility in the household

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[16]Cabrera, loc. cit.

[17]David G. Bennett, "An Analysis of the Spanish-American Population of Lansing, Michigan," Unpublished Field Problem, Department of Geography, Michigan State University (1966), pp. 10-11.

is easily evident. When this happens the older girls take charge of the household, while older boys may be expected to take financial responsibility of the household.[18]

Again, contrary to these typical Mexican American patterns, the Mexican American families with younger children do vary. Children are loved and they are protected, but this hardly seems much different than most families anywhere. Many restrictions of the activities for boys and girls in the family are not greater for Mexican Americans than for average Anglo youth.

Some restrictions that are changing are those related to marriage. Younger generations are experiencing a new freedom in dating and in marriage. Stoddard adds that in second generation Mexican American families the freedom to choose one's own mate is becoming an accepted practice.[19] A study by Mittelbach and others, reported that although the majority of Mexican Americans in Los Angeles (around 75 percent) still tend to marry within their ethnic group, the proportion of Mexican Americans marrying outside the group has increased since the 1930s. They also noted that marriage patterns vary according to generation, sex, social status, and age. The incidence of out-marriage increases with each succeeding generation. Another major finding is that first generation Mexican Americans tend to marry other immigrant Mexican Americans, while second and third generation persons tend to choose mates who are also native-born Mexican Americans of their generation. The

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[18]Hernandez, loc. cit.

[19]Stoddard, loc. cit.

incidence of out-marriage is greater among women than among men within each generation, and varies directly with social status.[20] One last report, is that those who marry outside the group tend to be younger than those who marry within it. Francesca also noted that there seems to be more independence in family life, and in third generation Mexican American families, there is an evident desire for fewer children.[21]

The Role of Women

There is presently much confusion and conflict among Mexican Americans as well as Anglos, as to the role of the woman in society. There are fewer and fewer women who are willing to accept the traditional values. Chicanos are struggling for greater equality not only in the Anglo society but also in comparison to the Mexican American male. Their role is definitely changing: many work and have a decisive voice in the home,[22] they have greater expectations from their husbands for a companionate relationship,[23] 13 percent of all Mexican American families (in the Southwest) are headed by females . . . they have become active leaders in Chicano movement . . . in

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[20]Frank G. Mittelback and others, Mexican American Study Project: Intermarriage of Mexican Americans, Report No. 6 (Los Angeles, California: Division of Research, University of California, 1966), pp. 35-42.

[21]Sister M. Francesca, "Variations of Selected Cultural Patterns Among Three Generations of Mexicans in San Antonio, Texas," American Catholic Sociological Review 19 (1958):30-31.

[22]Cabrera, op. cit., p. 56.

[23]Stoddard, op. cit., p. 104.

the Southwest, statistics revealed a higher formal education level for Mexican American females than for males.[24]

The Mexican American women are encouraged by La Causa (a Chicano movement) to increase their education and skill so that these can be used more effectively to preserve Mexican culture and its traditional institutions. However, Stoddard noted that in her efforts to do this, she runs the risk of departing from the traditional sex roles of the past--this by itself destroys the old family structure they want to preserve so much.[25] The old concept of male-female roles in Chicano society is requiring a painful examination and reevaluation of what is important and what is less important in the functional roles between man and woman.

Language Usage

Though the majority of Mexican American youngsters are bilingual, the level of bilinguality varies with their family position in the use of language. In many cases the student is expected by his family to speak Spanish in the home. This expectation reduces the reinforcement of English he is learning in school. According to Hernandez, ". . . a youngster from such a family has a more limited vocabulary in both languages than many of his peers, and his speech and pronunciation are adversely affected."[26] On the other hand, Stoddard presented other problems that the Mexican American student

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[24]Stoddard, op. cit., pp. 104-6.

[25]Ibid.

[26]Hernandez, op. cit., p. 21.

faces, "If he continues to speak with an accent, his teachers are disappointed. If he adjusts to correctly spoken 'school English,' his peers may ridicule him.[27]

However, recent development in the Chicano movement had diminished the stigma attached to having a foreign accent and there is more willingness to speak Spanish with pride rather than merely for convenience or comfort. Stoddard continues by stating that,

> In this context, the deliberate nonuse of English does not represent lack of English fluency or a lack of motivation to become proficient in it. Rather, it is symbolic of the emotional resentment felt toward the dominant Anglo society.[28]

Education

No general study of the family system of Mexican Americans would be complete without at least recognizing the role that formal education has within the family structure. The government states that every child should go to school until he is 18 years of age. This does not always happen within the low income families and especially within Mexican Americans.

The educational statistics on Mexican Americans show that their dropout rate is more than twice the rate of the national average. Estimates of the average number of school years completed by Mexican Americans (8.1 years), are significantly below figures of Anglo children (12.1 years) and Black students (9.0 years).[29] Ortego

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[27]Stoddard, op. cit., p. 122. [28]Ibid.

[29]Phillip D. Ortego, "Montezuma's Children," in Voices--Readings From El Grito, Octavio Romano, ed. (California: Quinto Sol Publications, 1971), p. 123.

stated that principal reasons for the high dropout rate of Mexican Americans are, among other, language, test and measurements, and over-age problems. Ortego continues on stating that,

> The prospects for keeping Mexican American youths in school beyond 8th grade anywhere in the Southwest are slim indeed. In the five southwestern states of Arizona, California, Colorado, New Mexico, and Texas, Mexican Americans complete three to four grades less than Anglos, except in Texas where the gap is six grades less.[30]

Stoddard also comments on the educational differences of the Southwestern states, where Mexican Americans as well as Spanish speaking persons in Texas showed a lower educational level. Major variations seem to be related to sex and rural or urban residence, and not to the location per se. According to Stoddard the educational level of Spanish-surname females in rural areas is not as low as that of the males, indicating that lower educational achievement is a combined product of sex (male) and occupational life styles (rural farms).[31]

U.S. Census records indicate that in 1950 most Spanish-surnamed individuals had gone only through the elementary grades and approximately 18 percent of the population had no schooling at all. (The figure for Anglos in comparison is just over 2 percent.) The figures for 1960 indicate that more Spanish-surnamed individuals are now going on to high school, while the figure for "no schooling at all" dropped to 10.9 percent.[32]

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[30]Ibid., p. 130. [31]Stoddard, op. cit., p. 123.

[32]Stoddard, op. cit., p. 124.

Bennett reported that the average education for a sample studied within the Lansing area, was found to be 5.2 years for the husband, while that of the wife was only slightly higher, 5.5 years. He also noted that some of the children in the sample group were high school graduates, and few of the young people have attended or graduated from college.[33] The 1970 Census of Population for the Lansing SMSA shows the median school year completed for all Spanish-speaking persons to be 9.7 years. This presents a rather significant increase in the national educational level over the 8.1 years figure of the 1960 U.S. Census of Population. The figure of "no schooling at all" for 1970 is that of 7.4 percent.

The future promises an improvement in educational levels achieved by younger Mexican Americans over those achieved by their parents. Grebler found that Mexican American youth under 25 years of age had a substantially higher median-educational level than those over 25.[34] This is directly the opposite of figures for the Anglo population, which showed that the older category has a higher level of education than the younger. Although in general younger generation Mexican Americans tend to be better educated than their parents, there are still large numbers of Mexican Americans with no schooling at all.

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[33]Bennett, op. cit., p. 15.

[34]L. Grebler, The Schooling Gap: Signs of Progress (Los Angeles, California: Division of Research, University of California, 1967), pp. 221-26.

Occupations

Like most minority groups within the United States, Mexican Americans have found it very difficult to move into the main stream of American economic life. Spanish speaking persons in the Southwest are twice to three times as heavily represented as Anglos in the poverty category. Stoddard believes that this situation is closely related to the state of residence and the occupational profile of a person, that is, the background training and type of employment for which the person qualifies.[35]

Nava stated that though a small percentage of Mexican Americans have now moved to such professions as technical work, and clerical and sales jobs, the majority of the Mexican American population continues working in low-paying menial jobs, such as laborers, farm help, and domestic employees.[36]

The 1960 U.S. Census of Population indicated that less than 8 percent of Spanish-speaking persons in five Southwestern states were employed in white-collar jobs. By 1970, the U.S. Census of Population indicated that this figure had increased to 18.5 percent for men and 37.7 percent for women. Nevertheless, there is still a high percentage of Mexican Americans in low-paying menial jobs, as compared to the national average. Stoddard adds that the Mexican American male labor force is highly concentrated in factory work, mining, construction work, farming, clerical work and domestic

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[35]Stoddard, op. cit., p. 161.

[36]Julian Nava, !Viva La Raza!--Readings on Mexican Americans (New York: D. Van Nostrand Co., 1973), p. 150.

service. Mexican American females are employed mostly in domestic service, clerical work, and sales, with a few in such professions as nursing or teaching.[37]

The 1970 U.S. Census of Population for the Lansing SMSA pertaining to Spanish-speaking persons indicated that 25.3 percent of the total labor force (both males and females) were employed in white collar jobs, while 57.4 percent were employed in blue-collar jobs: 15.7 percent as service workers, and only 1.5 percent as farm workers. This is contrary to the common stereotype that most Mexican Americans are farm workers. Within the female group the percentages vary. For the total body of female workers, 41 percent were employed in white-collar jobs, 28.7 percent were employed in blue-collar jobs, 30.0 percent as service workers, and no female was employed as farm workers. The same phenomena occurs in Lansing as in the Southwestern states where the U.S. Census showed more females in white-collar jobs than males.

Income

Accordingly, annual incomes for these families are also of a low average. The 1960 U.S. Census of Population showed an average income for Mexican Americans in the Southwestern states to vary from $1,500 to $4,100 with an average income of $2,804. This results in part from the occupational skills they possess and the type of work they do. Bennett found that in the Lansing area 35 percent of the families studied had an average annual income of $6,000.[38]

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[37]Stoddard, op. cit., p. 161. [38]Bennett, op. cit., p. 12.

This results chiefly from the employment in the automobile and associated industries. Sixteen percent of the respondents had an income of less than $3,000, and 22 percent earned between $3,000 and $5,000 a year, while only 19 percent had an annual income of $7,000 or over. The rest did not report their incomes.

The 1970 U.S. Census of Population for the Lansing SMSA reported an annual median income of $8,553 per family and unrelated individuals of Spanish-speaking persons. The U.S. Census of Population also showed an average of 9.9 percent of families within the same Spanish-speaking group with incomes below poverty level, for an average of $2,296 annually.

Housing

Low incomes result in substandard housing. This housing ranges from the most dilapidated shelters found in rural areas to the substandard dwellings especially abundant in aging urban centers. While some Mexican Americans live in decent housing, the great majority do not. Those who suffer the most over this matter are the ones able to make changes in their ability to determine where they will live--the poor themselves.

Bennett found that Mexican Americans within the Lansing area are most heavily concentrated in three major sections, Northside, Urbandale, and Maple Grove.[39] The 1970 U.S. Census of Population identified Northside (tract 0008) as the area with the heaviest concentration of Spanish-speaking persons. Bennett stated that at the

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[39]Bennett, op. cit., p. 20.

time, i.e., 1966, 80 percent of the respondents resided within the concentrated core areas of these three sections. He continues on by explaining that, "these people live in these areas because of discriminatory practices in renting residences . . . most of them prefer to live among those with similar cultural habits, thus giving them a greater feeling of security."[40] In 1966 Bennett reported that Cristo Rey Community Center officials estimated the Spanish population of Lansing to be between 3,900 to 4,500. In the summer of 1975 in an interview with the Director of Cristo Rey, Mr. Benavides, the estimate was that of 13,000 Spanish-speaking persons in the Lansing area. Benavides also identified two new areas where Mexican Americans are found, those of Towar Gardens and Pleasant Grove.

Meyer reported that among the Spanish-speaking persons who were seeking different housing at the Housing Commission in Lansing as of July of 1968, two-thirds gave overcrowding as their main problem. Even though Mexican Americans live in areas where the owner-occupancy ratio is high, the houses are among the oldest in the city and the property values are the lowest. Associated with their poor housing conditions, is the limited borrowing capability of this group. Thus, newly constructed units or dwellings are beyond the means of most Mexican Americans.[41]

Cabrera stated that housing experts estimate that under normal conditions, a family should not exceed more than 20 percent of

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[40]Bennett, op. cit., p. 21.

[41]Douglas K. Meyer, "Lansing's Mexican American Community: A Geographic Analysis," Unpublished Field Problem, Department of Geography, Michigan State University, 1969, pp. 15-20.

its annual income on housing. The cost of rentals is almost impossible for low income families. Consequently, Cabrera said, ". . . the poor are forced to pay greater proportions of their total income on housing. Crowding in with other family members and the sharing of costs are the only economics possible."[42]

Housing shortages for the Mexican American poor reflect the need for decent low cost housing for all American poor in urban and rural area. The solution to housing needs for Mexican Americans will come only when this need for America's poor people is met satisfactorily by the government.

Overview

The review of the Mexican American family system was written in the hope that it will provide the reader with an insight into the many cultural and historical facets of this ethnic group. The family structure, as well as the Mexican American population, has been changing slowly over a period of years. Thus, the structure of the Mexican American family is not well understood within the Anglo society, and many tend to describe their family structure using as a reference the Mexican family system. Recent efforts among Mexican Americans writers and educators have helped to present a more accurate account of this group's family system and the variations from the traditional Mexican family. There is a potential range of total possibilities in family systems found among Mexican Americans as well as in Anglo families. They will surely be mixtures of all types

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[42]Cabrera, op. cit., p. 28.

possible, and patterns may be unclear. Competent and committed inquiry will continue to be a primary requisite before valid conclusions may be drawn.

APPENDIX B

CONSTRUCTED INTERVIEW/QUESTIONNAIRE

SURVEY

STUDY OF FOOD HABITS AMONG

THREE GENERATIONS OF MEXICAN AMERICANS

IN THE LANSING AREA

Interview Number: _____

Address: _____

Interviewer name: _____

Date of Interview: _____

Time started: _____

Time Ended: _____

If multiple unit structure note:

How many dwelling units in structure? _____

Apt. Number: _____

Calls back:

Date	Reason	Results

INTERVIEWER INFORMATION ONLY

Generation Group classification:

___A. First - Born in Mexico, moved to U.S. (Parents born in Mexico)
___B. Second - Born in the U.S. (Parents born in Mexico, moved to U.S.)
___C. Third - Born in the U.S. (Parents born in U.S., of Mexican descend)

Sub-Classification (if Married)

___A.
___B. Married to a :
___C.

___A.
___B.
___C.
___D. Other: _____

Location of household:

___Northside
___Maple Grove
___Urbandale

Comments if any:

Sex: ___F ___M

Age group code:
___12-15 yrs
___16-20
___21-25
___26-30
___31-35
___36-40
___41-50
___51-60
___61- over

Occupational Level (Mark one)

___Professional, big business
___Semi-Professional, small business
___Clerical, sales
___Skilled labor
___Service Occupation
___Semi or Unskilled labor
___Housewife
___Retired, Unemployed
___Unemployed
___Military
___Student
___Other: _____

Interviewer Information only... cont.

Educational Level

___Completed grade 4 or less
___Completed grade 5 or 6
___Completed grade 7 or 8
___Completed grade 9 or 10
___Completed grade 11 or 12
___Completed high school plus other non-college training
___Completed 1 or 2 yrs of college
___Completed 3 or 4 yrs of college
___Completed some graduate work
___Other: _____
___Currently enrolled in school, grade in: _____

QUESTIONNAIRE

.Buenos dias'.

1. We are doing a survey of Mexican Americans in the Lansing area. Are there any Mexican Americans in this house?

No	Yes
Thanks anyway. Good bye'.	Go to question #2

NOTE: If the person does not speak English, use Spanish questionnaire and repeat Q. #1.

2. We are working on this survey of Mexican Americans in the Lansing area to gather some information on the family eating patterns, and see if there are any differences among different age groups.

My name is _____. Here is a letter from _____. Could I speak to you for a little while? Everything you say is confidential and we do not keep your name. This information will be used only for the writing of a student's dissertation work at Michigan State University.

If you are using a Spanish questionnaire go on to q. #4

3. How would you feel more confortable, if I ask you these questions in Spanish, or would you rather use English? It does not matter to me.

Choose appropiate questionnaire and continue on.

PERSONAL DATA

4. First of all, I would like to ask you few questions about yourself...What's your first name?

_____.

Sex: ___F ___M

5. How old are you? _____ Fill in age of respondent, if the person does not want to give age, write an estimate.

6. What's your occupation at the present?

___Works in : _____ (type of work)
___Unemployed
___Housewife
___Student
___Military man
___Retired
___Any other: _____

7 . What is the highest grade completed in school?

___Grade school: K 1 2 3 4 5 6 7 8 9 10 11 12 (Circle one)
___Vocational school, or other non-college training
___College: Years 1 2 3 4 (Circle one)
_____Graduate school work
___Currently enrolled in school in: _____

RESIDENTIAL HISTORY AND GENERATION GROUP

8. Where were you born?

___Mexico. Are you a U.S. citizen? ___Yes ___No
___Mexican American born in the U.S., State: _____

9. Where was your father born?

___Mexico
___U.S. , State: _____

10. Where was your mother born?

___Mexico
___U.S., State: _____

11. In what year did you come to Lansing? _____Year

12. How did you happen to come to Lansing?

___Parents moved here looking for work
___Have relatives or friends here before
___Heard about the Mexican community here
___Looking for job (job hunting)
___Was offered a job here.
___Was born here
___Other: _____

13. When did you move to your present home? Year: _____

14. Where did you live before? _____(Town and/or state)

15. Who else lives with you in this house?

___Father
___Mother
___Grandfather
___Grandmother
___Wife / husband
___Children: ___Brothers/sisters ___Sons/daughters
___Other: _____

16. What is your marital status?

___Single
___Married
___Divorced
___Separated
___Living together but not married
___Widow (er)

If the person being interviewed is married, ask him/her about the spouse's origin.
If the person is not married go on to q. #18

17. What is your husband's/wife's origin or descent?

___Mexican born in Mexico
___Mexican American born in the U.S.
___Puerto Rican
___Cuban
___Central or South Ame rica
___Other:_____

18. How about his/her parents, where were they born?

Mother: Mexico ___ U.S. ___

Father: Mexico ___ U.S. ___

LANGUAGE HABITS

19. In what language do you converse at home?

___Only Spanish
___Only English
___Both equally often
___Both but more frequent Spanish
___Both but more often English

20. In what language do you converse among friends?

___Only Spanish
___Only English
___Both equally often
___Both but more often Spanish
___Both but more often English

21. Who are your best firends in the Lansing area? List five, if possible, by their first names. (Indicate ethnic identity)

1._____ _____
2._____ _____
3._____ _____
4._____ _____
5._____ _____

CONTACT WITH ANGLOS

22. With how many non Mexican, unrelated families in the neighborhood where you live do you have friendly relations, i.e., visit or greet in a friendly manner? _____

22a. What is their ethnic background?
- ___ Black Americans
- ___ White Anglos
- ___ Cuban
- ___ Puerto Rican
- ___ Other: _____

COMMUNITY INVOLVEMENT

23. Do you subscribe to any newspaper or magazine that is delivered to your home?

___ Yes ↓

23a. Which ones?
- a. _____
- b. _____
- c. _____

___ No ↓

23b. Is there any one you would like to receive if you could?
- ___ Yes, go to q. #23c
- ___ No, go to q. #24

23c. Which one? _____

24. Have you read any of the Mexican American newspapers, like El Renacimiento, Ya Mero, La Experiencia Chicana: A Midwest Perspective?

___ Yes ↓

24a Do you read them regularly?
- ___ Yes
- ___ No

___ No ↓

24b. Would you like to read them?
- ___ Yes, go to q. #25
- ___ No. Why not? _____

_____

_____.

24c. Do you intent to or expect to read them?
- ___ Yes
- ___ No

25. Do you participate of or visit Mexican American centers like: Cristo Rey Community Center, El Quinto Sol, the Chicano Cultural Room at M.S.U.?

___ Yes ↓

25a. In what type of activities do you participate?
1. _____
2. _____
3. _____

25b. How often? _____

___ No ↓

25c. Why not? _____

_____

_____.

25d. Would you like to visit these places?
- ___ Yes
- ___ No

26. As you might be aware of, our country is going through an economic crisis that has directly affected the employment of many persons. Groups of those affected, including Chicanos, are being organized to demonstrate and demand more jobs and/or better financial help.

26a. Do you feel these demonstrations will help in any way the Chicanos?

___Yes ___No

26b. Have you participated in any of these demonstrations?

___Yes ___No

26c. Would you participate of any future ones?

___Yes ___No

CULTURAL KNOWLEDGE

27. Do you have any favorite Mexican artist, i.e., author, painter, singer, actress/actor, that you like the most?

___Yes ↓ ___No ↓

27a. What is her/his name?

27b. What is it that you like about this person?

27c. Is there any reason why not?
___Yes
___No
27d. Why?

28. Of all the days of <u>fiesta</u> , both Mexican and American-- religious, social, patriotic-- which ones are the most important to you?

a.
b.
c.
d.
e.

29. What makes these days so important to you?
(Examples: visitors,music, dances, family dishes, relatives, etc...)

FOOD PREFERENCES

30. What typical dishes are usually served for these holidays?

a.
b.
c.
d.
e.

31. Are there any other dishes you would like to see served?

___Yes ↓ ---No Go to q. #32

31a. Which ones? List a few:
a.
b.
c.

32. Now when you are at home do you prefer Mexican or American food, or do you like both equally well?

___Mexican
___American (Anglo)
___Both equally
___Other:_____

33. Talking about the meals prepared at home, could you tell me:

33a. Who is responsible for the preparation of the main meals at home?

33b. Who assist in the preparation of the meals?

33c. Who goes to buy the food at the store or the market?

34. If you were to list the five dishes you enjoy the most-- which ones would you list?

a.
b.
c.
d.
e.

35. Where do you usually eat your lunch?

___At home
___At work
  ___Brown-bag
  ___Cafeteria
___School cafeteria
___Other:_____

36. When you go out for dinner, where do you usually go?

If the person does not go out to restaurants, go on to q. #38 and mark the space below:
  ___Person does not go out to restaurants.

___Quick place:(McDonald,Burger King, Taco Bell, Mr. Taco,Pizzerias, Steak House, etc....)
___Restaurants:
  ___Mexican (Ex: Torres Taco, Famous Taco....)
  ___American
  ___Latino
  ___Other:_____

36a. Is there any reason why you go (and/or prefer) this place? If so, why?

37. If you were to look back to the last several times you have been out to dinner, which dishes did you enjoy the most? List a few:

a.
b.
c.

38. We have prepared a list of some dishes or food items, as I mention them to you, please tell me how often you eat them, whether it be:

a. More than once a day
b. Once a day
c. More than once a week
d. Once a week
e. More than once a month
f. Once a month
g. On holidays only
h. Hardly ever
i. Never

Ok, here we go!

38a. Food items and frequency of food consumption:	More than 1/day	Once a day	More than 1/week	Once a week	Morethan 1/month	Once a month	On holidays only	Hardly ever	Never	
1. Tortillas										
2. Tacos										
3. Chile con carne										
4. Enchiladas										
5. Menudo										
6. Tamales										
7. Chile &/or hot peppers										
8. Frijoles										
9. Rice (arroz)										
10. Corn meal (harina de maiz)										
11. Hamburgers										
12. Hot dogs										
13. Pizza										
14. Cold &/or hot sandwiches										
15. French fries										
16. Canned fruit (fruta enlatada)										
17. Fresh fruit (fruta fresca)										
18. Dried/candied fruit (fruta seca y abrillantada)										
19. Avocados (aguacates)										
20. Milk (leche)										
21. Hot Chocolate										
22. Pop drinks (coke, etc..) (Refeescos)										

39. According to Mexican folklore, there is a belief about some foof items that should be avoided by certain persons at certain specifc times. Are you aware of any specific food item (s) that should not be consumed by some people, at any specific time?

___Yes [Go to q. #39a] ___No [Go to q. #40]

39a.

Which foods and drinks may not be consumed by the following categories?, and why?	Kind of food and/or drink	Reason:
1 Infants		
2 Girls		
3. Boys		
4. Expectant mothers		
5. Women during lactation		
6. Women in general		
7. Men in general		
8. Sick person		

39b. Do you agree with these statements?

___Yes: ____All
____Some

___No: ____None

VIEWS OF THE FUTURE

40. Now I would like to ask you a question as to how you see your future life. We all want the best in life for ourselves and our families. When you think about the best possible future for yourself and your family, what are the things you would want?

Anything else?

41. On the other side, do you have any special fears or worries about the future?

Anything else?

42. Here is a picture of a ladder. [Give card with the drawing of the ladder to respondent.]

42a. Suppose the top of the ladder were the best life for you, and the bottom the worst life for you. Where on the ladder do you feel you stand at the present?

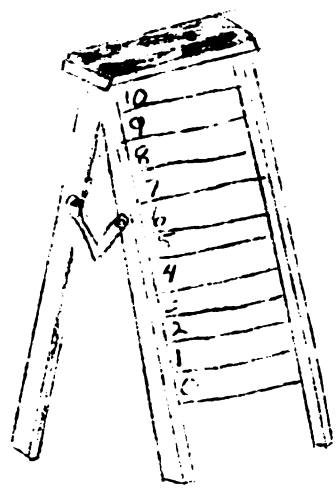
[Interviewer is to mark present on the ladder here.]

42b. Now, where on the ladder would you say you stood five years ago?

[Mark past on the ladder here]

42c. And where on the ladder do you think you will stand five years from now?

[Mark future on the ladder here.]



Well, I guess that is all! Thanks for giving us your time.

SURVEY

STUDY OF FOOD HABITS AMONG

THREE GENERATIONS OF MEXICAN AMERICANS

IN THE LANSING AREA

Interview Number: _____ Interviewer name: _____

Address: _____ Date of Interview: _____

Time started: _____

Time Ended: _____

If multiple unit structure note:

How many dwelling units in structure? _____

Apt. Number: _____

Calls back:

Date	Reason	Results

INTERVIEWER INFORMATION ONLY

Generation Group classification:

___A. First - Born in Mexico, moved to U.S. (Parents born in Mexico)
___B. Second - Born in the U.S. (Parents born in Mexico, moved to U.S.)
___C. Third - Born in the U.S. (Parents born in U.S., of Mexican descend)

Sub-Classification (if Married)

___A.
___B. Married to a :
___C.

___A.
___B.
___C.
___D. Other: _____

Location of household:

___Northside
___Maple Grove
___Urbandale

Comments if any:

Sex: ___F ___M

Age group code:
___12-15 yrs
___16-20
___21-25
___26-30
___31-35
___36-40
___41-50
___51-60
___61- over

Occupational Level (Mark one)

___Professional, big business
___Semi-Professional, small business
___Clerical, sales
___Skilled labor
___Service Occupation
___Semi or Unskilled labor
___Housewife
___Retired, Unemployed
___Unemployed
___Military
___Student
___Other: _____

Interviewer Information only... cont.

Educational Level

___Completed grade 4 or less
___Completed grade 5 or 6
___Completed grade 7 or 8
___Completed grade 9 or 10
___Completed grade 11 or 12
___Completed high school plus other non-college training
___Completed 1 or 2 yrs of college
___Completed 3 or 4 yrs of college
___Completed some graduate work
___Other: _____
___Currently enrolled in school, grade in: _____

QUESTIONARIO

!Buenos días!

1. Estamos haciendo un estudio sobre los Chicanos en el area de Lansing. Vive aquí algun Chicano?

___No ↓ ___Yes Go to q.#2

Gracias de todas maneras.
Adios!

2. Este estudio lo estamos haciendo en el area de Lansing, para coleccionar información sobre los tipos de comida de la familia Chicana, y ver si hay alguna diferencia entre distintos miembros de la familia de diferentes edades.

Mi nombre es_____. Aqui tengo esta carta del_____.
Le podría hablar por un ratito? Todo lo que hablemos será confidencial. Esta información será usada solamente por un estudiante de Michigan State University que está escribiendo su tesis.

3. Cómo se siente más cómodo, si le hago estas preguntas en español, o prefiere que le pregunte en inglés. A mi me da lo mismo, y no es problema.

4. Antes que nada, quisiera saber un poco más de usted, cómo se llama?

_____.

Sex: ___F ___M

5. Cuántos años tiene? _____

Fill in age of respondent. If person does not want to give his/her age, estimate and mark accordingly.

6. Cuál es su ocupación u oficio?

___Trabaja en _____ (type of work)
___Desempleado
___Ama de casa
___Estudiante
___Soldado /Militar
___Retirado
___Otro:_____

7. Cuál es el grado más alto completado?

___Escuela elemental/superior: K 1 2 3 4 5 6 7 8 9 10 11 12
(Circle one)
___Escuela vocacional u otra preparacion tecnica
___Universidad o colegio: Años: 1 2 3 4 (circle one)
___Escuela graduada: 1 2 3 4
___Actualmente estudiando en:_____(grade)

8. Dónde nació ud?

___Mexico. Es ciudadano americano? ___Si ___No
___Mejicano Americano, nacido en los Estados Unidos, Estado:_____

9. Dónde nació su papá?

___Mexico
___E.U., Estado:_____

10. Dónde nació su mamá?

___Mexico
___E.U., Estado:_____

11. En qué año vino a Lansing? _____

12. Porqué vino a Lansing?

___Padres se mudaron aquí buscando trabajo
___Tenía parientes y/o amigos aquí
___Había oido sobre la comunidad Chicana de Lansing
___Buscando trabajo
___Le ofrecieron trabajo aquí
___Nació aquí
___Otra:_____

13. Cuándo se mudó a esta casa?_____Año

14. Dónde vivía anteriormente? _____(Ciudad/Estado)

15. Quién más vive en esta casa?

___Padre
___Madre
___Abuelo
___Abuela
___Esposo(a)
___Niños: ____Hermanos(as) _____Hijos(as)
___Otro:_____

16. Es ud. casado? ___Si ___No (Go to q.#18)

___Soltero
___Casado
___Divorciado
___Separados
___Viviendo juntos, no casados
___Viudo(a)

If the person being interviewed is married, ask him/her about the spouse's origin. If the person is not married, go to q. #18.

17. Cuál es el origen o descendencia de su esposo(a)?

___Mejicano nacido en Mexico
___Mejicano Americano, nacido en E.U.
___Puertorriqueño
___Cubano
___De Centro o/y Sur America
___Otro:_____

18. Y los padres de su esposo(a), donde nacieron?

Madre: ___Mexico ___E.U.

Padre:___Mexico ___E.U.

19. En qué idioma habla en su casa?

___Español solamente
___Inglés solamente
___Ambos igualmente
___Ambos, pero mas español
___Ambos, pero mas inglés

20. En qué idioma habla con sus amigos?

___Español solamente
___Inglés solamente
___Ambos igualmente
___Ambos, pero mas español
___Ambos, pero mas inglés.

21. Quiénes son sus mejores amigos en Lansing? Si es posible, nombre por lo menos cinco por sus primeros nombres. ¿Son todos Mejicanos?

	Indicate ethnic identity
1. _____	_____
2. _____	_____
3. _____	_____
4. _____	_____
5. _____	_____

22. Con qué familias, que no sean Chicanas, se relaciona o visita usted? ¿Cómo cuantas familias?_____

22a. Cuál es la descendencia de ellos?

___Blacks(negros)
___Americanos(Blancos)
___Cubanos
___Puertorriqueños
___Otros:_____

23. ¿Está ud. subscrito a algún periódico o revista Chicana que le llegue por correo?

___Si ↓

23a. Cuáles?
a.
b.
c.

___No ↓

23b. Hay alguna que le gustaría recibir si pudiera?
___Si. Go to q.#23c
___No. Go to q.#24

23c. A cuales?

24. Ha leido alguno de los periódicos Chicanos como: El Renacimiento, Ya Mero, Ya Basta, La Experiencia Chicana: A Midwest Perspective?

___Si ↓

24a. Los lee ud. regularmente?
___Si
___No

___No ↓

24b. Le gustaria leer alguno?
___Si Go to q.#25
___No, porque no?

24c. Intenta ud., leer alguno de ellos alguna vez?
___Si
___No

25. Participa o visita ud., algunos de los centros de servicio Chicanos, como Cristo Rey, El Quinto Sol, o el Salón Cultural Chicano en M.S.U.?

___Si ↓

25a. En que tipo de actividades ud. participa?
a.
b.
c.

25b. Con qué frequencia?

___No ↓

25c. Porqué no?

25d. Le gustaría visitar alguno de estos lugares?
___Si
___No

26. Presumo que ud., está consciente de la crísis económica por la que está pasando nuestro pais, y como esto está afectando directamente el empleo de muchas personas. Algunos Chicanos se han organizado en grupos para hacer demostraciones y demandar más trabajo y/o mejores ayudas económicas;

26a. Cree ud. que estas demostraciones ayudará en alguna manera a los Chicanos?
___Si ___No

26b. Ha participado ud. de alguna de estas demostraciones?
___Si ___No

26c. Participaría ud en alguna en un futuro cercano?
___Si ___No

27. Tiene ud. algun artista mejicano que le gusta más?, ud sabe, como cantante, pintor, artista, escritor, poeta, etc...

___Si ↓ ___No ↓

27a. Cuál es el nombre del artista 27b. Qué le gusta más de esta persona?	27c. Alguna razón por la cual no tiene a nadie favorito? ___Si ___No 27d. Porque?

28. De todos los dias de fiesta, tanto mejicanos como americanos, religiosos, sociales, patrióticos,--cuáles considera ud., más importantes?

a.
b.
c.
d.
e.

29. Qué cosa hace que estos dias sean tan importantes?
(Ex: Visitantes, música, bailes, platos típicos, parientes, etc...)

30. Qué platos tipicos se sirven para estas ocasiones?

a.
b.
c.
d.
e.

31. Hay algún otro plato que le gustaría ver servir para estas ocasiones?

___Si ↓ ___No (Go to q.#32)

31a. Cuáles? Dígame algunos?
a.
b.
c.

32. Cuando está en su casa, prefiere ud., comida mejicana o americana, o le gustan las dos iguales?

___Mejicana
___Americana(Ànglo)
___Las dos iguales
___Otros:_____

33. Hablando de comidas en la casa, me podría decir:

33a. Quién es responsable en la casa por la preparación de las comidas?

33b. Quién asiste en la preparación de las comidas?

33c. Quién va al mercado a hacer la compra?

34. Si fuera a hacer una lista de los platos que disfruta mas, cuales nombraría?
a.
b.
c.
d.
e.

35. Por lo regular dónde come su almuerzo?
___En la casa
___En el trabajo
___Comida preparada en la casa (brown-bag)
___Cafeteria
___Cafeteria en la escuela
___Otro:_____

36. Cuando sale a comer afuera, por lo regular a donde va?

If the person does not go out to restaurants, go on to q.#38 ,and mark the space below:
___Person does not go out to restaurants.

___Sitios rapidos(quickplace): (McDonalds, Burger King, Taco Bell, Mr. Taco, Pizzerias, Steak House,etc...)
___Restaurantes:
___Mexicanos(Ex: Torres Taco, Famous Taco,etc...)
___American
___Latino
___Otro:_____

36a. Hay alguna razón por la cual prefiere este lugar? Cuál es?

37. Si fuera a recordar las ultimas veces que salió a comer afuera, que platos o comidas disfruto más? Nombre dos o tres,

a.
b.
c.

38. Hemos preparado una lista de algunos platos y/o alimentos, segun se los vaya mencionando, dígame con qué frecuencia los come, por ejèmplo:

a. Más de una vez al día
b. Una vez al día
c. Más de una vez a la semana
d. Una vez a la semana
e. Más de una vez al mes
f. Una vez al mes
g. Para dias de fiesta solamente
h. Casi nunca
i. Nunca

Entendido?...pues allá vamos!

38a. Food items and frequency of food consumption:	More than 1/day	Once a day	More than 1/week	Once a week	Morethan 1/month	Once a month	On holidays only	Hardly ever	Never	
1. Tortillas										
2. Tacos										
3. Chile con carne										
4. Enchiladas										
5. Menudo										
6. Tamales										
7. Chile &/or hot peppers										
8. Frijoles										
9. Rice (arroz)										
10. Corn meal (harina de maiz)										
11. Hamburgers										
12. Hot dogs										
13. Pizza										
14. Cold &/or hot sandwiches										
15. French fries										
16. Canned fruit (fruta enlatada)										
17. Fresh fruit (fruta fresca)										
18. Dried/candied fruit (fruta seca y abrillantada)										
19. Avocados (aguacates)										
20. Milk (leche)										
21. Hot Chocolate										
22. Pop drinks (coke, etc..) (Refeescos)										

39. Segun las tradiciones y creencias del folklore mejicano, existen algunos alimentos y/o comidas que no deben comerse en ciertas ocaciones por ciertas personas. ¿Sabe ud de alguna de estas comidas o bebidas que no deben comerse en algun momento, por alguna persona?

___Si [Go to q.#39a] ___No [Go to q.#40]

39a.

Que comidas y/o bebidas no se deben comer en ciertos momentos , y por que?	Tipo de comida y/o bebida	Razon
1. Infantes		
2. Ninos		
3. Ninas		
4 Mujeres embarazadas		
5. Mujeres lactando		
6. Mujeres en general		
7. Hombres en general		
8 Personas enfermas		

39b. Cree ud alguna de estas creencias que me menciono?

___Si ___Todas
___Algunas

___No

40. Ahora, yo quisiera hablaramos del futuro. Yo he quisiera preguntar como ud ve su vida en el futuro. Todos nosotros queremos lo mejor en la vida para nosotros y nuestras familias. Cuando ud. piensa en el mejor futuro para ud y su familia, cuáles son esas cosas que ud. desearía?

Algo más?

APPENDIX C

INTERVIEW RECORD SHEET

Name:_____

Food Habits Questionnaire Daily Record

Day/Date June 1975	Cluster Area	Total Number of Interviews	1st gen #'s	2nd gen #'s	3rd gen #'s	Traveling Expenses and/or Bus Fare
1.						
2.						
3.						
4.						
5.						
6.						
7.						
8.						
9.						
10.						
11.						
12.						
13.						
14.						
15.						
16.						
17.						
18.						
19.						
20.						

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