

THE SOCIO-CULTURAL MEANINGS OF OUTDOOR RECREATION:
AN EXPLORATION OF HISPANIC OUTDOOR RECREATION EXPERIENCES
ON THE FORESTS OF SOUTHERN CALIFORNIA

by

Deborah S. Carr

Thesis submitted to the Faculty of the
Virginia Polytechnic Institute and State University
in partial fulfillment of the requirements for the degree of
MASTER OF SCIENCE
in
Forestry

APPROVED:

Daniel Williams, Chairman

4/20/92
(Date)

Joseph Roggenbuck, Committee Member

4/20/92
(Date)

Michael Hite, Committee Member

4/20/92
(Date)

February, 1992
Blacksburg, Virginia

THE SOCIO-CULTURAL MEANINGS OF OUTDOOR RECREATION:
AN EXPLORATION OF HISPANIC RECREATION EXPERIENCES
ON THE FORESTS OF SOUTHERN CALIFORNIA

by

Deborah Susan Carr

Committee Chairman: Daniel R. Williams

Forestry

(ABSTRACT)

Outdoor recreation on national forests near large urban centers is changing and diversifying as users of many ethnic and racial backgrounds increasingly choose urban-proximate forests as recreation sites. These changes are particularly evident on the national forests of Southern California where large numbers of individuals of Hispanic origins are utilizing dispersed, relatively undeveloped sites for day-use recreation activities including picnicking, barbecuing, and swimming. This usage is the focus of the study.

Previous studies of outdoor recreation participation have treated ethnic group membership as a unidimensional, categorical variable. Using a social structural model, this study more fully explores inter- and intra-ethnic differences by examining the role of ancestry, generational status, and acculturation in influencing recreation experiences. Additionally, the study attempts a more holistic exploration of recreation experiences, including their meaning and significance as a way of more fully understanding the experience from the visitor's point of view.

The study uses a combination of quantitative (on-site, self-administered surveys) and qualitative (semi-structured interviews and observations) methods

to accomplish these objectives.

From the results of the study it appears that Hispanic visitors to the study sites vary in terms of their structural characteristics. Certain forest sites are visited primarily by relatively unacculturated immigrants to the United States, with few Anglos or more acculturated Hispanic present. Other areas are composed of more acculturated individuals of longer generational tenure.

In addition to structural variation in the study site's Hispanic visitors, there is also variation in meanings and preferences related to the recreation experience. Among the variables examined were past use history, social group composition, primary reason for the visit, what respecting the forest means, and place attachment. The largest differences among the study's respondents in the above questions were found between those of Anglo and Central American descent. Among the study's findings are that those of Anglo descent come to the sites more frequently and had been doing so for a longer time, are in smaller groups, and are less attached to the sites than those of Hispanic descent. Considerable structural differences between the two primarily Hispanic ancestral groups were revealed. The Central American response group contained more individuals born outside the United States and of lower acculturation levels. Hispanic participants born outside the United States were more dissimilar to Anglos in their responses to the questions related to recreation experiences than those born in the United States.

Acknowledgements

Like any endeavor of consequence, the list of people to whom I owe my gratitude is long. I wish I could thank each of you individually and in person for all your help. Unfortunately I cannot, so please know I extend my heartfelt gratitude to everyone that has helped me along the way. There are, however, several people who require a special word of thanks for without these people my life would be very different.

I would like to acknowledge and thank the USDA Forest Service's Wildland Recreation and the Urban Culture working unit for funding the thesis, as well as for welcoming me into their midst for an all too brief summer. Special thanks are due to Alan Ewert and Deborah Chavez for their interest and support for this effort. I would also like to thank Lisa and Victor Caro for their assistance with the data collection team and with translating surveys and interviews.

In addition to the researchers and technicians involved, I owe much gratitude to the excellent data collection team who persevered and triumphed over the many difficulties we encountered in the field. Thanks Carla, Christine, Diana, Dennis, Joong, Karla, Marianne, Mary, Mike, and Steve! There would be no thesis without you guys!

I would like to thank my committee as a whole. We have explored uncharted waters together in my thesis. Each of your research interests lie a long way from the forests of Southern California and the Hispanics who

recreate there. I hope the journey has been nearly as interesting and rewarding for you as it has been for me. I would like to thank Daniel Williams, my committee chairman, for giving me the freedom to take this project where I wanted it to go. It would have been easier and possibly more interesting for him had he taken control and directed the project himself. Thank you for allowing me to experience the highs and lows of conducting research. I have developed my abilities as a scientist more in these two years than I could ever have hoped.

My other two committee members, Joseph Roggenbuck and Michael Hite, have also contributed immensely to my thesis. Both helped me sort through the tangled web of my thoughts as I tried to put to paper all I had read and done. Your suggestions and criticisms have been invaluable to me.

I have been extremely fortunate to have so many wonderful mentors showing me the way toward being a good scientists, a competent professional, and a decent human being. I would like to thank Catherine Back for introducing me to the world of field research. The joy and integrity she brings to her work forever changed the way I view the act of "doing science." I found my profession and a friend in my summer's work for her.

I would like to thank Patrick West for introducing me to natural resource sociology. His dedication and enthusiasm for teaching his interests to undergraduates has influenced many more lives than mine. Also, his continued input as an absentee committee member has been invaluable.

I would also like to thank Deborah Chavez for being both my advisor and friend through this whole process. Her input has been invaluable to my thesis, her example as a scientist has been invaluable to me as a professional, and her belief in me has been invaluable to me personally. Thanks Deb, may your

mellow never be harshed!

I would like to thank Alan Ewert for all he has done for me, both in terms of supporting my thesis work and in encouraging me to join his staff. Many of the opportunities that have come to me during my graduate career have been due to Alan's interest and belief in me, for this I am deeply grateful.

One of the highlights of my time in graduate school will always be my fellow graduate students, Bill Borrie, Denis Dean, Kevin Gericke, Robyn McMullin, Michael Patterson, Christopher Stubbs, and Peter Williams. Your companionship, advice, and encouragement meant more than you know! I owe a SAS debt to Denis and Mike that my feeble analysis skills will never allow me to repay.

I would like to thank my best friend, and the sister I never had, Michelle Rachmaninoff, for all she has meant and done for me. She has been my cheerleader and taskmaster when I needed it, and a friend when I did not deserve it. Thank you and ving!

Thanks are due to my three feline friends; Bubba, Nermal, and Jenny for braving the five thousand mile round trip with me to Southern California. Their companionship on the road made the miles pass by a little faster.

Finally, my deepest and most heartfelt thanks go out to the many forest visitors who took the time to participate in my study and share a bit of themselves with me. You have given me memories that will last a lifetime. Muy gracias por su ayuda!

Attention Patron:

Page vii is missing from
all copies

Chapter Three: Methods	91
Selecting Appropriate Methods	91
Qualitative Methods	91
Quantitative Methods	95
Designing a Culturally Relevant Study	96
The Study Design	97
Data Collection Instruments	99
The Survey	100
The Observation Form	102
The Interviews	102
Data Analyses	103
Creating Variables for Analysis	103
Analyzing the Data	106
Chapter Four: Quantitative Results	109
Introduction	109
The Overall Sample Population	111
The Analysis Sample	112
Section One: General Description of the Respondents at Each Site	112
Section Two: The Relationship Between Structural Variables and Use Patterns	116
Spatial Use Patterns	116
Temporal Use Patterns	119
Section Three: The Meaning of the Recreation Experience	121
Primary Reason for Coming to the Site That Day	121
Social Group Composition	124
Respecting the Forest	128
Place Identity and Dependence	131
Ethnic Composition Preferences	136
Cultural Group Identification Preferences	139
Location of Family Members	142
Chapter Five: Social Field Analysis	146
Introduction	146
The Social Field of Each of the Study Sites	147
Site 1: The West Fork of the San Gabriel River	148
Site 2: The East Fork of the San Gabriel River	150
Site 3: Lytle Creek	154
Site 4: Forest Falls	157
Chapter Six: Interaction Variables	160
Introduction	160
Hypothesized Interaction Variables	160
Other Potential Interaction Variables	163

Chapter Seven: Discussion and Conclusion.....	164
Discussion.....	164
Social Structural Variables.....	164
The Socio-Environmental Relationship.....	168
Past Use History.....	168
Primary Reason for Coming to the Site That Day.....	169
Recreation Group Composition.....	170
Respecting the Forest.....	171
Place Attachment.....	174
Ethnic Composition Preferences.....	177
Cultural Group Identification Preferences.....	177
Location of Family Members.....	178
Management Implications.....	179
National Level Implications.....	180
District Level Implications.....	181
Study Limitations and Future Research Suggestions.....	184
Conclusion.....	187
Literture Cited	190
Appendix A: Data Collection Materials	197
Appendix B: Tables From Results Section	203
Vita	265

List of Tables

Table 1.	Data Collection Efforts by Study Site	204
Table 2.	Ancestral Composition Of Entire Study Sample by Study Site.....	205
Table 3.	Individual Characteristics by Study Site by Ancestral Group	206
Table 4.	Group Characteristics by Study Site by Ancestral Group.....	207
Table 5.	Past Use History by Study Site by Ancestral Group.....	208
Table 6.	Individual and Group Language Usage Characteristics by Study Site by Ancestral Group.....	209
Table 7.	Group Location Within Study Site by Ancestral Group.....	210
Table 8.	Ancestral Group by Study Site	211
Table 9.	Generation Status Composition by Ancestral Composition by Study Site.....	212
Table 10.	Means and Standard Deviations of Acculturation Levels by Ancestral Group by Study Site.....	213
Table 11.	Mean Income Levels by Ancestral Group by Study Site.....	214
Table 12.	Means and Standard Deviations of Education Levels by Ancestral Group by Study Site.....	215
Table 13.	Previous Visitation by Ancestral Group by Study Site.....	216
Table 14.	Means and Standard Deviations of Number of Visits Respondents Made to the Site in the Past Year	217
Table 15.	Means and Standard Deviations of Number of Years Respondents Have Been Coming to Site by Ancestral Group.....	218
Table 16.	Generational Status by Ancestral Group by Previous Visitation	219
Table 17.	Means and Standard Deviations of Past Use History by Generational Status	220
Table 18.	Means and Standard Deviations of Acculturation Levels by Ancestral Group by Previous Visitation	221
Table 19.	Pearson's Correlation Between Acculturation Levels and Past Use History.....	222
Table 20.	Mean Income Levels by Ancestral Group by Previous Visitation.....	223
Table 21.	Means and Standard Deviations of Years of Education by Ancestral Group by Previous Visitation	224

Table 22.	Pearson's Correlation Between Education Levels and Past Use History Variables by Ancestral Group.....	225
Table 23.	Pearson's Correlation Between Income Levels and Past Use History Variables by Ancestral Group.....	226
Table 24.	Reason for Coming to Site by Ancestral Group	227
Table 25.	Reason for Coming to Site by Generation Status by Ancestral Group	228
Table 26.	Means and Standard Deviations of Acculturation Levels by Ancestral Group by Reason For Coming to Site.....	229
Table 27.	Mean Income Levels by Ancestral Group by Reason for Coming to Site.....	230
Table 28.	Means and Standard Deviations of Education Levels by Ancestral Group by Reason for Coming to Site	231
Table 29.	Social Group Composition by Ancestral Group	232
Table 30.	Social Group Composition by Ancestral Group by Generational Status	233
Table 31.	Means and Standard Deviations of Acculturation Levels by Ancestral Group by Social Group Composition.....	234
Table 32.	Mean Income Levels by Ancestral Group by Social Group Composition.....	235
Table 33.	Means and Standard Deviations of Education Levels by Ancestral Group by Social Group Composition.....	236
Table 34.	Response Items Within Each Cluster by Ancestral Group	237
Table 35.	Cluster Type by Ancestral Group.....	238
Table 36.	Cluster Type by Ancestral Group by Generational Status	239
Table 37.	Means and Standard Deviations of Acculturation Levels by Ancestral Group by Cluster Type.....	240
Table 38.	Mean Income Levels by Ancestral Group by Cluster Type.....	241
Table 39.	Means and Standard Deviations of Education Levels by Ancestral Group by Cluster Type.....	242
Table 40.	Items and Factor Loadings of the Place Attachment Question.....	243
Table 41.	Means and Standard Deviations of Place Identity Scores by Ancestral Group by Study Site.....	244
Table 42.	Means and Standard Deviations of Place Dependence Scores by Ancestral Group by Study Site.....	245
Table 43.	Means and Standard Deviation of Place Identity Scores by Generation Status by Ancestral Group.....	246
Table 44.	Pearson's Correlation Between Acculturation Levels and Place Identity and Place Dependence Scores	247
Table 45.	Pearson's Correlation Between Income Levels and Place Identity and Place Dependence Scores.....	248
Table 46.	Pearson's Correlation Between Education Levels and Place Identity and Place Dependence Scores.....	249
Table 47.	Ethnic Composition Preferences by Ancestral Group.....	250
Table 48.	Ethnic Composition Preferences by Generational Status by Ancestral Group	251

Table 49.	Means and Standard Deviations of Acculturation Levels by Ancestral Group by Ethnic Composition Preferences.....	252
Table 50.	Mean Income Levels by Ancestral Group by Ethnic Composition Preferences.....	253
Table 51.	Means and Standard Deviations of Education Levels by Ancestral Group by Ethnic Composition Preferences.....	254
Table 52.	Cultural Group Identification Preferences by Ancestral Group	255
Table 53.	Cultural Group Identification Preferences by Generation Status by Ancestral Composition.....	256
Table 54.	Means and Standard Deviations of Acculturation Levels by Ancestral Group by Cultural Group Identification Preferences	257
Table 55.	Mean Income Levels by Ancestral Group by Cultural Group Identification Preferences	258
Table 56.	Means and Standard Deviations of Education Levels by Ancestral Group by Cultural Group	259
Table 57.	Means and Standard Deviations of Number of Family Members by Ancestral Group.....	260
Table 58.	Means and Standard Deviations of Number of Family Members by Generation Status by Ancestral Group.....	261
Table 59.	Pearson's Correlation Between Acculturation Levels and Number of Family Members.....	262
Table 60.	Pearson's Correlation Between Income Levels and Number of Family Members.....	263
Table 61.	Pearson's Correlation Between Education Levels And Number of Family Members	264

List of Figures

Figure 1. Summary of Early Empirical Work Related To Minority Participation In Outdoor Recreation	22
Figure 2. The Two Ways of Using Social Structural Variables	31
Figure 3. Types of Territories.....	61
Figure 4. Components of the Social Field.....	65
Figure 5. The Conceptual Model Used for Field Work.....	74
Figure 6. The Ancestral Composition of Each Site.....	118
Figure 7. Primary Reason for Coming to the Site by Ancestral Group.....	123
Figure 8. Social Group Composition by Ancestral Group.....	126
Figure 9. Respecting the Forest Cluster Answer by Ancestral Group.....	130
Figure 10. Place Identity Scores by Ancestral Group	133
Figure 11. Place Dependence Scores by Ancestral Group.....	134
Figure 12. Ethnic Composition Preferences by Ancestral Group	138
Figure 13. Cultural Group Identification Preferences by Ancestral Group.....	140
Figure 14. Geographic Locales of Family Members by Ancestral Group.....	144

Chapter 1

Introduction

Problem Statement

Outdoor recreation on the national forests of Southern California is changing and diversifying. Users from various ethnic/racial backgrounds increasingly choose the national forest lands as recreation sites, often pursuing "traditional" activities such as picnicking, hiking, and camping, but in new or different ways (Ewert, 1989). For example, on July 4th, 1991 a picnic area with twenty-eight picnic sites hosted nearly 3,000 picnickers, the majority of whom were of Hispanic¹ descent. Other areas around the national forests of Southern California experienced similar high density use by visitors of Hispanic descent. The tendency of Hispanic visitors to be in large groups among and to come together in such high densities in various places around the forest has led researchers of the USDA Forest Service's Wildland Recreation and the Urban Culture Working Unit, whose mission includes studying this phenomenon, to

¹ The term "Hispanic" is the official term used by state and federal agencies (e.g. the Census Bureau) to refer to any person of Mexican, Puerto Rican, Cuban, Central or South American or other Spanish origin and will therefore be used here. The term "Anglo" will be used when referring to those individuals of white, primarily European origins. The debate over the best or most fitting term to describe these groups is discussed in a subsequent section.

coin a new term for this use - concentrated dispersed day use.

As resource professionals, Forest Service managers are charged with protecting the public's forests, while at the same time attempting to provide a quality experience for those who choose to recreate on the forests. At this time little is known about how the recreational users' ethnic background² affects their goals, behaviors, and selection of sites for recreational experiences. This gap in knowledge is a barrier for a manager trying to fulfill the dual roles of providing a quality recreation experience for his/her clientele and managing the natural resources within his/her jurisdiction.

The challenge to outdoor recreation professionals arising from this situation is two-fold. The first, and more obvious, is the challenge to understand the variation in outdoor recreation preferences and behaviors across ethnic boundaries. This issue, as it relates to Hispanic recreation, will be developed as the primary focus of the thesis. Before doing this, however, a second challenge related to the many assumptions behind research in this area will be explored, namely the existence and applicability of cultural values already operating within current research and management philosophies and practices. Presumably, the values and perceptions researchers and managers hold regarding the management of public lands are a product of their culture, including both the predominantly Anglo background of resource managers as well as the professional subculture of resource management itself. The

² As the thesis proceeds the phrase "ancestral origin" and "ancestral group membership" will be used instead of "ethnic background" or "ethnic group membership" in referring to individuals' national origins to gain a more holistic representation of the recreation phenomena that is developed in the thesis. It is not just members of ethnic groups whose culture has an impact on their recreation experience; culture plays a role in all individuals' experiences.

possibility that culturally specific influences affect public land management has not been an issue until fairly recently. As individuals of other cultures (or subcultures) begin to use federal lands in larger numbers, it becomes necessary to explore the cultural roots of land management practices. This issue which essentially asks us to reflect upon our own culture warrants a brief examination before moving forward to examine other cultures.

The Culture of Resource Management

Complicating the study of the effect of ethnicity upon recreation choices and behaviors is the cultural orientation built into current research (e.g., the models, assumptions, salient variables, and methodologies) and management practices. The recreation profession and its research agenda are products of the researchers', managers', and long-standing client groups' identities. Previously, researchers, managers, and users have had little reason to question the underlying or guiding philosophies and values of resource management due to their largely similar cultural origins. Consequently, the recreation profession may be unknowingly influenced by culturally bound knowledge and assumptions, which left unchallenged, may have turned into built-in, hidden biases in management practices.

This is not to say that present management traditions are invalid, but that they must be recognized as traditions of a particular cultural group. They are the expression of primarily Anglo American history and relationship with the land. Members of this group derive a sense of pride from the spirit of adventure, toughness, and independence it took to conquer the frontiers of America; their ancestors tamed the wilderness and made it produce for them. As the 19th

century came to a close, it became clear that the frontier was dwindling; soon there would be no more wilderness to conquer. This alarmed many of the well-educated of the Eastern cities. The call went out for protection and wise use of remaining wild areas (Nash, 1982).

From these concerns, the two primary natural resource management agencies, the Forest Service and National Park Service, were created. As such, they represented a traditional or historical view of land management in their organic acts. At its inception the Forest Service's primary mission was to protect the watershed maintenance value of the forests. Its focus continues to be primarily natural resource protection and utilization; however, providing human services (such as recreation) is becoming an increasingly important role for the Forest Service.

It is from this history that current managers derive their conceptualization of "traditional" and "untraditional" uses and users. Traditional uses range from resource protection and utilization to limited forms of outdoor recreation. Traditional clientele range from companies involved in resource extraction to mostly white, middle-class, individuals pursuing primitive recreational activities such as hiking and camping, and families using developed campsites (see Brown & Lee, 1990).

However, these traditions are not the only valid representation of the value and use of America's public lands. Other segments of society, whose origins stem from different cultures, may hold different perceptions of the value and appropriate uses of the land. These culturally based differences in perceptions, if ignored, can lead to inequitable distribution of recreation resources. From subtle feelings of not fitting in or belonging in primarily Anglo

recreation areas, to literally not fitting into recreation sites designed for Anglo groups, differences between cultures (and subcultures) can work to exclude some groups (see Irwin, Gartner, and Phelps, 1990).

Ignoring cultural differences creates a barrier for effective land management in the face of a new multicultural clientele base. The job of trying to provide a quality recreation experience for all clientele, while minimizing conflict (between users, as well as between users and the agency), along with communicating acceptable uses, goals and values designed to protect the natural resources becomes a daunting and complex task.

The problem viewed from the perspective of only one segment of society has two important consequences for this thesis. It tends to contribute to the idea that there is one right way to use and manage the land. The traditional land ethic and management philosophies applied to the federal lands is seen as the only correct way to think about these lands, when in fact previous inhabitants, as well as current ethnic and cultural groups may have very different conceptions of how the land should be managed. It may also lead land managers to see the problem as being a loss of control over "their" lands and to see the best research as that which points them toward ways to convert users to their way of viewing appropriate uses of the land.

Knopf, Allison, Robertson, and Leatherberry, (1987) note that the drive to simplify complex situations and to minimize discord and disorder is of paramount importance in existing land management practices . Recreationists' behaviors are either right or wrong depending on whether their actions agree or disagree with management philosophies. Whole groups of users seem to be categorized as "good" or "bad" visitors based on whether they follow

management prescriptions. This way of thinking is not conducive to the equitable incorporation of new user groups into forest management concerns. Instead, recreation research and management professionals should reflect upon the questions presented by Knopf et al. (1987):

"Maybe our approach as outdoor recreation resource managers should be to increase complexity. Maybe it should be to unleash potential conflicts in order to shake us from our complacency. Why can't we become thrilled by the problem of bringing forth a diversity of life quests, and by the challenge of mixing them together on a common resource base? Why can't we learn to be energized by the prospect of creating more diversity, more complexity, more confusion, and more problems - and by the challenge of working it all out? Why aren't we zealous about the prospect of providing opportunities for all groups to enjoy outdoor recreation environments?"

In attempting to find an equitable resolution to the issue of changing recreational uses of the forest, the goal should not be to fit new, multicultural users and uses into the existing mold of use and management of the national forests, but instead to find a way of balancing the claims of different component groups of society with each other, as well as with the claims of society as a whole (Salwasser, 1990).

Obviously this is an "easier said than done" statement. The day-to-day realities of managing recreation lands make it difficult to focus on issues such as "diversity of life quests." Because of limited resources, the temptation for many researchers and managers may be to think of certain areas as "sacrifice areas" because of the magnitude of resource impacts and the complexity of management issues. The challenge here is to rise above the logistics of managing areas where differing land ethics make such basic management actions as litter removal and bathroom maintenance a daunting task. The recreation research and management profession provides more than janitors

and maintenance workers. The profession provides an essential service; supplying and managing the areas where people leave their everyday lives behind and escape to a place where they can enjoy nature and their companions. If the productivity of a recreation area can be thought of as a reflection of the number of people for whom it serves this crucial function, those so called "sacrifice areas" are some of the most productive lands in the federal land system.

While the challenge of examining our own culture as predominantly Anglo American resource professionals is not the major orientation of this paper, it must be kept in mind throughout the investigation process - from conceptualization of the problem through management suggestions. It is hoped that the attempt to increase understanding of the meanings, values and behavior of Hispanics related to their recreation experiences on the National Forests of Southern California is the first steps toward a culturally meaningful exploration of minority recreation and a more equitable distribution of recreation resources.

A brief digression concerning the idea of "traditional" and "untraditional" users is necessary before proceeding with the chapter. As discussed earlier, the concept of traditional users and uses as defined by the resource management culture is rather restrictive, and in this case may be somewhat misleading. Hispanic recreation on the forests is not as recent of a phenomena as initial impression may indicate. There is evidence that as far back as the 1930's Los Angeles County was bringing inner-city Hispanic individuals out to the forests for a day's recreation and that Hispanic church groups as early as the turn of the century were coming out to the forests to hold religious services

(Carr, 1991). It is not clear however, what course Hispanic recreation has taken in the sixty years between then and now. For this reason the terms "traditional" and "untraditional" have been used in quotation marks when referring to forest users and activities. Additionally, these terms tend to imply the "rightness" or "wrongness" of the users and activities. This thesis attempts to lower the cultural blinders, leaving terms like traditional and untraditional behind. It is the hope of the author that this research be not just culturally sensitive, but culturally relevant as well. The former implies a "don't offend the natives" way of thinking, while the latter implies attempting to gain understanding of the phenomena as it is viewed and experienced by the study participants.

Study Area

Nowhere are the changes and challenges in outdoor recreation more apparent than on the two forests examined in this thesis: the 693,452 acre Angeles and 630,265 acre San Bernardino National Forests. Both forests are literally the backyard of the greater Los Angeles metropolitan area. They provide a significant portion of the open space available to the twelve million residents of the greater L.A. area (Schwabe, 1981). As such they receive an incredible number and diversity of users. In 1980 the Angeles N.F. received thirty-three million visits from individuals speaking ninety-nine different languages (Schwabe, 1981). The San Bernardino N.F. received six and one half million Recreation Visitor Days in the same year.³ The activities pursued on the forests are as diverse as the users themselves, ranging from camping,

³ One Recreation Visitor Day equals twelve hours of visitation, which likely translates into many more visitors. The figure for the Angeles National Forest (from a different source) appears to be total number of visits.

hiking, and picnicking, to hang-gliding, mountain biking, rock climbing, and recreational shooting. Off-road vehicle usage is also popular. In an article about the Angeles National Forest, a reporter for the Los Angeles Times observes that, "The forest has become both a place for Southern Californians to engage in their notoriously unrestrained recreational activities and a setting for transported urban customs, including crime, traffic, and vandalism" (Hunt, 1988).

Background and Goals

Of particular interest in this thesis is not the diversity between activities, but the diversity within activities. Previous research in the area of Hispanic recreation has shown that individuals pursuing the same recreation activities frequently have different expectations and experiences (Simcox & Pfister, 1990). From a psychological perspective, this is manifested as differences in motivations for and benefits from participation. From a sociological perspective, this is manifested in different socio-cultural meanings and norms related to the use of the environment.

This thesis attempts to combine both views, while giving emphasis to the sociological perspective in the exploration of Hispanics' recreation experiences on the forests. At the most basic level, the Hispanics' activities seem to fit within what would be considered "traditional" outdoor recreation activities; they picnic, hike, socialize, and play, and yet past research (Simcox and Pfister, 1990) seems to suggest that there are many differences (relative to Anglos) within these activities.

Understanding Hispanics' recreation experiences is of importance

because it is a way of getting beyond the surface level explanations for recreation use patterns, namely that of user preferences. For example, initial studies seem to reveal a rather confusing pattern of preferences.⁴ On the surface, at least, Hispanic preferences seem to be quite similar to those of Anglos. Facilities such as clean, well-maintained restrooms, picnic tables, trash cans, and adequate parking are important. Broken glass, litter, and excessive rowdiness detract from enjoyment. Feeling safe and not too crowded is also important. Responses also seem to indicate dissatisfaction with the type and condition of facilities that are generally available at sites heavily used by Hispanic recreationists. In spite of this apparent dissatisfaction, the absence or inadequacy of desired facilities, and the presence of undesired characteristics (e.g. broken glass, litter), a majority of the recreationists rate the site as good or excellent and state that they are willing to return again and recommend the site to friends or family. This suggests that something deeper is influencing use patterns besides preferences related to on-site facilities and conditions.

In order to explore these apparent inconsistencies, this thesis has been designed with the primary goal being to answer the question, "**What is it about the relationship between people** (meaning recreational users of the forests of Southern California of Hispanic origin) **and sites** (meaning the dispersed, relatively primitive sites) **that leads to the recreation use patterns occurring on the Angeles and San Bernardino National Forests** (primarily picnicking, barbecuing, and socializing)?"

Wording the question in this way changes how researchers typically go

⁴ These results are based on a pilot study conducted in the summer of 1990 by the author and Dr. D. Williams (VPI & SU). The results appear to be consistent with findings of other research conducted in the study area (see Simcox and Pfister, 1990).

about exploring recreation site use patterns. Most research that focuses on site preference, choice, and satisfaction treats the recreation site as having objective properties independent of the user that can be inventoried and measured. It is generally believed that having an itemized checklist of which attributes users prefer or dislike gives managers the information necessary to manage an area in a way that maximizes user satisfaction. This approach ignores important subjective or socially determined aspects of recreation sites: personal and/or group meanings, attachment to certain places, and the symbolic content of the landscape. Recreation patterns can be more meaningfully characterized as a triadic relationship between individuals, groups, and sites; of which preferences are only one part.⁵ This thesis will explore user preferences, not as an end in itself, but as a part of the relationship between people and sites. The more important focus has to do with how socio-cultural meanings affect people's relationship with recreation sites on Southern California's National Forests.

By trying to understand the relationship between the Hispanic recreationists and the sites at which they recreate, the thesis seeks to understand why, if particular facilities and attributes are important, some Hispanic users of the forests choose "ethnic" areas or areas where these attributes appear to be inadequate or unavailable?

⁵ For ease of presentation this triadic relationship between individuals, groups and the sites will be shortened to the relationship between people and the environment (or more specifically, to sites).

Objectives

Given this background, the objectives of this thesis are to:

- 1) Develop a theoretical framework for exploring the relationship between Hispanic recreationists and the sites they use for recreation.
- 2) Explore the relationship between ancestral group membership and the spatial use patterns within and across recreation sites of the Angeles and San Bernardino National Forests.
- 3) Explore the relationship between ancestral group membership and the meanings individuals associate with their outdoor recreation experiences within and across recreation sites of the Angeles and San Bernardino National Forests.
- 4) Link research findings to management concerns in order to facilitate the transfer and dissemination of information to land managers.

Chapter Two

Literature Review

Overview

Before proceeding with the review, a few brief comments must be made on the process of putting this work together. Minority or ethnic group participation in outdoor recreation is a potentially broad topic from a theoretical perspective, crossing the lines of all major social science disciplines. Choices ultimately had to be made about how the topic would be treated, what would be included or excluded, and finally, a theoretical perspective had to be chosen to be used as a tool for organizing the material. The literature review is meant to extend beyond what is actually researched in the field portion of the thesis. The world-view it presents is meant to be a holistic look at the subject, bringing together diverse literatures in a more comprehensive fashion than is currently available in this particular field. It was written as a document useful in and of itself, rather than simply as a means to achieving the ends stated in the thesis.

From an empirical perspective however, ethnic group outdoor recreation participation is a fairly limited topic. Therefore much of this thesis is exploratory, drawing theory from other fields and applying it to outdoor recreation. At the start of the review process it was not clear even which questions needed to be

asked. This has resulted in an unfolding of research questions, subsequent hypotheses, and appropriate methods as the review developed.

In order to provide a conceptual framework for this literature review, the material is organized into four main sections aimed at understanding variation in outdoor recreation experiences as a function of ancestral group membership. At the most basic level, this can be broken down to seeking to understand who the recreationists are and how they use a given recreation site.

The first section serves as an introduction, beginning with a brief introduction to important values of the Hispanic culture and continuing with a review of previous work on ethnic group recreation. The second section focuses on the recreationists themselves. Taking a sociological approach, important social structural, interaction, and personality variables are presented in an attempt to characterize the relationship between who the recreationists are and the recreation experiences they seek. The third section of the chapter introduces the concept of the social field to examine the content of environmental experience and the process of experiencing settings. Finally, building on the first three sections, and the work of Keefe and Padilla (1986), the fourth section presents the model that will be used to guide the field portion of the thesis.

Section One: Introduction

An Introduction to Core Values of the Hispanic Culture

Marín and Marín (1990) review several values basic to Hispanic culture. They suggest that an understanding of these values is necessary for

researchers, regardless of discipline, who wish to study any aspect of the Hispanic population. Therefore the literature review will begin with these concepts to set the stage for the primary focus of the thesis: Hispanic recreation. Among the values mentioned by Marín and Marín (1990) are allocentrism, familialism, personal space, power distance, and time orientation.

Allocentrism

Allocentrism (or collectivism) can be a difficult concept to fully grasp for those with an individualistic orientation. Those cultures with an allocentric orientation emphasize the "needs, objectives, and points of view of an ingroup while individualistic cultures determine their social behavior primarily in terms of personal objectives, attitudes, and values that resemble little if at all those of the ingroup" (Marín & Triandis, 1985). Allocentrism is characterized by high levels of personal interdependence, conformity, and willingness to sacrifice for the good of the ingroup members. Within the ingroup, interactions tend to be supportive, loving and respectful.

An important component of allocentrism is the cultural script of *simpatía*. A cultural script is a "pattern of social interaction that is characteristic of a particular subgroup." (Triandis, Marín, & Betancourt, 1984). *Simpatía* describes a person who is likeable and easy going. Someone who is *simpatíco* tends to be a conformist and empathetic, as well someone who seeks harmony in their relationships with others. Conflict is avoided. This is a highly valued characteristic within the Hispanic culture. This tendency has potentially important implications for recreation research where the unit of measure has emphasized the individual level (Kelly, 1987). It may be that salient motivations

and preferences may be held at the group level rather than at the individual level as is frequently assumed in recreation research.

Familialism

The importance of family in the Hispanic culture has been well documented. It involves strong identification with, and attachment to, both the nuclear and extended family. In her work on the continuing importance of the family to Mexican Americans in the United States, Keefe (1980a) states, "Values and behaviors concerning the family run to the core of a culture and are more resistant to change than more superficial traits such as celebration of holidays and recognizing folk heroes. The extended family is more than a meaningful cultural tradition among Mexican Americans."

The importance and impact of the Hispanic family with regard to recreation choices will be further discussed in the section examining social structural variables.

Personal Space

Hispanics are considered a contact culture (Marín and Marín, 1990). They are comfortable at closer physical proximities than non-contact cultures (like the Anglo-dominated culture of the United States). Their personal space is smaller and may be more permeable. The concept and significance of group personal space and territoriality (an extension of the personal space construct) will be discussed in the section on socio-environmental behavior.

Power Distance

Power distance can be thought of as the level of power held by interacting individuals toward each other. While it is manifested at the individual level, it is a societally supported value. Cultures vary in whether they maintain high or low power distances. The Hispanic culture has been shown to hold high power distances. High power distance cultures generally value conformity and obedience (in lower power individuals) and believe high power individuals should not be challenged, but should be treated with deference (Marín & Marín, 1990). Regardless of power level, it is important to show respect for individuals when interacting so as not to deny their "personal power." This concept is extremely important whenever researchers have face-to-face interactions with Hispanic respondents and will be further addressed in the methods section.

Time Orientation

An extensive body of research exists on differences in time orientations across cultures. There are two major types of time orientation, future and present perspectives. The Anglo-dominated culture of the United States represents a future-orientation with its belief in planning for the future, delayed gratification, punctuality, and efficiency. The Hispanic culture represents a present-orientation with its belief in a more relaxed or flexible attitude toward time. Thus, with regard to interpersonal contact, it is the quality of the interaction, not the punctuality of the participants or the length of time spent together that is considered important.

Again this characteristic has important implications for research involving

Hispanic individuals and should be kept in mind when examining issues related to recreation goals and event planning. It is an important factor in the actual data collection process as well. An interviewer who pushes too hard or appears to be on a time schedule will likely be less well received than one who is relaxed and appears to be genuinely interested in the respondents. From my own experience I have found that taking time to sit and have a soda or lunch when invited has had a positive effect on the receptiveness of not only the respondents in question, but on the nearby groups as well.

Implications of Hispanic Cultural Values for Research

These several qualities of the Hispanic culture have important implications for research involving Hispanic individuals including issues related to conducting and interpreting research . The interpersonal dynamics between the researcher/data collector and the study participant are an important component of research. Difficulties related to differences in cultural values can arise due to the researcher appearing unfriendly either because of differences in personal space preferences, the desire for efficiency, or not showing the proper respect to the respondent. Also important is how the power distance issue and *simpatía* script (particularly the desire to avoid negative and promote positive interactions) affect a respondent's interaction with the researcher.

It is important to consider how these values affect the interpretation of the data. Researchers who do not understand these values are liable to misinterpret their data or observations. It is apparent that differences in cultural values are present and affect Anglo researchers' views of recreation (Pfister, 1991).

Anglo researchers' emphasis on time (how long did it take to plan and travel to the site, arrival time, length of stay, etc.), individual preferences and goals, activity orientation, and crowding all reflect the Anglo way of experiencing recreation. From an Anglo perspective, Hispanic recreation often seems rather haphazard, with little planning or goal-oriented behavior. Participants do not seem to "do" anything while recreating. As long as research continues to view recreation with Anglo cultural values in mind, significant progress toward understanding the recreation experiences of particular ethnic groups will be difficult. Suggestions for addressing these differences in values will be made in the methods section.

Ethnicity and the Recreation Experience

Much of the work done in the field of minority participation in outdoor recreation has been an attempt to explain participation rates and patterns relative to that of the majority. This line of research began in the early 1970's as a reaction to the civil rights movement. In an attempt to lessen the threat of urban racial violence and address the inequities brought to light during this era, major programs were begun to increase access to and quality of recreation programs for inner-city minorities (Kraus, 1987).

As a result, much of the work done on minority participation in recreation activities has been quite general in nature; looking at activities ranging from card playing and television watching to camping and fishing, rather than focusing solely on outdoor recreation as is the case for this thesis.

Four general theories have been proposed and tested to explain patterns of minority participation in outdoor recreation. Factors include **demographic**,

ethnicity, **marginality**, and **compensation** explanations.

The **demographic** explanation suggests that differences in participation between ethnic groups are due to structural differences in the populations that are related to and affect participation rates such as family size and marital status. An example of this would be hypothesizing that Hispanics' large family size (relative to Anglos) is an explanation for low participation rates in expensive (per person) recreation activities (see Washburne & Wall, 1979 for further discussion).

The **ethnicity** or subcultural theory suggests that differences in participation are due to the existence of minority subcultures with distinctive values and norms apart from those of mainstream America. An example of this phenomenon would be the celebration of Cinco de Mayo (Mexico's Independence Day) by Mexican Americans (see Washburne & Wall, 1979 for further discussion).

It is also important to note that while the ethnicity explanation has previously been used to account for under-participation, it does not necessarily predict only under-participation. It can also be used to explain high levels of participation or different styles or recreation behavior if there are cultural or sub-cultural explanations for the patterns.

The **marginality** theory suggests that differences in participation may be due to individuals' or groups' marginal position in society acting as barriers to participation. Factors included in the marginality theory are current and previous racism, insufficient time, money, transportation, or facilities, and feelings of isolation or apathy. An example of marginality would be hypothesizing that minority groups choose not to recreate at up-scale Anglo

areas like Malibu Beach because of perceived or actual prejudices on the part of the majority group in attendance (see McDonald & Hutchison, 1986 for further discussion).

In contrast to the three previous theories, which are frequently used to explain lower participation rates of minorities, the ***compensation*** theory predicts higher participation rates as a means of adjusting to the barriers minority individuals perceive in mainstream society (see Washburne & Wall, 1979 for further discussion). With respect to ethnic variation in recreation participation, the compensation theory has received little attention. It has been primarily proposed as an explanation for the high rate of volunteerism within the black community.

This latter view is important, however, because the use patterns observed on the national forests appear to be related to increasing use among ethnic groups and this view is the only one of the four theories that explicitly predicts anything other than minority under-participation (relative to Anglos) in recreation activities. While the recreation patterns on both the Angeles and San Bernardino National Forests do not necessarily suggest over-participation, they are not typical of the under-participation situations characterized by earlier studies.

A Brief Review of Existing Empirical Work

Figure 1 summarizes many of the early studies related to minority participation in outdoor recreation, including factors such as minority groups studied, theories tested, and results. Because this thesis intends to treat ethnic group recreation participation in a substantially different way than many of the

Investigators	Groups Studied	Theories Used	Found Support For
Antunes & Gaitz, 1975	Hispanics, Blacks, Whites	Ethnicity, Compensation	Blacks: Eth, Comp Hisp: Eth
Bultena & Field, 1978	Did not break into ethnic groups	Ethnicity, Marginality	Ethnicity
Buttel & Flinn, 1978	Did not break into ethnic groups	Demographics, Marginality	Demo Partially Marg
Hartmann & Overdevest, 1989	Hispanics, Blacks, Asians, Native Am., Whites	Ethnicity, Marginality, Demographics	Did not project results
Hutchison, 1987	Hispanics, Blacks, Whites	Ethnicity, Marginality, Demographics	Blacks: Marg, Demo Hisp: Eth, Marg, Demo
Hutchison & Fidel, 1978	Hispanics, Whites	Ethnicity	Ethnicity
Klobus-Edwards, 1981	Blacks, Whites	Ethnicity, Marginality	Ethnicity, Marginality
Klobus-Edwards, 1978	Blacks, Whites	Ethnicity, Compensation, Marginality	Did not project results
Lee, 1972	Did not break into ethnic groups	Ethnicity, Marginality	Ethnicity, Marginality

Figure 1. Summary of Early Empirical Work Related To Minority Participation In Outdoor Recreation

Investigators	Groups Studied	Theories Used	Found Support For
McDonald and Hutchison, 1986	Blacks, Whites	Ethnicity, Marginality, Demographic	Did not project results
McMillen, 1983	Hispanics, Whites	Ethnicity, Marginality	Ethnicity, Marginality
Settle, et al., 1979	Did not break into ethnic groups	Demographic, Marginality	Demographic
Stamps & Stamps, 1978	Blacks, Whites	Ethnicity, Marginality	Did not project results
Vernon, 1976	Blacks, Whites	Ethnicity, Marginality, Demographic	Partial Eth; Marg, Demo
Washburne & Wall, 1979	Blacks, Whites	Ethnicity, Marginality, Demographic	Ethnicity, Partial Marg
Washburne, 1978	Blacks, Whites	Ethnicity, Marginality, Demographic	Ethnicity, Partial Marg
West, 1989	Blacks, Whites	Ethnicity, Marginality	Marginality
West, 1977 & 84	Did not break into ethnic groups	Marginality	Marginality
Williams, et al., 1973	Hispanics, Blacks, Whites	Ethnicity, Compensation, Marginality	Hisp: Eth, Marg Blacks: Eth, Comp

Figure 1 (continued). Summary of Early Empirical Work Related To Minority Participation In Outdoor Recreation

existing studies, it does not appear necessary or useful to review each study on a case by case basis. The studies reviewed below are among the most frequently cited studies and reflect the diversity of thought within the field.

An early study of political and social participation rates found differing results for blacks and Hispanics (Antunes & Gaitz, 1975). The authors expected to see higher participation (relative to Anglo rates) for both minority groups due to strong ethnic identification and compensation. This was found to be true only for blacks; Hispanic participation rates were lower than either black or Anglo levels. The authors hypothesized that the difference between the two minority groups may be a result of subcultural differences related to the values and norms held with regard to social participation.

Hutchison (1987) focused on urban outdoor recreation participation of blacks, Anglos and Hispanics using primarily qualitative methods. Demographic factors (residential patterns, birth-rates and periods of settlement), marginality factors (socioeconomic differences, particularly for blacks), and ethnicity factors (family loyalty for Hispanics and male peer groups for Blacks) were found to affect participation rates.

Two studies by Klobus-Edwards (Klobus-Edwards, 1981 and Klobus-Edwards, Edwards, & Kemmack, 1978) examined the compensation, marginality, and ethnicity, theories, and found no support for the compensation or marginality theories.

The Klobus-Edwards studies add an important social-psychological dimension to the understanding of variation in participation. The 1981 study supported ethnicity as a factor in leisure participation rates among blacks. However, the 1981 study also found differences between blacks living in

primarily black neighborhoods compared to blacks living in primarily white neighborhoods. The leisure participation rates of blacks in predominantly white neighborhoods more closely resembled white leisure patterns than blacks in predominantly black neighborhoods.

Klobus-Edwards et al. (1978) proposed two possible explanations for the difference in participation rates of blacks from all black and mixed race neighborhoods. The first, *anticipatory socialization*, hypothesized that blacks in mostly white neighborhoods desire to adopt the values and activities of their neighbors. There is considerable support for this from West's (e.g., 1977, 1984) work on diffusion-adoption (discussed below) as well as Bultena and Field's (1980) work on structural effects on visits to National Parks (discussed in a subsequent section). The second explanation proposed by Klobus-Edwards et al., *compensation for lack of informal recreation opportunities*, predicted that more informal leisure activities such as "neighboring" are not as readily available to blacks in white neighborhoods. More formal recreation activities may reinforce blacks' position in the community by giving them a chance to interact with other members of the community.

Washburne (1978) and Washburne and Wall (1979) explored minority participation in wildland recreation. Both studies incorporated the ethnicity, demographic, and marginality theories in their attempt to explain apparent under-participation in wildland recreation. Neither study found support for the demographic theory and found only limited support for the marginality theory (insufficient transportation and educational deficits were found to be partial explanations for lower participation rates). Data limitations prevented a rigorous test of the ethnicity theory, but limited empirical and ample theoretical

evidence presented supported the ethnicity theory. Within the ethnicity theory the studies proposed two factors that may account for the differential participation of blacks. First, activities and locations may be chosen to be consistent with norms, values, or traditions among their ethnic group. Second, activities and locations may be chosen to maintain cultural identity (boundary maintenance).

Several of West's studies (e.g., 1977, 1984) addressed status group dynamics in the diffusion and adoption of recreation activities. There are four basic concepts involved in the status group dynamics approach (West, 1977): status-based diffusion (individuals of lower status groups adopt the activities of higher group in order to gain status mobility), status-based withdrawal (ceasing to participate in an activity because its perceived status level has changed), status defusion (an activity becomes status defused when it loses its strong ties to a particular status level), and status group barriers (barriers erected by a group's enforcement of values and norms upon itself).

More recent work by West (1989) explored the impact interracial relations have on black and white metropolitan Detroit residents' park usage, finding actual or perceived prejudice playing a role in park location choices.

A Critique of Existing Empirical Work

In looking at this body of literature as a whole, several observations and concerns surface. The first is related to the validity of using such wide ranging data as volunteer, political, and other types of social group participation as substantive support for patterns of recreation participation. The appropriateness of applying such diverse measures of participation patterns to

outdoor recreation needs to be carefully explored before applying these studies to the field.

A second concern relates to the number of studies that draw on secondary data to extrapolate explanations for differences in participation. Survey data taken for other reasons may not lend itself to a rigorous study of many of the important aspects of the various participation theories. Some work of this type is useful, but when so much of the work comes from this method it is difficult to gain much depth in the investigations.

A third concern relates to the legitimacy of generalizing of findings across time. Many of the studies were performed in the 1970's, often with data collected in the 1960's. This can be attributed to the dearth of work done in the 1980's, but these early studies must be used with care. The life circumstances of many ethnic groups has changed a great deal since this time (Thomas & Hughes, 1986).

A fourth concern relates to the variability of the results in existing studies. Some variability is due inevitably to the large variability among the populations studied and the methods used, but there are also more fundamental concerns related to the difficulty or variability in operationalizing and testing the various theories. Criteria for defining the evidence necessary to support each theory are lacking, allowing similar results to be interpreted as supporting different theories (Klobus-Edwards et al.,1981).

These attempts at explaining recreation participation rates have, however, yielded some consistent results. The majority of the studies tend to support the ethnicity explanation: specifically, there appear to be differences in recreation participation rates across ethnic and racial groups even when socio-

economic factors are held constant (Klobus-Edwards, 1978).

However, support for the ethnicity explanation may not invalidate the demographic, marginality, and compensation explanations of minority participation in leisure (Hutchison, 1988). Another way to conceptualize the "under-participation" controversy that potentially avoids the necessity of choosing between competing explanations is to examine ethnicity and the other explanations within the general sociological framework of social structure and personality.

Section Two: The Recreationist

Social Structure and Personality

Social structure and personality, as one of the main theoretical paradigms of social psychology, claims as its theoretical domain the study of "macro-social structures and processes and how these affect and are affected by individual psychology and behavior" (House, 1981). Individuals can be characterized as a combination of their individual psychology as well as the macro-social structures of which they are a part. Within the context of ethnic group participation in outdoor recreation, macro-structures constitute ethnicity and other demographic variables. Individual psychology pertains to leisure participation and meanings.

House's definition does not require the acceptance of a strictly deterministic view of social structure acting upon individuals; it allows for individuals acting upon the social structure as well. This is an important distinction for leisure research due to its emphasis on the recreationist as a

"purposive actor" (Knopf, 1983).

Research within this area has an extremely wide breadth of theoretical concerns, encompassing both sociological and psychological issues, along with incorporating symbolic interactionism as the primary linkage between social structure and the individual. However, a major obstacle to doing research within the social structure and personality domain is the difficulty in identifying the linkages that attempt to explain how macro-level structures come to affect an individual psychologically (and vice versa). Without this attempt at explanation, research does little to illuminate the phenomena under study because we learn only which structural variables are operating, but not the mechanism or explanation behind them. For example, knowing that socio-economic status affects occupational attainment is interesting, but it explains very little about how and why this is the case. Research that incorporates explanatory variables (interaction variables in social structural terminology) such as the degree of self-direction, level of paternal support, and motivations for occupational achievement provides a basis for exploring questions related to how positions within the social structure affect individuals better than that provided by statistical correlations between socio-economic levels and occupational attainment alone.

Exploration of leisure involvement among non-white populations, although begun in the 1960's, is still very much in its infancy. Early leisure research explored the utility of using social structural variables (primarily socio-economic status) in attempts to predict and explain leisure preferences and behaviors, but met with little success. Subsequently, the usefulness of a social structural approach has been questioned by recreation researchers (Hutchison,

1988). Based on the review above, it appears that the difficulties found with the use of the structural approach in recreation research are not inherent in the concept itself, but instead, in the way in which the concept has been operationalized.

The declining interest in social structural variables in recreation researchers is a detriment to studies focusing on ethnicity or ancestral group membership. While any person is both a member of societal-level institutions as well as a unique combination of social structural characteristics, there are certain characteristics commonly held among subgroups that emerge as patterns or clusters of social structural variables. These characteristics are the ones of interest for this project in that they occur at a level of analysis that is broad enough to explain individual behavior within a group context, but not so broad such that salient patterns are blurred. This means defining individuals in terms of their social structural background, rather than in terms of single structural variables as is the case with the four theories of leisure participation discussed above (demographic, ethnicity, marginality, and compensation). The next step is exploring how belonging to a particular ancestral group or to a certain socio-economic status (SES) contributes to the phenomena being studied, rather than simply attributing the observed differences in recreation to being "Hispanic" or of the "working-class." This distinction can be handled quite well from a social structure and personality perspective.

Ethnic Group Membership as a Social Structural Variable

There are two possible uses for social structural variables - they may be used to **predict** or **explain** a particular phenomena (Figure 2).

TO PREDICT:



TO EXPLAIN:

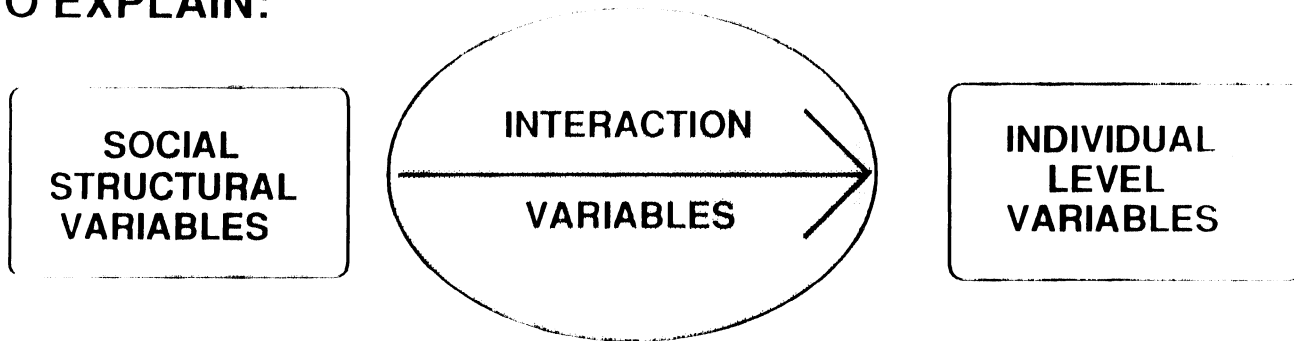


Figure 2. The Two Ways of Using Social Structural Variables

Much of the criticism of social structural analysis has focused on its weak performance predicting recreation participation. This emphasis on prediction has led to studies that focus on whether non-interacting social aggregates (e.g. social class, ethnic group) are associated with distinctive recreation patterns. For example, early research focused on finding statistical correlations at the individual level between socio-economic status and participation rates in various recreational activities, on the assumption that all individuals of a given socio-economic status would participate in similar activities. Through time, this assumption proved to be too simplistic; less than ten percent of variance in participation rates was ever explained in this way (Kelly, 1980). Not only was socio-economic status too broad of a variable to be meaningfully operationalized, but the relationship between socio-economic status and recreation choice is far too complex to expect it to be an important predictor by itself.

When ethnicity is investigated as a possible predictor of recreation choices, an individual's ethnic group membership has been operationalized as a categorical measure of an individual's ethnicity. A person is classified as black, Hispanic, Anglo, Asian, etc. with little regard to how strongly one identifies with such a designation. Beyond the fact that ethnicity is a much more complex phenomena (Keefe & Padilla, 1987), this treatment of ethnicity ignores the social structural framework of which people are a part since ethnic group membership represents only one dimension of their social background and identity. In order to better understand ethnic variation in outdoor recreation, it is necessary to explore the combination of social structural variables that may have an impact on outdoor recreation patterns in addition to ancestral group

membership. Among the possible variables that may have an impact on recreation behavior are socio-economic status, family structure, and strength of the connection with ancestral origins.

In addition to difficulties with how social structural variables have been used as predictors, there is the tremendous gap in knowledge of how the variables operate to explain recreation choices (the bottom half of Figure 2). Even when ethnic group membership has been found to be a predictor of recreation choices, questions regarding how an individual's ethnic or racial identity leads to these differences have not been addressed. Emphasizing prediction alone in social structural analysis leaves a conceptual gap between the two variables that must be filled if the structural variable is to be used in an explanatory fashion.

Starting in the mid 1970's, recreation researchers began to propose and test more sophisticated explanations for variations in recreational activities. Included in these explanations are questions related to the role actual interacting social groups (as opposed to social aggregates) play in recreation decision-making (Field & O'Leary, 1976). Families in particular were found to be important in influencing recreation patterns (Kelly, 1977). Also significant is that recreation styles in addition to activity choice, may be affected by and vary across social status levels (Kelly, 1987). Style refers to how people go about a particular activity, rather than what activity is chosen. Also, the socio-economic status of individuals' reference groups (Bultena & Field, 1980) or groups they wish to emulate (West, 1977, 1982, 1984) has an effect on recreation choices. In his review of previous work, Kelly (1987) noted this change in research direction quite succinctly: "The level of analysis began to shift from macrosocial

aggregation to microsocial interaction contexts in which leisure interests are learned and expressed."

These findings are of particular importance for this thesis in that they point the way toward a more successful treatment of ancestral origin as a predictor and explainer of recreation preferences, motivations, and behaviors. They point to the importance of examining any given phenomena from a micro-social perspective, *as the individuals themselves experience the phenomena*, rather than from a more abstract macro-social perspective that is too distant from the actual phenomena being studied to have significant explanatory power.

This has two major implications for the use of traditional social structural variables as predictors. First, this means understanding the individual in terms of his or her social structural background as it is experienced to varying degrees in different situations. The key is to isolate those variables that have an impact on the phenomena in question, and to explore their relationship to the phenomena, as well as their inter-relationships.

The second major implication has to do with the complex, multifaceted nature of seemingly simple variables. The key issue is to identify how individuals experience their position within the social structure. In the case of ancestral origins, this means exploring not only what group an individual belongs to (as has been done previously), but understanding how he or she identifies with his or her ancestral group and how this identification affects the way he or she thinks and acts toward the phenomena in question. It means exploring an individual's relationship to Anglo culture as well as to his or her own ancestral culture.

In the case of exploring recreation patterns, again this means understanding how individuals experience their recreation outings, in addition to recording their behaviors. This means exploring why they come to certain sites, what their style of recreation is, and what it means to them. Like social structural variables, the recreationist can be described in terms of a holistic package of recreationally-oriented variables. The process is the same - isolating those variables that are influencing the recreation experience being studied; essentially asking why they are here, why they do what they do the way they do, and why these people and not some other people?

The findings also point to ways of using social structural variables to explain recreation motivations, preferences, and meanings. It is necessary to fill the gap, to make the conceptual linkages, between the social structural variables and the phenomena being studied.

House (1981) proposes three principles to guide researchers in conceptualizing the necessary linkage between the social structure and individual psychology:

1) **Components Principle** Not all structural components influence a specific type of behavior or to the same degree. Therefore, it is necessary to identify which aspects or dimensions of the social structure are most relevant to understanding a given hypothesized relationship. This is a major point of emphasis for further understanding the role of ancestral group on recreation patterns.

2) **Proximity Principle** A major theoretical task in the study of social structure and personality is to trace how macro-social structures affect increasingly smaller social structures and ultimately those micro-social phenomena that

directly impinge upon the individual.

3) ***Psychological Principle*** There must be an adequate understanding of individual psychology so that we can specify and test when, how, and to what extent macrosocial phenomena and the proximal microsocial phenomena and stimuli they produce (or influence) affect individual personality or behavior.

The next several sections describe a potential social structural framework for this thesis, including social structural, personality, and interaction variables, along with the conceptual linkages. The purpose for organizing the framework in this way is two-fold. First, it develops the contextual framework for understanding the recreational activities within the larger context of individuals' lives, a major goal of this thesis. Secondly, from a management perspective, having the framework explicitly identified aids in revealing patterns of meanings and activities related to structural variables. This provides managers with both an explanatory and predictive tool.

Level of Analysis

As this thesis attempts to document, it is not useful to address structural variables at the most macro level. It is not practical to explain recreation patterns based on the knowledge that one is "Hispanic" any more than it is possible to explain recreation patterns based on the knowledge that one is "Anglo." Such a level is too broad and lacks depth to be anything but a cursory attempt at explaining recreation patterns. Nor is it useful to concentrate research upon the individual level, because the cultural context would be lost. Kelly's (1987) description of the dialectical nature of recreation helps to clarify this point: recreation is not wholly free or entirely determined; it is neither a total

expression of personal freedom nor under the complete control of the norms and values of the social system. It exists between these two poles.

To address adequately the ethnic variations in recreation patterns, it is necessary to focus upon divisions among the macro-level variables. While each person is a unique combination of characteristics within a group, there are certain characteristics commonly held among subgroups that emerge as patterns or clusters of social structural variables. Potential examples include differences between subgroups of the Hispanic ancestral group (Mexican versus Central American) or differences within a particular group depending on whether the individual was or was not born in the United States. These characteristics are the ones of interest for this project in that they occur at a level of analysis that is broad enough to explain individual behavior within a group context, but not so broad that salient patterns are blurred.

Social Structural Variables

The three social structural variables that have surfaced in the literature review process are ethnic group membership, socio-economic status, and family structure.

Ancestral Group Membership

Within the broad ancestral group designation of Hispanic, there are at least three sources of socio-cultural variation including ancestral origins, generational status in the United States, and levels of acculturation. Each of these will be discussed below.

Ancestral Origin

The generic term "Hispanic" encompasses two distinct cultural groups; the Caribbean-based cultures of Cuba, Puerto Rica, etc. and the Mayan-based cultures of Mexico, Central America, and parts of South America (Loretta, 1990). The differences between and within these groups has only begun to be explored in recreation research. Earlier studies that have included Hispanic participants have not identified the component cultures. More recent studies (Simcox, Pfister, & Hodson, 1989; Simcox & Pfister, 1990) have begun to separate Hispanics into their various component cultures and have found distinct differences between Hispanics of Mexican origin and Central American origins (the two most frequently found Hispanic groups in Southern California) in motivations, preferences, and demographic characteristics.

In their discussion of how to treat the various subgroups of the Hispanic culture, Marín and Marín (1990) suggest that some attributes may be generalized to the Hispanic population as a whole, with no loss of information or over-generalization, while other attributes should be considered on a group by group basis. Research in cross-cultural psychology has long made the distinction between etic (universal) and emic (group specific) attributes. Decisions about whether the variables of interest for a study should be treated as "etic" or "emic" should be made empirically.

Marín and Marín use two examples to clarify this point. The cultural script *simpatía* (discussed in an earlier section) has been shown to be an etic or universal attribute of the Hispanic culture. When speaking of this attribute, it is possible to refer to the entire Hispanic population, regardless of origin, with no loss of information or over-generalization. However, an attribute as basic as

median age has been shown to be emic or group specific. The median age of the Hispanic population in the United States is 25.5 years, with considerable variation between groups, from Mexican Americans at 23.9 years of age to Cuban Americans at 38.7 years old. Central Americans fall in between at 27.6 years old (Marín & Marín, 1991). Applying the median age of the population to a specific subgroup is an over-generalization and leads to incorrect information being used. Early indications (Simcox et al., 1989; Simcox & Pfister, 1990) are that the recreation experience contains both etic and emic characteristics. By lumping all Hispanics together past research efforts may have lost information on significant differences between groups.

Generational Status

The first distinction between Caribbean and Mayan-based cultures is important, but not the sole important source of variation within the Hispanic population in the United States. The second variable of interest is temporal, i.e., related to individuals' and/or their families' time in the United States. Southern California is the gateway to the United States for many people wishing to emigrate primarily from Mexico and Central America. The composition of the Hispanic population of Southern California reflects this in that there are people who have lived in the U.S. for weeks or months and those whose family has lived in the U.S. for generations. The number of generations that an individual has resided in the United States, or for a first generation individual, the length of time spent in the U.S., is an important factor in understanding an individual's ethnic identity. The Hispanic population of Southern California is constantly growing and changing, fed by a steady immigration of individuals along with a higher than average birth rate (relative to Anglo Americans). This results in a

steady increase of individuals of all generational levels through time.

Generational status has important implications for many aspects of an individual's life. Studies have found it to be highly correlated with socio-economic status, educational levels, and number of family members in the U.S. (Keefe, 1980a). Perhaps more importantly, generational status is an good indicator of length and depth of exposure to the culture of the host country, in this case the United States. It should be emphasized that it is not a direct measure of acculturation (the third source of variation), but is highly correlated with it (Padilla, 1980).

Acculturation

Understanding the socio-cultural dynamics involved in Hispanic recreation patterns requires an examination of the processes of ethnic group maintenance and change of the Hispanic population of Southern California, namely the process of acculturation. The classic definition of acculturation continues to be used today with few modifications. It reads:

"Acculturation comprehends those phenomena which result when groups of individuals having different cultures come into continuous first-hand contact, with subsequent changes in the original culture patterns of either or both groups... under this definition, acculturation is to be distinguished from culture change, of which it is but one aspect, and assimilation, which is at times a phase of acculturation." (Redfield, Linton, & Herskovits, 1936).

In theory, changes due to acculturation can occur in one or both of the groups that come into contact. However, in most cases this definition has been modified to include the element of a dominant and weaker group (Berry, 1980). In the United States acculturation has been treated as a "unidimensional continuum of change from ethnic minority culture to Anglo culture" (Keefe, 1980a). The process of acculturation is far more complicated than this and

bears further examination.

The process of acculturative change involves at least five dimensions including: 1) language familiarity, usage, and preference, 2) knowledge of cultural heritage, 3) ethnic pride and identity, 4) inter-ethnic interaction, and 5) inter-ethnic distance (Padilla, 1980).

Researchers in many fields have assumed that the process of acculturation inevitably leads to, and is essentially the same as assimilation (the incorporation of one group into another as expected in the "melting pot" theory). The terms are often used synonymously in some fields. This is in spite of evidence that for non-European ethnic groups in general, acculturation but not necessarily assimilation takes place in the United States. This can be shown by the lesser social, economic, and political power of minority groups (Gordon, 1964; Keefe & Padilla, 1987). A more thorough examination of the dynamics of acculturation is necessary in order to meaningfully incorporate it into the study of ethnic group recreation on the forests of Southern California.

Berry (1980) describes the process of acculturation as consisting of three stages: 1) **contact**, 2) **conflict**, and 3) **adaptation**. At minimum there must be **contact** between two autonomous cultural groups for acculturation to occur. Because of the seemingly inevitable creation of dominant and subordinate groups, contact tends to lead, in varying degrees, to **conflict** rather than a smooth change from two separate cultures to one unified dominant culture (complete assimilation). **Adaptation**, as an effort to stabilize and/or reduce conflict, is more likely to occur than assimilation because of antagonism between the two groups.

Berry (1980) discusses three types of adaptive mechanisms: 1)

adjustment, 2) **reaction**, and 3) **withdrawal** . **Adjustment** is

homogenization or complete assimilation of one group into the other. As mentioned earlier it is what research once assumed to always be taking place, but it is only one possible scenario. The second possibility is **reaction**, where the weaker group retaliates against the dominant group. The third possibility is **withdrawal** in which the weaker group separates itself from the dominant group. These three processes in varying combinations lead to socio-cultural change within the groups.

There are three general models of socio-cultural change within an ethnic group. All three incorporate the processes of acculturation (which can be broken into two parts; the loss of traditional cultural traits and the acceptance of new cultural traits) and assimilation (the social, economic and political integration of an individual into mainstream society) from the native culture to the host culture.

The three models vary in whether the process of acculturation and assimilation are viewed as 1) a single, linear continuum, 2) a matrix made up of the native and host cultures, or 3) a multidimensional model where changes are affected at the individual trait level. The first two models assume a steady movement toward complete immergence into the host culture (hence the "melting pot" theory), while the third model is referred to as one of selective acculturation with changes occurring at varying rates. In this latter view, some native traits are exchanged for host traits quickly, others only gradually, and still others maintained and strengthened (Keefe, 1980a; Keefe & Padilla, 1987).

While it is clear from Berry's (1980) work that assimilation is not the only possible strategy, the three models are useful in gaining an understanding of

the process of acculturation. Even though they are best suited to accommodate assimilation, each model would, to varying degrees, be able to incorporate all three adaptive strategies.

Research on acculturation and of Hispanics in the United States has shown that Mexican Americans have slower rates of acculturation than other ethnic groups that have been in the U.S. for the same length of time. Many possible explanations have been suggested to account for this phenomena including: 1) strong family ties, 2) the proximity to Mexico and culture of origin, and 3) institutionalized discrimination (Grebler, Moore, & Guzman, 1970).

Keefe and Padilla's (1987) three year study of the socio-cultural changes among Mexican Americans in Southern California tends to support the selective acculturation model. First, acculturation was not as quick or complete as would be expected under the first linear or matrix models. Second, acculturation was selective, resulting in a uniquely Mexican American culture (not just a combination of Mexican and American cultures).

Assimilation, which is essentially the degree to which individuals are incorporated into mainstream society, lagged behind acculturation in Keefe and Padilla's study. Economic and social (primarily more formal social situations such as work environments) assimilation were both found to increase between first and second generations, but then level off in subsequent generations. Political assimilation was hindered by the fact that economic assimilation tends to be limited to blue-collar jobs with few powerful positions held by Hispanics.

Keefe and Padilla's study is the most recent and comprehensive investigation of acculturation within a Hispanic subgroup. It is not clear whether rates and patterns of acculturation are etic (universal) or emic (group specific) in

Hispanics. At a minimum, Keefe and Padilla's work provides an excellent model of how to proceed with exploring acculturation and ethnic identity.

In addition to the general work on the nature of Hispanic ethnicity in the United States, there is also a body of work that looks at it specifically in relation to recreation.

Recreation and Hispanic Ethnicity

Recreation, like any other learned behavior, is firmly rooted in culture; culture is both the context and material of leisure (Kelly, 1987). In his classic study, Gans (1962) found extensive sub-cultural differences in leisure patterns based on family interaction patterns along with various ethnic forms of entertainment, celebrations, food and drink, games and communication styles.

The differences in leisure patterns between ethnic groups can be understood as stemming from the different meanings of leisure underlying these observable differences in behavior. In the case of Hispanic recreation, meanings may "serve as an instrument of identifying membership in some groups and separation from others (Kelly, 1987)." Consequently, research that strips away the cultural (or ethnic) context of recreation is limited in advancing our understanding of minority recreation.

Simcox and Pfister (1990) examined subcultural differences (between U.S. and non-U.S born Hispanics and Anglos) in motivations for and perceptions about recreation on the Angeles National Forest. Their work shows significant differences between Anglo and Hispanic recreationists, as well as between U.S. and foreign born Hispanics in how they perceive the site and why they come there. Included in their findings were differences in how appealing, relaxing, and natural the area was perceived to be - in all three cases non-U.S.

born Hispanics rating these attributes higher than U.S. born Hispanics or Anglos.

Floyd and Gramann (1991) focused more directly on the effect assimilation and acculturation have on Hispanic's (primarily Mexican American) recreation behavior and styles of participation on the Tonto National Forest in Arizona. While only preliminary analysis has been completed as of this writing, there is support for the hypothesis that levels of acculturation correlate with recreation motivations, with the most acculturated Hispanics most resembling Anglo recreationists and the least acculturated being the most dissimilar to Anglos. For example, escape motivations such as "having a change of scenery" were rated as more important by those of Anglo descent and more acculturated Mexican Americans compared to less acculturated Mexican Americans.

The findings of Irwin et al. (1990) study of Mexican American campers on the forests in New Mexico are similar to Simcox and Pfister's findings. Large family groups, concerns about better facilities, and a higher tolerance of interactions with other recreationists were among the characteristics shared by the Hispanics on the Angeles and the Mexican Americans on the Lincoln National Forest.

Family

Most studies that compare Mexican American and Anglo family structures tend to highlight the differences and ignore the similarities. Family in most societies is the dominant influence and social group. The chief difference, however, lies in the emphasis Mexican Americans place on the centrality of family in general, as well as on the importance of maintaining strong extended

family ties. Mexican Americans tend to have large (relative to Anglos) local extended families. This results not only from a strong cultural emphasis on maintaining family ties, but also from the tendency to reside in the same area for long periods of time (Keefe & Padilla, 1987).

This strong cultural emphasis on the centrality of family is what sets Mexican Americans apart from Anglos. Both groups value their family and yet Anglos also tend to have a much wider array of social circles in which they interact from work/school friendships to political groups and the softball league. Anglos also tend to be more geographically mobile. As discussed earlier, Hispanics are significantly less involved with voluntary organizations of all kinds than whites or blacks (Antunes & Gaitz, 1975). Further, kinship groups are the primary source of social support and interaction for Hispanics (Keefe & Padilla, 1987; Keefe, 1980b). The importance of, and loyalty to, family has been reported to affect aspects of individuals' lives ranging from stress reduction and coping mechanisms (Diaz-Guerro, 1979) to food choices (Wallendorf & Reilly, 1983).

Recreation and the Hispanic Family

Family structure is an important variable in studies of recreation preferences and meanings. The preferences and meanings associated with outdoor recreation experiences of single adults, young families, families with teens, and elderly adults tend to be quite different.

Of particular interest in this case is the role that outdoor environments play in facilitating the desired familial interactions. These roles include: development and expression of family intimacy, both by giving dispersed families the opportunity to come together (particularly important when thinking

of extended families) and by setting aside a time for family activity (Kelly, 1987).

The importance of family interaction during recreation is not unique to Hispanic groups; this has been noted for Anglo leisure groups as well (Kelly, 1983). What is unique, however, is the emphasis on extended kinship groups as the social unit, rather than on the smaller nuclear family unit as is the case in most Anglo recreation groups. Hispanic recreation groups tend to be made up of large (nearly double the size of Anglo groups), multi-generational family units, with friendship groups much less common (Simcox & Pfister, 1990). The importance of being with family during recreation has also been noted by Gramann and Floyd (1991), with an interesting pattern. Being with family was found to be a stronger motivation for recreation outings for those of longer generational tenure. They hypothesized that the disruptions of family ties caused by immigration make this a more central issue for those who have been in the United States longer.

Also important for the study of Hispanic recreation is the difference between Anglos and Hispanics in how they perceive familial obligations and family-related sources of emotional support. Anglos see these as important during times of stress or crisis, while Hispanics see them as equally important during good times such as sharing in celebrations and social events (Marín & Triandis, 1985).

In addition to the traditional variations and effects of family structure on recreation preferences and meanings, the number of family members in the U.S. is an important factor for first generation Hispanics. Keefe's (1980a) work clearly showed that immigration has an important impact on Mexican Americans' local family network. Much of the primary kin network is left behind

in Mexico, while there is likely to be secondary kin (aunts, uncles, grandparents, etc.) already residing in the United States. Given the large size of the Hispanic recreation groups, attention should be given to the structure of these groups, particularly those including first generation individuals.

Socio-Economic Status

The third structural variable is socio-economic status (SES), which has often been used to predict recreation participation. Traditional measures of SES combine income, job prestige, and educational level to categorize individuals and families into SES levels relative to the rest of the individuals and families within society, with income being the biggest factor in determining SES. As an illustration, with the current poverty level in the U.S. at \$12,092 for a family of four, 26.7% of Hispanics in the United States are at or below the poverty line, with the median household income for Hispanics of Mexican descent at \$19,839 (U.S. Department of Commerce, 1988, 1989).

In order to understand the effect SES has on an individual's way of life it is necessary to keep in mind House's (1981) three principles mentioned earlier, particularly the proximity principle. Current ways of classifying individuals into different statuses are too generalized to make meaningful predictions about how individuals experience their SES. This is particularly true when the individuals in question are of a different culture than the one creating the categories.

Measures used to designate SES are culturally relative, as well as relative to the reference group the individual uses to make comparisons about his/her status. This fact can often be ignored in many studies, but is of critical

importance when studying ethnicity and acculturation issues. For example, in an upper class neighborhood, anyone who does not have a job that provides a chauffeur driven limousine may be considered as having a less prestigious occupation, regardless of his/her income. While in a lower class neighborhood, anyone that has a steady job that pays well enough to allow for the purchase of an automobile may be considered well-off. If an individual comes from a culture where the average education level is the sixth grade, then completing high school is a major educational achievement.

Within leisure research there is (at least) one example of relative effects having an impact on an individual's recreation choices. Research exploring visitation patterns to national parks has shown that it is primarily a middle class phenomena, but the SES of an individual's neighborhood or community (an individual's reference group) affects park-going in addition to his or her own SES (Bultena & Field, 1980).

Consequently, designation of individuals into various status levels leads social scientists to make many assumptions about groups of people that may or may not be useful or accurate. This raises several questions when trying to understand how Hispanic individuals perceive their SES and its influence on recreation patterns, including:

- 1) Is it valid to designate poverty or lower class levels based on the average of all residents of the United States, or would designation relative to some subgroup of Hispanics yield a more precise and meaningful measurement of SES levels?
- 2) Is an objective measure of SES using just Hispanics for comparisons adequate by itself?

- 3) Should economic or educational statuses from an individual's country of origin be considered when designating his or her attainment and mobility?
- 4) How do the measures of the various status designations from an individual's country of origin compare with those in the United States?
- 5) How is occupational prestige affected when potential occupational opportunities fall into different ranges than typical for mainstream America?
- 6) How is SES affected by the economic support (both in the form of actual money and bartered goods and services) Hispanic individuals can generally expect from their kin group?

A potentially more meaningful way of examining SES comes from Gordon's (1964) concept of an ethclass. Both ethnic group membership and SES are important aspects of how individuals identify themselves and each other. Within an ethnic group an individual shares to some degree a sense of "peoplehood" or group history with the group members. Within SES individuals tend to share similar values, behaviors and life experiences (Gordon, 1964). Individuals are not either ethnic group members or SES holders; they are both. These two variables can be seen as interacting to create an "ethclass," which consists of the effects of both ethnic group membership and social class, that is not fully appreciated when broken into its separate components. Combining both ethnic group membership and SES helps to avoid some of the difficulties mentioned above when using SES alone.

In addition to these more general issues related to SES, more specific issues can be examined as they related to recreation patterns.

Recreation and Socio-Economic Status

Since the 1960's most studies of outdoor recreation have dealt with a fairly homogeneous population from a SES perspective (Hutchison, 1988), focusing primarily on the middle class. This may have restricted the potential of SES as a predictor due to limited variation. The work that has been done on how SES affects recreation patterns indicates that SES accounts for variations in styles of recreation (as does ethnic group membership), but not in actual rates of recreation participation. Style refers more to how people go about a particular activity rather than what activity is chosen (Kelly, 1987). Using picnicking as an example of style; a young couple may have wine and cheese in a secluded area of the park, an Anglo family may have hotdogs and potato chips near the playground area, and a Hispanic family may roast tamales and have tacos away from the more developed sites. Nearly any recreational activity is flexible enough to be adaptable to different meanings.

Personality Variables

The personality component of the framework refers simply to the behavioral manifestations of an individual's relationship to the recreation setting. This includes recreation choices based on preferences for location, type of site, activities, members of the group, and timing of recreation.

Interaction Variables

The importance of the interaction component of the framework was discussed in the second section of the literature review. Variables within this component comprise the content of the relationship between individuals and

their recreation experiences and facilitate the explanatory use of structural variables. Because little work has been done with the social structure and personality framework in mind, there is very little in the literature to act as theoretical guide for identifying potentially important interaction variables. Because of the importance of the interaction component of the framework to the objectives of the thesis a considerable amount of effort is spent developing a theoretical perspective for elaborating upon this component. This perspective is developed in the following section.

Section Three: The Socio-Environmental Relationship

Toward a Theoretical Perspective of Socio-Environmental Behavior

Many authors have addressed how people use the environment. Much of outdoor recreation research has a similar basis for inquiry - how the nonhuman environment influences the social environment (Lee, 1973). How the relationship between people and the environment is conceptualized depends a great deal on the discipline doing the conceptualizing (Knopf, 1987). For example, the forestry profession has emphasized both recreation activities and physical attributes in conceptualizing socio-environmental behavior, while environmental sociology emphasizes the social context in which recreationists act.

To more accurately conceptualize the relationship between people and the leisure environment, a more systematic or holistic representation of the "organized complexity observed in everyday recreation behavior" (Lee, 1973) is attempted. Within the field of environment and behavior research, a number of

investigators including Stokols (Jacobi & Stokols, 1983; Stokols & Shumaker, 1981) and Altman and Rogoff (1987) have proposed a general theoretical orientation to operationalizing the relationship between people and the environment which they refer to as transactionalism.

The transactional approach is particularly relevant for studying the relationship between people and the environment because the unit of analysis consists of "a spatial and temporal confluence of people, settings and activities that constitutes a complex organized unity" (Altman & Rogoff, 1987). This "organized unity" can be thought of as a behavioral setting where:

"Behavior, places, and temporal dynamics are mutually interlocked such that behavior gains meaning by virtue of its location in a particular spatial and temporal context, and the context gains meaning by virtue of the actors and actions that exist within it. Thus, aspects of the behavior setting are defined by and define one another, and lend a collective unity to the stream of behavior within the setting (Altman & Rogoff, 1987).

Stokols sees the focus of environment and behavior research as increasingly directed at developing concepts and measures for representing the strength and quality of people's relationship or attachment to places. This approach to environmental psychology seeks to understand:

- (1) The degree of interdependence between individuals, groups, and surroundings.
- (2) The factors affecting the development and strength of such interdependencies.
- (3) The role of people-place dependencies in mediating occupants' behavior and well-being (Jacobi and Stokols, 1983).

This relationship can be thought of as consisting of two components; the content of the environmental experience and the process of experiencing settings. The content of the relationship refers to the meanings held toward the environment. The process of developing and maintaining the relationship is seen in the dynamics of socio-environmental regulation. These two

components are the building blocks of the interaction variables that will aid in understanding the relationship between individuals and their recreation experiences. Each of these components will now be discussed.

Understanding Meaning

Meanings can be thought of as the content of the person/environment relationship. Meanings help us make sense out of seemingly "strange" or inconsistent behavior by illuminating the context behind the actual behavior. A behavior cannot be understood isolated from all meaning and context, but instead should be considered within the larger set of social transactions (Altman, 1981). For example, stripped of all context and meaning, the recreational activity of picnicking seems rather strange. Individuals who have kitchen and dining facilities capable of preparing and serving a tasty and comfortable meal pack up their family and some rudimentary cooking equipment to drive to an outdoor area to eat food they probably would not consider eating at home. Their experience may include crowds, sand in the hotdogs, insects, and balancing flimsy paper plates while sitting on the ground. The reasoning behind this behavior is not clear until meanings and context are considered. The opportunity for a family outing, a break in the routine, a chance for some sun and fresh air, or sharing an experience with your children that your parents shared with you may play a role in the decision to picnic. Suddenly burnt hotdogs and traffic jams make more sense to the observer of picnicking behavior.

Unfortunately there is no simple definition of the term "meaning" as it is being used here. It is, in part, similar to motivation. It is an attempt to elaborate

what lies behind behavior or preferences. It is highly reliant upon the context of the situation. It is a more holistic view of recreation activities and places in that it attempts to understand them within the larger context of people's lives.

Meanings are present at many levels and can be applied to different aspects of the environment. They include tacit, background assumptions similar to those discussed earlier regarding interpretation of cultural phenomena, as well as more individually significant factors like past experiences and memories.

Several authors have grappled with defining and operationalizing the concept of meaning as it relates to an individual's relationship to the physical environment. Williams (1980) has defined meaning as, "a psychological variable describing the images or definitions a person holds" toward an object or place. Stokols and Shumaker (1981) refer to the social imageability of a place as the vivid and collectively held social meanings of its occupants. Lee (1973) sees meanings as symbolizing relationships among individuals, groups, and the environment. The meanings themselves can be seen as lying along a continuum from functional (based on how an object or space is used) to symbolic (based on what an object represents) both at an individual and cultural level (Williams, 1980).

According to Stokols and Shumaker (1981) six factors may be used to describe and analyze meanings. They are: 1) **content** of the meanings, 2) **complexity** - the number of shared meanings held about a place, 3) **clarity** - how many people hold the same meaning about a place, 4) **heterogeneity** - the number of subgroups that hold different meanings about an area, 5) **distortions** - discrepancies between the meaning of a place and the activities that occur there, and 6) **contradictions** - the inconsistency between the

meanings held toward an area and the occupants' preferences. These six factors are useful both conceptually (to help clarify the idea of meanings) and methodologically (to provide a basis for analyzing the meanings held by occupants toward a given area or activity).

Meanings may be held at many levels and toward different aspects of the environment. The distinction between places and environmental objects is an example of this. New or undifferentiated spaces evolve into places as individuals and/or groups experience them and attach meanings. A melding of objective and subjective attributes results in a definition of a place that can only be represented by the relationship or transaction between the individual or group and the place. The process is the same for the transition of environmental attributes into environmental objects. The difference between places and environmental objects is one of scale. Places are a reflection of the environment as a whole, while environmental objects refer to specific aspects of the environment. A place might refer to a favorite stretch of the Au Sable River where an individual canoes, camps, and fishes, while an environmental object might be a particular pool where "the big one" lives. Presumably there are objects within an environment that are more or less salient in people's definitions of places (Lee, 1973). The way people differentiate and assign meanings to their environment defines their relationship to it.

Understanding the meanings individuals hold toward the areas they choose for recreation is crucial for exploring recreation patterns. For example, referring back to the picnickers, there are many possible places to picnic. If we observe picnickers at a local park we may ask why they chose to have their

picnic there. Is it because it is close to home; because it has good picnicking and playground equipment; because they went there with their parents or because they know most people using the park will be local families on a day outing like themselves? The reason for choosing an area is a significant part of people's relationship with a place.

Meanings of places and environmental objects are the result of socio-environmental transactions on many levels. Of particular interest for this thesis are meanings held at the socio-cultural group level, for both Hispanic and Anglo users of the national forest, as well as variation in socio-cultural meanings among Hispanic subgroups. At the most basic level are individually held personal meanings. Learning camping skills as a child in Yellowstone would influence the park's meaning to an individual. Group meanings are less idiosyncratic than personal meanings, but are not necessarily widely held. The experience of solidarity among family members during a visit to Yellowstone would influence the park's meaning to the family. Social imageability consists of the shared meanings held by the occupants of the site. Yellowstone as a premier vacation spot is an example. These socio-cultural meanings can be thought of as the "glue that binds individuals and groups to a particular environment" (Stokols & Shumaker, 1981).

Because meanings may be held at individual, as well as cultural levels, it is extremely important to understand the array of meanings attached to the outdoor recreation activities and settings held by all the various ethnic groups (as well as the different meanings within these groups).

The Dynamics of Socio-Environmental Regulation

The second component of an individual's or group's relationship to the environment is the process used to maintain, communicate, and regulate socio-environmental meanings. This is a boundary maintenance and regulation process that reflects and is reflected in people's spatial relationship to each other and the environment. Altman (1981) refers to this concept as privacy regulation. In its most basic form privacy can be defined as "selective control of access to the self or to one's group" (Altman, 1981). It is a dynamic, give-and-take process of boundary regulation between individuals, groups, and the environment. Lee (1973) refers to a similar process as socio-environmental regulation. The term socio-environmental regulation will be used rather than privacy because it is more consistent with the other terms used in this review.

There are (at least) two possible ways to conceptualize the process of socio-environmental regulation in the outdoor recreation areas used by Hispanics. The first is in terms of territoriality. Altman (1981) defines territorial behavior as:

"...a self/other boundary-regulation mechanism that involves personalization of or marking of a place or object and communication that it is "owned" by a person or group. Personalization and ownership are designed to regulate social interaction and to help satisfy various social and physical motives [p 53]."

This is an ecological view of people. It refers to ownership or possession of geographic areas based on their function. The territory and its boundaries are associated with objects and space.

Before the discussion of territory proceeds further, it may be helpful to trace the course of animal and human territoriality research. Much of the early work on territoriality was done with animals. The holding, marking, and defense of a territory was thought to be a biological imperative. Subsequent work

showed that while animal territories serve the physiological needs for survival, they are not solely biologically (genetically) controlled. Animals show more flexible and complex responses to their territorial needs than would be expected for instinctual behavior. There is a learned component to territorial behavior in animals (Brown, 1987).

Work on human territories has followed essentially the same course as that on animal territories; with territorial behavior first being considered a biological drive, then a socially learned behavior. Animal territories are seen as having a learned *component*, much of the work on human territory considers it a completely learned phenomena (Brown, 1987). Also different are the functions of animal and human territory. Animal territories serve survival needs, while human territories also serve psychological (Altman, 1981) and social (Gold, 1982) needs. Of particular importance for this thesis is the fact that human territories are frequently used by occupants to communicate their identity - a kind of relationship to the environment. Where people are located, how they convey "ownership" of an area, and how they defend their territories are all expressions of their identity.

The differing functions of human versus animal territories is the important distinction between the two and must be kept in mind to fully understand human territoriality. The image of a bull moose defending his breeding grounds does not lend itself to an appreciation of the complexity of the human territory.

To better illustrate human territories and territorial behavior, territories can be broken down into various types based on several factors. These factors include differing functions, geographic features, social units involved, temporal duration of ownership, and how territorial possession is communicated to

others. Altman (1981) and Brown and Altman (1981) have included these factors in their designation of territories based on the duration of the ownership or occupation of the territories, the centrality of the territory in occupants' everyday lives, marking intentions and range, and responses to invasion. Using these factors, three types of territories emerge; primary, secondary, and public. These are illustrated in Figure 3.

Primary territories are those whose exclusive use belongs to their owner. They are relatively long-term in duration and are central in the everyday lives of the occupants. Examples include homes and offices. In secondary territories occupants have free access and some degree of control over who else occupies the area. Examples include neighborhood bars and social clubs. The basic definition of public territories is that they tend to be temporary and essentially anyone who chooses to do so has occupancy rights. Ownership is through occupancy, not actual possession. Examples include public parks, streets, and a table at a restaurant. Each of the types of territories may serve a variety of functions.

In theory, this categorization would place nearly all outdoor recreation areas in the public territory designation (exceptions would include privately owned clubs such as backyard tennis courts or country clubs). All locally, state, and federally owned recreation areas would be considered public territories, open to all who choose to use them. In reality groups often impose meanings on the environment that imply more control over use. Thus, conflict results over what formally is public territory, but to some groups function more like secondary territories, resulting in certain groups feeling and being welcome or unwelcome in "public" recreation areas.

Dimension	Primary Territory	Secondary Territory	Public Territory
Duration	Long	Short, but regular usage common	Short
Centrality	Very central	Somewhat central	Not central
Marking intentions	Usually personalizing or decorating	Often claiming territory	Intentionally claiming territory
Marking range	Heavy reliance on a wide range of markers and barriers; bodily and verbal marking common	Some reliance on physical markers; bodily and verbal marking common	Few physical markers or barriers; much bodily and verbal marking
Responses to invasion	Cannot relocate easily, can use legal recourse, reestablishment of physical markers and barriers, as well as bodily and verbal markers	Can often relocate, use immediate bodily and verbal markers, as well as some reemphasis of physical markers	Can relocate or use immediate bodily and verbal markers

Source: Brown, B.B. (1987). Territoriality. In D. Stokols and I. Altman (Eds.) *Handbook of Environmental Psychology*. New York: John Wiley.

Figure 3. Types of Territories

Viewing outdoor recreation sites as "free spaces (or as being referred to here, public territories) where everyday normative constraints are relaxed or even lacking" is what Lee (1973) describes as a "presociological" view of recreation. Recreation areas do not occur in a social vacuum, they are subject to socio-environmental regulation (most likely as secondary territories). It is necessary to explore whose secondary territory an area is, and how the territory is defined and defended in order to understand the socio-environmental dynamics of a recreation area.

In Lee's (1973) view, much of what is described as territorial behavior in humans is not defense of an object or spaces as assumed in traditional territory theory, but is actually defense of a social relationship. Therefore, a second and possibly more appropriate way of conceptualizing socio-environmental regulation is proposed through the idea of interactional territories, or more aptly called, group personal spaces.

On an individual level, personal space refers to "an area with an invisible boundary surrounding the person's body into which intruders may not come" (Altman, 1981). On the group level, it refers to areas where interactions between groups occur. The boundaries that occur are a result of intergroup orientation, rather than an orientation to geographic objects or spaces (Altman, 1981). As a result, this boundary is not tied to a specific geographic area (such as home), although it may be expressed in spatial terms. The group is essentially the center point of the space. The boundaries are relative to this center point and may be regulated by defining and defending them relative to geographic objects or spaces or by the center point (the group) relocating to adjust the spacing. Both of these regulatory processes are dynamic;

boundaries expand and contract based on personal, interpersonal, and situational factors.

Beyond these etic characteristics of territories, it is important to keep in mind the differences in personal space (discussed in the earlier section on Hispanic cultural values). Given the differences in individual personal space, it should be expected that there will be differences in group personal space as well. Questions related to intra and inter-ethnic differences in group personal space will be pursued in this research.

A Theoretical Perspective of Socio-Environmental Behavior

The fundamental building blocks of a theory of socio-environmental behavior have been laid out in the previous section. All that is left to do is to build with them. Socio-cultural meanings provide a structure with which to build.

Socio-cultural meanings that arise from the relationship between people, groups, and places are at the most basic level. They in turn may lead to social imageability (a sharing of some subset of meanings of a place between actual and potential occupants of a site). Lee (1973) stresses the importance of this concept in his study of outdoor recreation behavior when he hypothesizes that "a minimal requirement of recreation is an unusually high degree of consensual agreement regarding the meaning of environmental objects salient for the activities pursued." ➤

The social imageability of a place leads to a perceived social field of the physical environment (or in Lee's terminology, a situated communication field) in which people act. Stokols and Shumaker (1981) define the social field of a

place as "the totality of meanings conveyed to current or prospective occupants." The perceived social field is made up of the actual content of the meanings held toward a place as well as the mechanisms for regulating socio-environmental meaning. Figure 4 illustrates the linkages described above.

The social field of a given place presents to potential users a behavioral context. To the extent that the social field is known to individuals and/or groups, they can decide whether or not to enter the field based on similarities and differences of the socio-cultural meanings represented in the field relative to those they hold.

It should be noted here that the social field and its two constituent components (socio-cultural meaning and socio-environmental regulation) are not likely to be immediately accessible information for the individual or the researcher. Because these elements are so basic the individual may or may not be conscious of their presence and how they affect decision-making. Lee (1973) found that while he could observe a pattern of site selection based on composition and proximity of other groups at beaches when asked, the beachgoers themselves were unable to offer reasons for choosing the sites they did. He found his own observations more useful in understanding site selection than the explanations (or lack thereof) of the respondents.

The theory of socio-environmental behavior developed by Lee (1973) is a logical outcropping of the conceptualization of the social field. He states that, "individuals seek outdoor areas where they may share a scheme of order (meaning) with others similar enough to themselves to be able to take for granted many of the everyday normative constraints. It is only in such situations that individuals feel at home or that they belong." This is presumably the part of

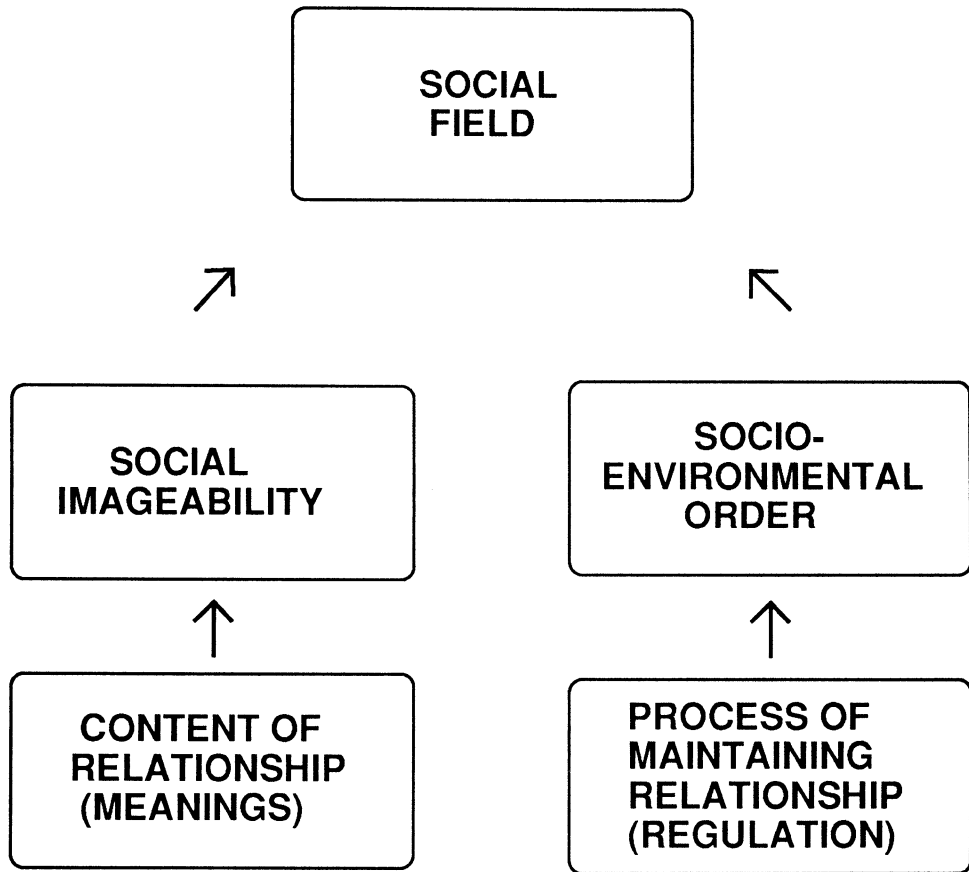


Figure 4. Components of the Social Field

the reasoning behind Irwin et al.'s (1990) statement that "ethnic group members may be seen to congregate at specific locations, such as regional parks. The assemblage of the ethnic group and participation in certain activities serves to support its subculture and makes clear its identity as distinct from mass culture."

Exploring the social field seems to be the key to getting beyond the surface level preferences expressed by visitors related to what they like or do not like about a given area. Having adequate and well-maintained facilities is only one aspect of the recreation experience, but the experience is much more. Anyone who has endured the uncomfortable, crowded seating arrangements, or long lines to use bathrooms at a sporting event knows that facilities do not make or break the experience. Factors like the reason you came in the first place, your history with the team, the people you are with, how your team is playing, your fellow fans around you, and the intoxicated fan of the opposing team behind you all play a substantial role in whether the recreation experience will be considered "fun" or a "drag." These are all parts of the social field.

In the case of the recreation experiences at sites on the national forests, exploring the social field involves addressing questions such as what the national forests mean to individuals and groups, why they came to a site that day, how often and how long they have been coming to the site, who they are with, and what role using that site plays in their personal and cultural identity.

Based on this conceptualization, the primary goal of this thesis can be reworded to focus on exploring the social field in which individuals and/or groups act, specifically those arising from the relationship between the Hispanic users and the dispersed and relatively undeveloped sites on the Angeles and San

Bernardino National Forests.

Potential Interaction Variables

Unlike the section on social structural variables which was firmly rooted in the literature, much of the material in this section relies heavily on theoretical perspective laid out in this section, along with a bit of speculative reasoning. The listing of variables should not be considered all inclusive or as a completely accurate portrayal of the study situation, but is an exploratory attempt at describing the interaction (or relationship) between people and the recreation sites they choose. Its primary merit is as a theoretical exercise in trying to understand the recreation experiences being studied from a more holistic perspective.

Early work in the field of outdoor recreation assumed recreation settings to be socially neutral and that the event or experiences taking place was solely due to the interaction between the individual or group and the resource. Lee (1972) challenged this view suggesting that recreational settings are subject to the same social pressures as other social settings. Consequently, the meaning and significance of both physical and social attributes of recreation settings need to be examined.

The following sections attempt to characterize potentially important interaction variables arising from the setting itself. Interactions that arise within the individuals themselves or from aspects within social structural variables are not considered within this section, but are likely to play an important role in understanding the relationship between people and the site. The potential interaction variables that may be affecting Hispanic recreation experiences can

be described in three groups: 1) resource quality, 2) resource availability, and 3) the importance of recreating with other Hispanics.

In discussing resource quality and availability it is important to keep in mind that both actual and perceived attributes play an important role in a person's judgment of resource quality or availability.

Resource Quality

Previous research (Simcox and Pfister, 1990) has suggested that among the key **physical attributes** that affect visitor's perceptions of resource quality are *water availability* (much of the activities witnessed at sites around the forest seem to center around freshwater streams and rivers) and *quality* (there seems to be discrepancies between actual and perceived water quality), *sun/shade desirability* (related to eco-type or landscape preferences, but also sun-bathing as a culturally influenced practice), *site size* (since typical Hispanic groups are nearly twice the size of Anglo groups, sites need to be either larger in size or have loosely defined and expandable boundaries), *proximity to home* (perceptions of sites as being too close or too far from home may affect quality judgments), *cover/open desirability* (related to privacy, amount of cover versus open areas tends to regulate both the activities and social interactions at the site), *safety* (perceptions of what constitutes a safe place for children and adults to recreate seem to vary), and finally *eco-type* (work on landscape preferences gives tentative support to the idea that people tend to prefer landscapes which contain aspects that are familiar to them).

The hypothetically important **social attributes** of resource quality include *who currently utilizes an area* (existing social definitions influence

whether or not a person feels comfortable using the area), *current activities* (related to the effects of current users, potential for conflict between users and uses), *current management standards* (related to above two attributes), *prejudice* (whether actual or perceived this factor weighs heavy in the judgement of quality), *privacy needs* (includes actual and perceived crowding effects, as well as intra- and inter-ethnic privacy needs), and *cost of entry* (entry fees may be seen as an attempt at social control).

Resource Availability

The hypothesized important **physical attributes** of resource availability include *knowledge of potential sites* (the array of potential recreation sites in Southern California is quite diverse and far-flung, it is impossible to have knowledge of everything available, particularly if you speak little or no English), *proximity of potential sites to home* (there is a maximum distance range that people can/will travel for day-use recreation), *cost of potential sites* (there is a maximum cost that people can/will pay for day-use recreation).

The hypothesized important **social attributes** of resource availability include *evaluation of potential sites' ability to meet needs* (a site that does not substantially meet an individual's needs will not be considered part of the potential array) and *evaluation of the acceptability or appropriateness of the site* (while similar to the above attribute, this evaluation is of the fit between the resource and the individual wishing to recreate there; if you wish to recreate at a certain location, but don't feel you belong there it is not part of your potential sites).

Importance of Recreating with Other Hispanics

The final interaction variable, the hypothesized importance of recreating with other Hispanics, has been pulled out of the social attributes categories in order to highlight its importance. This variable encompasses several components of ethnic group membership, including maintenance of ethnic identity for yourself and/or your children, reforming bonds lost in immigration, and the fact that the inverse of recreating with other Hispanics is not recreating with non-Hispanics. Whether or not there is interaction between recreation groups, areas used exclusively or primarily by one ethnic group can provide users with an area where they may share a "scheme of order with others similar enough to themselves to be able to take for granted many everyday normative constraints" (Lee, 1972). The implications of this variable go far beyond any other single variable in influencing the meaning and preferences for outdoor recreation; ethnic group membership becomes the fundamental reason behind the outdoor recreation preferences.

Section Four: Developing a Testable Model

Focusing the Inquiry for Field Research

Thus far the literature review has been an attempt to characterize as many of the potentially important variables as possible in order to provide a holistic look at the role of ethnicity in outdoor recreation. It is impossible within the scope of this thesis to adequately address all the possible issues identified in the review process. It necessary to do this in order to develop a conceptual framework to act as a guide and reference for research attempting to gain an

understanding of the meaning of wildland recreation to the Hispanic users of the forests of Southern California.

The first step in focusing the thesis has been to concentrate on the social environment rather than the physical attributes of the setting. This does not mean that the physical environment will be totally ignored, rather it means that it will not be treated as a product or commodity that can be inventoried, packaged, and sold (see McCool & Stankey, 1985). The meanings and symbolic content of the physical environment will be emphasized rather than the functional qualities. This decision is based on two factors. First, the focus on meaning is based on personal observations of Hispanic recreation use throughout Southern California in a variety of recreation locations, from city parks to ocean beaches. It is striking how similar the activities are regardless of the physical resource type. No matter what the potential of the resource may appear to be in terms of attributes, the recreational activity typically revolved around large family groups supported by a great deal of equipment (relative to Anglo groups) who are in various stages of preparing, cooking and eating traditional Mexican foods. Beyond this central activity, children played, and adults, young and old, listened to radios (frequently tuned to Spanish-speaking stations), played cards, napped, visited among themselves, and "necked." Furthermore, Edgerton (1979) made similar observations of the same activities pursued by Hispanics in his study of Southern Californian ocean beach behavior.

The second factor on which this decision was based are conversations with several individuals familiar with Hispanics of Mexican American origin. In discussions with Drs. Margo Garcia, Susan Keefe (university professors who have done extensive research related to various aspects of Mexican Americans'

lives), and Debbie Chavez (the leader of the U.S. Forest Service's Wildland Recreation and the Urban Culture project), along with Bill Woodland (a former recreation technician on the Angeles National Forest) and Francisco Venezuela (a Hispanic Forest Service employee) a common theme was that the best way to go about understanding the recreation patterns in question would be to concentrate on the social interaction aspects of recreation, rather than on the physical resource. Dr. Keefe, in particular, commented that being with one's family is not just a means to accomplishing a recreational end, it is the end in itself.

These two factors taken together make a strong case for de-emphasizing physical attributes in the thesis. This is not to imply that physical attributes, whether they be macro level qualities (as in area-wide attributes) or micro level qualities (as in site-level attributes) are not a factor in recreation decision-making. Clearly getting away from home and out into a more natural setting is important. The difficulty lies in the fact that most recreation research has been conducted with the assumption that physical characteristics of an area or a specific site within an area were the most important (if not sole) factors in the recreation decision-making process. At sites around the Angeles and San Bernardino National Forests, the users (regardless of ancestral group) voice concerns about and preferences for clean, safe bathrooms, picnic tables, and barbecue pits much like any recreationist would. What is different about Hispanics (and possibly other ethnic groups) is that people go to the sites in large numbers, even though the chosen sites seem to have little or none of the facilities claimed to be of importance. It would be difficult to understand recreation choices in this instance by focusing solely on physical attributes.

The more interesting question in this case seems to be, if these particular facilities are important and they are absent or in poor condition, why are they popular? It appears that in recreation decision making, some people weigh physical attributes less and social attributes more than past studies would indicate.

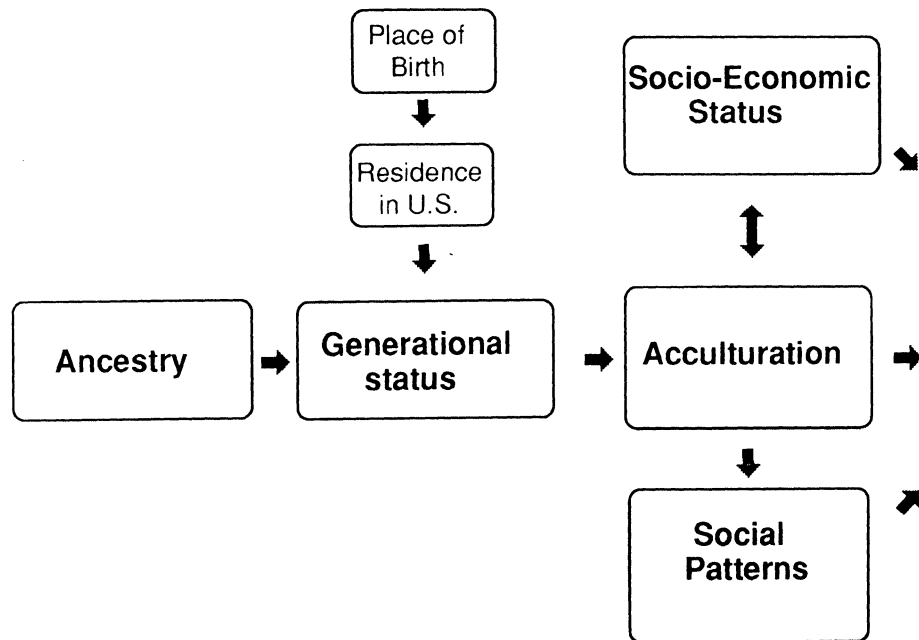
To study the influence of socio-environmental meanings, appropriate study sites would be those that are as similar as possible from a physical resource perspective. The most frequently found attributes in the Forest Service recreation areas used by Hispanics are relatively low elevation, riparian zones with minimally developed day-use sites. These physical attributes were used as the minimum criteria for site selection. The next phase in focusing this thesis was in selecting the social attributes of interest, a critical issue for this thesis.

The Socio-Environmental Model to be Tested

A conceptual model was developed (Figure 5) in order to present a more coherent picture of the linkages between the topics that have been reviewed in the previous sections, as well as to focus the research effort, . There are two basic divisions in the model: social structural characteristics of the recreationist and of the socio-environmental relationship.

Each of the items in the boxes have been fully elaborated upon in the course of the literature review and so will not be discussed here except for one clarification. The "social patterns" box refers to several loosely related variables that all have to do with individuals' regular social interactions. For this thesis these patterns include place of residence and proximity to other family members, as well as patterns related to the recreation sites themselves. These

Social Structural Characteristics of the Recreationists:



Characteristics of the Socio-Environmental Relationship:

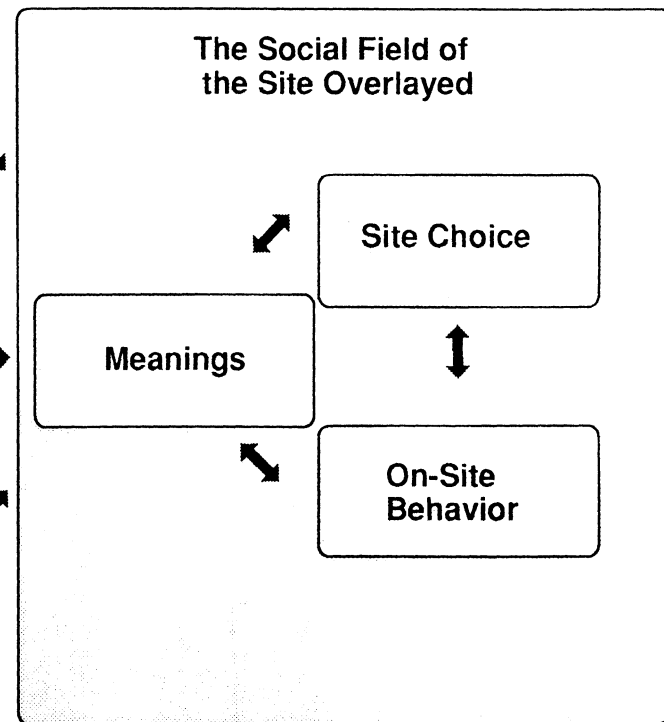


Figure 5. The Conceptual Model Used for Field Work

patterns include social group size and composition, and site use patterns.

The arrows represent the hypothesized direction of the linkages between the variables, based on the literature review. While it was not possible in the course of this exploratory thesis to do any type of causal modeling, these linkages help to illustrate the conceptualization of the thesis topic. To facilitate the understanding of how the pieces of the model may come together to illustrate outdoor recreation patterns, an example will be used combining the work of Keefe and Padilla (1987) with what is already known from previous research about one of the sites that was used for the field portion of the thesis, the West Fork of the San Gabriel River on the Angeles National Forest.

It should be re-emphasized that all the potential linkages between individuals and their recreation site selection are almost purely speculative at this point. The purpose of introducing Keefe and Padilla's typologies and providing a rather lengthy example is two-fold. While they did not include recreation patterns in their identification of different types of Mexican Americans, Keefe and Padilla's work does provide a good reference for understanding the variation within the Mexican American community. It is not clear whether the patterns witnessed by Keefe and Padilla are etic or emic, so the content of their study (the typologies) cannot be unequivocally applied to the entire Hispanic population without further research. Most importantly, their work can act as a model or goal for how this thesis can go about understanding the link between who people are from a social structural perspective and their recreation choices.

Keefe and Padilla's Ethnic Typologies

A cluster analysis performed on measures of ethnic loyalty, cultural awareness and ethnic social orientation (Keefe and Padilla's measures of acculturation and ethnic identity) yielded five clusters of characteristics: 1) La Raza (Spanish for "The Race") individuals who are highly unacculturated and identify strongly with Mexico; 2) Changing Ethnics who are equally unacculturated as La Razas, but do not identify as strongly with Mexico; 3) Cultural Blends are what their name implies, they are more acculturated than clusters one and two, but still retain their ethnic identity to a significant degree; 4) Emerging Americans who are slightly more acculturated than the cultural blends, but identify much less with their ethnic heritage; and finally, 5) New Americans who are the most acculturated and identify the least with their ethnic heritage.

Keefe and Padilla also examined the correlations between demographic characteristics of individuals and cluster membership. The analysis identified three types of individuals.

The first type, Keefe and Padilla's "La Raza" consists mostly of immigrants who have strong ties to Mexico and its cultural orientation. They tend to be barrio residents of low SES (relative to other Mexican Americans) who have little contact with Anglos. They are likely to believe Anglos are prejudiced and are likely to have encountered discriminatory actions. They tend to have a small kin network in America if they are recent immigrants.

The second type, "Cultural Blends" consists of primarily second generation individuals (this typology combines clusters 2 and 3 from the original cluster analysis). They are proud of their Mexican heritage, but are not as

knowledgeable about Mexican cultural practices as "La Raza" individuals. They are somewhat more acculturated and therefore comfortable with some American cultural practices. They have daily contact with Anglos (generally through work at blue-collar level jobs), but continue to prefer other Mexican-American individuals for socializing. Their kinship network in the United States is generally larger than the "La Raza" individuals because their parents are established in the U.S..

The third type, "Americans...Set Apart" combines the fourth and fifth clusters from the original cluster analysis. These individuals are later generation Mexican-Americans (often referring to themselves as Americans of Mexican descent). They may be of a slightly higher SES than those of the second type. The bigger difference is in the degree to which they have accepted American values and cultural practices. They still retain some Mexican cultural values and practices (particularly the importance of maintaining extended local family group ties), but are very much Americans in many respects. The fact that they see themselves as set apart says they are not fully assimilated into American culture, but they feel quite comfortable and in some cases prefer socializing with Anglos rather than Mexicans.

Hypothesized Conceptual Linkages

In applying the model to the users of San Gabriel Canyon (the study site that had the most existing information available before the field portion of the thesis), it should be kept in mind that this example focuses primarily one specific type of individual from a social structural perspective. The example includes individuals of Hispanic (primarily Mexican) descent, born outside the United

States, of a relatively low socio-economic status, and have limited English language skills (Simcox & Pfister, 1991). Among the salient social patterns (projected from Keefe and Padilla's typologies) are short residence in the United States, most family members still located in the ancestral country, and barrio residence. What this example attempts to do is project how this social structural profile would affect recreation meanings and behaviors.

In seeking a place to recreate, do recent immigrants seek areas where the values and traditions they know and are comfortable with are present including Spanish language usage, preparation and consumption of Mexican foods, familiar music, and socializing with other Mexican-Americans?

Are recent immigrants using recreation experiences to help them find a place for themselves within the Mexican-American community? If so, the place they are seeking may depend on the age of the individual and marital status. For example, are they at a time in their life where they would likely be looking for a spouse for themselves or possibly one for a child? Are they simply seeking to fill the void caused by the distance between themselves and their mother, father, sisters, brothers, cousins, etc?

Keefe and Padilla characterize individuals who have resided in the United States for some time as having likely found their place within their community. Their kin network likely consists of in-laws, children, and possibly newly immigrated relatives in addition to any relatives who were in the United States originally. They are not likely to be significantly more acculturated or assimilated than when they first arrived, so they are being pushed and pulled by the same characteristics as the recent immigrant. Possibly they are looking for an area that allows them to come together with their kin group, rather than

looking for a place within the community.

The first generation immigrant is likely to live in the barrio of his or her city. These areas aren't likely to have open areas where large groups of people can get together, or if they do, they may be controlled by local gangs. Are people being pushed out of their neighborhoods and pulled to areas large enough to facilitate their desired socializing, along with areas that are perceived to be more safe?

Regardless of whether an immigrant is new to the country or has lived here for some time, he or she is likely to be distrustful or uneasy around Anglos for a variety of reasons. Immigrants may hold beliefs or have direct experiences that relate to prejudice and discrimination on the part of Anglos. At minimum, they may be unsure about what to expect from interactions with Anglos. The explanations relate to seeking to be with others like themselves, while the feelings and experiences of prejudice, discrimination and uneasiness are related to the desire to avoid being with others who are not like them. The desire to be with others like oneself and avoid those unlike oneself is certainly not unique to these individuals. This phenomena, known as homophily, is typical of nearly all individuals and groups.

Not only would immigrants likely avoid areas where Anglos are the dominant group (in numbers), they may avoid areas where Anglos are present at all because of their lack of understanding of Anglo culture and their distrust of Anglos in general. Immigrants from Mexico and Central America may be attracted to areas where Hispanics are the majority group (possibly even in areas dominated by Il Mayan-based groups, since they likely have little more in common with Caribbean-based Hispanics). Are these individuals seeking out

areas of exclusive Hispanic use in an attempt to avoid recreating with Anglos?

The Hispanics' attempt to find areas without Anglos present would certainly include Anglo authority figures (e.g. managers, life guard, etc), not just Anglo recreational users. As discussed earlier in the paper, U.S. land management practices are dominated by Anglo-European cultural values. Are Hispanic individuals not using highly managed areas where the rules and regulations (either implicit or explicit) and site designs are not familiar or comfortable for them and pulled to areas with little active management efforts where they are free to create their own site design and rules and regulations?

Based on Lee's conceptualization of recreation requirements, it seems as if the privacy immigrants may seek is not from each other, but from those who are not like themselves and do not share their scheme of order. This does not necessarily mean that they come to these sites to interact and socialize with one another, but that they come to an area where they share expectations and meanings with those around them. Is the ideal site one where people's activities, expectations, and norms are predictable?

Beyond these social characteristics, there are important physical characteristics as well. These include knowledge of potential sites, proximity to home, and "socio-economic realities". For first generation individuals, their knowledge of potential recreation sites when they first immigrate is likely to be rather limited, influenced by whoever they know when they first arrive. The longer they are in the area, the more opportunities there are for their knowledge base to expand. Do recent immigrants come to San Gabriel Canyon because they know of no other places to visit? Do individuals who have been in the area for a longer period of time know of other places to go, but choose San Gabriel

Canyon because it has the desired characteristics, or are they so comfortable with the San Gabriel Canyon site that they rarely search out other outdoor recreation sites to visit?

For day-use activities, sites perceived to be too far from home will not be considered. This is not a tremendous limitation in the Southern California area; the day recreation possibilities within a "reasonable" drive-time are numerous. Given that the average drive-time for respondent to get to San Gabriel Canyon is one hour (Simcox and Pfister, 1991), it can be presumed that any site within at least this drive-time is not eliminated because it is too far away.

The "socio-economic realities" are related to the fact that, as immigrants, these people are likely to be relatively poor. Many areas (such as Disneyland) are far too expensive to go to, even if they are considered a desirable place. Due to the complexity of objective versus subjective SES of immigrants (as discussed earlier in this paper), it is not clear, "how much is too much" to spend on recreation. Individuals who consider themselves well-off relative to their former status in Mexico may be willing to allocate more money to recreation than a person who considers him/herself poor, regardless of status here or in Mexico. It is not clear how this factor comes into the push and pull of recreation choices, except to say that beyond the cost of getting to the site and the cost preparing meals, a three dollar parking fee is charged at the entrance of the canyon. Any potential site with similar costs is not eliminated for economic reasons.

Research Questions

The thesis objectives and the conceptual model developed in the literature review lead to three broad research questions. They are:

- 1a) What are the **inter-ancestral patterns** in the relationship between the primary social structural variables of interest⁶ (i.e. ancestry, generational status, acculturation, income, and education) and the **use patterns** seen on the forests of Southern California?
- 1b) What are the **intra-ancestral patterns** in the relationship between the primary social structural variables of interest (i.e. generational status, acculturation, income, and education) and the **use patterns** seen on the forests of Southern California?
- 2a) What are the **inter-ancestral patterns** in the relationship between the primary social structural variables of interest (i.e. ancestry, generational status, acculturation, income, and education) and the **meanings individuals hold toward their recreation experiences** on the forests of Southern California?
- 2b) What are the **intra-ancestral patterns** in the relationship between the primary social structural variables of interest (i.e. generational status, acculturation, income, and education) and the **meanings individuals hold toward their recreation experiences** seen on the forests of Southern California?
- 3) What are the characteristics of the **social fields** of the recreation sites and how do they vary with respect to meanings and use patterns?

⁶ Inter-ancestral patterns focus on five primary social structural variables: 1) ancestry, 2) generational status, 3) acculturation, 4) income, and 5) education. For intra-ancestral patterns, the focus becomes just four variables. Ancestry is not included as a variable since all individuals are of the same ancestral group when making intra-ancestral comparisons.

The third question should be thought of as an emergent product of the other research questions. It is a combination of the above relationships that come together to create the social field.

Having developed the conceptual model, one final phase of the literature review is necessary. There are two methodological issues that are important to the successful testing of the model. The first issue pertains to operationalizing the model from a transactional perspective. The second issue pertains to conducting cross-cultural research, in this case, with those of Hispanic descent.

Methodological Implications of the Transactional Approach

In order to operationalize the model as it has been conceptualized it is important that the methods chosen are consistent with the transactional approach and are capable of yielding the kind of information desired from the questions raised within the theoretical framework. To aid in this decision-making process, Altman and Rogoff (1987) outline six methodological implications of the transactional orientation, none of which dictate a specific methodological approach, but instead are meant to act as guides for methodological choices. These are discussed below.

1) *Transactional research takes settings and contexts into account.*

The authors define context as including, "the qualities of the physical and social environment that may be psychologically relevant, the nature of tasks and instructions, the flow of events, how the setting relates to other aspects of a person's life, the meaning and interpretation of the situation by participants, and the familiarity of the participants with the setting." It is important from a transactional perspective to identify and examine those aspects of the context

that are most relevant and how they can be best addressed methodologically.

2) *Transactional research seeks to understand the perspective of the participants in an event.*

As discussed earlier, attempting to understand the phenomena from the perspective of the respondent is crucial (see section two of the literature review). When doing research within the realm of one's own culture, the researcher is able to rely to some degree on his/her own tacit knowledge for guidance in understanding the perspective of the participants. This is not the case when doing research within the realm of different cultures, because the meanings and expectations that define an event are culturally bound. In these cases the researcher must strive to embrace the participant's perspective, rather than having, "preconceptions of the meaning of an event, and determining only whether or not the results of a study are in accord with those preconceptions."

3) *Transactional research attempts to understand the observer as an aspect of events.*

Observers (who are both the participants directly experiencing and observing events, as well as the researcher observing the participants) view a situation from only one position; their account of an event is affected by their location, role, and perspective. The transactional approach seeks to understand how observers' positions affect their observations. This entails using a variety of research techniques to show different positions and how they affect what is observed.

4) *Transactional research emphasizes the study of process and change.*

It is the transactions among individuals and between individuals and the environment that are of interest, not isolated individual qualities or

characteristics. This approach calls for the use of research methods that are able to incorporate processes and changes, the natural beginnings and endings of events, rather than artificial temporal designations.

5) *Transactional approaches accept the relativity of indicators and measures of psychological functioning.*

Trying to standardize measures across situations without being sensitive to the suitability or appropriateness of the measures can lead to "artificial fragmentation" of the phenomena under study. The transactional approach calls for the use of research methods that are appropriate to the situation. This requires sensitivity and creativity in addressing the social, physical, and temporal qualities of the situation.

6) *Transactional approaches emphasize methodological eclecticism.*

It is necessary to choose methods that are capable of yielding the kind of information desired from the questions raised within the theoretical framework, as well as appropriate for the current state of knowledge about the phenomena being studied. It should be kept in mind that no one method is better than another, it is a matter of appropriateness given the situation at hand. The transactional approach ideally combines a variety of methodologies that work together to answer the research question.

Methodological Implications of Cross-Cultural Research

There are many important methodological issues related to doing cross-cultural research. Rather than attempting to address the full range of issues, this section will address issues specific to working with the Hispanic population in the United States. Much of this discussion is taken from Marín and Marín's

(1990) work, *Research with Hispanic Populations*. For a more in-depth discussion of these issues as well as a thorough reference list, Marín and Marín should be consulted. This section discusses language and literacy issues, the development of culturally relevant research instruments, and potential influences of Hispanic cultural values on participants' responses.

Literacy and Language Issues

Literacy

Two findings of Simcox and Pfister's (1990) work have important implications for the use of written material for studies of Hispanic recreationists. The first is that Hispanics, particularly first generation individuals, tend to have lower education levels than Anglos. Secondly, the ability to speak a language, whether it is Spanish or English, does not automatically mean the respondent has the ability to read the language.

These two findings suggest that any written material should be written at an appropriate grade level (Marín and Marín suggest third grade-level English to accommodate low education levels as well as for more concise translations. The practicality of designing questions at a third grade level seems to limit its applicability of this suggestion). The findings also suggest that methods other than written, self-administered surveys should be considered either as a replacement or supplement to written surveys.

Language

Previous studies of Hispanic recreation at San Gabriel Canyon on the Angeles National Forest (Simcox & Pfister, 1991) found that 44.9% of the respondents spoke only Spanish, 37.2% were bilingual, and 17.5% spoke only

English (.4% listed an Asian language). Almost half of the respondents can only be reached through the Spanish language. Of the 37.2% who were bilingual no mention was made of the language of choice. Communicating in the respondents preferred language is important to getting higher participation rates and more reliable answers to questions. Also communicating in the language of most fluency increases the likelihood that the respondent understands what is being asked. While this seems to be almost too obvious to mention, the respondent's understanding of research questions is a major issue in cross-cultural studies. There are two components to this issue, proper translations and using culturally relevant questions.

Proper Translations

When writing an instrument in English to be translated into Spanish, Marín and Marín have many suggestions to aid in the process including using simple English and short sentences, using words with Latin roots, using nouns instead of pronouns, using the active rather than the passive voice, and using redundant wording to clarify the meaning of a phrase or word whenever necessary. They also advocate a double translation method in which one translator works from the original English version to Spanish then a second individual takes this Spanish version and translates it back to English. Field pre-testing is also important.

Developing Culturally Relevant Research Instruments

Developing culturally relevant research instruments is more than an issue of translating work from English to Spanish or vice versa. It requires an understanding of the language and culture to be able to write questions in a

way that is relevant and meaningful to individuals of the target culture and that ask questions that are of interest to the researcher. This requires an understanding of whether the concept being explored, as well as the meaning of the questions being asked, are etic (universal) or emic (group-specific). A simple example would be asking an Englishman and an American the question, "Do you like football?" the Englishman thinks of what Americans call soccer, the American thinks of football in the American sense, and yet they both say yes. The researcher believes he/she has found a commonality between the Englishman and the American, when in reality, his/her question held different emic meanings to the respondents.

A related problem is asking questions that are not meaningful to the respondent. An example Marín and Marín use has to do with a study of family decision making in lower-class Puerto Ricans (residing in Puerto Rico). Using a survey developed with Anglos in the United States, respondents were asked who in the family makes decisions about where to vacation, what schools the children would attend, etc. The questions proved to be irrelevant to these people; they were too poor to have ever considered these issues. In order to explore family decision making in this context, the division of labor within the household was eventually used since it was a more meaningful concept to the study population.

A basic understanding of the phenomena being studied from the respondent's point of view is crucial to designing an instrument that captures the central issues. In some cases, this can be gained from previous research. In other cases relying on key informants and/or exploratory research may be necessary.

Using multiple methods is one of the best ways to increase the likelihood of gaining a true picture of the phenomena being studied as the respondents see it. Using multiple methods, also called triangulating data, is much like taking photographs of the phenomena being studied from different angles and locations. Each photograph presents a different side of the phenomena, and added together, present a more accurate and complete representation of the phenomena than any one picture could do on its own. For this thesis a combination of surveys, interviews, and participant observation will be used to gain a richer understanding of the recreation experience.

Potential Influences of Hispanic Cultural Values

Three response styles, likely related to the allocentric orientation of the Hispanic culture, particularly the *simpatía* script, are discussed by Marín and Marín. They refer to this issue as potential problems of data interpretation, but there is no need to wait until the data interpretation stage to address these issues. They can be handled methodologically, long before they become a data-oriented problem. Among these issues are:

- 1) A tendency for Hispanics to use the extreme response categories more so than Anglos in Likert-scaled questions.
- 2) A tendency for Hispanics to agree with questions regardless of the specific content of the question.
- 3) A tendency for Hispanics to report socially desirable responses, particularly if the questions are personal or deal with sensitive issues.

Also at issue are inaccurate or incomplete reporting of responses. These tendencies may be related to the emphasis of ingroup/outgroup boundaries in

the Hispanic culture. While there is a great deal of openness and trust among ingroup member (family, fictive kin⁷, close friends), outgroup members are regarded with an element of suspicion. Interactions with outgroup members tend to be fairly reserved (Hui & Triandis, 1989).

A final issue, the relationship between the researcher and the respondent, has both methodological and ethical implications. Possibly because of the tendency not to question those of higher power and to avoid conflict, Hispanics generally have higher compliance rates than Anglos for participating in research projects. It is important not to abuse these tendencies in the quest to gather data. Marín and Marín argue that since minority individuals in general have less leisure time than majority individuals, and those with lower education levels find completing research instruments more difficult, the burden of being study participants tends to be greater for Hispanics than for Anglos.

It should be emphasized that while all these issues have empirical support, the differences between Hispanics and Anglos are not overwhelming and can likely be easily accommodated when designing a research instrument.

⁷ Fictive kin are individuals who are considered family even though they are not relatives such as godparents, compadres, and comadres.

Chapter Three Methods

Selecting Appropriate Methods

For the data collection and analysis related to understanding recreation meanings and the social fields of the research sites, a qualitative approach is needed in addition to the more traditional quantitative approach. There is little existing knowledge on which to form hypotheses; in particular, little is known about the context of Hispanics' recreation experience or the cultural norms, meanings, and expectations related to the situation. Qualitative methods, with their greater emphasis on holistic exploration of the phenomenon, are better able to address these types of issues.

The data collection and analysis related to the exploration of intra- and inter-ethnic variation of social structural characteristics lends itself more to a quantitative approach, because of the greater theoretical development of the underlying concepts.

Qualitative Methods

When a quantitative approach is taken, much of the study's validity and generalizability comes from the survey design itself (primarily concerned with

random sampling and researcher objectivity). These types of "quality safeguards" are not automatically built into the qualitative process, but instead rely upon the researcher to construct them. When doing qualitative research it is necessary to have an idea of the array of methodological options available, however the decision about exactly which methods to use depends to a certain extent on how the research process unfolds. The study's validity and generalizability comes from a "triangulation" process, which is essentially the researcher's methodological choices (Berg, 1989). The goal of the research is to combine methodologies in a way that gives the fullest and most accurate depiction possible of the phenomena under study. Four basic types of qualitative methods were considered for this study.

Focus groups This technique, originally used in marketing research, is particularly useful when you wish to have group interaction and discussion as a part of your data gathering (Appleby, 1981). Researchers within the realm of natural resource management in the United States are finding this technique to be an extremely useful tool for gaining richer, more holistic understandings of the phenomena under study, particularly when dealing with minority populations (c.f. Montgomery Research Consultants, 1988, Missouri Department of Conservation, 1990). Of particular interest to this thesis is recently completed work by Gobster (1991) in the Chicago area with "on site" focus groups, attempting to explore how users of a city park feel about the park and what they would and would not like to see changed as part of an effort to revitalize the park area. Formal focus groups can be expensive for the sponsors (paying for facilities and people's time) and time consuming for participants (adding together travel time and the meeting time). Informal focus

groups, either at the site or possibly at a pre-arranged time in people's homes, are a way of minimizing these costs. Informal focus groups also have the potential to combine the group interaction information with the contextually rich information gained through participant observation, since the group will remain in the environment being studied. Given the cohesive family groups found in the Hispanic culture, having focus groups sessions like these with the Hispanic extended families using the forest sites has the potential of revealing a wealth of information about meaning and preferences they hold about their recreation experiences. There may be difficulties with focus groups, however, if participants are related to or know each other (as would be the case if on-site focus groups were to be used). A participant's responses may be influenced by group members, presenting a group-oriented view of the phenomena being studied, rather than an individual-orientation as is traditionally desired from focus group work. While this technique has promise, it is not clear how practical or successful it would be.

At this point, the technique is too untried within recreation research to be part of the thesis, but it should not be ruled out for the future. It seemed quite natural for the Hispanics who participated in the study to talk among themselves about the questions (in fact it was often difficult to convince them not to talk about the survey questions to arrive at a group answer). Obviously a unanimous group response is not the goal of the focus group, but the dialogue and exchange is valuable information that cannot be attained in any other way.

Social mapping This is a technique developed by anthropologists as a way of placing people in the space in which they operate (Edgerton & Langness, 1974). It is a way of simultaneously representing the physical geography and

social interactions of an area. Of particular interest for this thesis, it provides a way of describing the social boundaries and meanings of specific sites such as "barbecue alley" (one of the specific areas within San Gabriel Canyon so named by previous researchers because of the large numbers of groups barbecuing there). This technique is also an excellent way to get to know the area and people at the study sites in a less threatening manner because it provides the researcher reasons for walking around and asking questions without directing all his or her attention toward the study participants themselves (Crane & Angrosino, 1974).

Social mapping is a relatively unknown and untried technique within outdoor recreation. As used in traditional anthropology, it depends a great deal on whether study subjects are familiar enough with the area to have both a geographic and social map of the area in their minds. Social mapping was not utilized due to logistical limitations related to administering other parts of the study.

Participant observation This is not a technique that one "does" in a traditional sense. The technique involves simply being in a place and observing. It is a way of being around, and getting to know the study subjects and area. It is an excellent way to become familiar with the study and to begin to explore the phenomena in question (Crane and Angrosino, 1974).

Participant observation can be done informally, as would be the case in most introductory efforts, with the researcher watching and conversing, with little predetermined observations in mind, or it can be more formal, with specific observations being done in a systematic way usually during a later phase of the research effort.

Individual Interviews Within the realm of qualitative methods, interviewing is done with minimal predetermined structure. The objective is to allow the respondent to define the subject matter as he or she sees it, rather than as the researcher see it or thinks it should be seen. This method is useful when researchers have little information to go on for directing their own specific questions. Respondents inform the researcher of how the phenomena exists for them. One-on-one interviews can yield a wealth of information and a level of detail that cannot be obtained through other methods (Berg, 1990).

Conducting qualitative and quantitative methods is not a mutually exclusive process. The opportunity to use qualitative methods (participant observation and individual interviews) is present with each group contacted, as self-administered surveys are being filled out. Systematic observation of equipment and food present as well as casual conversation with group members are valuable sources of data if systematically recorded.

Quantitative Methods

Data related to the research questions regarding social structural characteristics (ancestry, generational status, acculturation, income, and education) and their relationship to recreation preferences and patterns were collected using an on-site, self-administered survey. In addition to standard demographic questions related to age, education, occupation, and home ZIP code, other questions were included to measure ethnicity and acculturation levels. These included:

- a) ethnic self-designation,
- b) country and town or region of origin for the individual, his or her parents and grandparents,

- c) number and location of family members (immediate and extended) in the U.S.,
- d) number and location of family members (immediate and extended) in ancestral country and visits to ancestral country,
- e) primary and secondary languages,
- f) recreation group size and relationships;

In addition to demographic information, the survey was used to establish the respondent's use history of the site and to explore meanings and attachment to the recreation site.

Designing a Culturally Relevant Study

In designing and distributing the self-administered questionnaire, several steps were taken to enhance the quality of responses and accommodate the differences between those of Anglo and Hispanic origins. These include:

- 1) Written data collection instruments were kept short to try to accommodate differences in language and literacy skills, as well as to try to be sensitive to the increased burden survey that study participation is for some individuals.
- 2) Written data collection instruments were extensively pretested to develop the most concise and useful questions as possible.
- 3) To assist in identifying inattentive responses to Likert-scaled questions, some items were written to be the opposite of other items.
- 4) To assist in determining whether or not extreme responses were a substantial problem, a visual inspection of all surveys was done.
- 5) For any Likert scaled questions, a six point Likert scale spanning from "very strongly agree" to "very strongly disagree" was used, eliminating the "neutral" response to help reduce compliant responses.
- 6) Whenever possible, at least one of the two partners working together doing

data collection were of Hispanic origins.

7) The data collection team was trained to approach respondent groups in a friendly way and establish a sense of rapport with the potential respondents before asking for their participation in the study to help ease the "ingroup/outgroup" distance.

8) The data collection team was trained to encourage respondents to complete as much of the survey as possible without putting undue pressure on the respondent.

The Study Design

Based on a review of the literature as well as on earlier research in this area (Ewert, Gramann, & Floyd, 1990; Floyd & Gramann, 1990; Simcox et al., 1989; Simcox & Pfister, 1990), it appears that the primary distinction contributing to similarities and differences in outdoor recreation preferences and behavior is ancestral group membership (used in a very broad sense - Hispanic vs. white vs. black), followed by distinctions based on natal country. A third distinction is more complex and subtle, but in general is related to generational status and levels of acculturation. The effects of acculturation are multifaceted and presumably include factors related to an individual's or group's relationship to the environment.

Based on these differences it is proposed that:

1) Preferences Hispanic visitors hold regarding the ancestral composition of fellow visitors are related to varying levels of acculturation in Hispanic recreationists. Higher acculturation levels would be expected to be related to preferences for more varied areas (in terms of their ancestral composition),

while lower acculturation levels would be expected to be related to preferences for more homogeneous areas.

2) Meanings and socio-environmental regulation will vary across sites based on the ethnic composition of the area.

Previous studies of visitors to the Angeles and San Bernardino National Forests have found considerable variation in the ethnic composition of visitors across recreation sites (Simcox et al., 1989). Four sites were chosen for this thesis to span the continuum from areas used almost exclusively by Hispanics, to areas of diverse ethnic composition, to areas where Anglos are the majority. These four sites are:

On the Angeles National Forest:

Site 1) The West Fork of the San Gabriel River (a predominantly Hispanic area).

Site 2) The Oaks Picnic Area on the East Fork of the San Gabriel River (also a predominantly Hispanic area).

On the San Bernardino National Forest:

Site 3) The Lytle Creek Picnic Area (an ethnically diverse site, with Hispanics still the predominate group).

Site 4) The Forest Falls Picnic Area (a predominantly Anglo area, with a small Hispanic subgroup).

These sites vary from little facility development (pit toilets, garbage cans, and a parking lot) to moderate development (the above facilities plus picnic tables and BBQ grills). All are located in riparian zones with creeks that flow the entire summer. Sites vary in elevation from about 1800 to 4500 feet. All are in the greater Los Angeles metropolitan area, although the two sites on the

Angeles National Forest are closer to central Los Angeles.

The data were collected by a twelve person team, consisting primarily of undergraduates from local universities, employed by the USDA Forest Service's Wildland Recreation and the Urban Culture Working Unit. The author acted as supervisor for the data collection team, in addition to participating data collection. Each weekend day, from July 1 to September 15, as well as July 4th and Labor Day, a four person data collection team was assigned to at least one (occasionally two) of the research sites. Three of the data collection team members were fluently bilingual, approximately half had limited Spanish language skills, and the rest were trained in basic Spanish phrases that allowed them to introduce themselves and the study, as well as ask for the visitor's participation.

An effort was made to disperse the sampling of each site throughout the summer, although logistical limitations made truly random sampling of sites impossible. Within each site, the team attempted to contact every group present. This was usually possible at all sites except Lytle Creek, where there were frequently close to or over 1,000 visitors present. At Lytle Creek, data collection was begun at a different location in the site each day to try get as representative of a sample as possible. With each group contacted, any individual who wished to participate in the study was given a survey.

Data Collection Instruments

The nature and design of each of the data collection instruments was exploratory. Since the thesis was trying to explore social meanings of participation, there was little to guide the selection of methods and specific

research questions. Three methods were chosen: a self-administered survey, an observation form filled out by the data collection team member, and semi-structured interviews conducted by the author and a fluent bilingual team member.

The Survey

Demographic Questions

The primary data collection instrument was a self-administered survey, available in both English and Spanish. The entire English version of the survey is included in Appendix A. The survey asked extensive questions about the respondent's demographic characteristics. These characteristics include the country and state where the individual and each of his or her parents and grandparents were born to establish ancestral origins and generational status. In addition, to determine how respondents think of themselves relative to their ancestral group, respondents were also asked which cultural group they preferred to have others think of them as.

Several questions were asked in an attempt to explore individuals' social, familial and temporal ties to the United States as well as their natal country. Individuals born outside the United States were asked how long they had lived in the U.S. and how many times they had visited their ancestral country in the past five years. Individuals were also asked to estimate the number of family members they had living in Southern California, the United States, and their ancestral country. A four item language skill and preference scale developed by Marín and Marín (1991) was used to measure acculturation level.

Two measures of socio-economic status were included; education level and income. Education was measured on a scale of 1 to 20 years. Income was represented by eight possible ranges from under \$5,000 to over \$60,000. Because of the difficulty of incorporating income ranges for individuals of Hispanic and Anglo descent which tend to fall into two separate distributions, two categories at the low end of the scale were in \$5,000 increments, the next five categories were in \$10,000 increments, followed by an over \$60,000 category.

The last demographic questions asked the respondents' age, gender, and ZIP code.

Questions Related to the Visitor's Relationship to the Site

The questions attempting to illuminate the visitor's relationship to the site ranged from well established questions, to questions modified to fit the research situation, to completely exploratory questions. Three items attempted to establish individuals' temporal relationship with the site (their past use history): 1) whether the respondent had been to the site before, 2) if so, how many times in the past year, and 3) how many years had he or she been coming to the site. Respondents were asked to choose the one most important reason for coming to the site that day in an attempt to explore the role of the site in their lives. Two questions dealt with the composition of respondents' social group at the site. The first asked who or what type of group individuals came with to the site, while the second asked about the presence of specific family members.

Individuals were asked about their preferences regarding the ethnic or racial composition of the recreation areas they use. While this is a potentially

sensitive question to ask with connotations of a socially acceptable or politically correct answer, it was hoped that enough people would feel comfortable answering the question to show a trend in perceptions about this issue.

A question containing thirteen place attachment items adapted from Williams and Roggenbuck's (1989) work with wildland recreationists was included in an attempt to reveal the role the site plays in respondents' lives. Two aspects of place attachment were included within the thirteen items: 1) place identity items (how the site relates to creating and maintaining self-identity) and 2) place dependence items (how dependent the individual is on the site for their desired recreation experiences).

An open-ended question, "What does respecting the forest mean to you?" was included to elicit responses characterizing how people thought about their role in protecting the forest areas they were using.

The Observation Form

An observation form was used to record information about survey respondents' recreation group and on-site activities, equipment, etc. (Appendix A). Included on the observation form was information about the size and ancestral composition of the respondents' group, type and method of food preparation, activities taking place, and equipment brought to the site. Also, there was a comments sections for the data collection team member to record anything that seemed unique about the group or comments visitors made.

The Interviews

The interviews were used to allow individuals to talk about the site and

what it means to them in their own words. Each interview was tape recorded and transcribed in its entirety. Because of logistical limitations, only one day of interviewing was conducted at three of the four sites, yielding 6, 11, and 8 interviews at the East Fork site, Lytle Creek, and Forest Falls (sites 2 through 4) respectively. For some purposes this would constitute a large enough sample size for the interviews to stand alone for analysis. The very exploratory nature of the questions asked in the interviews, as well as potential complications in interpretation due to cultural differences between those being interviewed and the researcher require a more cautious use of the interviews. They were used to help illustrate and more fully explain the results of the aforementioned methods and to evaluate potential methods for future research.

An additional source of data for the thesis comes from the field notes taken by the researcher during her time at the study sites. The notes do not fit precisely the description of participant observation since they were taken while performing (and dressed) as a data collection team member, but they are an attempt to record as much of what was seen as was possible. The notes were used much like the interviews, to illustrate and explain results of the more quantitatively based survey, as well as to guide future research suggestions.

Data Analyses

Creating Variables for Analysis

Before data analysis could begin, several of the variables in the data set had to be structured into a more useful format. First, from information about an individual's birthplace, along with his or her parents and grandparents

birthplaces, ancestral origin was assigned. For the purposes of this thesis, an individual was considered to be of Anglo origins if he or she was born in the United States and was not of Hispanic or African origins⁸. Individuals of Hispanic origins were classified as being of Mexican, Central American, South American, or "other Hispanic" descent. Individuals of Asian and Pacific Island origins who were not born in the United States were maintained as a separate group, as were individuals born outside the United States and of ancestries other than those discussed above.

Individuals of Hispanic descent were also assigned to generation status levels based on where they, their parents, and grandparents were born. Immigrants or zero generation individuals were born outside the United States. First generation individuals were those born in the United States, but with parents and grandparents born outside the United States. Second generation individuals were those born in the United States with one or both parents also born in the United States. In addition, there was the potential to classify individuals as third generation based on where their grandparents were born, but there were so few individuals who fell into this classification that they were lumped in with second generation individuals.

For Hispanic individuals, the four item acculturation scale was reduced to

⁸ While this grouping of individuals can only be loosely considered "Anglo" an examination of the means and standard deviations of several variables shows no major differences in means or standard deviations with only "true" Anglos--those individuals who indicated a northern European descent. The issue is not with this grouping of individuals but with calling them Anglos. Because of sample size requirements and for lack of a better term, these individuals will be lumped together and the title will remain Anglo. It should be emphasized that the focus of this study is to examine Hispanic relationships to the forest sites, not necessarily Anglo. To make any meaningful statement about Anglos, since their numbers are so small, it would be necessary to deliberately oversample them at all sites except Forest Falls in order to get a large enough sample size to analyze.

a single mean score by averaging the item scores for all respondents who answered two or more of the scale items.

Responses to the open-ended question that asked about what respecting the forest meant to the respondent were initially coded into sixteen categories and later reduced to four clusters, as will be discussed in the results section. Originally up to two different answers were entered into the data set for each individual, but because of the statistical limitations this places on the data (the responses were not independent of each other since individuals could potentially fall into two clusters) both responses could not be used. Because there is no way to classify which answer the individual would have chosen as their first and only answer, all individuals who gave two answers were removed from the data set for the analysis of this question. While this dramatically lessens the sample size, the trends were still revealing.

Multiple responses were also a problem for the question about the most important reason for coming to the site that day. Even though the instructions asked for the one best response, several people gave more. As in the open-ended question up to two responses were recorded for each individual. The same statistical limitations were encountered and resolved in the same manner. Only individuals who gave one response are included in the analysis.

Multiple responses were also an issue for the question about the composition of the respondent's social group. Unlike the above questions that were designed to have only one response, this question was designed to be answered with as many responses as was appropriate for the respondent's group. Therefore it cannot be treated in the same way as the above two questions. To compensate for the lack of independence across responses

caused by the multiple responses, the single variable was broken into six separate variables for each of the possible responses for the purposes of analysis. Each individual was coded whether they were or were not with each of the six possible group types listed. While this makes statistical tests more awkward, the goal was to thoroughly describe the composition of social groups of the ancestral groups.

Analyzing the Data

Descriptive statistics (frequencies or means) are given for all demographic questions for each of the ancestral groups at each of the study sites in an attempt to illustrate the user composition of each of the study sites. In addition, relationships between study sites and the five primary independent variables hypothesized to be of importance - ancestry, generational status, acculturation level, income, and education - were analyzed.

In the case of ancestry and generational status, chi-square tests (used to test for differences in the frequencies of variables) were used to test the relationship between these two variables and study site. Three numbers are reported in conjunction with all chi-square tests: the actual test statistic (chi-square value), the level of significance associated with the test statistic and the measure of association (i.e. to determine the strength of the relationship between the variables being tested). For the purposes of this study, a p-value of .05 or less will be used to determine significance. The reasons for this are that it offers a consistent decision-making level and it is the most commonly cited level within the literature. The contingency coefficient (c) was selected as the measure of association because in no case are the data being tested ordered

and the size of the chi-square tables varies.

In the case of acculturation level, income, and education, ANOVA (analysis of variance used to test for differences between means of variables) tests were performed to examine the relationship between these three variables and the study sites. Three numbers are reported in conjunction with all ANOVA tests: the F-value (the actual test statistic), the p -value (the level of significance associated with the test statistic), and the r^2 value (the amount of variance explained by the relationship between the variables being tested).

The thirteen item Likert-scaled question exploring the place attachment aspects of individual's relationship to the recreation sites was first analyzed using factor analysis to establish the relationship among the items. Three numbers were reported for the factor analysis: the factor loadings (the correlation between the individual items and the factors), the eigenvalue (the amount of variance explained by items in a factor), and Cronbach's alpha (a measure of inter-item reliability within a factor). After factor analysis was performed, differences in the mean scores for the items within each factor across the three ancestral groups were explored using ANOVA. Seventeen people were removed from the sample before any analysis was done based on a visual inspection of the data for response patterns. Any individual who answered either "Very Strongly Agree" or "Very Strongly Disagree" for **all** the items was removed. Two of the items were negatively worded, and therefore conscientious respondent's answers should have differed for these items.

The relationship between the remaining survey questions and the independent social structural variables were analyzed using the appropriate statistical tests for each of the ancestral groups. In addition to ANOVA and chi-

square tests described above, Pearson product moment correlations were reported for cases where both variables were continuous. When a Pearson correlation is tested two numbers are reported: the correlation (r) and the significance level (the p -value). The tests were designed to examine both inter-ancestral and intra-ancestral differences.

Chapter Four

Quantitative Results

Introduction

Reporting the results of the thesis as they pertain to the three research questions is a complex task. It requires reporting the findings for the questions relating to use patterns and the meaning of the experience from two perspectives: across each ancestral group (inter-ancestral variation) as well as within ancestral groups (intra-ancestral variation) for each of the five hypothesized social structural variables of importance: ancestry, generational status, acculturation level, income, and education. In the case of intra-ancestral variation ancestry is treated as an antecedent variable, rather than an independent variable. No tests are done using the ancestry variable in intra-ancestry analysis. Because of this complexity, the results will be reported in three chapters, each attempting to illustrate a different aspect of the research questions. Chapter 4, rather than presenting all the possible tests within each of the above combinations, acts as a guide to reference the tests performed. The tables are located in Appendix B. In addition, this chapter will serve to briefly highlight those tests that are both statistically significant and that help to illustrate key trends within the data. Chapter 5 attempts to weave the relevant results from the quantitative data together with the qualitative data to describe

the social field of each area. The goal of Chapter 5 is to attempt a more holistic representation of the relationship between the visitors and where they recreate. Chapter 6 attempts to look at the results as whole and identify items or aspects of the findings that may assist in the identification of interaction variables. It is the goal of Chapter 6 to help fill the explanatory gap between the structural variables of which describe individuals' socio-cultural background, as well as their on-site preferences and behaviors. Where appropriate, suggestions about additional interaction variables or how to better measure a particular interaction variable are discussed.

Even though the goal of this thesis is to explore the relationship between individuals, groups, and sites, it is not possible to perform statistical analyses at this level (by study site and ancestral group) for all questions due to sample size limitations. However, because the study is exploratory in nature and understanding these relationships is central to the thesis, every effort will be made to explore relationships through quantitative and qualitative means, in both the results and discussion sections.

In this chapter, after a brief description of the overall study sample and the data gathering efforts, the results of the quantitative data for the analysis sample are presented in four sections. The first section contains general descriptive statistics of several individual and group characteristics at each of the four sites. The second section presents the results of the tests of the relationship between structural characteristics and use patterns (research questions 1a and b). It also contains the results of the tests of the relationship between the five primary structural variables and the four study sites, as well as those of the respondent's past use history and the five primary structural

variables. The third section presents the results of the tests of the relationship between structural characteristics and the meaning of the recreation experience (research question 2a and b), divided into two sub-sections. The first has basic information about respondents' use of the study site, including the most important reason for coming to the site that day, and who they were with during their visit. The second section has more abstract aspects of respondents' relationship to the forest and includes what respecting the forest means to them, place attachment, and ethnic composition preferences. The last section addresses cultural group identification preferences and location of family members.

The Overall Sample Population

Table 1 presents the results of the data collection effort. At the West Fork site, data were collected over the course of 7 weekend days; 88 groups were contacted, resulting in 188 surveys being completed. At the East Fork site, data were collected over the course of 6 weekend days; 63 groups were contacted, resulting in 141 surveys being completed. At Lytle Creek, data were collected over the course of 8 weekend days; 129 groups were contacted, resulting in 243 surveys being completed. At Forest Falls, data were collected over the course of 5 weekend days; 87 groups were contacted, resulting in 160 surveys being completed. Taken together, the four sites yield an overall sample size of 732.

Table 2 examines the ancestral composition of study participants at each site for the entire study sample. Those of Anglo descent comprise only a small proportion of the respondents at all sites except Forest Falls. Those of Hispanic

origins comprise the largest subgroup at all sites except Forest Falls.

Individuals of Asian ancestry and "other" ancestries comprise a small portion of the respondents at all sites, but are present in somewhat larger numbers at Forest Falls.

The Analysis Sample

The remainder of the analysis focuses on the three largest ancestral groups: those of Anglo, Mexican, and Central American origins. Respondents of South American, "other Hispanic," Asian and Pacific Islands, and "other " ancestries (collectively comprising 7.6% of the sample) were too few in number to analyze in detail. Even while focusing on the three largest groups there remains some combinations of ancestry and location that are not represented in large enough numbers to allow complete statistical analysis. The remaining analysis concentrates on the largest ancestral groups and consists of 175, 135, 231, and 135 respondents at the West Fork, East Fork, Lytle Creek, and Forest Falls respectively for a total of 676 respondents.

Section One: General Description of the Respondents at Each Site

Tables 3 through 7 present the basic descriptive statistics pertaining to individual and group characteristics for each of the ancestral groups at each of the sites.

Table 3 presents the average age, income and education of the respondents at each of the four study sites. Also included are the percent composition of males and females at each site (Questions 14-16 in the survey - see Appendix A). As a whole, individuals of Anglo descent tend to be older

relative to the two Hispanic groups (35.0 years), while those of Mexican descent tend to be slightly younger (30.1), and those of Central American descent falling in between (30.7). This is true at all sites except Lytle Creek where those of Mexican descent are slightly older than the other two groups. Those of Anglo descent also tend to have higher income and education levels (\$33,489 and 13.1 years respectively) than those of either Hispanic group (\$19,375 and 9.5 years for those of Mexican descent and \$15,136 and 9.1 years for those of Central American descent). This pattern holds across all four study sites.

Table 4 presents the mean and median group sizes of the ancestral groups at the four study sites. Also reported is the ancestral composition of the group respondents were with at the site. Both the average and median group size are smaller for those of Anglo descent (mean=5.7, median=4) than for either of the Hispanic groups (mean=11.8, median=9 for those of Mexican ancestry and mean=10.3, median=9 for those of Central American ancestry). This pattern holds across all four study sites.

The composition of the groups (from an ancestral perspective) varies considerably. Those of Mexican ancestry are in mixed ancestral groups (Anglo/Hispanic combined) more frequently than those of Central American ancestry (13.0% versus 5.9%) at all sites except the East Fork site. The percentages of individuals in mixed ancestry groups ranges from 4.5% at the East Fork site to 38.5% at Forest Falls for those of Mexican descent and 0% at the West Fork to 16.0% at the East Fork site for those of Central American ancestry. Those of Anglo origins are most frequently with a mixed ancestral group at Lytle Creek (30.4%) and least frequently at Forest Falls (13.4%).

Table 5 presents the results of the three questions related to past use

history. There are no significant differences in the number of respondents who had been to the site previously across the ancestral groups, with approximately 25% first time visitors at all sites.

Individuals of Anglo descent have been coming to all the sites for a longer period of time (11.6 years for the four sites combined), than either those of Mexican descent (7.31 years) or of Central American descent (4.9 years). Those of Anglo descent visit Lytle Creek and Forest Falls more frequently (9.8 and 7.6 times respectively) than either of the two Hispanic ancestral groups, although the gap is much narrower at Forest Falls (6.8 times for those of Mexican descent). Individuals of Mexican descent are the most frequent visitors to the West Fork area, while those of Central American ancestry visit the East Fork area most frequently (15.1 times versus 3.1 and 4.8 times for those of Anglo and Mexican descent, respectively).

Table 6 presents several aspects of language usage at each site including the language of the completed survey, the language the group was speaking as a team member approached, and whether an English speaker was present when the team member inquired. For those of Hispanic ancestry, Spanish language surveys were the dominant choice at all of the study sites (60.7% for those of Mexican ancestry and 88.4% for those of Central American descent). These percentages vary little across the study sites.

However, the language the group was speaking when a team member approached is much more variable. The percent of respondents of Mexican descent who were in groups speaking only Spanish when approached range from 7.7% at Forest Falls to 55.0% at Lytle Creek. Respondents in groups speaking a combination of English and Spanish ranged from 29.1% at Lytle

Creek to 54.4% at the West Fork. The patterns are similar for those of Central American origins except the percentage who spoke only Spanish is higher (61.8%) and the percentage who spoke a combination of English and Spanish is lower (25.0%).

Those of Mexican origins tend to have an English speaker present in their group more often than those of Central American origins (83.3 % versus 67.5%). The percentages vary across sites from 80.2% at Lytle Creek to 93.8% at Forest Falls for those of Mexican ancestry and 50.0% at the East Fork to 83.3% at Lytle Creek for those of Central American ancestry.

Table 7 presents the location of the respondent and his/her group within the site when contacted. The categories vary somewhat by study site. Respondent were coded as to whether they were in a designated site⁹, and for those sites where there is a picnic area separate from the creek area, whether they were in the picnic area or by the creek. Additionally, at Forest Falls, locations included whether respondents were located near the falls.

While those of Anglo descent were found using designated sites more frequently (55.7%) than those of Mexican (38.7%) or Central American descent (38.6%), this figure is somewhat misleading due to the variation in the availability of designated sites and the distribution of ancestral groups across the sites. Facility usage is more accurately represented by the patterns within each site. Examining each site separately, those of Anglo descent are only slightly more likely to be found at designated sites. The biggest difference is for those of Central American ancestry at the East Fork site. They were found at

⁹ A designated site is defined as an individual site designed by the forest Service for use as a picnic site.

designated sites much more frequently (66.7%) than those of Anglo (46.2%) or Mexican heritage (39.2%).

Distinct and separate picnic areas exist at the East Fork site and Forest Falls. Respondents could locate either in the picnic area or near the creek (and in the case of Forest Falls, also near the falls). At the East Fork area those of Central American descent were found in the picnic area most frequently (81.3%), followed by those of Anglo descent (61.5%) and Mexican ancestry (46.8%). At Forest Falls those of Anglo and Mexican descent were found in the picnic area equally frequently (73.1% and 76.5% respectively). Only Anglo groups were found picnicking by the falls (6.5%).

Section Two: The Relationship Between Structural Variables and Use Patterns

Spatial Use Patterns

Having given a general description of visitors at each of the four study sites, this section presents the relationship between demographic variables and spatial use patterns. Tables 8 through 12 present the results of the tests of the relationship between inter-site spatial use pattern (where respondents were surveyed) and the five primary structural variables: 1) ancestral origins, 2) generational status, 3) acculturation, 4) income, and 5) education.

Table 8 presents the ancestral composition of each of the study sites. Individuals of Mexican ancestry were the dominant ancestral group at the West Fork (74.3%), the East Fork (67.2%), and Lytle Creek (83.8%). Individuals of Anglo descent were the dominant group at Forest Falls, accounting for 72.1% of the respondents. At the other three sites individuals of Anglo origins represent

from 4.6% of the respondents at the West Fork site to 14.6% at the East Fork site. Individuals of Central American ancestry were present in substantial numbers only at the West and East Fork sites (21.1% and 18.3% respectively), and were completely absent at Forest Falls. A graphic illustration of the variation in ancestry by site is provided in Figure 6.

Table 9 presents the generational status of Hispanic respondents at each of the study sites. Among Hispanic respondents, the majority were born outside the United States. The percent varies somewhat across sites, ranging from 63.4% of the Hispanic respondents at Forest Falls to 82.4% at the West Fork site. In the case of those of Mexican descent, subsequent generations vary from 23% to 37% of the remaining respondents at the West Fork and Forest Falls respectively. First generation individuals consistently make up 16-18% of those of Mexican ancestry, while second generation individuals vary from 4.4% to 19.5% of the Mexican respondents at the East Fork site and Forest Falls respectively. In the case of those of Central American descent, the vast majority were born outside the United States. First generation respondents vary from 0% to 14% of the respondents at the West Fork and Lytle Creek respectively. There were no second generation individuals of Central American origins contacted at any of the sites.

Table 10 presents the acculturation levels of those of Hispanic descent at the study sites as measured by language used in various situations (Question 10 of the survey - see Appendix A). Overall, as well as at each site, individuals of Mexican descent have higher acculturation levels than those of Central American descent (2.41 versus 1.81 on a five point scale). In terms of what these numbers mean from the original scale, a score of 1 equates to speaking

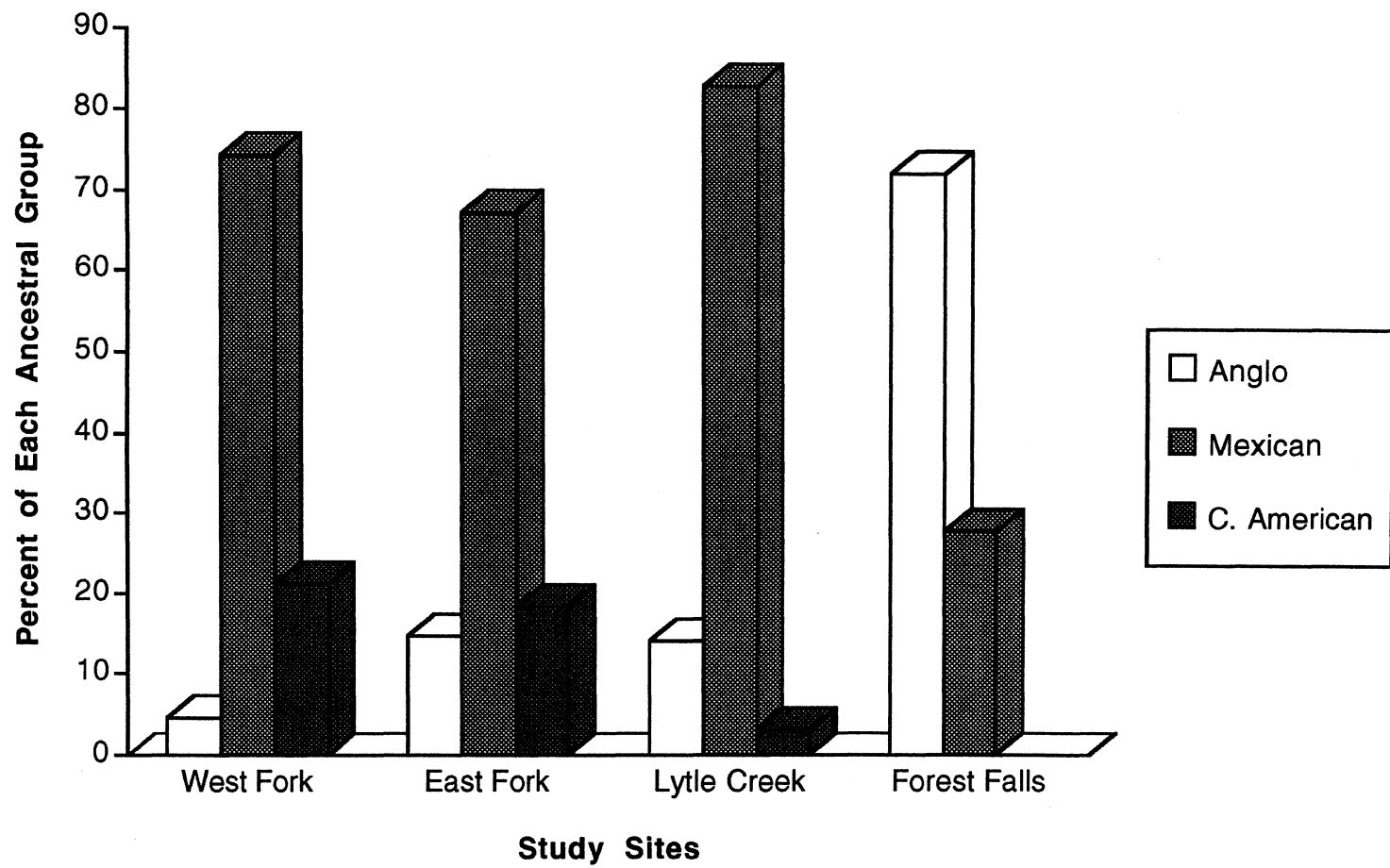


Figure 6. The Ancestral Composition of Each Site

"Spanish only," 2 equates to speaking "Spanish better than English" and 3 equates to speaking "Spanish and English equally." From this it appears that, as a whole, respondents of Mexican descent are significantly closer to being bilingual than the Central American respondents as a group.

Within each Hispanic group, acculturation levels increase across the sites from the West and East Fork sites to Lytle Creek to Forest Falls (sites one through four respectively). Scores for those of Mexican descent range from 2.19 (mostly Spanish) at the West Fork site to 2.92 (nearly bilingual) at Forest Falls. Scores for those of Central American descent range from 1.74 at the West Fork site to 1.93 at Lytle Creek. Those of Central American descent appear to vary little in their acculturation levels as reflected by language ability, and overall possess fairly limited English skills regardless of study site.

Tables 11 and 12 present the income and education levels of respondents across the study sites (Questions 15 and 17 on the survey - see Appendix A). As mentioned earlier, those of Anglo descent tend to have higher income and education levels than those of either Hispanic group. The differences within the ancestral groups across the sites are not significant.

Temporal Use Patterns

The descriptive statistics for the three items that make up individuals' past use of the study site where they were surveyed have already been provided in Table 5 (Question 1 on the survey - see Appendix A). What is of interest here is how the use history relates to the five primary structural variables of interest. Tables 13 through 22 present use history by ancestral origins, generational status, acculturation, income, and education.

Tables 13-15 present the relationship between ancestral group membership and each of the three past use variables: 1) whether the respondents had been to the site previously (Table 13), 2) how often they came to the site in the past year (Table 14), and 3) how many years they have been coming to the site (Table 15). There are no significant relationships between ancestry and percent of first time users: between 62.5% and 82.1% of the respondents had made a prior visit to the site. Those of Central American ancestry visited the East Fork area more times in the past year on average (15.1 times) than either those of Anglo or Mexican descent (3.1 and 4.8 times respectively). Those of Anglo origins have been visiting all the sites for a longer period of time than those of either Hispanic ancestral group. This difference is particularly large at Forest Falls where those of Anglo descent have been visiting the site for 11.7 years and those of Mexican descent only 4.3 years. Individuals of Central American origins have been visiting the East Fork site longer than any other study area.

Tables 16 and 17 present the relationship between generational status and the three use history variables. There is a small, but significant relationship between generational status and the number of visits in the past year (Table 16), with the number of visits increasing as generational tenure increases (4.5, 5.9, and 11.8 visits last year for those of immigrant, first, and second generations respectively).

The number of years the respondent has been coming to the site (Table 17) also increases as generational tenure increases (5.5, 9.9, and 12.3 years for those of immigrant, first, and second generations respectively). While this seems to be an obvious relationship for those born outside the United States, it

is important to note that the number of years continues to rise for those of the first and second generations as well.

Table 18 and 19 present the relationship between acculturation and the three past use history variables. Those who had been to the sites before are slightly more acculturated than those who had not been to the site before (2.42 and 2.16 respectively) suggesting that those who have been to the site before are slightly closer to being equally fluent in both languages than those who have not. Similarly, higher acculturation levels are positively correlated ($r=.267$) with longer use history with all the sites.

Tables 20 through 23 present the relationship between income and education and the three past use history variables. In general neither income nor education are associated with any of the three use history variables.

Section Three: The Meaning of the Recreation Experience

Primary Reason for Coming to the Site That Day

Respondents were asked to choose from a short list their primary reason for visiting the site (Question 2 on the survey - see Appendix A). The choices included enjoying the place itself, wanting to get out of their city or neighborhood, wanting to spend time with family, wanting to spend time with friends, and the site being a good place to picnic, BBQ, swim, or relax. An "other" item with a blank to be filled in was also included. Because so few respondents chose the friends category it was combined with the family category, but it is noteworthy that when asked to choose between the importance of spending time with family or friends, far more people chose family rather than friends. Tables 24 through 28 detail the tests of the relationship between the

primary structural variables and most important reason for coming to the site.

Table 24 presents the relationship between ancestral group membership and primary reason for coming to the site. Figure 7 depicts this relationship as well. Overall, three of the four responses - enjoying the place itself, spending time with family/friends, and the area being a good place for the various activities - were given with equal frequency (28.9%, 28.9%, and 30.2% respectively). The fourth response, getting out of their city or neighborhood, was given by 12% of the respondents.

For individuals of Anglo origins, enjoying the place itself and wanting to spend time with family/friends were the two most frequently given answers (32.3% and 31.2% respectively). The site being a good place to picnic, BBQ, swim, or relax was the least common answer (11.8%). For individuals of Mexican ancestry, a good place to picnic, BBQ, swim, or relax was the most frequently provided answer (34.9%). The desire to escape their city or neighborhood was the least common response (9.4%). For individuals of Central American ancestry, enjoying the place itself was the most frequently provided answer (38.0%), wanting to get out of their city or neighborhood was the least common response (6.0%).

There were not enough of any one response from the "other" item to include in the statistical analysis. It is important to note, however, that for a small number of individuals (13 individuals of Hispanic descent and one of Anglo origins), coming to the site to conduct religious services or baptisms was the primary reason for coming rather than any of the usual social or recreational activities. Also mentioned in very small numbers was recreational gold mining (three individuals of Anglo origins).

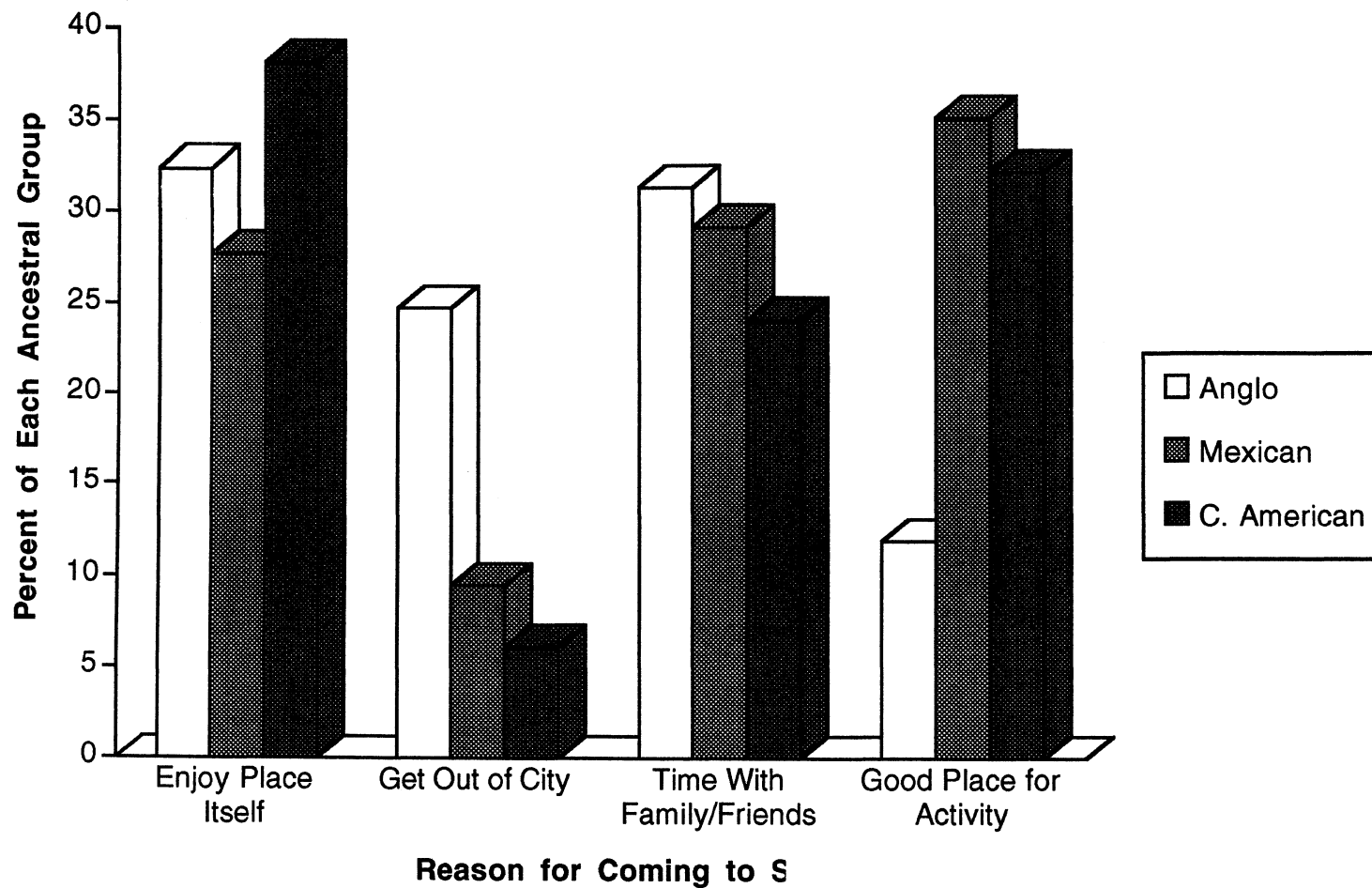


Figure 7. Primary Reason for Coming to the Site by Ancestral Group

Tables 25 and 26 present the relationship between generational status and acculturation and primary reason for coming to the sites. There does not seem to be a relationship between primary reason for coming to the site and generational status for any of the items except wanting to get out of the city or neighborhood, which is given more frequently as generational tenure increases from 8.7% of those born outside the United States to 24.4% of second generation individuals (Table 25). The test of the relationship between primary reason for coming to the site and acculturation (Table 26) just misses being significant ($p=.07$). It appears that there is a slight tendency for those born outside the United States to give the "I enjoy the place itself" responses, while those born in the United States tend to give the "I wanted to get out of my city or neighborhood" response more frequently.

Tables 27 and 28 present the relationship between income and education and primarily reason for coming to the site. Income levels vary across each of the reasons from \$18,368 for those who came because the site is a good place to picnic, etc. to \$28,433 for those who wanted to get out of their city or neighborhood (Table 27). Education levels vary across each of the reasons from 9.6 years for those who thought it was a good place to BBQ, picnic, swim, or relax to 12.1 years for those who wanted to get out of their city or neighborhood (Table 28).

Social Group Composition

As discussed in the methods section, the lack of independence between items within the social group composition question due to the multiple responses given, makes it impossible to analyze the question about

respondents' social group composition as a whole (Question 3 on the survey - see Appendix A). Rather, each of the six possible responses have been broken into separate variables for the purposes of analysis. This means that variation within each of the ancestral groups cannot be statistically measured.

Furthermore, because some possible response items were so infrequently mentioned, there are instances where statistical tests are not possible. The value of this information comes not in the statistical insight it provides, but more in the general description it provides of how social group composition varies across the different ancestral groups who come with to the sites. Tables 29-33 present the relationship between each structural variable and group composition.

Table 29 presents the relationship between ancestral origins and social group composition. This relationship is also depicted in Figure 8. All respondents are more likely to be with their immediate family (85.5%) than any of the other possible survey choices. The next most common response is being with extended family (45.0%), followed by friends (29.2%). Respondents are equally likely to be in organized groups (7.1%) and with compadres or comadres¹⁰ (6.8%). Being by themselves is the least frequently given answer with only 2.3% of the responses.

Individuals of Mexican ancestry are more likely than either those of Anglo or Central American heritage to be with their immediate family (88.9% versus 77.1% versus 80.9%). This trend is also true for being with the extended family (50.6% versus 30.0% versus 39.7%). Individuals of Anglo descent are more

¹⁰ There is no equivalent to compadres (male) and comadres (female) in Anglo culture. They are similar to godparents except that they are considered family (fictive kin) and are more actively involved in the day to day lives of the family.

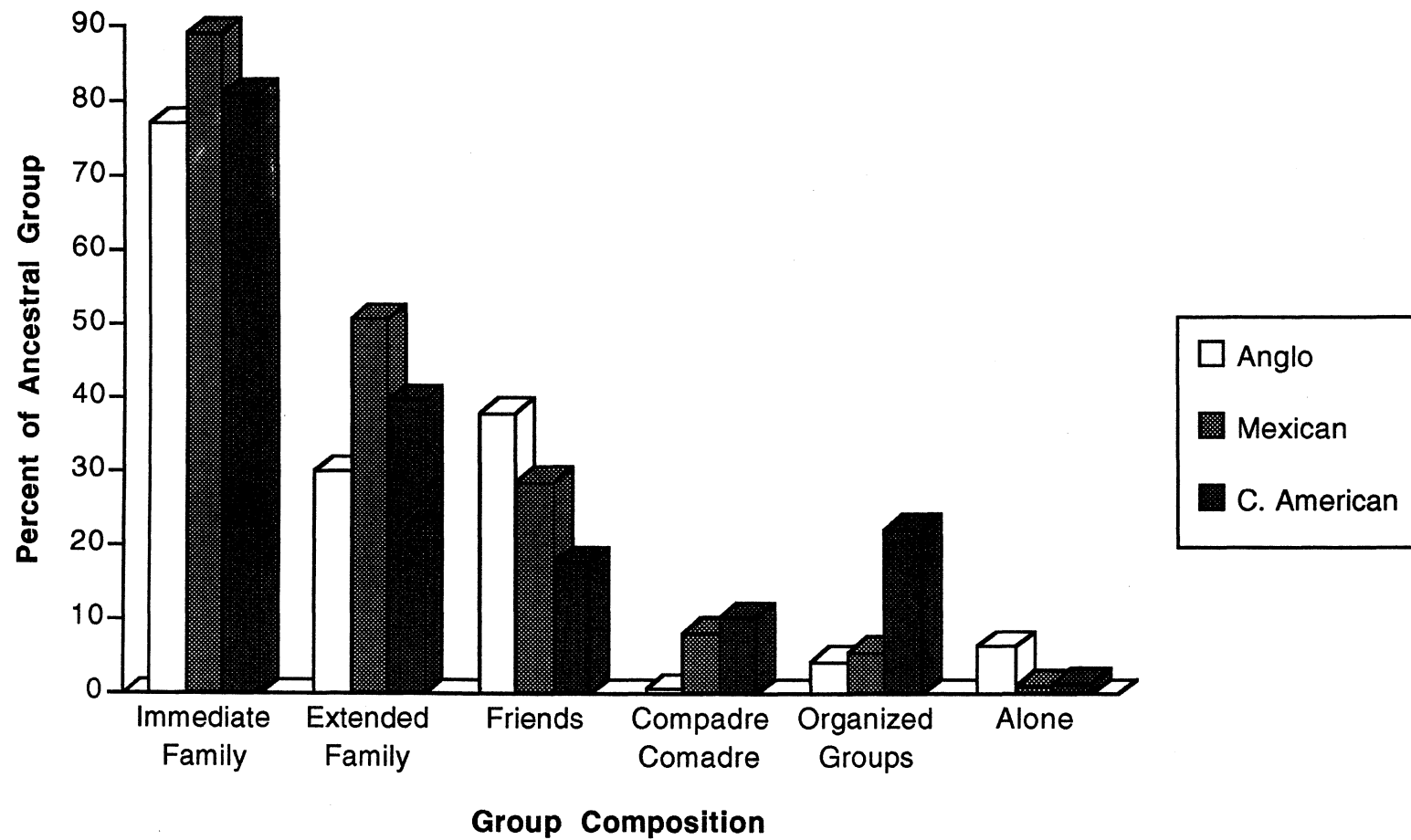


Figure 8. Social Group Composition by Ancestral Group

likely to be at the site with friends (37.9%) than those of Mexican ancestry (28.5%) or of Central American descent (17.7%). Those of Central American descent are more likely than those of Anglo or Mexican origins to be with organized groups (22.1% versus 4.3% versus 5.7%) and have their compadres or comadres with them (10.3% versus .7% versus 8.2%).

Table 30 presents and results of the relationship between generational status and social group composition. Among the Hispanic respondents, being with friends increases as generational tenure increases (26.5%, 27.6%, and 42.6% for immigrants, first and second generation individuals respectively). Similarly, among Hispanic respondents of both ancestral groups, individuals born outside the United States are more likely than either first or second generation individuals to be with organized groups (7.1% versus 2.6% versus 2.1% for immigrants, first and second generation individuals respectively).

Table 31 presents the relationship between acculturation levels and social group composition. Among the Hispanic respondents, acculturation levels seems to be more highly related to social group composition than generational status. The difference is widest for those who were with compadres/comadres where the mean scores were 2.20 for individuals of Mexican descent and 1.39 for individuals of Central American origins. In other words, individuals of both Hispanic groups who were with their compadres/comadres have fairly limited usage of the English language, particularly those of Central American ancestry.

Tables 32 and 33 present the relationship between income and education and social group composition. Income levels within each of the group composition types follows the patterns seen in the analysis sample as a

whole, with those of Anglo origins having the highest level, followed by those of Mexican, and then Central American origins. This is true for all group composition types except for those who were with organized groups and by themselves where incomes were not significantly different.

Education levels within each of the group composition types also follows the patterns seen in the analysis sample as a whole, with those of Anglo origins having the highest level, followed by those of Mexican, then Central American origins. This is true for all group composition types except for those who were by themselves or with their compadres or comadres where incomes were not significantly different.

Respecting the Forest

The first step in analyzing the coded, open-ended responses to the question "What does respecting the forest mean to you?" (Question 4 on the survey - see Appendix A) was to collapse the 305 responses into 14 types of responses, and then into a more manageable number of categories or clusters. From a qualitative inspection of the responses, answers appears to fall into one of four themes.

The first, and most common theme, is related to pragmatic, behaviorally oriented ways of taking care of the forest. Included in this cluster are answers such as not littering and cleaning up after one's self. These types of responses were provided by 40.3% of the individuals answering the question. The responses grouped in the second cluster, given by 22.0% of the respondents, describe relationships to, and meaning of, the forest. Responses such as having clean air and water or a safe place to come to are included in this

cluster. The third cluster consists of responses describing broader, more abstract actions compared to cluster one. Included in this cluster are responses related to preserving nature or protecting the forest. Cluster three responses were given by 28.9% of the individuals replying to the question. The remaining responses are treated as a fourth cluster which consists of a variety of responses that link respect for the forest to respect for self or home. This fourth cluster makes up 9.1% of the responses.

Table 34 shows each of the individual responses that make up each of the four clusters. Tables 35 through 39 present the results of the tests of the relationship between each structural variable and cluster type.

Table 35 presents the relationship between ancestral group membership and respect response cluster. This relationship is also depicted in Figure 9. Individuals of Anglo ancestry tend to give behaviorally oriented responses (Cluster 1) more frequently (61.7%) than either respondents of Mexican or Central American ancestry (37.7% and 18.2% respectively). Individuals of Central American descent give experiential responses (Cluster 2) more frequently (42.4%) than those of Mexican or Anglo descent (22.6% and 8.3% respectively). Individuals of both Hispanic ancestral groups gave cluster four (respect the forest as one would respect) responses more frequently than those of Anglo origins (10.4% and 9.1% for those of Mexican and Central American descent versus 3.3% for those of Anglo descent).

Table 36 presents the relationship between generational status and respect response cluster. First or second generation individuals of Hispanic descent are more likely to give a behaviorally oriented (cluster one) than those born outside the United States (60.5 and 60.7% versus 25.9%). Those

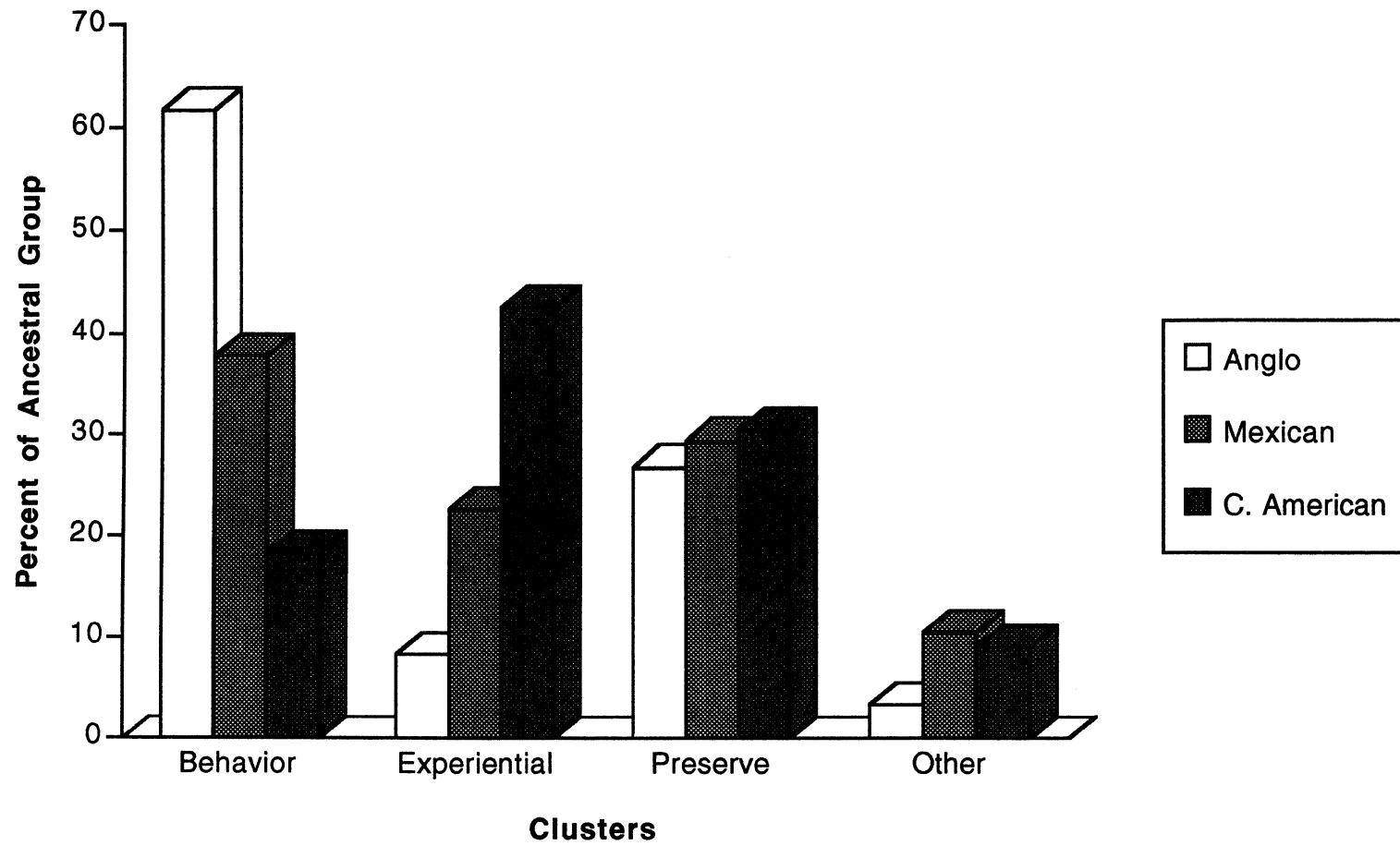


Figure 9. Cluster Answer Given by Ancestral Group

individuals of Hispanic descent who are born outside the United States are more likely to give c experiential responses (28.2%) than either first or second generation individuals (14.0% and 3.6%, respectively). Those individuals of Hispanic descent who were born outside the United States were more likely to give cluster four responses (14.8%), than either first or second generation individuals (2.3% and 3.6% respectively).

Table 37 presents the relationship between acculturation levels and respect cluster. Among those of Hispanic descent, the acculturation levels are highest for those who gave behaviorally-oriented responses, and lowest for those who gave respecting self responses (2.98 versus 1.56). Thus, those who gave behavior responses are equally bilingual while those who gave respecting self responses have very little English language skills.

Tables 38 and 39 present the relationship between income and education and respect cluster. Respondents with the highest incomes are more likely to give behaviorally-oriented responses, while those with the lowest incomes were more likely to give respecting self responses (\$23,776 versus \$14,700). The variations in income levels across cluster types is significant only for those of Central American ancestry. Income levels vary from \$5,417 and \$6,2500 for behavior and self clusters respectively to \$18,438 for the experiential cluster. Education levels do not seem to vary across respect cluster types for any of the three ancestral groups.

Place Identity and Dependence

The first step in reporting the place attachment results (Question 5 on the survey - see Appendix A) was to factor analyze the thirteen items. Table 40

presents the three factors stemming from the factor analysis of the thirteen place identity and dependence items across all three ancestral groups,¹¹ as well as the eigenvalues and inter-item correlations for each of the factors.

Factor one represents the place identity dimension, while factor two contains the place dependence items. Because only two items were included in the survey that could possibly fall into the domain represented by factor three, the factor is unstable and has a low alpha (a measure of inter-item reliability). The results for factor three are consistent with the original scaling (they are worded to be the reverse of the other items). This factor is useful however as a control factor, enabling the researcher to detect response sets since the items are roughly the opposites of many of the other items in the other two factors. That the items in the control factor are negatively loaded indicates that the visual inspection for response set surveys was successful in eliminating those who did not read the question, but simply circled the same answer for all items. Because this question asks respondents specifically about the site, the relationship between the answers given by each ancestral group at each study site is of particular interest. Tables 41 through 46 compare the means of the items within each of the factors for each of the five primary structural variables of interest.

Tables 41-42 present the relationship between ancestral group membership and scores on the two factors. These relationships are also depicted in Figures 10 and 11. Comparing responses between the two factors, each of the three ancestral groups more strongly agree with the place identity

¹¹ A factor analysis of each of the ancestral groups yielded similar enough results to warrant performing the factor analysis on all three groups together.

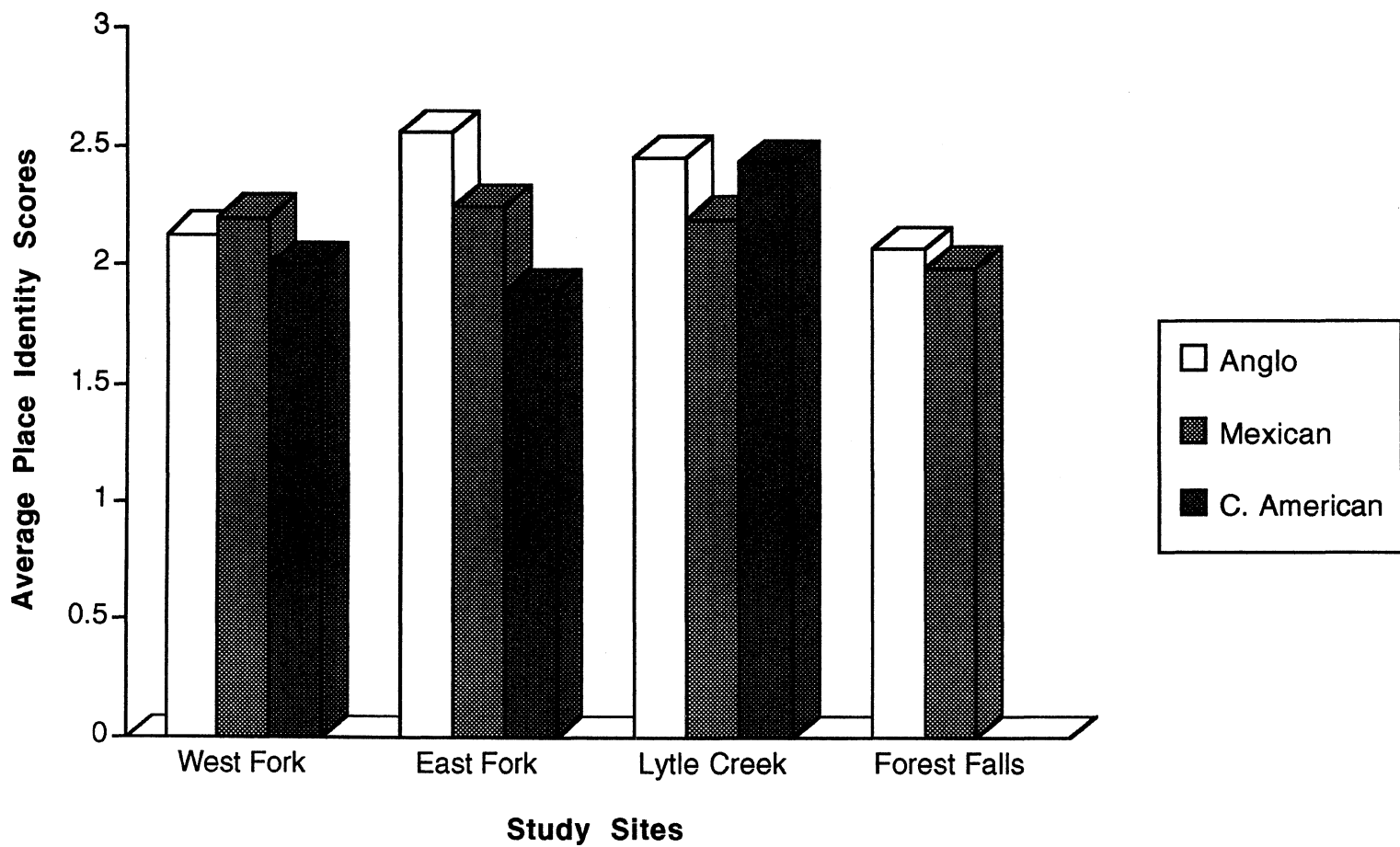


Figure 10. Place Identity Scores by Ancestral Group

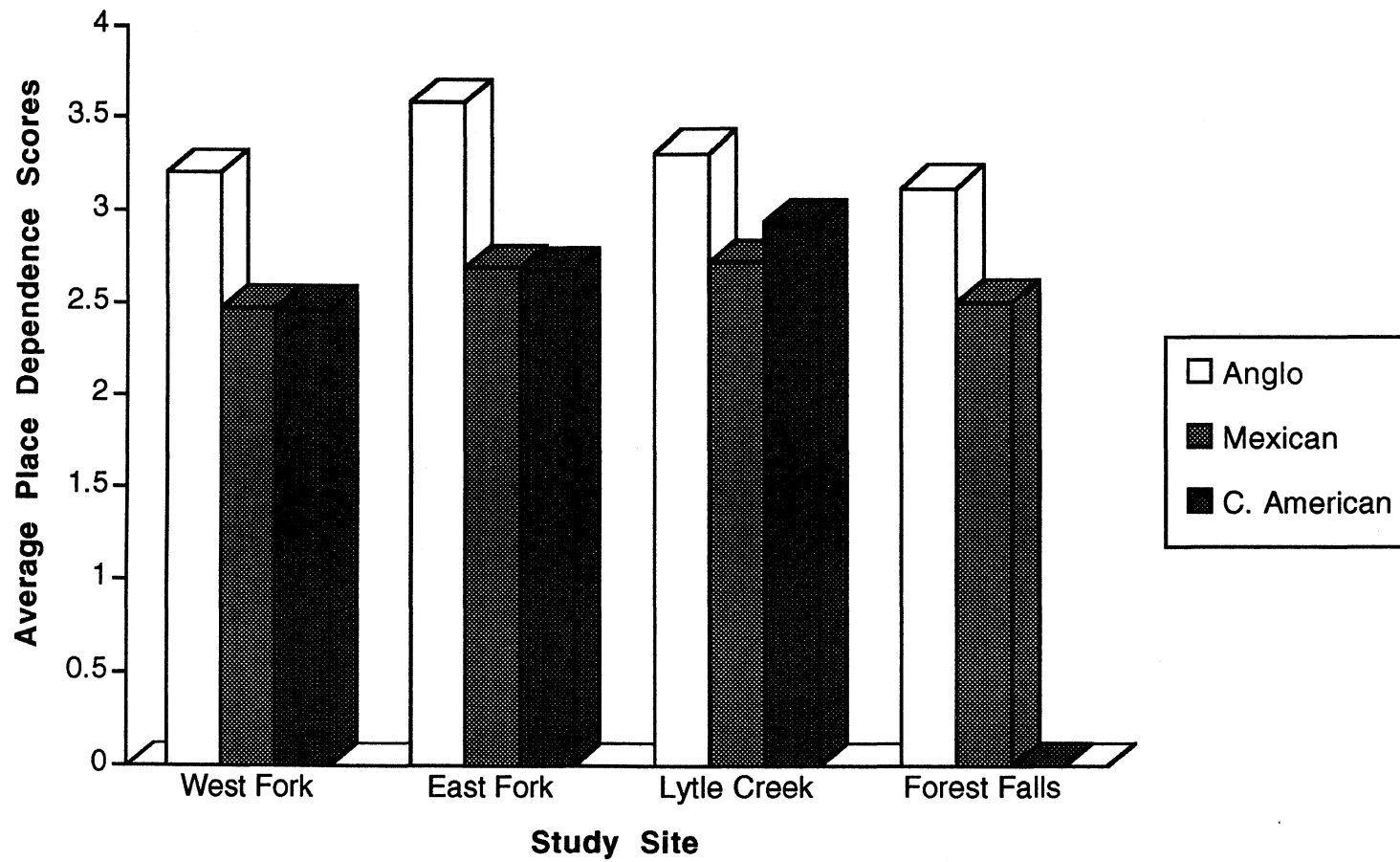


Figure 11. Place Dependence Scores by Ancestral Group

dimension than the place dependence dimension. This was particularly true for individuals of Anglo descent who averaged one point lower on the Likert scale (signifying stronger agreement) on place identity items (2.2) compared to the dependence items (3.2). There are no differences in the scores of the place identity factor across the three ancestral groups. Individuals of both Hispanic ancestral groups score lower, indicating stronger agreement with the place dependence items than those of Anglo origins (2.62 and 2.59 for those Mexican and Central American origins versus 3.22 for those of Anglo origins). A similar pattern occurs across study sites. Individuals of Central American origins at the East Fork site agree more strongly with the place identity items than either those of Anglo or Mexican descent (1.89 versus 2.56 and 2.25).

Table 43 presents the relationship between generational status and scores on each of the two factors. Individuals who were born in the United States (both first and second generation) score higher on the place identity factor, meaning they more strongly disagreed with the items in this factor, than those born outside the United States (2.38 and 2.34 versus 2.10). Individuals who were born in the United States (both first and second generation) also score higher on the place dependence factor, meaning they more strongly disagreed with the items in this factor, than those born outside the United States (2.89 and 2.76 versus 2.53).

Table 44 presents the relationship between acculturation and scores on each of the two factors. Acculturation does not appear to play a significant role in place identity or dependence scores.

Tables 45 and 46 present the relationship between income and education and scores on each of the two factors. There appears to be a

moderate positive correlation (Pearson's $r=.295$) between income and place dependence, meaning that place dependence decreases as income increases for those of Anglo descent. These relationships are also significant at the East Fork (Pearson's $r=.776$) and at Lytle Creek (Pearson's $r=.331$). For individuals of Central American ancestry, higher education levels are associated with higher place identity scores at Lytle Creek, meaning stronger disagreement with the items (Pearson's $r=.783$). Also for individuals of Central American ancestry, higher education levels are associated with higher place dependence scores, meaning stronger disagreement with the items (Pearson's $r=.329$) across all four study sites.

For individuals of both Anglo and Mexican ancestry at Forest Falls, higher education levels are associated with higher place dependence scores, meaning stronger disagreement with the items (Pearson's $r=.241$ and Pearson's $r=.401$ respectively).

Ethnic Composition Preferences

Respondents were asked to choose which of four statements about the ethnic composition of recreation areas came closest to their preferences (Question 6 on the survey - see Appendix A). They were asked whether they preferred areas where 1) everyone is of the same ethnic/racial group as the respondent, 2) most are of the same ethnic/racial group as the respondent, or 3) where a variety of ethnic/racial groups are present. A "no preference" item was included for those who either truly felt this way or were uncomfortable with answering the question. In coding the data, enough respondents gave both the variety and no preference responses to warrant including them as an additional

category. Tables 47 through 51 present the relationships between the five structural variables and ethnic composition preference.

Table 47 presents the relationship between ancestral group membership and ethnic composition preferences. This relationship is also depicted in Figure 12. By far the most common response for all ancestral groups was "no preference," given by 60.0% of the respondents. This was followed by "a variety of ethnic/racial groups present," given by 20.2% of the respondents, followed by "most like me" and "all like me" given by 8.7% and 5.1% of the respondents, respectively.

Individuals of Anglo origins gave the "most like me" response nearly twice as often as those of Hispanic descent (13.9% versus 7.2% and 6.7% for those of Anglo, Mexican, and Central American origins respectively). Individuals of both the Hispanic ancestral groups gave the "all like me" response more frequently than the those of Anglo ancestry (6.0% and 5.0% for those of Mexican and Central American ancestry versus 2.7% for those of Anglo origins).

Table 48 presents the relationship between generational status and ethnic composition preferences. Among those of Hispanic descent, individuals born in the United States are more likely to prefer a variety of ethnic/racial groups present than those born outside the United States (32.1% and 34.8% for those of first and second generations versus 16.6% for those born outside the United States). Similarly, individuals born outside the United States are more likely to have no preference than those born in the United States (62.3% versus 50.0% and 45.7%).

Table 49 presents the relationship between acculturation levels and ethnic composition preferences. Among those of Hispanic descent, the lowest

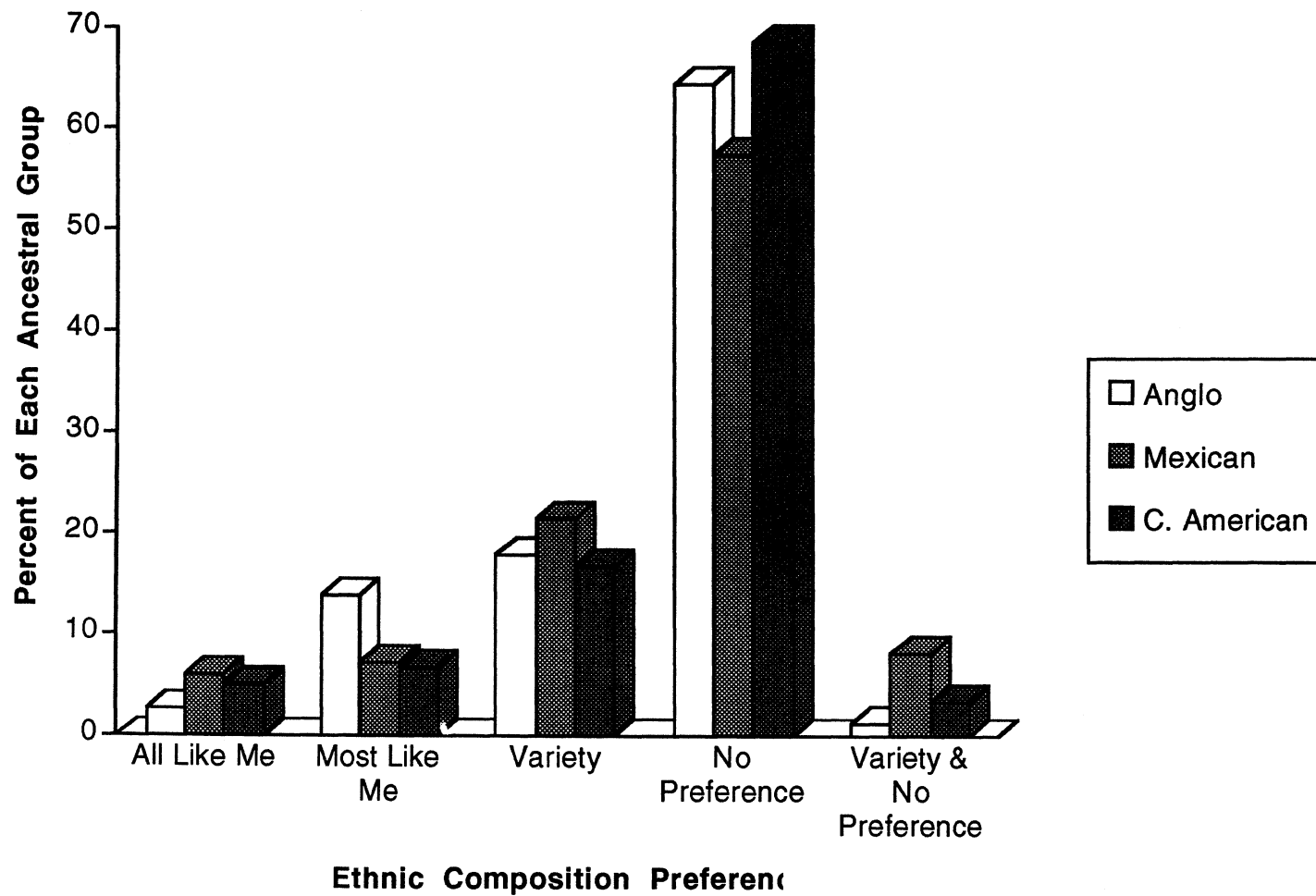


Figure 12. Ethnic Composition Preferences by Ancestral Group

acculturation levels are associated with those who chose both the "most people of the same ethnic/racial group as me" and "no preference" with scores of 2.26 and 2.22 respectively. In terms of the meaning of these numbers from the original items, these respondents have limited English language skills. The highest acculturation levels are associated with those who prefer a variety of ethnic/racial groups present, with a score of 2.79.

Tables 50 and 51 present the relationships between income and education and ethnic composition preferences. The lowest income levels are associated with those who preferred "all of those present to be of the same ethnic/racial group as me" and the highest be for those who preferred "most of those present to be of the same ethnic/racial group as me" (\$15,000 versus \$28,581).

Culturation Group Identification Preferences

Individuals of Hispanic origins had several possible choices for answering the question, "What cultural group do you prefer others to think of you as?" These included Anglo American, Mexican American, Latino, and Hispanic American (Question 9 on the survey - see Appendix A). There was also the opportunity for them to fill in an "other" items with the designation of their own choice. Tables 52 through 56 contain the results of the tests of the relationship between the five structural variables and cultural group identification preferences.

Table 52 presents the relationship between ancestral composition and cultural group identification preferences. This relationship is also depicted in Figure 13. The most frequent response given is "Latino" followed by "Mexican

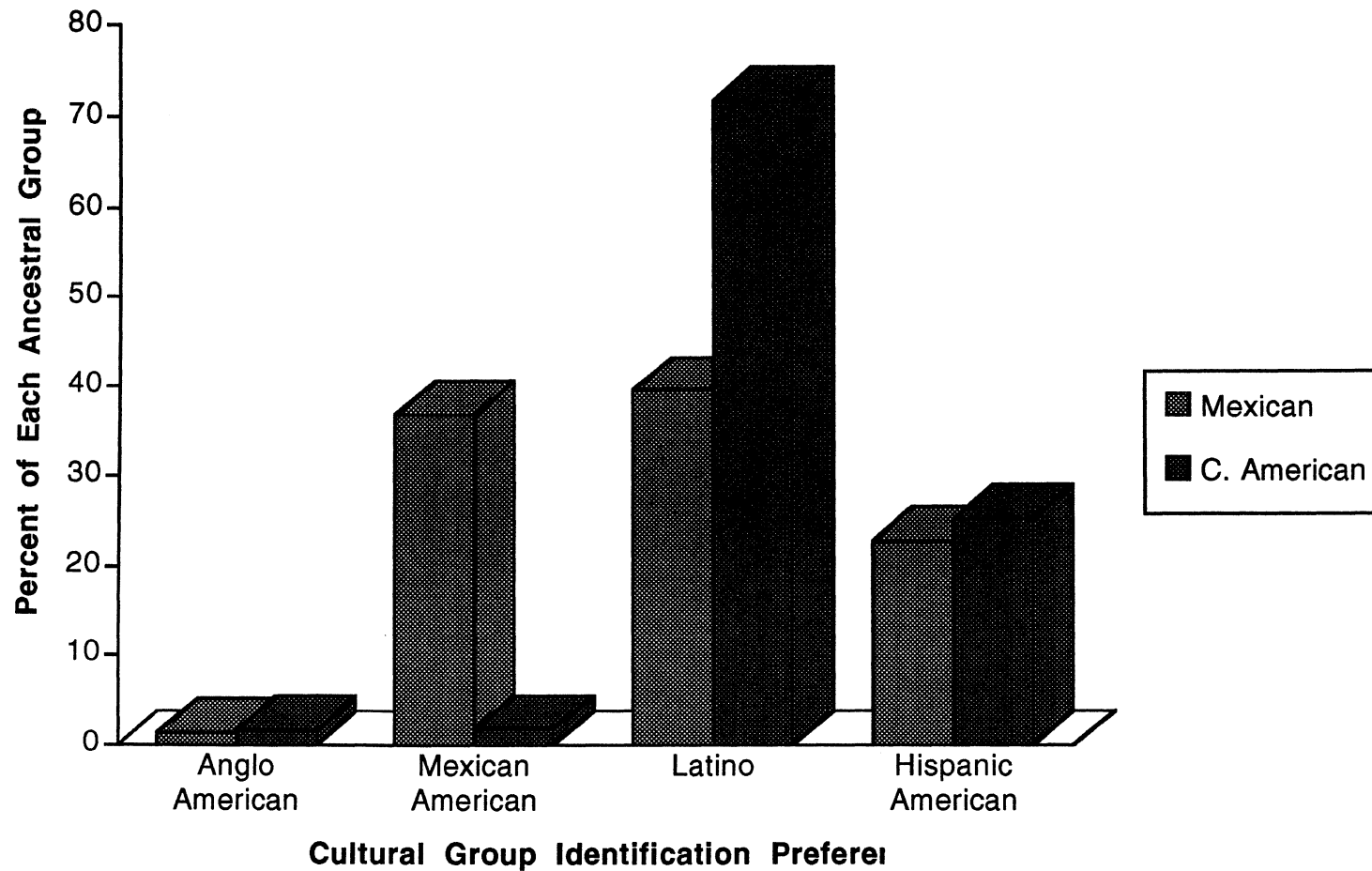


Figure 13. Cultural Group Identification Preferences by Ancestral Group

American" and "Hispanic American" (43.5%, 32.2%, and 22.9% respectively). "Anglo American" was chosen by 1.5% of the Hispanic respondents. The most common answer given by those of Mexican descent is "Latino," with 34.7% of the respondents giving this response. The next most common answer for those of Mexican ancestry is "Mexican American" at 32.4%, followed by "Hispanic American" with 19.9%. A small number of respondents (1.3%) chose "Anglo American." The only answer given with any frequency in the "other" designation is "Mexicano" written in by 7 individuals.

The most common answer given by those of Central American descent is "Latino," given by 71.4% of the respondents. The next most common answer for those of Central American ancestry is "Hispanic American" given by 25% of the respondents. A small number of respondents (1.7% and 1.8%, respectively) chose "Anglo American" and "Mexican American."

Table 53 presents the relationship between generational status and cultural group identification preferences. For those of Mexican descent, individuals born outside the United States were more likely to give "Latino" as their preferred cultural group identification than those born in the United States (52.6% versus 9.2% and 0% for those of immigrant, first, and second generations, respectively). The most common response for first and second generation individuals is "Mexican Americans," (69.2% and 51.3% versus 27.6% for those of immigrant, first, and second generations, respectively). For those of Central American descent, Latino remains the most common answer across generations (71.7% and 66.7% for those of immigrant and first generations respectively).

For those of both Hispanic ancestral groups, "Hispanic American" is

increasingly chosen as generation tenure increases (19.7%, 22.1%, and 43.6% for immigrants, first generation, and second generation respectively). Although "Anglo American" was the least common answer, nearly all of the responses came from second generation individuals (5.13% versus 1.23% for second generation versus those born outside the United States).

Table 54 presents the relationship between acculturation levels and cultural group identification preferences. Those who chose "Mexican American" have the highest acculturation levels (2.87) and those who chose "Latino" have the lowest (1.81).

Tables 55 and 56 present the relationship between income and education levels and cultural group identification preferences. Those who chose "Anglo American" have the highest income level and those who chose "Latino" have the lowest income level (\$23,333 versus \$16,796). Similarly, those who chose "Anglo American" have the highest education level and those who chose "Latino" have the lowest education levels (10.1 years versus 8.7 years).

Location of Family Members

Respondents were asked to estimate the number of family members they had living in three geographic locales: in Southern California, in the whole United States, and in their ancestral country (Questions 11-13 on the survey - see Appendix A). The aim was not to get an absolute number of family members, since this would be a very time consuming process for the respondent, but to get an idea of individual's family geography. Tables 57 through 61 present the relationship between the five structural variables and the

number of family members respondents have within each of the geographic locales

Table 57 presents the relationship between ancestral group membership and numbers of family members in the three geographic locales of interest: Southern California, the entire United States, and their ancestral country. This relationship is also depicted in Figure 14. Those of Mexican descent have the most family members in Southern California, followed by those of Anglo origins (31.3 and 18.1 respectively). Individuals of Central American ancestry have the least number of family members in Southern California (8.5). Those of Anglo origins have the most family members in the United States, followed by those of Mexican ancestry (53.4 and 44.3). Again, those of Central American descent have the least number of family members in the United States (14.7). Those of Mexican descent have the most family members in their ancestral country, followed by those of Central American origins (40.1 and 29.6). Individuals of Anglo ancestry have the least number of family members in their ancestral country (19.7).

Table 58 presents the relationship between generational status and number of family members in each of the three geographic locales. Among those of both Hispanic ancestral groups, the number of family members in Southern California increases as generational tenure increases. The same is true for those of Mexican ancestry for increasing numbers of family members in the United States as a whole. Among those of Mexican ancestry, the number of family members in their ancestral country peaks with first generation individuals and is about equal for those born outside the United States and for those of the second generation (37.6, 47.4, and 39.7 family members for immigrant, first, and

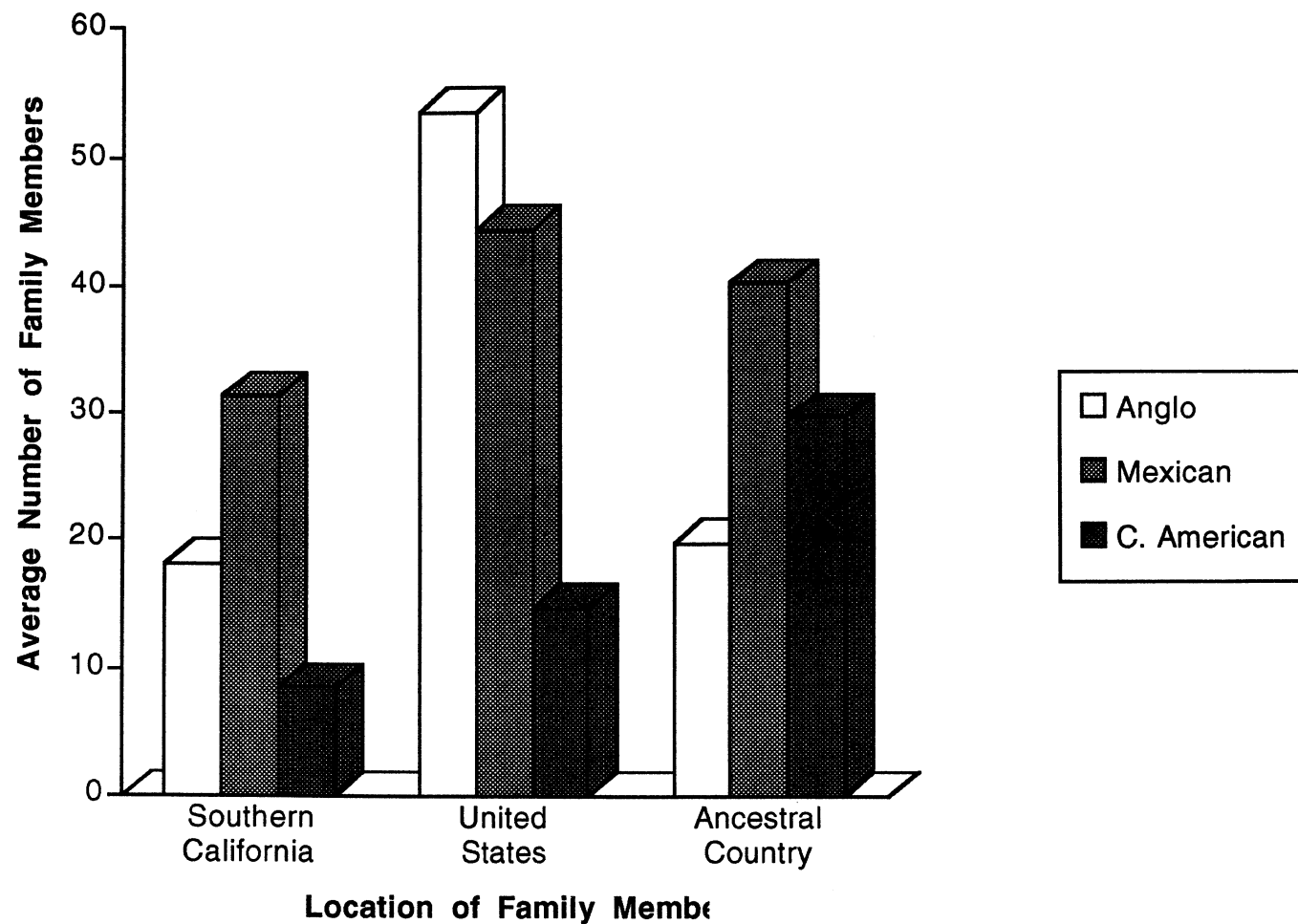


Figure 14. Geographic Loci of Family Members by Ancestral Group

second generation individuals).

Table 59 presents the relationship between acculturation levels and the number of family members in each of the geographic locales. For those of Hispanic descent, higher acculturation levels are associated with larger numbers of family members in Southern California (Pearson's $r=.387$) and in the United States (Pearson's $r=.437$). There is a small, but significant relationship between larger numbers of family members in the ancestral country and acculturation levels (Pearson's $r=.121$).

Tables 60 and 61 present the relationship between income and education levels and the number of family members in each of the geographic locales. Neither income nor education seem to be strongly associated with the number of family members in any of the three geographic locales.

Chapter Five

Social Field Analysis

Introduction

One of the primary goals of this thesis is to understand the *relationship* between individuals and the recreation sites. It is the *confluence* of variables that come together at each of the study sites that is of interest here. In order to discuss the study sites and respondents in this manner it is necessary to pull together all the variables studied and attempt to discuss them as a whole, rather than each in isolation of the other as was the case in the chapter four. The concept of the social field described in the literature review provides the needed tools. Stokols and Shumaker (1981) define the social field of a place as "the totality of meanings conveyed to current or prospective occupants." The perceived social field is made up of the actual content of the meanings held toward a place, as well as the mechanisms for maintaining socio-environmental order (the way meanings are communicated). This presents a behavioral context to potential users. It is possible in describing the social field of an area to simultaneously describe the users and their relationship to the site. The process of describing the social field entails meshing both the quantitative and qualitative data gathered for the thesis.

The Social Field of Each of the Study Sites

The ancestral composition of each study site roughly follows the pattern that was originally expected. The respondents at the West and East Fork sites are almost exclusively individuals of Hispanic origin and Forest Falls respondents are primarily of Anglo descent. There are fewer Anglo respondents at Lytle Creek than initially expected. It is possible that since respondents were approached on a group-by-group basis and also since Anglo groups are smaller than either of the Hispanic groups, there is the potential to get more responses per group from Hispanic groups which would tend to underestimate the percentage of Anglos at the sites. Still, the composition of Lytle Creek was not so far off the expected composition to invalidate the initial assumptions made about it.

Beyond the ancestral composition of the area, several characteristics of the groups at each site were recorded in the attempt to understand and characterize the social field of each of the study sites. These characteristics include the language the group was speaking upon the team members' approach, whether an English speaker was present in the group when the team member asked for one, and the respondent's language choice for taking the survey. Also included in these characteristics were the ancestral composition and size of the groups.

The variation across study sites in each of these characteristics gives an indication of the social field of the area, as well as about the individual groups that make up each site. Each measure suggests varying degrees of ethnic diversity from sites dominated by those of Hispanic descent and using primarily

the Spanish language to more ethnically plural sites (individuals of Anglo and Hispanic ancestry), with both English and Spanish being used, to sites where those of Anglo descent are the dominant group. These trends are particularly true for Mexican ancestral groups. Central American groups tend to be more similar across the sites than the Mexican ancestral groups.

Site 1: The West Fork of the San Gabriel River

The West Fork site is the most unique of the four sites. A manager or researcher will quickly notice its heavily littered and impacted use areas and large amounts of graffiti that make it seem somewhat inhospitable on one's first visit. There are no picnicking facilities available (only a pit toilet and small parking lot); visitors must bring all the equipment they will need. Access to the stream area is relatively difficult, going down an old stairway that ends in a two foot drop off, leaving about a fifty foot distance through a rock field that must be traversed before getting to the stream. The absence of facilities and difficult access may in part explain the smaller percentage of individuals of both Hispanic groups who said their primary reason for coming to the site was because it was a good place to picnic, BBQ, swim, and relax than at the East Fork site or Lytle Creek, where access and facilities are better.

The Anglo visitor (based on the impressions of team members and others involved in the study) at the West Fork site is very aware of his or her minority status. Only eight individuals (4.3%) of Anglo descent were surveyed at the West Fork site, and according to the field notes, two of these individuals were not using the area, but on mountain bikes passing through on the far side of the creek. In terms of income and education levels, the Anglos at the West Fork site

are not different from Anglos in the analysis sample as a whole. Possibly because so few individuals of Anglo origins use the site, the Hispanic visitors were curious about team members and tended to watch them and ask questions about what they are doing and why. Even when team members were not dressed in team shirts, and were just "hanging out" doing participant observation, people wanted to know why they were not getting in the water and when they were going to BBQ.

The Hispanic visitors to the West Fork comprised 93.6% of the respondents, approximately three-quarters of which were of Mexican descent. There are many indications that individuals of Hispanic descent at the West Fork are the least acculturated as a group relative to the other study sites. The West Fork site included: (1) the largest number of individuals born outside the United States, (2) the lowest acculturation, income, and education levels, (3) fewer groups that included Anglos members, and (4) more respondents who spoke only Spanish and chose Spanish language survey. Additionally, the most commonly given cultural group identification preference was "Latino."

Individuals of Central American ancestry are the newest visitors to the site and come least frequently. Those of Mexican ancestry come to the site most frequently. The few individuals of Anglo origins using the site appear to have been visiting the longest.

The most common reason given for coming to the site was enjoying the place itself, followed by wanting to spend time with family/friends. Groups comprised of Central Americans were the largest in size at the West Fork and those of Anglos were the smallest.

From a strictly qualitative perspective, the sound of Spanish language

radio stations carries up and down the stream. Carne asada (thinly sliced steak highly marinated and seasoned) served on tortillas with fresh vegetables was frequently the meal of choice. Children play quite freely up and down the creek. On several occasions team members commented that their own (Anglo) parents would never have let them run so freely in an area with so many potential physical hazards such as broken glass, jagged rocks, and deep pools of water. On an initial visit to this area, the finals for the world soccer cup were being played and involved a Central American country. Everywhere the team went, the radios blasted the coverage in Spanish. Overall, it seems like everyone is in balance with each other, even though there never seems to be much intergroup interactions taking place. It is difficult to put into words all the sights, sounds, and smells that seem to be part of the "Hispanic atmosphere," but it is here, at the West Fork site, that this feeling was strongest and most pervasive.

Site 2: The East Fork of the San Gabriel River

The East Fork site is similar in many respects to the West Fork, although the "Hispanic atmosphere" occurs in pockets around the site, rather than being spread throughout the area. The East Fork area has more diversity in terms of uses, users, and facility layout than any of the other areas. The Forest Service designated site consists of a heavily shaded picnic area with approximately fifteen double length picnic tables and BBQs on concrete pads with adjoining pit toilets and parking lot. Across the road and approximately 150 feet below the road level is the creek area. Access is fairly difficult (down the cliff) unless the visitor spots one of two unmarked dirt "ramps" down to the creek. There are no facilities on the creek side of the road. There is less graffiti than at the West Fork

area. Because of regular Forest Service maintenance in the picnic area, the heaviest build-up of litter is almost exclusively confined to the creek area.

Unlike the West Fork site, the most frequently given reason for coming to the site is that it is a good place to picnic, BBQ, swim and relax, followed by wanting to spend time with family/friends, possibly a reflection of the availability of facilities and somewhat cleaner conditions.

Individuals of Mexican ancestry are the newest visitors to the site. Those of Central American ancestry come to the site most frequently and have been coming there longer than they have any other site. With the exception of Central American groups at the West Fork site, group sizes were larger here than at any other site.

Those of Anglo descent are still very much the minority at this site, comprising 12.8% of the sample. The road running essentially through the middle of the site makes it much more prone to people making brief stops, so those of Anglo descent were not as much of a source of interest at the East Fork site. In addition to Anglo picnickers, there was a small but consistent group of gold miners who were primarily middle-aged Anglo men. The miners frequently spent two or three days a week camping at the site. They bring a great deal of equipment including motorized dredging machines to mine the in the stream. For the most part they tend to keep to themselves. They mine for recreational purposes, most say the amount of gold they take allows them to break even on their expenses. The research team initially had a difficult time talking with the miners because the research effort began about the same time the Sierra Club began an effort to ban mining in the area. The miners were suspicious of the team for most of the first half of the summer. Once they were convinced the

team was not a part of the Sierra Club's efforts they were friendly and talkative. Through conversations and interviews with several of the miners, it seems that the miners very much disliked the litter and noise of the Hispanic picnickers, but they did not dislike the people themselves. Some seem to enjoy the picnickers curiosity about their activities. Continued access for mining, getting a site to use their dredger, and being left to their own devices seem to be their major concerns.

In addition to the Anglo picnickers and miners, there were at various times in the summer three homeless groups living at the East Fork site, all of whom were of Anglo descent. The team had several conversations and interviewed one group in particular who was there for nearly two months. They were a family of four who had been homeless since January of 1991. When they moved into the site they chose an area that had been particularly popular with large Hispanic church groups. In doing so they placed themselves right in the middle of a heavily used area. This set them up for a summer of what they perceived as extreme conflict because of the close proximity of the Hispanic groups. During an interview the man of the group said:

"They invade your space and leave their trash. They were going to camp right here in our yard and finally we said you're not going to camp here, you've got to leave. I had to more or less shove them out. Can't they see we're camped here. My other tent is down there by the water, that doesn't keep them from dumping water on it, it doesn't keep them out of our pitchers we have down there or getting into our coolers down there. They invade your stuff."

It apparently never occurred to them that they could possibly have been the invaders.

Those of Hispanic descent comprise 83.7% of the respondents at the

East Fork site. As with the West Fork site the split is approximately three-quarters individuals of Mexican descent and one-quarter individuals of Central American descent. These individuals tend to be slightly more acculturated than their counterparts at the West Fork site given that: (1) their acculturation, income, and education levels were higher, (2) they spoke English only more frequently and chose English language surveys more frequently.

In addition to the picnickers, there is a strong church group component at the East Fork that is not well represented in the survey population (church groups were also present at the West Fork site, but in smaller numbers). The church groups consist mainly of individuals of Central American heritage. These groups bring with them entire public address systems and generators, musical instruments, folding tables and chairs, and large quantities of food. Occasionally the sound of their services can be heard from some distance, although the sound of the running water from the creek tends to muffle all the noise at the site. Their services include regular sermons given by their leader, always in Spanish, frequently followed by baptisms in the creek. The survey teams was often unable to survey these groups because they were in services the entire time the team was at the site. If the team was able to survey them, it was not unusual to get only one or two surveys from fifty or sixty people, sometimes everyone deferring to the minister to fill out a survey for them all. Early in the season, contact with one of the Central American church groups provided an explanation as to why so many church groups come to the East Fork site. According to the informant, a Hispanic church group (he did not mention more specific origins) visiting the area around the turn of the century had a religious experience; they had visions and spoke in tongues, etc. The

knowledge of this experience has been passed among many churches in the Los Angeles area and now many church groups come to the site. This unique relationship between those of Central American descent and the East Fork area is reflected in many facets of the results. Those of Central American descent are more likely to be with church groups than either of the other two ancestral groups (22.1%, 4.3%, and 5.7% for those of Central American, Anglo, and Mexican origins respectively). Those of Central American descent come to the East Fork more frequently and have been coming for a longer period of time than individuals of Central American descent at any other site. Based on the place attachment question, the site seems to be more central to their identity and they are more dependent on using the site than those of the other ancestral groups.

At both the East and West Fork sites many respondents clearly struggled with filling out the surveys. Literacy issues, as well as a general unfamiliarity with filling out surveys, seemed to play a role in respondent's difficulties.

Site 3: Lytle Creek

Lytle Creek (on the San Bernardino National Forest) is a long narrow picnic area (approximately 1/4 mile long) that follows the creek bed. It has approximately thirty picnic tables, each accompanied by a BBQ and/or a fire ring. In addition to these facilities, three relatively small parking lots run along the area, as do several pit toilets and water spigots. The area is actively maintained by Forest Service personnel during low-visitation hours, resulting in a relatively litter- and graffiti-free area. Several people at Lytle Creek commented that they used to go to San Gabriel Canyon (no one specified

where in the canyon), but it was too dirty and crowded so they come to Lytle Creek now. In addition to these maintenance activities, the Forest Service seems to be actively trying to communicate with their Spanish-speaking clientele through Spanish language signage, including a sign that thanks them for their visit on the way out.

The area is similar to an urban park because of its closer proximity to foothill communities at the base of the mountains and easier access between the parking area and the recreation sites (there are no stairways, ramps or cliffs to navigate). This urban park perception seems to fit with how some of the visitors see it as well. Comments from conversations and interviews about the site include wishing it had a grassy area, playground equipment, and sandy areas along the shore. Also, it was not unusual to see gang members hanging out in the parking lots at Lytle Creek. An Anglo family that lived in Fontana (near Lytle Creek) was interviewed at Forest Falls. When asked why they drove all the way to Forest Falls rather than go to Lytle Creek, the husband described Lytle Creek as a crowded and noisy party place with people riding their dirt bikes.

The majority of the visitors locate themselves in shady areas along the creek rather than use the designated sites, many of which are out in the direct sun. It was not uncommon to have one thousand or more people at the site and to have picnic tables in the direct sun go unused. Many people seem to have adapted their recreation equipment to fit their needs here, including building a barbecue with wheels and creating a baby bassinet that hangs from a tree. Possibly because of the easier access here, equipment and food preparation tends to be more elaborate. Several times in the summer, groups were seen

cutting up entire pig skins to deep fry fresh pork rinds at the site. On two separate occasions groups were seen simmering an entire skinned and dressed goat in a large kettle.

Lytle Creek had an interesting gradation within the social field. After repeated visits it is was evident that many more Spanish language surveys were used at the north end of the area . The change in the social field of the area from end to end was quite striking. At the southern end, there were many Anglo groups and English speaking Hispanic groups. Toward the middle this distinction blurred, and at the far end, the social field was very much like that at the West Fork area. A unique aspect of the social field at Lytle Creek are the many Hispanic vendors (a traditional method of sales in Mexico). Vendors included a for-hire mariachi band, women and children selling rice and corn on the cob, and an ice cream man with a pushcart. These vendors are found almost exclusively at the more distant northern end of the picnic area (with the exception of the ice cream man who can be seen throughout the area). The visual cues related to variation in the backgrounds of Hispanic visitors seemed larger at Lytle Creek. People varied from fairly impoverished looking individuals who spoke little English, to fairly affluent individuals who spoke English with no Spanish accent. Unfortunately, observations about the differences within the area were made too late in the summer to develop location codes within Lytle Creek that could be used to compare quantitative (survey) results.

With the exception of Central Americans at the East Fork, respondents of all ancestral groups have been coming to Lytle Creek the longest of the four study sites. It is also the site that those of Anglo origins visit most frequently.

The most frequently given reason for coming to the site was that it was a good place to picnic, BBQ, swim, and relax followed by enjoying the place itself.

Those of Hispanic descent comprise 84.8% of the respondents at Lytle Creek, approximately 93% of which were of Mexican descent and 3% of which were of Central American descent. The individuals of Mexican descent as a whole seem to be more acculturated than their counterparts at the West and East Fork sites given that: (1) the number of individuals born outside the United States is much lower, while the number of second generation individuals is three times greater, (2) acculturation levels were higher, (3) respondents spoke English only more frequently and chose English language surveys more frequently and (4) respondents were in mixed Anglo/Hispanic groups more frequently. The few individuals of Central American ancestry do not seem to be different from their counterparts at the West and East Fork sites in the above characteristics, except that their education levels are slightly higher.

In addition to the people who are there only for the picnic site, there are a small number of picnickers at the site who are there primarily to use a nearby shooting range operated on the national forest. They come to the Lytle Creek to eat and drink for a short time only before or after going to the shooting range.

Lytle Creek could be characterized as having the most varied social field, but because of its size most visitors had little idea what was going on in areas further up or down stream from them. A more accurate description of Lytle Creek is that it contains two or three micro-social fields.

Site 4: Forest Falls

Forest Falls is what comes to mind for most people in the outdoor

recreation profession when they think of Forest Service picnic sites. Located under large Ponderosa pines, it consists of approximately twenty widely-spaced individual sites that include a table, BBQ, and fire ring located around a loop road. The creek runs through the back of the picnic area. In addition to single parking spaces located at each picnic site, there is a large parking lot at the entrance to the picnic area. This parking area is meant for those individuals who are hiking into the trails of the San Geronio Wilderness Area which borders the area.

Those of Anglo descent comprise the largest group at Forest Falls (58.8%). The income level of these Anglos is more than \$13,000 higher than Anglos at Lytle Creek. Education levels, however, are not significantly higher. Individuals of Mexican descent comprise 28.1% of the respondents. They seem to be the most acculturated group relative to individuals of Hispanic descent at other sites given that: (1) the number of individuals born outside the United States is lower and the number of second generation individuals is higher, (2) acculturation, income, and education levels are higher, (3) more groups speak English only and choose English language surveys more frequently, (4) mixed Anglo/Hispanic groups are more frequent, and (5) survey respondents were generally much more familiar with filling out surveys and did so much quicker.

In addition to those of Anglo and Mexican origins, Forest Falls is the only site to have Asian/Pacific Islander and "other" ancestral groups in any great number. Those of Asian/Pacific Islander descent comprise 5.6% of the respondents and those in the "other" designation comprise 7.5% of the respondents. Among the countries represented in the "other" category are Ireland, Poland, and South Africa.

The most frequently given reason for coming to the site is enjoying the place itself, followed by wanting to spend time with family/friends. Individuals of Mexican ancestry come to Forest Falls more frequently to the site than do individuals of Mexican ancestry at any other site, but have been coming for a much shorter length of time.

Group sizes are smaller at Forest Falls, particularly for those of Mexican descent. It is generally a much quieter picnic area, playing radios loudly does not seem to be considered acceptable. Neighboring groups asked people to turn their music down a few times when team members were around. Children are generally kept closer to the parents or are supervised when they went to the stream. An Anglo man commented during an interview that there is a psychological impact associated with being at Forest Falls. People were quieter and more respectful there than they would be otherwise. He liked that about the people there. The food prepared was more typical BBQ fare - primarily hotdogs and hamburgers. The large Hispanic groups that would have blended in at any of the other sites tended to be more noticeable at Forest Falls. A young Hispanic woman at Lytle Creek, mentioned that she knew about Forest Falls, but that "only white people go there, not her people." She said she would not feel comfortable there.

Young local residents, as well as high school students from surrounding areas, frequently congregate in the parking lot to "hang out" and drink.

Chapter Six

Interaction Variables

Introduction

As suggested in the social structure and personality section of the literature review, it appears that one of the major difficulties in the use of such social structural variables as ancestral group membership to explain on-site recreation patterns has been the lack of understanding of the relationship between the two variables (social structure and behavior). The path that leads from the macro-level social structural variable down to individual preferences and behaviors has not been explored in most cases. This thesis attempts to illuminate this path or relationship (in social psychological terms, these interaction variables) as it pertains to the Hispanic recreation patterns seen on the national forests of Southern California. Because of the exploratory nature of this thesis, it is not possible to definitively describe the important interaction variables. Instead, it is possible to point to those things that appear to be linkages in the relationship of interest.

Hypothesized Interaction Variables

Several of the potential interaction variables identified in the interactions

section of the literature review were mentioned by study respondents as being important. These include:

(1) Physical attributes - The presence of a stream and shade to get away from the heat.

(2) Proximity to home - Some of the places people mentioned wanting to visit made for too long of a day trip with children. Among the sites mentioned in this context are the ocean beaches.

(3) Safety - Many individuals mentioned in the survey, in the interviews, and in casual conversation the importance of feeling safe from inner-city hazards at the sites (drugs and gangs were specifically mentioned). Part of having a sense of safety seems to stem from having other people around. Questions about preferences related to the ancestral background of other people at the recreation site are difficult to raise with respondents, but there is tentative support for some groups preferring that other people be of similar ancestral backgrounds.

(4) Eco-type preferences - A consistent theme in the interviews and in casual conversations with individuals of Hispanic descent born outside the United States was the similarity between the recreation site and activity on the forest and recreation sites and activities in their ancestral country. There are several potential implications of these comments including preferences for a familiar landscape and activity, maintaining ties to cultural identity, and being in a comfortably homogeneous area (from an ancestral composition perspective). This particular explanation seems to hold great promise for understanding Hispanic individuals' relationship to sites, particularly those born outside the United States.

(5) Current users and uses of the site - One of the important aspects of the "fit" between individuals and sites where they were contacted seems to be the other users and uses present. In interviews and in conversations people mentioned that they were comfortable at the site (in a social sense). Also frequently mentioned is the idea that the people at the site were just like themselves. This seems to be part of what the individuals like about the site. On the other hand, those people who talked about other study sites they had visited mentioned users and uses unlike themselves and things they did not like or were not comfortable with. Examples include the Forest Falls visitor who did not like Lytle Creek because of the dirt bike riders and the rowdy partiers, or the woman of Mexican descent who did not think Forest Falls was the kind of place her people went and that only Anglos went there.

(6) Ancestral composition - It is difficult to determine the role or importance of being around other Hispanics in an individual's relationship to the site. The issue comes up several times in the above explanations. It does seem clear that if it is indeed important, it is not for the potential interactions with others outside the recreation group. The importance seems, if anything, to stem from the comfort level that being with others who share your background provides. This can be characterized in terms of the desirability of having a shared scheme of order with those around you (Lee, 1972) so that you do not have to wonder whether you are "doing the right thing" relative to the cultural standards of those around you. Because this issue comes up in so many different ways within the thesis it appears to require more thorough treatment before drawing any conclusions one way or another about its significance as an explanation.

Other Potential Interaction Variables

In addition to the interaction variables that were hypothesized to be of importance (all relating specifically to conditions at the site itself) other interaction variables surfaced having to do with the cultural orientation of the Hispanic visitors. These include:

(1) Locus of control/responsibility - Through the course of conversations with individuals of Hispanic origin, as well as in the results of the question "What does respecting the forest mean to you?" it seems that there is a difference in perception about whose role or responsibility it is to do specific actions related to maintaining the site. In the "respecting the forest question" those of Hispanic descent gave responses that did not put the responsibility for keeping it clean directly on themselves, where those of Anglo descent mentioned their own responsibility for keeping it clean (e.g., the more abstract "keeping it clean" as opposed to "cleaning up after yourself"). This is a subtle difference that seems to relate to an internal versus external locus of control. This seems to be an important key to understanding specific on-site behaviors related to caring for the site; this is an issue central to current management concerns.

(2) Given the apparent variability in characteristics of the social field within a given site, it may be important to look at intra-site explanations for the relationship between people and sites.

Chapter Seven

Discussion and Conclusion

Discussion

As highlighted in Chapter 4, the results of the many survey questions seem to substantiate the existence of relationships (but not the direction of the relationship) between variables proposed in the conceptual model at the end of the literature review (Figure 5). As shown in Chapter 5, it is possible to define the social field of a given area by examining factors related the meanings of recreation experiences, site choices, and on-site behaviors. Furthermore, these factors vary relative to the social structural characteristics of the visitors at a given site. Chapter 6 identified some of the possible interaction variables. Chapter 7 will now discuss the importance and management implications of these findings.

Social Structural Variables

Ethnicity

Individuals of Central American descent are distributed more unevenly across study sites than those of Mexican descent. Individuals of Central American descent were found in substantial numbers only at the West Fork

(21.1%) and East Fork (18.3%) sites. They comprised only 3.0% of the sample at Lytle Creek and were not present at all at Forest Falls.

The majority of Hispanic respondents were born outside the United States. The percentages vary from a high of 82.4% at the West Fork to a low of 63.4% at Forest Falls. The number of first generation individuals remains fairly constant across each site - around 15% and, as expected, second generation individuals varied from a low of 4.4% at the East Fork site to a high of 19.5% at Forest Falls.

Individuals of Central American origins show little variation in generational status or acculturation level across study sites. The proportion of individuals of Central American descent born outside the United States ranges from 100% at the West Fork site to 85.7% at Lytle Creek. The overall acculturation score is 1.81, with scores ranging from 1.79 at the West Fork to 1.93 at Lytle Creek. This puts the language skills for those of Central American descent somewhere between speaking only Spanish to speaking Spanish better than English.

Acculturation levels of those of Mexican ancestry varies across the sites as expected. The overall score for those of Mexican descent is 2.33, with scores ranging from 2.19 at the West Fork to 2.92 at Forest Falls. These scores put those of Mexican descent somewhere between speaking Spanish better than English and speaking both equally. Across all sites, those of Mexican descent have higher acculturation scores than those of Central American descent.

Income and Education

As expected, those of Anglo descent have the highest levels of individuals studied. In the case of income, individuals of Mexican descent have higher levels than those of Central American descent. The education levels of those of both Hispanic ancestral groups are approximately equal. Within each ancestral group, there is little variation in education levels across sites. This is also the case for income levels of those of Anglo and Central American origins. Income levels of those of Mexican descent vary from a low of \$16,660 at the West Fork site to a high of \$24,000 at Forest Falls.

The results pertaining to the structural variables discussed above fit within the expectations of the proposed conceptual model (Figure 5). It appears that all five structural variables do indeed contribute to the composition of the social field of the study sites. Of particular interest is the distribution of those of Central American heritage across sites. While it is impossible to imply the causation, the fact that those of Central American descent are present in extremely small numbers at Lytle Creek and not at all at Forest Falls fits well with the expectations of the model. If it is accurate to expect that individuals seek to recreate in places that match their acculturation level, it appears that from the generational status and acculturation scores, there may not be a substantial component of the Central American population that have the longer generational tenures and higher acculturation levels that seem to go with Lytle Creek and Forest Falls. However, the possibility that more acculturated individuals of Central American origins choose entirely different recreation activities and sites than those studied here cannot be excluded.

It is important to keep these dramatic structural differences in mind when

attempting to interpret the results of this and other studies that have been conducted at these study sites. Previous research conducted at the sites has found differences based on place of birth in Hispanic respondents' motivations and preferences related to recreation sites and experiences (Simcox and Pfister, 1990). If the differences in percentages of individuals of Mexican and Central American ancestry born in the United States found in the current study were also present in Simcox and Pfister's findings, it is not immediately clear how to interpret their results. The differences between those of Mexican and Central American origins may be true subcultural differences based on the differences in their origins, or they may be due to the significantly lower number of first and second generation Central American individuals at the study sites (relative to those of Mexican ancestry).

The same is true for the results of this study. Until a study specifically attempts to explore how the differences in generational status and acculturation levels of the two groups affect preferences, motivations, and meanings, any conclusions drawn in relation to subcultural differences between those of Mexican and Central American descent would be very tentative.

It is also important to note that while acculturation, income, and education are all significant predictors of inter-ethnic differences for use patterns and relationships to study sites, these measures vary in their importance for explaining intra-ethnic differences. This suggests that a combination of traditional socio-economic factors and ethnic identity factors should be used in studying intra-ethnic differences.

The Socio-Environmental Relationship

Past Use History

As would be expected, in general, individuals born in the United States (both of Anglo and Hispanic descent) have been visiting the sites longer and using them more frequently than those born outside the United States. Acculturation levels of those who have been to the site before are higher than those who have not. Higher acculturation levels are also correlated with more visits per year and more years visiting the site. The differences in past use history are especially apparent between those of Anglo and Central American origins.

Additionally, there are notable trends within the use history data for each site. Individuals of Central American descent visit the East Fork site more frequently than do the other two ancestral groups, and it is also the site they as a group have been visiting the longest. The area's regular use for religious purposes may be the reason for this.

Individuals of Mexican descent have been visiting Forest Falls a much shorter period of time relative to the other sites. Given the comments of the woman of Mexican ancestry at Lytle Creek about it being a place for Anglos and not her people, there may be a perception of Forest Falls among those of Hispanic descent as a place for those of Anglo descent. During the interviews and in casual conversations at Forest Falls two separate Mexican Americans commented that they like Forest Falls a little more each time they come there, as if it takes some time to become accustomed to being there. One man commented that it was too quiet for him initially, but now he enjoys it.

Primary Reason for Visit

The most significant finding pertaining to reasons for visiting the site is that the two groups that have tended to be the most different, those of Anglo and Central American descent, both gave enjoying the place itself as the most common response. It is difficult to interpret whether each of these groups actually mean the same thing when they say they enjoy the place itself. The interviews are of some help in understanding what individuals of Anglo descent enjoy about Forest Falls. Many people mentioned its peacefulness and beauty. The cooler temperatures were also important to many respondents, as was being able to enjoy nature. One man commented that it was his way of getting away from California, even though it is still California. No interviews were conducted with individuals of Central American descent, but through casual conversations and the results of other questions it seems that coming to the sites for religious purposes and getting fresh air are central to their enjoyment.

A somewhat counter-intuitive finding is that spending time with one's family was not the most frequent answer for either of the Hispanic groups. This seems contradictory to the image of the centrality of family within the Hispanic culture. It is possible, however, that the family is such a central part of Hispanic culture that wanting or not wanting to spend time with family members is not a central issue in the recreation decision-making framework.

This interpretation has been supported in conversations with Dr. Susan Keefe. Her extensive work with individuals of the Hispanic culture suggests that being with family is such an integral part of everyday existence that it probably would not be consciously considered as the primary reason for a recreation

outing, as is frequently the case with individuals of Anglo origins. This interpretation is also supported by the work of Marín and Triandis (1985). Their work suggests that sharing in the good times, such as celebrations and social events, is considered equally as important a family obligation as is sharing the bad times for those of the Hispanic culture. Given this different way of viewing the role of family in leisure, it seems logical that Hispanic respondents chose other answers more frequently.

In the case of individuals of Mexican descent, the most common reason for the visit is having a good place to picnic, BBQ, swim or relax. This was supported by the interviews and in casual conversations with individuals of Mexican ancestry. Having a safe place for their children to play and swim was important to people, as was having a place where they could relax and recover from the week's work. One man said, "I'd like to live here. It's like when you're going back to the big city, you're fresh again; reborn. Everything I have from the big city I lose, I go back all new."

Recreation Group Composition

The results from the question about the respondents' social group composition seem to support the argument for the centrality of family in recreation outings among Hispanic groups. Both Hispanic ancestral groups were more likely to be at the site with both immediate and extended family, particularly for those of Mexican ancestry. Generational status and acculturation levels do not appear to have an effect on individuals being with immediate or extended family, which is consistent with existing literature having to do with the continued importance of family to those of Hispanic ancestry

across generations (Keefe, 1980a; Keefe and Padilla, 1987). The wider social circle of those of Anglo ancestry is reflected in this question as well. Those of Anglo descent were more likely than either of the Hispanic groups to be at the sites with friends.

Individuals of Central American descent were more likely than either of the other two groups to be with their compadres and comadres or organized groups (church groups) in seemingly all cases. It should not be assumed, however, that family is less important for those of Central American descent, they simply have fewer family members in the Southern California and the United States as a whole than those of Mexican ancestry

Acculturation levels appear to affect group composition differently across ancestral groups. Those of Mexican ancestry who were with compadres/comadres and organized groups tend to be of lower acculturation levels than those who were with family or friends. The pattern is different for Central Americans, with acculturation levels being generally the same for everyone except those with their compadres/comadres, where the acculturation level is lower.

Respecting the Forest

Four types of responses, each seeming to represent a different aspect of individual's relationship to the forest, are associated with different ancestral groups. The behavioral action responses that show individual's respect for the forest, is most frequently mentioned by those of Anglo origins. Experiential responses that represent outcomes of respecting the forest are most frequently provided by the two Hispanic ancestral groups. The third type of responses,

those that reflect more generic actions that show respect for the forest, are equally likely to be given by the three ancestral groups. The fourth type of responses, which consist of answers such as we respect the forest like we respect ourselves or our homes, was most frequently given by the two Hispanic ancestral groups.

Within the Hispanic respondents, generational status and acculturation levels show the similar trends to each other. Those who gave cluster 1 answers were more likely to be first or second generation individuals and have higher acculturation levels. Those who gave cluster 2 and 4 answers were more likely to not have been born in the United States and have lower acculturation levels.

The results of this question are particularly interesting given that the responses were generated by the individuals themselves through an open-ended format. The question seems to tap individual's most salient perceptions about respecting the forest, rather than having them respond to a predetermined list.

The primary difference in responses to this question seems to hinge around the awareness of the social norms related to being in and using the forests. Responses from those of Anglo origins as well as those of Hispanic origins born in the United States refer to not littering, vandalizing, or having fires. Also included are actions like cleaning up after yourself and leaving the place cleaner than you found it. One explanation is that those of Anglo origin and more acculturated Hispanics by virtue of their long-term residence in the United States have been exposed to an intensive anti-litter, anti-fire campaign. The messages range from "Give a Hoot, Don't Pollute!" to "Only you can prevent forest fires!," to the visual image of a Native American standing in the litter next

to a freeway with tears rolling down his cheek. Messages of this bent may be echoed back in the responses provided by those of Anglo descent and the more acculturated Hispanic individuals born in this country.

Those who were born outside the United States may not be aware of either the social norms involved or the centrality of these norms to using the forest. In either case, the result seems to be that those born outside the United States focus more on the experiential aspects that are derived when one respects the forest. These aspects include having clean air and water, having a safe place to come to, and having a place to relax.

Support for the latter came up both in the interviews and in casual conversations with visitors at the sites. Those of Anglo origins frequently brought up issues related to litter and cleaning up the area. A woman at Forest Falls commented, "I think it would be nice if they had trash cans with lids nearby. I don't even see any trashcans. And maybe a sign, take out whatever you bring in. When you see other people's litter on the ground it kind of ruins it." A miner at the East Fork area commented that he was a little disappointed in the area. He added, "I understand that the business with the parking fee was to help clean the place up. You come in here and there's trash all over the place. That's to be expected any time you start running into a lot of people. I'm not saying all miners will pick up after themselves, but a lot of other people don't."

On the other hand, Hispanic visitors to the sites seem to feel the area is clean and a good place to come to. Getting out of the pollution and into nature are frequently mentioned. A Hispanic man at the East Fork area said, "I just like to go out from the big city into the wilderness to try to get a family gathering and just have fun. I say let's go to the mountains now. The things we're going to

find here are relaxation and fun." A woman at Lytle Creek described it as, "a nice place to have a picnic, recreate under the trees, lots of water. Socially, this is a calm place and the people are nice. There are no drug addicts here." Two separate Hispanic men mentioned they liked the East Fork site because it was safe, there was a lot of law enforcement around. This made it a good place to to spend the day and let their children play.

Place Attachment

Place Identity

The scores on the place identity factor were not significantly different across the ancestral groups. The one exception to this is at the East Fork area where individuals of both Hispanic groups, particularly those of Central American descent scored higher on the identity dimension than did those of Anglo descent. Generational status appears to be connected with place identity responses as well. For individuals of the two Hispanic groups, those born outside the United States agreed more strongly with the place identity items than did those born in the United States (both first and second generations).

It was hoped that the place identity items would tap into Hispanic respondents' relationship to the site as a means for maintaining cultural identity. Unfortunately, on hindsight, these items may tap a more generic individuals identity rather than some aspect of personal ethnic identity. There is tentative evidence from two sources to support the ethnic identity relationship to the site, however. Within the Hispanic population, in all of the areas, individuals born outside the United States were the dominant group. It was also these

individuals who most strongly agreed with the place identity items. While this is a fairly weak empirical linkage, it is strongly supported from theoretical perspective.

The second source of support comes from a recurring theme in interviews and in casual conversations with people. In an attempt to explore what coming to the sites meant to people, respondents were asked what the natural environment was like where they were born and what they did for outdoor recreation when they were growing up. Several people commented that the study sites were similar to places in Mexico where they grew up, particularly the rivers. Many also comment that they did similar things for recreation in Mexico; come out to the river to swim and make carne asada. One woman interviewed on her first visit to Lytle Creek commented that "in Guadalajara there's a place like this, similar to here. This is the reason why my next outing will be here." A man commented that "the natural environment (in Mexico) is similar to here at Lytle Creek. It reminds me of home." Similar comments were made by those of Mexican descent at the East Fork site as well.

Although there is little direct evidence, it may be that a familiar social environment is also part of what people are thinking of when they talk about their recreation activities back in Mexico. In any case a strong connection with the natural environment and recreational activities at the study sites and with those in Mexico, seems to provide strong support for the existence of a cultural identity component to respondents' relationship to the recreation sites they visit.

Interestingly, the ties to individual's birthplace were not limited to those of Hispanic descent. A Cambodian man interviewed at the East Fork site volunteered information about this connection when we asked what made it a

good place to visit. He said, "The water and the forest, it's like our country. That's what we like. In my country I see the mountains and the water. I can jump in the water (they had a big pond to swim in on their farm in Cambodia). My babies can swim. I feel better."

Being at Forest Falls brought back childhood memories for two separate people of Anglo origins as well. One was reminded of the landscape in Washington state. Another woman after mentioning that she and her children had been to the ocean recently commented, "I'm more mountain than beach anyway. Both of our parents were born in Tennessee, so we've gone back and forth. We're country girls. This is what it looks like there. We had a creek like this that went through our property. We played in the creek in Tennessee, just like we're doing now."

Place Dependence

With respect to the place dependence dimension of attachment those of Hispanic descent and individuals born outside the United States are more strongly place dependent than those of Anglo descent or first or second generation individuals. In addition, acculturation levels tend to be negatively correlated with place dependence scores.

Because there are few sites available for Hispanics to recreate where fellow Hispanics are the majority group, it seems to make sense that if this (fellow Hispanics being the majority) is indeed a desirable quality in recreation sites, that these individuals would be more place dependent. From the tentative evidence presented above, it seems that this indeed may be the case.

Ethnic Composition Preferences

Despite the difficulties of asking such a question, one might expect those of higher acculturation levels and generational statuses to feel more comfortable and potentially prefer being with a variety of ethnic/racial groups than those of lower acculturation levels and generational statuses. Results, however, were mixed. Those of the first and second generation, as well as those having higher acculturation levels were more likely to give the "prefer a variety of ethnic/racial groups" response. Those born outside the United States and of lower acculturation levels were more likely to give a "no preference" response. It may be that those born outside the United States would prefer being in areas where most or all of the individuals are of their own ancestry, but given their marginal position in the United States, are not comfortable with voicing this preference. Instead, they opt for the neutral response of no preference.

Cultural Group Identification Preferences

Unlike previous studies, "Latino" is the most frequently given cultural group identification preference for those of Hispanic descent at the various sites. Further, it appears that Latino is most preferred by those born outside the United States and of lower acculturation levels, while Hispanic American or (for those of Mexican descent) Mexican American is preferred by those of the first or second generations and of higher acculturation levels. A small number of second generation individuals of Mexican descent preferred to be called Anglo Americans. Those preferring to be thought of as Anglo American have the highest income and education levels, and those preferring to be thought of as

Latinos have the lowest income and education levels.

While preferred cultural group designations may not have directly applicable implications to their recreation experiences, they are important for two primary reasons. The first is that researchers have assumed that the categories they have included on previous surveys adequately represent the range of preferences those of Hispanic descent hold. The popularity of the additional "Latino" category suggests that research has not fully addressed cultural group identification preferences. Eventually, if these choices are refined to the point of including most, if not all, of the preferred designations, they may provide useful indicators of acculturation levels (see Keefe and Padilla, 1987).

The second reason this is an important area of study is that it helps to inform both researchers and managers about how the visitors to these areas prefer to be addressed. From the results, it seems that Hispanic American is not highly favored in the overall Hispanic visitor community. Mexican American is acceptable to a many of those of Mexican descent, but does not apply to those of any other Hispanic heritage.

Location of Family Members

Those of Mexican descent have more family members in Southern California and in their ancestral country, while individuals of Anglo origins have the most family members in the United States as a whole. Individuals of Central American descent have the fewest number of family members in Southern California and the United States as a whole. Both generational status and acculturation levels follow the same pattern. As generational status and

acculturation levels increase, so do the number of family members located in Southern California.

This pattern makes a great deal of intuitive sense in that the proximity to Mexico would allow easier access for family members to both move to the United States as well as making travel back to the ancestral country easier, therefore keeping those living in the U.S. more in touch with relatives in the ancestral country. Because of the regional aspect of Mexican and Central American immigration, it is not surprising that Anglos have more family members dispersed around the United States than do either of the Hispanic groups. It was not expected that individuals of Central American descent would have so many fewer family members in Southern California and the United States as a whole. This difference in the location of family members reveals itself in the responses to the question about primary reason for coming to the site. It may be that Central Americans having fewer family members in Southern California and the United States at least partially accounts for the lower percentage choosing the desire to be with family as the reason for their recreation visit.

Management Implications

There are many levels of management within the Forest Service. In trying to address the implications of this study, management at the two ends of the spectrum, at the national and district levels, are considered.

National Level Implications

At the national level, this study has implications for equity issues in management. Presumably it is the goal of the Forest Service and other natural resource agencies to serve their recreation clientele equitably. Whether this has been the case in the past is not relevant, the national issue related to outdoor recreation needs of ethnic groups seems to be whether or not the various minorities are facing barriers (through lack of opportunity, current or previous racism, and/or socio-economic position) that make access to a resource and experience that they wish to have difficult or impossible. The alternative reason for low participation by many minorities is that through subcultural differences in values and norms, minorities are simply expressing their own unique ethnic character in choosing not to visit wildland recreation areas or by choosing to participate in different activities on national forests.

It is probable that these alternatives are not mutually exclusive and it is a combination of the two that influences minority participation in wildland recreation. The results of this study as well as others, (Ewert, et al., 1990; Irwin et al., 1990) support this idea. There seem to be subcultural differences in the desired and actual recreation experience between individuals of Hispanic and Anglo origins. In the Irwin study there was also a strong desire on the part of Hispanic participants to have access to a type of campground they currently were not using and that was not designed to accommodate the large groups typical of Hispanic recreation.

One of the major difficulties in addressing equity issues lies in how research on the subject has been approached. Much of the work done with respect to minority participation has taken what could be called a third world

view; minority participation has been judged against the participation of Anglos with any differences treated as an anomaly on the part of the minorities (Klobus-Edwards, 1978) with the inference that mainstream values should be passed on to minorities. Klobus-Edwards in a 1981 paper discusses the impropriety of this view:

"Conceivably, the leisure values and norms of minority subcultures are a product of years of inaccessibility to certain types of recreational activities, as well as a function of experiences in leisure activities which have been readily available. Promotion of policies which would plan and develop recreation programs based on current ethnic preferences may simply accentuate such differences and perpetuate limited opportunities for new experiences. On the other hand, policies that do not address ethnic diversity may foster "middle class values" which are not acceptable to large subgroups of Americans. Certainly, the consequences of both approaches should be carefully considered."

By exploring Hispanic recreation in a more holistic way, this study has attempted to shed light on these issues. Answers to questions about why people come to particular sites, even when they seem not to have the desired facilities and what the site means to the recreationists get at the heart of the marginality and ethnicity explanations for minority recreation patterns.

District Level Implications

Much of the work in this thesis may appear to be too conceptual or abstract to be of use to managers attempting to address on-the-ground issues related to ethnic groups recreating on the forests. While it does not provide immediate prescriptions for visitor management or resource protection, it does attempt to provide crucial information that, when dealing with Anglos, can easily be taken for granted. When researchers design studies to explore Anglo recreation they bring to the task a large body of knowledge that they learned not

in college courses, but as children on family picnics, as teenagers at the beach, as young adults hiking in wilderness areas, and as parents teaching their children to fish or play baseball. Most researchers experience Anglo recreation from a participant's perspective. This knowledge aids in designing a culturally-relevant study, which leads to the transfer of useful and relevant information from researchers to managers. Managers use this same "insider information" in their decision-making and interactions with visitors. It helps them provide the experience the visitors desire, while at the same time, protect the resource. The difficulty with applying this information to the various ancestral groups using the forests is that it becomes "outsider information" and hinders managers understanding of and communication with these groups.

This study, with its concentration on describing the social field of each of the study sites, attempts to provide managers with some background on "insider information" about people of other ancestral origins and their relationship to the forests. This information is useful in many ways. First, it helps to make the users and uses of these sites seem less "foreign" to managers. From a personal perspective, this investigator knows how intimidating being the only Anglo in sight can be, not understanding most of what is being said around you, as well as how comfortable the same site can be once you begin to understand the people and their activities. Secondly, the information can be used once management actions have been decided upon to tailor the message or action to the individuals at the site. This may include introducing some social norms such as anti-littering messages in an educational format in areas where immigrants who are not familiar with what these norms are, while using a more regulatory format in areas where the norms are likely to be more familiar to the

occupants.

Other important findings related to on-the-ground management concerns include:

(1) The Hispanic visitors of both ancestral groups seem to welcome management presence. They are concerned about safety issues, about following the rules, and also about learning about their recreation areas. They seemed to enjoy visiting with team members, frequently it was more difficult to leave the group once conversation began than to approach the group in the first place. The potential for difficulty approaching some visitors may be related to their intimidation by the Forest Service's uniform, which is extremely similar to the Immigration and Naturalization Service's uniform.

(2) While Spanish is the language of choice for a sizeable majority of the visitors to the various sites, only a small percentage of the groups had no English speaker present at all when the data collection team asked if there was one. This group member may have been a young child or someone who only knows a few words of English, but they were present. Team members sometimes found the English speaker after attempting a few phrases in Spanish, as if they were waiting for the team member to meet them halfway. Most Spanish speaking visitors reacted very favorably to what in most cases could only be called marginal attempts at speaking Spanish.

(3) The gap in understanding between Forest Service managers and Hispanic visitors operates in both directions. The majority of the users at all the study sites were born outside the United States. Anglo and/or resource management culture is as much a mystery to the visitors as the Hispanic culture is to managers. At the East Fork site a Hispanic informant asked a team

member what Anglos did for fun. He had no idea where they went, what they did, or why they did it. This is very much like the situation faced by managers, only in reverse. Also, most of the visitors have not been exposed to a lifelong anti-litter, anti-fire campaign. If these issues are important to the concerns of managers, then the visitor should be educated about them, rather than being expected to pick up these messages on their own. Some of the cues being sent by the agency may well give visitors the opposite impression. The absence of trashcans in heavily used areas may give the visitor the impression that it is alright to leave the trash at the recreation site.

Study Limitations and Future Research Suggestions

Several of the limitations of the field portion of this thesis have to do with the study plan itself. As with past studies of cultural diversity on the Southern California, the sites were not randomly chosen, but were selected to represent a continuum of ethnic composition. Therefore the results of the study may not be representative of all the sites on the forests. Second, the study was done only on weekends and holidays during the summer months. It does not represent those visitors who use the sites during the week or during other seasons. Third, because respondents were contacted on site, the results do not represent the Hispanic population of Southern California, only users of these sites. Finally, individuals were not selected on a purely random basis for participation in the study.

In order to continue to add to the knowledge and theory related to this subject, some effort will be needed to identify uses and users at other times and at other sites.

Given the exploratory and qualitative nature of the study, these limitations do not seem to be as central to the findings as the potential limitation related to assuming each of the sites are similar enough to each other to ignore the influence of the physical differences of the sites on respondent's answers to survey and interview questions. While the dominate physical features of the sites (e.g. creek, facilities, and geographic locale) were as similar as realistically possible, the impact that more subtle features of the sites (e.g. placement of facilities, amount of litter/graffiti present) may have had on respondent's answers is unknown. This issue has much larger bearing than as just a study limitation. The differences in perceptions of subtle physical (and social) aspects of the environment across the Hispanic and Anglo cultures has importance for many aspects of resource management from facility design and education programs to visitor satisfaction.

In addition to recommendations related to study limitations, there are several research suggestions stemming from the findings of the study. Acculturation levels appear to play a significant role in the relationship between individuals and their recreation experiences both in this study and in Gramann and Floyd's (1991) study. In the case of this study, acculturation was measured based on language usage in a variety of situations. Given the proximity of the individuals and sites to Mexico, language usage alone may not be the best indicator of an individual's level of acculturation. There is a relatively free flow of people going across the border in both directions resulting in many situations that call for Spanish language usage, for all residents of area, including those of Anglo descent in addition to those of Hispanic descent. Therefore retention of Spanish language skills even in highly acculturated individuals may have

resulted in artificially low acculturation scores in the study. For future studies, additional measures of acculturation levels should be used to give a more accurate or balanced view of individual's acculturation levels. Among the possible measures are cultural group identification preferences and knowledge of and preference for certain customs. Keefe and Padilla (1987) explore potential measures of acculturation extensively. Gramann and Floyd (1991) use language skills and preferences along with the ancestral origin of friends to indicate acculturation and assimilation of Hispanic respondents.

The transactional approach, with its emphasis on holistic understanding and multiple research methods, appears to have been a successful way of conceptualizing the study. The attempt to conceptualize the recreation experiences of Hispanics from a transactional world-view required the review of a wider array of literatures. It also meant the investigator was responsible for actively trying to understand and interpret the study situation, rather than taking a more passive role in the investigation with the belief that the statistics are the primary tool for understanding. The various methods used appear to compliment one another and enhance the understanding of Hispanics' recreation experiences. It seems that studies guided by the transactional approach can be a valuable addition to the understanding of a given recreation phenomenon.

Related to the success of using the transactional world view, is the apparent viability of the conceptual model proposed at the end of the literature review (Figure 5). The model attempts to represent a holistic view of the relationship between Hispanic recreationists and the sites they visit. The next step in using this model may be a more rigorous (and quantified)

operationalization of the variables in the model to test the relationships in the model as a whole through path analysis.

The relative newness of individuals of Central American ancestry to the forests presents a unique opportunity to follow the changes in this group through time as they become more experienced forest users. A systematic study of these individuals through time may provide excellent information about the acculturation process of a user group to the Anglo and resource management culture. Studies of this sort may also shed light on the issue of subcultural differences between different components of the Hispanic culture.

Exploring the social field of a site seems to be a potentially important source for explaining respondent's relationship to the site. Continued qualitative work, including interviewing and social mapping, may be a valuable source of information in this vein.

One of the major difficulties with doing qualitative research involves the substantial amount of time in the field it requires of the investigator. For this reason, it may be more suitable work for graduate students to pursue, rather than university professors.

Conclusion

The research framework developed in this paper allows investigators to ask whether the various structural dynamics related to ethnic group membership are useful for predicting the meanings, preferences, and patterns of outdoor recreation occurring on the Angeles and San Bernardino National Forests. It has also begun the process of exploring the relationship between people and sites in order to add explanation to the predictions. Given the

answers to this questions I believe the Forest Service will be in a much better position to serve its diverse clientele group.

I would like to conclude this plan with a more philosophical look at this topic. In most research, this is the point in the project where the researcher begins to lay the work aside having fulfilled the bulk of the requirements related to the project. We may have a tendency to see our responsibilities as more strongly linked to our institution or our funding agency than to to the respondents. The issues raised in this study (and much recreation research) are central to people's lives and happiness: ethnic identity, family bonds, and freedom of choice. What are our responsibilities to them, and how do we fulfill them?

By trying to understand the Hispanics' recreation experience through their eyes we am asking them to share themselves with us in order to obtain the tools, not just to get a degree or protect a resource, but to contribute to the quality of their lives. There are larger issues that loom in many of these people's lives: inadequate housing and health care, gang violence, discrimination; the list goes on. This should not diminish the importance of the potential impact we, as resource professionals, can have on their lives. West (1989) addresses this issue quite eloquently when he writes:

"We should remember that the act of Rosa Parks' exercise in civil disobedience in sitting in the front of a bus on that historic day had to do only tangentially with mass transportation, and had everything to do with human dignity. So it is in outdoor recreation and every other sector of public life. In the context of a renewed incidence of racism surfacing around the country in the mid 1980s, it is time that the insular outdoor recreation research and policy community lose its innocence and more squarely face its responsibility and challenges in its own small corner of the wider agenda of a

just society."

Less eloquently perhaps, but just as passionately, I add my voice to this call for the need for greater social awareness on the part of the recreation community. Recreation, an important freedom of modern life, should not be another aspect of people's lives where inequity is heaped upon them. They deserve and we owe them more than that.

Finally, I would like to end my thesis with a message from a young Central American man. He wrote this comment on the back of a survey because he was concerned about why we were asking him and his family so many questions. This is probably good reason for concern, given the style of government prevalent in so many Central American countries. I believe his message is addressed to all of us, any recreation researcher or manager that comes into contact with those of different cultures. He wrote:

"We are good people and try to care for a good forest,
for a good time with my family. We appreciate your
help and we hope to keep coming back with no problems
at all."

LITERATURE CITED

- Altman, I. (1981). The environment and social behavior. New York: Irvington.
- Altman, I. & Rogoff, B. (1987). World views in psychology: Trait, interactional, organismic and transactional perspectives. In D. Stokols & I. Altman (Eds.) Handbook of environmental psychology. New York: Wiley.
- Antunes, G. & Gaitz, C.M. (1975). Ethnicity and Participation: A study of Mexican-Americans, Blacks and Whites. Journal of Sociology 80 (5).
- Appleby, M. (1981). Four group methods. In Citizen participation for citizens. Draft report.
- Berg, B.L. (1989). Qualitative research methods for the social sciences. Boston: Allyn and Bacon.
- Berry, J.W. (1980). Acculturation as adaptation. In A.M. Padilla (Ed.), Acculturation: Theory, models and some new findings. Boulder, CO: Westview.
- Brown, B.B. (1987). Territoriality. In D. Stokols & I. Altman (Eds.) Handbook of Environmental Psychology. New York: John Wiley.
- Brown, P. & Lee, M. (1990). A study of Southern California urban cultures recreating on the Inyo National Forest. Unpublished Forest Service report.
- Bultena, G.L. & Field, D.R. (1980). Structural Effects in national parkgoing. Leisure Sciences 3 (3).
- Bultena, G.L. & Field, D.R. (1978). Visitors to National Parks: A test of the elitism argument. Leisure Sciences 1.
- Buttel, F. H. & Flinn, W.L. (1978). Social Class and Mass Environmental Beliefs. Environment and Behavior 10 (3).
- Burch, W.R. (1970). Recreation preferences as culturally determined phenomena. In B. Driver (Ed.), Elements of outdoor recreation planning. Ann Arbor: University of Michigan Press.
- Carr, D.S. (1991). Personal conversations with Forest visitors.

- Crane, J.G. & Angrosino, M.V. (1974). Field projects in anthropology. Morristown, New Jersey: General Learning Press.
- Diaz-Guerro, R. (1979). The development of coping style. *Human Development* 22.
- Edgerton, R. B. (1979). Alone together: Social order on an urban beach. Berkeley: University of California Press.
- Edgerton, R.B. & Langness, L.L. (1974). Methods and styles in the study of culture. San Francisco: Chandler and Sharp Publishers
- Ewert, A. (1989). Improved understanding is needed of different cultural groups, their use of recreation resources and the satisfactions derived. USDA Forest Service PSW Forest and Range Experiment Station, Riverside, CA.
- Ewert, A., Gramann, F., & Floyd, M. (1990). Ethnic patterns in recreational uses of natural resources: Rethinking the marginality-ethnicity paradigm. Presented at the Rural Sociological Society meetings, Norfolk, VA.
- Field, D. R. & O'Leary, J. (1973). Social groups as a basis for assessing participation in selected water-based recreation. Journal of Leisure Research 5.
- Floyd, M.F. & Gramann, J.H. (1990). Cultural and structural assimilation and its effect on outdoor recreation behavior among Mexican-Americans. Presented at the Wildland Recreation and Urban Culture Workshop, Ontario, CA.
- Gans, H. (1962). The urban villagers. New York: The Free Press.
- Gobster, P. (1991). Personal communication.
- Gold, J.R. (1982). Territoriality and human spatial behavior. Progress in human geography 6.
- Gordon, M. (1964). Assimilation in American life: The role of race, religion, and national origins. New York: Oxford University Press.
- Gramann, J.H. (1991). Ethnic assimilation and recreational use of the Tonto National Forest. Contract Report to USDA Forest Service's PSW Wildland Recreation and the Urban Culture working unit.
- Grebler, L., Moore, J.W., & Guzman, R.C. (1970). The Mexican American people. New York: Free Press.

- Hartmann, L.A. & Overdevest, C. (1989). Race, ethnicity, and outdoor recreation participation: A state-of-the-Knowledge review and theoretical perspective. In Southeastern Recreation Research Conference, Asheville, NC.
- House, J. S. (1981). Social structure and personality. In M. Rosenberg & R. Turner (Eds.), Social psychology: sociological perspectives. New York: Basic Books.
- Hui, C.H. & Triandis, H.C. (1989). Effects of culture and response format on extreme response style. Journal of Cross-Cultural Psychology 20.
- Hunt, F.A. (1988). The Angeles: Playground or battleground? American Forests, March/April.
- Hutchison, R. (1988). A critique of race, ethnicity, and social class in recent leisure-recreation research. Journal of Leisure Research 20.
- Hutchison, R. (1987). Ethnicity and urban recreation: Whites, Blacks, and Hispanics in Chicago's public parks. Journal of Leisure Research 19.
- Hutchison, R. & Fidel, K. (1984). Mexican-American recreation activities: A reply to McMillen. Journal of Leisure Research 16 (4).
- Irwin, P.N., Gartner, W.C., & Phelps, C.C. (1990). Mexican-American/Anglo cultural differences as recreation style determinants. Leisure Sciences 12.
- Jacobi, M. & Stokols, D. (1983). Tho role of tradition in group-environment relations. In N.R. Feimer & E.S. Geller (Eds.), Environmental psychology: Directions and perspectives. New York: Praeger Publishers.
- Keefe, S.E. (1980a). Acculturation and the extended family among urban Mexican-Americans. In A.M. Padilla (Ed.), Acculturation: Theory, models and some new findings. Boulder, CO: Westview.
- Keefe, S. E. (1980b). Personal communities in the city: Support networks among Mexican Americans and Anglo Americans. Urban Anthropologist 9.
- Keefe, S. E. & Padilla, A.M. (1987). Chicano ethnicity. Albuquerque, New Mexico: University of New Mexico Press.
- Kelly, J. R. (1977). Leisure socialization: Replication and extension. Journal of Leisure Research 9.

- Kelly, J. R. (1980). Outdoor recreation participation: A comparative analysis. Leisure Sciences 3.
- Kelly, J.R. (1983). Leisure identities and interactions. London and Boston: George Allen & Unwin Ltd.
- Kelly, J. R. (1987). Freedom to be: A new sociology of leisure. New York: MacMillan Publishing Co.
- Klobus-Edwards, P.C. (1981). Race, residence, and leisure style: Some policy implications. Leisure Sciences 4 (2).
- Klobus-Edwards, P.C., Edwards, J.N., & Kemmack, D.L. (1978). Differences in social participation: Blacks and Whites. Social Forces 56 (4).
- Knopf, R.C. (1983). Recreational needs and behavior in natural settings. In I. Altman & J. Wohlwill (eds.), Behavior and the Natural Environment. NY: Plenum Press.
- Knopf, R., Allison, M.T., Robertson, R.D., & Leatherberry, E.C. (1987). Under-representation and over-representation in outdoor recreation: Who gets what and why?. In D. Dustin (Ed.), Justice in outdoor recreation resource allocation. San Diego State University.
- Kraus, R. (1987). Serving ethnic minorities: A submerged issue? Parks and Recreation December.
- Lee, R.G. (1973). Social organization and spatial behavior in outdoor recreation. Unpublished PhD dissertation: University of California, Berkeley.
- Lee, R.G. (1972). The social definition of outdoor recreation places. In W.R. Burch, N.H. Cheek, and L. Taylor (Eds.), Social behavior, natural resources and the environment. New York: Harper & Row.
- Loretta, J. (1990). 1990 Outlook for Hispanic American travelers. 1990 Outlook for travel and tourism proceedings of the 15th annual travel outlook forum. Hollywood, FL.
- Marín, G. & Marín, B.V. (1990). Research with Hispanic populations. Applied Social Research Methods Series 23.
- Marín, G. & Triandis, H.C. (1985). Allocentrism as an important characteristic of the behavior of Latin Americans and Hispanics. In R. Díaz-Guerrero (Ed.), Cross-cultural and national studies in social psychology. Amsterdam: Elsevier Science Publishers.

- McCool, S.F. & Stankey, G.H. (1985). Proceedings--Symposium on recreation choice behavior. Intermountain Research Station, Forest Service, U.S. Department of Agriculture, Gen Tech Report INT-184
- McDonald, J. & Hutchison, I. (1986). Minority and ethnic variations in outdoor recreation. In L. Alexander (chair), The President's Commission on Americans Outdoors: A literature review.
- McMillen, J.B. (1983). The social organization of leisure among Mexican-Americans. Journal of Leisure Research 15.
- Missouri Department of Conservation. (1990). Urban Missourians' interests in fish, forests and wildlife: Results of a 1989 citizen survey. Report 2: Non-white and white comparisons and focus group insights. Public profile 3-90.
- Montgomery Research Consultants, Inc. (1988). Specific educational marketing strategies for Florida's nongame wildlife program.
- Nash, R. (1982). Wilderness and the American mind.. 3rd ed. New Haven and London: Yale University Press.
- Padilla, A.M. (1980). The role of cultural awareness and ethnic loyalty in acculturation. In A.M. Padilla (Ed.), Acculturation: Theory, models and some new findings. Boulder, CO: Westview.
- Redfield, R., Linton, R. & Hershovits, M.J. (1936). Memorandum on the study of acculturation. American Anthropologist, 38. From A.M. Padilla (Ed.), Acculturation: Theory, models and some new findings. Boulder, CO: Westview.
- Salwasser, H. (1990). Personal conversation, October, 1990.
- Schwabe, J. (1981). Socio-economic overview for the Angeles National Forest. USFS Land Management Plan, Pacific Southwest Region.
- Settle, R.B., Alreck, P.C. & Belch, M.A. (1979). Social class determinants of leisure activities. Advances in Consumer Research 6.
- Simcox, D.E. & Pfister, R.E. (1990). Hispanic values and behaviors related to outdoor recreation and the forest environment. Technical Research Report.
- Simcox, D.E., Pfister, R.E. & Hodson, R.W. (1989). Communicating with users of the Angeles National Forest: Report No. 1. USDA Forest Service, PSW Forest Experiment Station, Riverside, CA.

- Stokols, D. & Shumaker, S.A. (1981). People in places: A transactional view of settings. In J. Harvey (Ed.), Cognition, social behavior, and the environment. Hillsdale, New Jersey: Erlbaum Press.
- Stokols, D. (1988). Instrumental and spiritual views of people-environment relations: Current tensions and future challenges. 10th Annual Conference of the International Association for the Study of People and Their Surroundings. The Netherlands.
- Thomas, M.E. & Hughes, M. (1986). The continuing significance of race: A study of race, class and quality of life in America: 1972-1985. American Sociological Review 51.
- Triandis, H.C., Marín, G., & Betancourt, H. (1984). Simpatía as a cultural script of Hispanics. Journal of Personality and Social Psychology 47.
- U.S. Department of Commerce: Bureau of the Census (1989). Current Population Reports. Series P-20, number 444.
- U.S. Department of Commerce: Bureau of the Census (1988). Current Population Reports. Series P-28, number 1509.
- Vernon, J. (1976). Recreation participation and ethnicity. In N. Cheek, D. Field, & R. Burdge (eds), Leisure and Recreation Places. Ann Arbor Science Publishers: Ann Arbor, MI.
- Wallendorf, M & Reilly, M.D. (1983). Ethnic migration, assimilation, and consumption. Journal of Consumer Research 10.
- Washburne, R.F. & Wall, S. (1979). Cities, wild areas, and black leisure: In search of explanations for black-white differences in outdoor recreation. Unpublished manuscript.
- Washburne, R.F. (1978). Black under-participation in wildland recreation: Alternative explanation. Leisure Sciences 1 (2).
- West, P.C. (1989). Urban region parks and black minorities: Subculture, Marginality, and interracial relations in park use in the Detroit Metropolitan area. Leisure Sciences 11.
- West, P.C. (1984). Status differences and interpersonal influence in the adoption of outdoor recreation activities. Journal of Leisure Research 16.
- West, P.C. (1982). A nationwide test of the status group dynamics approach of outdoor recreation demand. Leisure Sciences 5 (1).

- West, P.C. (1977). A status group dynamics approach to predicting participation rates in regional recreation demand studies. Land Economics 53.
- Williams, D.R. (1980). Relationship to place as a determinant of outdoor recreation preferences. Unpublished Masters thesis, Utah State University.
- Williams, J.A., Babchuk, N. & Johnson, D.R. (1973). Voluntary associations and minority status: A comparative analysis of Anglo, Black and Mexican-Americans. American Sociological Review 38.

Appendix A: Data Collection Materials

Virginia Polytechnic Institute and State University
Department of Forestry
Blacksburg, VA 24061-0324

Dear Forest Visitor,

We would like to ask you some questions about your recreation experiences here at this area. We are interested in what coming here means to you. Please take a few moments to help us out!

Thank you!

1. a. Have you ever been here before? _____ Yes _____ No

b. If yes, about how many times in the past year? _____ Times

c. If yes, how long have you been coming here? _____ Years

2. Which of the following was the most important reason for coming to this place today? (Please circle only one)

- _____ I enjoy this place itself.
- _____ I wanted to get out of my city/neighborhood.
- _____ I wanted to spend time with family.
- _____ I wanted to spend time with friends.
- _____ It is a good place to picnic, BBQ, swim, or relax.

3. Who do you come here with most of the time? (Check all that apply)

- _____ Primary kin (mother, father, sisters, brothers)
- _____ Secondary kin (aunts, uncles, cousins, grandparents)
- _____ Fictive kin (compadres, comadres)
- _____ Friends
- _____ Organized groups (like church groups)
- _____ By myself

4. What does respecting the forest mean to you?

5. The following statements relate to your involvement in coming here. The statements sound pretty close to each other so please read each one carefully and respond to each one as accurately as you can. Please **circle one** of the possible responses.

VSA = Very strongly agree D = Disagree
 SA = Strongly agree SD = Strongly disagree
 A = Agree VSD = Very strongly disagree

- | | | | | | | |
|--|-----|----|---|---|----|-----|
| a. Coming here says a lot about who I am. | VSA | SA | A | D | SD | VSD |
| b. You can tell a lot about a person by seeing them come here. | VSA | SA | A | D | SD | VSD |
| c. Coming here offers me relaxation and enjoyment when pressures build up. | VSA | SA | A | D | SD | VSD |
| d. Coming here is one of the most satisfying things that I do. | VSA | SA | A | D | SD | VSD |
| e. I can relate coming here to other parts of my life. | VSA | SA | A | D | SD | VSD |
| f. Coming here has a central role in my lifestyle. | VSA | SA | A | D | SD | VSD |
| g. Being able to come here is important to me. | VSA | SA | A | D | SD | VSD |
| h. Because of my lifestyle, coming here is important to me. | VSA | SA | A | D | SD | VSD |
5. Some people feel that the ethnic composition of a recreation area is an important consideration in the decision to go to a place; other people don't feel it is important. We would like to know how you feel about this. Please check the response that comes closest to your view.

- _____ I prefer going to recreation areas where **all** the people there are of the same ethnic or racial group as me.
- _____ I prefer going to recreation areas where **most** of the people there are of the same ethnic or racial group as me.
- _____ I prefer going to recreation areas where there are people of **many** different ethnic or racial groups present.
- _____ I do not have a preference regarding the ethnic or racial group membership of the people at the recreation areas I go to.

SOME QUESTIONS ABOUT YOU AND YOUR FAMILY

	Country	State
7. a. Where were you born?	_____	_____
b. Where was your mother born?	_____	_____
c. Where was your father born?	_____	_____
d. Where were your mother's parents born?	_____	_____
e. Where were your father's parents born?	_____	_____

8. a. If you were not born in the United States, how long have you lived here

_____ Years

b. How many tims in the last five years have you visited your ancestry country?

_____ Times

9. What cultural group do you prefer to have others think of you as?

_____ Anglo American	_____ Native American
_____ Black American	_____ Latino
_____ Mexican American	_____ Hispanic American
_____ Asian American	_____ Other _____
	(please specify)

10 a. In general, what language do you read and speak?

_____ Only Spanish

_____ Spanish better than English

_____ Both equally

_____ English better than Spanish

_____ Only English

b. What language do you usually speak at home?

- ☐ Only Spanish
☐ Spanish better than English
☐ Both equally
☐ English better than Spanish
☐ Only English

c. In which language do you usually think?

- ☐ Only Spanish
☐ Spanish better than English
☐ Both equally
☐ English better than Spanish
☐ Only English

d. What language do you usually speak with your friends?

- ☐ Only Spanish
☐ Spanish better than English
☐ Both equally
☐ English better than Spanish
☐ Only English

11. About how many family members do you have living in southern California?

Family members

12. About how many family members do you have living in the UnitedStates?

Family members

13. About how many family members do you have living in your ancestral country?

Family members

14. How old are you? Years

15. Gender: ☐ Male ☐ Female

16. What was the last year of school you completed? (Please circle one number)

Elementary
School
1 2 3 4 5 6

Middle
School
7 8

High
School
9 10 11 12

College
13 14 15 16

Graduate
School
17 18 19 20

16. What is your postal ZIP code for the place that you live? _____

17. What is your annual household income?

_____ Under \$5,000	_____ \$30,001-40,000
_____ \$5,001-10,000	_____ \$40,001-50,000
_____ \$10,001-20,000	_____ \$50,001-60,000
_____ \$ 20,001-30,000	_____ Over \$60,001

THANK YOU VERY MUCH FOR TAKING THE TIME
TO SHARE YOUR THOUGHTS!

Appendix B: Tables From Results Section

Table 1. Data Collection Efforts By Study Site

Data Collection Efforts	Study Site				Overall
	West Fork	East Fork	Lytle Creek	Forest Falls	
Number of Days Sampled	7	6	8	5	26
Number of Groups Contacted	88	63	129	87	367
Number of Surveys Obtained	188	141	243	160	732

Table 2. Ancestral Composition Of Entire Study Sample By Study Site

Ancestral Composition	n	Study Site				Overall %
		West Fork %	East Fork %	Lytle Creek %	Forest Falls %	
Anglo	152	4.3	12.8	13.2	58.8	20.8
Hispanic						
Mexican	455	69.2	65.3	79.0	25.6	62.2
Central American	69	19.7	17.7	2.9	0.0	9.4
South American	13	4.8	0.0	1.7	0.0	1.8
Other Hispanic	8	0.0	0.7	1.2	2.5	1.1
Asian	20	2.1	2.1	1.7	5.6	2.7
Other	15	0.0	1.4	0.4	7.5	2.0
Total Sample	732	25.7 (n = 188)	19.3 (n = 141)	33.2 (n = 243)	21.8 (n = 160)	100.0 (n = 732)

Table 3. Individual Characteristics By Study Site By Ancestral Group

Study Site	n	Age	Individual Characteristics		Income	Education
			Gender			
			% Male	% Female		
<u>West Fork</u>						
Anglo	8	33.4	62.5	37.5	\$31,875	14.1
Mexican	130	28.1	49.2	50.8	\$16,113	9.2
Central American	37	28.5	61.1	38.9	\$14,667	8.9
<u>East Fork</u>						
Anglo	20	37.0	60.0	40.0	\$32,667	12.9
Mexican	92	27.1	60.2	39.8	\$19,867	9.9
Central American	25	33.5	65.2	34.8	\$16,944	9.0
<u>Lytle Creek</u>						
Anglo	33	30.3	54.8	45.2	\$29,000	12.8
Mexican	192	32.5	48.9	51.1	\$20,204	9.5
Central American	7	31.0	60.0	40.0	\$14,583	9.7
<u>Forest Falls</u>						
Anglo	106	36.0	44.4	55.6	\$40,000	13.2
Mexican	41	31.8	55.0	45.0	\$25,000	10.3
Central American	0	-	-	-	-	-
<u>Overall</u>						
Anglo	167	35.0	49.0	51.0	\$33,489	13.1
Mexican	455	30.1	51.8	48.2	\$19,375	9.5
Central American	69	30.7	62.5	37.5	\$15,136	9.1
Total Sample	691	31.2	52.5	47.8	\$22,325	10.4

Table 4. Group Characteristics By Study Site By Ancestral Group

Study Site	n*	Group Characteristics						
		Size		Median Number Of		Composition		
		Average	Median	Adults	Children	% Anglo	% Hispanic	% Mixed A/H
<u>West Fork</u>								
Anglo	5	4.1	3	2	3	75.0	0.0	25.0
Mexican	62	9.9	9	5	3	0.8	94.5	4.7
Central American	16	11.0	11	6	3	0.0	100.0	0.0
<u>East Fork</u>								
Anglo	13	8.6	4	2	2	82.4	0.0	17.7
Mexican	42	16.0	10	6	5	0.0	95.5	4.5
Central American	15	10.0	5	4	2	0.0	84.0	16.0
<u>Lytle Creek</u>								
Anglo	24	6.9	6	3	4	69.7	0.0	30.4
Mexican	107	12.0	10	6	5	0.0	82.8	17.2
Central American	7	8.7	9	6	3	0.0	100.0	0.0
<u>Forest Falls</u>								
Anglo	58	5.2	4	3	2	86.7	0.0	13.4
Mexican	25	7.8	6	3	3	0.0	61.5	38.5
Central American	0	-	-	-	-	-	-	-
<u>Overall</u>								
Anglo	100	5.7	4	3	2	84.0	0.0	16.0
Mexican	236	11.8	9	5	4	0.2	86.8	13.0
Central American	38	10.3	9	5	3	0.0	94.1	5.9
Total Sample	374	10.0	7	5	3	23.1	67.7	5.6

*The number of groups is slightly larger than those shown in Table 1 due to the double counting of groups with mixed ancestry in this format.

Table 5. Past Use History By Study Site By Ancestral Group

Study Site	n	Past Use History		
		Percent First Visit	Number Of Previous Visits	Number Of Years Coming To Site
<u>West Fork</u>				
Anglo	8	37.5	3.0	11.0
Mexican	130	33.1	4.4	7.0
Central American	37	27.0	2.1	3.6
<u>East Fork</u>				
Anglo	16	25.0	3.1	10.6
Mexican	89	24.7	4.8	6.0
Central American	25	32.0	15.1	7.7
<u>Lytle Creek</u>				
Anglo	32	25.0	9.8	12.0
Mexican	181	23.2	6.2	8.7
Central American	7	28.6	2.3	3.8
<u>Forest Falls</u>				
Anglo	84	17.9	7.6	11.7
Mexican	39	28.2	6.8	4.3
Central American	0	-	-	9.9
<u>Overall</u>				
Anglo	140	21.4	9.2	11.6
Mexican	439	26.9	5.5	7.3
Central American	69	29.0	6.2	4.9
Total Sample	648	25.9	6.5	8.1

Table 6. Individual And Group Language Usage Characteristics By Study Site By Ancestral Group

Individual And Group Language Usage Characteristics						
Study Site	Language Of Survey		Language Spoken On Approach			English Speaker Present %
	English %	Spanish %	English %	Spanish %	Mixed E/S %	
<u>West Fork</u>						
Anglo	100.0	0.0	100.0	0.0	0.0	100.0
Mexican	31.5	68.5	5.7	39.0	54.4	84.3
Central American	10.8	89.2	22.2	69.4	8.4	70.8
<u>East Fork</u>						
Anglo	100.0	0.0	82.4	0.0	17.7	100.0
Mexican	41.3	58.7	10.2	48.9	40.9	84.4
Central American	12.0	88.0	0.0	44.0	56.0	50.0
<u>Lytle Creek</u>						
Anglo	100.0	0.0	93.5	0.0	6.5	100.0
Mexican	42.2	57.8	14.3	55.0	29.1	80.2
Central American	14.3	85.7	14.3	85.7	0.0	83.3
<u>Forest Falls</u>						
Anglo	100.0	0.0	97.8	0.0	2.2	100.0
Mexican	46.3	53.7	51.3	7.7	41.0	93.8
Central American	-	-	-	-	-	-
<u>Overall</u>						
Anglo	100.0	0.0	94.6	0.0	5.4	100.0
Mexican	39.3	60.7	14.4	45.1	39.7	83.3
Central American	11.6	88.4	13.2	61.8	25.0	67.5
Total Sample	51.8	48.2	34.9	35.2	28.9	85.2

Table 7. Group Location Within Study Site By Ancestral Group

Study Site	Group Location			
	Percent At Designated Site	Percent At Picnic Area	Percent At Creek	Percent At Falls
<u>West Fork</u>				
Anglo	N/A	N/A	N/A	N/A
Mexican	N/A	N/A	N/A	N/A
Central American	N/A	N/A	N/A	N/A
<u>East Fork</u>				
Anglo	46.2	61.5	38.5	N/A
Mexican	39.2	46.8	53.2	N/A
Central American	66.7	81.3	18.8	N/A
<u>Lytle Creek</u>				
Anglo	44.4	N/A	N/A	N/A
Mexican	42.5	N/A	N/A	N/A
Central American	42.9	N/A	N/A	N/A
<u>Forest Falls</u>				
Anglo	66.3	73.1	20.4	6.5
Mexican	69.2	76.5	23.5	0.0
Central American	-	-	-	-
<u>Overall</u>				
Anglo	55.7			
Mexican	38.7			
Central American	38.6			
Total Sample	42.6			

Table 8. Ancestral Group By Study Site

Ancestral Group	Study Site				Overall %
	West Fork %	East Fork %	Lytle Creek %	Forest Falls %	
Anglo (n = 152)	4.6	14.6	14.2	72.1	24.2
Mexican (n = 455)	74.3	67.2	82.8	27.9	65.9
Central American (n = 69)	21.1	18.3	3.0	0.0	10.0
Overall (n = 676)	25.3 (n = 175)	19.8 (n = 135)	33.6 (n = 231)	21.3 (n = 135)	100.0 (n = 676)

$\chi^2 = 283.6$, $p = 0.000$, $c = 0.539$

Table 9. Generational Status Composition By Ancestral Group By Study Site

Generational Status	n	Study Site				Overall %
		West Fork %	East Fork %	Lytle Creek %	Forest Falls %	
<u>Mexican</u>						
Immigrant	326	77.4	76.9	69.3	63.4	72.6
First Generation	76	15.6	18.7	16.9	17.1	16.9
Second Generation	47	7.0	4.4	13.8	19.5	10.5
<u>Central American</u>						
Immigrant	66	100.0	92.0	85.7	-	95.7
First Generation	3	0.0	8.0	14.3	-	4.6
Second Generation	0	0.0	0.0	0.0	-	0.0
<u>Overall</u>						
Immigrant	392	82.4	80.2	69.9	63.4	75.7
First Generation	79	12.1	16.4	16.8	17.1	15.6
Second Generation	47	5.5	3.5	13.3	19.5	9.1
Total Sample	518	31.9 (n = 165)	22.4 (n = 116)	37.8 (n = 196)	7.9 (n = 41)	100.0 (n = 518)

$\chi^2 = 19.70$, $p = 0.003$, $c = 0.191$

Table 10. Means And Standard Deviations Of Acculturation Levels By Ancestral Group By Study Site

Ancestral Group	Study Site									
	West Fork		East Fork		Lytle Creek		Forest Falls		Overall	
	Mean	s.d.	Mean	s.d.	Mean	s.d.	Mean	s.d.	Mean	s.d.
Mexican ^a (n = 448)	2.19	1.13	2.31	1.04	2.53	1.24	2.92	1.42	2.41	1.19
Central American ^b (n = 69)	1.74	0.82	1.89	0.86	1.93	0.69	-	-	1.81	0.82
Overall (n = 517)	2.15	1.14	2.23	1.04	2.55	1.24	2.92	1.42	2.33	1.16
F-ratio	5.18		3.34		1.62		No Statistical Test Possible		16.16	
Significance	0.024		0.070		0.204				0.0001	
Explained Variation	0.031		0.029		0.008				0.030	

^aIntra-ethnic test for those of Mexican ancestry: $F = 3.72$, $p = 0.012$, $r^2 = 0.024$

^bIntra-ethnic test for those of Central American ancestry: $F = 0.34$, $p = 0.714$, $r^2 = 0.011$

Table 11. Mean Income Levels By Ancestral Group By Study Site

Ancestral Group	Study Site				Overall
	West Fork	East Fork	Lytle Creek	Forest Falls	
	<i>Mean</i>	<i>Mean</i>	<i>Mean</i>	<i>Mean</i>	<i>Mean</i>
Anglo ^a (n = 139)	\$31,875	\$32,667	\$29,000	\$40,000	\$33,489
Mexican ^b (n = 392)	\$16,113	\$19,867	\$20,204	\$25,000	\$19,375
Central American ^c (n = 55)	\$14,667	\$16,944	\$14,583	-	\$15,136
Overall (n = 586)	\$16,640	\$21,157	\$21,385	\$34,913	\$22,325
F-ratio	3.94	4.72	4.42	9.39	44.86
Significance	0.022	0.011	0.013	0.003	0.0001
Explained Variation	0.049	0.082	0.044	0.071	0.133

^aIntra-ethnic test for those of Anglo ancestry: $F = 1.02$, $p = 0.389$, $r^2 = 0.022$

^bIntra-ethnic test for those of Mexican ancestry: $F = 3.88$, $p = 0.009$, $r^2 = 0.029$

^cIntra-ethnic test for those of Central American ancestry: $F = 0.03$, $p = 0.971$, $r^2 = 0.001$

Table 12. Means And Standard Deviations Of Education Levels By Ancestral Group By Study Site

Ancestral Group	Study Site									
	West Fork		East Fork		Lytle Creek		Forest Falls		Overall	
	<i>Mean</i>	<i>s.d.</i>	<i>Mean</i>	<i>s.d.</i>	<i>Mean</i>	<i>s.d.</i>	<i>Mean</i>	<i>s.d.</i>	<i>Mean</i>	<i>s.d.</i>
Anglo ^a (n = 151)	14.1	4.32	12.9	2.08	12.8	1.87	13.2	2.59	13.1	2.52
Mexican ^b (n = 433)	9.2	3.53	9.9	3.36	9.4	3.15	10.3	3.05	9.5	3.30
Central American ^c (n = 66)	8.9	3.60	9.0	3.37	9.7	3.77	-	-	9.1	3.53
Overall (n = 650)	9.5	3.59	9.8	3.34	10.3	2.97	12.5	2.95	10.4	3.29
F-ratio	7.37		8.28		17.80		31.08		79.24	
Significance	0.0001		0.0004		0.0001		0.0001		0.0001	
Explained Variation	0.081		0.121		0.140		0.191		0.197	

^aIntra-ethnic test for those of Anglo ancestry: $F = 0.67$, $p = 0.572$, $r^2 = 0.013$

^bIntra-ethnic test for those of Mexican ancestry: $F = 1.62$, $p = 0.184$, $r^2 = 0.011$

^cIntra-ethnic test for those of Central American ancestry: $F = 0.14$, $p = 0.870$, $r^2 = 0.004$

13. Previous Visitation By Ancestral Group By Study Site

Ancestral Group	Study Site				Overall %
	West Fork %	East Fork %	Lytle Creek %	Forest Falls %	
Anglo (n = 140)	62.5	75.0	75.0	82.1	78.6
Mexican (n = 439)	66.9	75.3	76.8	71.8	73.1
Central American (n = 69)	73.0	68.0	71.4	-	71.1
Overall (n = 648)	68.0 (n = 119)	73.9 (n = 96)	76.4 (n = 168)	78.9 (n = 97)	74.1 (n = 648)

$\chi^2 = 2.02$, $p = 0.364$, $c = 0.056$

Table 14. Means And Standard Deviations Of Number Of Visits Respondents Made To The Site In The Past Year

Ancestral Group	Study Site									
	West Fork		East Fork		Lytle Creek		Forest Falls		Overall	
	<i>Mean</i>	<i>s.d.</i>	<i>Mean</i>	<i>s.d.</i>	<i>Mean</i>	<i>s.d.</i>	<i>Mean</i>	<i>s.d.</i>	<i>Mean</i>	<i>s.d.</i>
Anglo ^a (n = 107)	3.0	2.71	3.1	2.63	9.9	19.33	7.6	11.80	7.5	13.20
Mexican ^b (n = 308)	4.4	5.57	4.8	4.82	6.2	12.58	6.8	15.56	5.5	10.07
Central American ^c (n = 44)	2.1	1.41	15.1	19.77	2.3	1.50	-	-	6.2	12.52
Overall (n = 449)	3.8	4.89	6.2	8.77	6.7	13.65	7.4	12.90	6.0	11.12
F-ratio	2.28		8.66		0.95		0.07		1.33	
Significance	0.107		0.0004		0.380		0.800		0.265	
Explained Variation	0.039		0.168		0.012		0.001		0.005	

^aIntra-ethnic test for those of Anglo ancestry: $F = 1.97$, $p = 0.123$, $r^2 = 0.053$

^bIntra-ethnic test for those of Mexican ancestry: $F = 0.81$, $p = 0.489$, $r^2 = 0.007$

^cIntra-ethnic test for those of Central American ancestry: $F = 6.41$, $p = 0.004$, $r^2 = 0.238$

Table 15. Means And Standard Deviations Of Number Of Years Respondents Have Been Coming To The Site By Ancestral Group

Ancestral Group	Study Site									
	West Fork		East Fork		Lytle Creek		Forest Falls		Overall	
	<i>Mean</i>	<i>s.d.</i>	<i>Mean</i>	<i>s.d.</i>	<i>Mean</i>	<i>s.d.</i>	<i>Mean</i>	<i>s.d.</i>	<i>Mean</i>	<i>s.d.</i>
Anglo ^a (n = 110)	11.00	7.42	10.58	12.13	12.00	13.28	11.66	10.06	11.59	10.87
Mexican ^b (n = 298)	6.97	6.82	6.02	4.61	8.65	9.99	4.32	6.05	7.31	8.04
Central American ^c (n = 41)	3.58	3.75	7.69	5.78	3.75	2.22	-	-	4.90	4.71
Overall (n = 449)	6.40	6.30	6.86	6.21	9.05	10.47	9.87	9.26	8.14	8.62
F-ratio	4.06		2.88		1.60		10.45		13.10	
Significance	0.020		0.061		0.205		0.002		0.0001	
Explained Variation	0.072		0.061		0.020		0.106		0.055	

^aIntra-ethnic test for those of Anglo ancestry: $F = 0.05$, $p = 0.985$, $r^2 = 0.001$

^bIntra-ethnic test for those of Mexican ancestry: $F = 2.89$, $p = 0.036$, $r^2 = 0.029$

^cIntra-ethnic test for those of Central American ancestry: $F = 3.81$, $p = 0.031$, $r^2 = 0.167$

Table 16. Generational Status Composition By Ancestral Group By Previous Visitation

Generational Status	n	Visitor Has Been To Site Previously
<u>Mexican</u>		
Immigrant	310	71.9
First Generation	76	80.3
Second Generation	47	74.5
<u>Central American</u>		
Immigrant	66	71.2
First Generation	3	66.7
Second Generation	0	
<u>Overall</u>		
Immigrant	376	71.8
First Generation	79	79.8
Second Generation	47	74.5
Total Sample	368	73.3

$\chi^2 = 2.14$, $p = 0.343$, $c = 0.065$

Table 17. Means And Standard Deviations Of Past Use History By Generational Status

Generational Status	n	Past Use History Variables			
		Number Of Visits In Past Year		Number Of Years Coming To Site	
		<i>Mean</i>	<i>s.d.</i>	<i>Mean</i>	<i>s.d.</i>
<u>Mexican^a</u>					
Immigrant	213	4.1	5.43	5.6	6.52
First Generation	59	5.9	11.43	10.1	8.41
Second Generation	34	11.8	20.29	12.3	11.14
<u>Central American^b</u>					
Immigrant	42	6.4	12.81	5.0	4.75
First Generation	2	3.5	0.71	2.0*	-
Second Generation	0	-	-	-	-
<u>Overall</u>					
Immigrant	255	4.5	7.20	5.5	6.26
First Generation	101	5.9	11.25	9.9	8.41
Second Generation	34	11.8	20.29	12.3	11.14
Total Sample	390	5.4	9.95	6.9	7.22
F-ratio		8.18		18.27	
Significance		0.0003		0.0001	
Explained Variation		0.045		0.099	
Significant At Site		1, 3		1, 3	

^aIntra-ethnic test for those of Mexican ancestry for:

Number Of Visits In Past Year: $F = 9.72$, $p = 0.0001$, $r^2 = 0.060$,
significant at sites 1, 2, 3

Number Of Years Coming To Site: $F = 15.98$, $p = 0.0001$, $r^2 = 0.099$,
significant at sites 1, 3

^bIntra-ethnic test for those of Central American ancestry for:

Number Of Visits In Past Year: $F = 0.10$, $p = 0.757$, $r^2 = 0.002$

Number Of Years Coming To Site: $F = 0.38$, $p = 0.534$, $r^2 = 0.010$

*n = 1

Table 18. Means And Standard Deviations Of Acculturation Levels By Ancestral Group By Previous Visitation

Ancestral Group	Whether Visitor Has Been To Site Previously					
	Yes		No		Overall	
	<i>Mean</i>	<i>s.d.</i>	<i>Mean</i>	<i>s.d.</i>	<i>Mean</i>	<i>s.d.</i>
Mexicana ^a (n = 432)	2.50	1.18	2.26	1.26	2.43	1.20
Central American ^b (n = 61)	1.91	0.83	1.58	0.75	1.81	0.81
Overall (n = 493)	2.42	1.14	2.16	1.21	2.35	1.16
F-ratio	11.38		5.44		17.06	
Significance	0.0008		0.021		0.0001	
Explained Variation	0.030		0.039		0.033	
Significant At Sites	1		-		1, 2	

^aIntra-ethnic test for those of Mexican ancestry: $F = 3.44$, $p = 0.064$, $r^2 = 0.008$, significant at site 1

^bIntra-ethnic test for those of Central American ancestry: $F = 2.43$, $p = 0.123$, $r^2 = 0.035$

Table 19. Pearson's Correlation Between Acculturation Levels and Past Use History

Ancestral Group	n	Past Use History Variables									
		Number Of Visits In Past Year					Number Of Years Coming To Site				
		West Fork	East Fork	Lytle Creek	Forest Falls	Overall	West Fork	East Fork	Lytle Creek	Forest Falls	Overall
Mexican	432	0.370*	0.338*	0.182*	0.114	0.209*	0.347*	0.286*	0.226*	0.314*	0.257*
Central American	61	0.068	0.066	-0.063	-	0.113	0.290	0.023	-0.071	-	0.236
Overall	493	0.370*	0.118	0.186*	0.114	0.118*	0.327*	0.282*	0.231*	0.314*	0.267*

* Significant at the $p = 0.05$ level

Table 20. Mean Income Levels By Ancestral Group By Previous Visitation

Ancestral Group	Whether Visitor Has Been To Site Previously		Overall <i>Mean</i>
	Yes <i>Mean</i>	No <i>Mean</i>	
Anglo ^a (n = 125)	\$31,352	\$37,685	\$32,720
Mexican ^b (n = 378)	\$19,491	\$18,699	\$19,286
Central American ^c (n = 55)	\$16,938	\$10,333	\$15,136
Overall (n = 558)	\$22,028	\$21,464	\$21,886
F-ratio	22.81	20.03	44.86
Significance	0.0001	0.0001	0.0001
Explained Variation	0.099	0.226	0.133
Significant At Sites	4	1, 2	1, 2, 3, 4

^aIntra-ethnic test for those of Anglo ancestry: $F = 2.17$, $p = 0.143$, $r^2 = 0.017$

^bIntra-ethnic test for those of Mexican ancestry: $F = 0.19$, $p = 0.661$, $r^2 = 0.001$,
significant at site 1

^cIntra-ethnic test for those of Central American ancestry: $F = 2.84$, $p = 0.098$,
 $r^2 = 0.051$

Table 21. Means And Standard Deviations Of Years Of Education By Ancestral Group By Previous Visitation

Ancestral Group	Whether Visitor Has Been To Site Previously					
	Yes		No		Overall	
	<i>Mean</i>	<i>s.d.</i>	<i>Mean</i>	<i>s.d.</i>	<i>Mean</i>	<i>s.d.</i>
Anglo ^a (n = 139)	13.0	2.29	13.6	3.08	13.2	2.48
Mexican ^b (n = 417)	9.7	3.11	9.3	3.70	9.6	3.28
Central American ^c (n = 66)	9.4	3.49	8.1	3.38	9.1	3.46
Overall (n = 622)	10.4	2.98	10.0	3.56	10.3	3.16
F-ratio	54.46		20.17		79.24	
Significance	0.0001		0.0001		0.0001	
Explained Variation	0.191		0.208		0.197	
Significant At Sites	2, 3, 4		1, 2, 3, 4		1, 2, 3, 4	

^aIntra-ethnic test for those of Anglo ancestry: $F = 1.18$, $p = 0.280$, $r^2 = 0.009$

^bIntra-ethnic test for those of Mexican ancestry: $F = 1.26$, $p = 0.262$, $r^2 = 0.003$, significant at site 1

^cIntra-ethnic test for those of Central American ancestry: $F = 1.92$, $p = 0.170$, $r^2 = 0.029$

Table 22. Pearson's Correlation Between Education Levels and Past Use History Variables By Ancestral Group

Ancestral Group	n	Past Use History Variables									
		Number Of Visits In Past Year					Number Of Years Coming To Site				
		West Fork	East Fork	Lytle Creek	Forest Falls	Overall	West Fork	East Fork	Lytle Creek	Forest Falls	Overall
Anglo	106	0.576	0.020	0.017	0.021	-0.106	0.368	0.137	0.050	-0.056	0.125
Mexican	296	0.285*	0.161	-0.010	0.095	0.065	0.275*	0.303*	0.234*	0.273	0.227*
Central American	44	0.221	0.241	-0.190	-	0.213	0.010	0.019	-0.182	-	0.010
Overall	446	0.212*	0.114	0.059	0.056	0.107*	0.280	0.251*	0.223*	0.295*	0.257*

* Significant at the $p = 0.05$ level

Table 23. Pearson's Correlation Between Income Levels and Past Use History Variables By Ancestral Group

Ancestral Group	n	Past Use History Variables									
		Number Of Visits In Past Year					Number Of Years Coming To Site				
		West Fork	East Fork	Lytle Creek	Forest Falls	Overall	West Fork	East Fork	Lytle Creek	Forest Falls	Overall
Anglo	97	0.265	0.257	-0.109	-0.172	-0.106	0.427	-0.368	0.242	0.146	0.019
Mexican	269	-0.109	0.075	-0.197	0.023	-0.098	0.223	0.062	-0.105	0.059	0.002
Central American	35	-0.029	0.418	0.327	-	0.261	0.100	0.849*	0.619	-	0.444*
Overall	401	0.037	0.120	-0.104	-0.091	-0.024	0.243	0.040	0.011	0.051	0.085

* Significant at the $p = 0.05$ level

Table 24. Reason For Coming To Site By Ancestral Group

Ancestral Group	Reason For Coming To Site				Overall %
	Enjoy Place Itself %	Get Out Of City %	Time With Family/Friend %	Good Place For Activity %	
Anglo (n = 23)	32.3	24.7	31.2	11.8	19.2
Mexican (n = 341)	27.7	9.4	29.0	34.9	70.5
Central American (n = 50)	38.0	6.0	24.0	32.0	10.3
Overall (n = 484)	28.9 (n = 140)	12.0 (n = 58)	28.9 (n = 140)	30.2 (n = 140)	100.0 (n = 484)

$\chi^2 = 31.94$, $p = 0.000$, $c = 0.249$

Table 25. Reason For Coming To Site By Generational Status By Ancestral Group

Generational Status	n	Reason For Coming To Site				Overall %
		Enjoy Place Itself %	Get Out Of City %	Time With Family/Friend %	Good Place For Activity %	
<u>Mexican</u>						
Immigrant	276	31.9	9.4	27.2	31.5	72.1
First Generation	66	24.2	12.1	33.3	30.3	17.2
Second Generation	41	26.8	24.4	26.8	22.0	10.7
<u>Central American</u>						
Immigrant	56	39.3	5.3	26.8	28.5	94.9
First Generation	3	33.3	33.3	0.0	33.3	5.1
Second Generation	0	0.0	0.0	0.0	0.0	0.0
<u>Overall</u>						
Immigrant	332	33.1	8.7	27.1	31.1	75.1
First Generation	69	24.6	13.0	31.9	30.4	15.6
Second Generation	41	26.8	24.4	26.8	22.0	9.3
Total Sample	442	31.2 (n = 138)	10.9 (n = 48)	27.8 (n = 123)	30.1 (n = 133)	100.0 (n = 442)

$$\chi^2 = 11.68, p = 0.069, c = 0.160$$

Table 26. Means And Standard Deviations Of Acculturation Levels By Ancestral Group By Reason For Coming To Site

Ancestral Group	Reason For Coming To Site									
	Enjoy Place Itself		Get Out Of City		Time With Family/Friends		Good Place For Activity		Overall	
	<i>Mean</i>	<i>s.d.</i>	<i>Mean</i>	<i>s.d.</i>	<i>Mean</i>	<i>s.d.</i>	<i>Mean</i>	<i>s.d.</i>	<i>Mean</i>	<i>s.d.</i>
Mexican ^a (n = 381)	2.43	1.18	2.89	1.26	2.35	1.25	2.27	1.09	2.41	1.19
Central American ^b (n = 59)	1.79	0.99	1.83	1.04	1.67	0.59	1.90	0.86	1.83	0.81
Overall (n = 440)	2.32	1.17	2.80	1.27	2.28	1.21	2.23	1.07	2.36	1.16
F-ratio	4.91		1.95		3.51		1.64		4.20	
Significance	0.029		0.172		0.064		0.203		0.006	
Explained Variation	0.044		0.059		0.031		0.012		0.029	

^aIntra-ethnic test for those of Mexican ancestry: $F = 2.28$, $p = 0.079$, $r^2 = 0.020$

^bIntra-ethnic test for those of Central American ancestry: $F = 0.18$, $p = 0.091$, $r^2 = 0.011$

Table 27. Mean Income Levels By Ancestral Group By Reason For Coming To Site

Ancestral Group	Reason For Coming To Site				Overall Mean
	Enjoy Place Itself	Get Out Of City	Time With Family/Friends	Good Place For Activity	
	Mean	Mean	Mean	Mean	
Anglo ^a (n = 101)	\$33,906	\$33,611	\$34,355	\$35,000	\$34,084
Mexican ^b (n = 330)	\$19,100	\$24,324	\$20,130	\$16,418	\$19,197
Central American ^c (n = 48)	\$11,842	\$32,500	\$15,577	\$18,846	\$16,042
Overall (n = 479)	\$21,325	\$28,433	\$22,857	\$18,368	\$22,020
F-ratio	15.34	1.01	9.02	8.32	37.79
Significance	0.0001	0.371	0.0002	0.0004	0.0001
Explained Variation	0.206	0.042	0.129	0.125	0.137

^aIntra-ethnic test for those of Anglo ancestry: $F = 0.08$, $p = 0.972$, $r^2 = 0.000$

^bIntra-ethnic test for those of Mexican ancestry: $F = 3.12$, $p = 0.026$, $r^2 = 0.032$

^cIntra-ethnic test for those of Central American ancestry: $F = 1.36$, $p = 0.276$, $r^2 = 0.002$

Table 28. Means And Standard Deviations Of Education Levels By Ancestral Group By Reason For Coming To Site

Ancestral Group	Reason For Coming To Site									
	Enjoy Place Itself		Get Out Of City		Time With Family/Friends		Good Place For Activity		Overall	
	<i>Mean</i>	<i>s.d.</i>	<i>Mean</i>	<i>s.d.</i>	<i>Mean</i>	<i>s.d.</i>	<i>Mean</i>	<i>s.d.</i>	<i>Mean</i>	<i>s.d.</i>
Anglo ^a (n = 108)	14.0	2.38	13.3	3.20	12.7	2.05	13.6	1.63	13.2	2.50
Mexican ^b (n = 369)	9.5	3.59	11.4	3.66	9.2	3.50	9.2	2.80	9.5	3.34
Central American ^c (n = 56)	9.0	3.45	9.7	3.20	8.6	3.50	9.7	3.70	9.3	3.43
Overall (n = 533)	10.4	3.81	12.1	3.58	9.9	3.53	9.6	3.04	10.2	3.47
F-ratio	21.22		2.91		14.23		11.73		59.92	
Significance	0.0001		0.063		0.0001		0.0001		0.0001	
Explained Variation	0.243		0.099		0.177		0.149		0.184	

^aIntra-ethnic test for those of Anglo ancestry: $F = 1.33$, $p = 0.269$, $r^2 = 0.043$

^bIntra-ethnic test for those of Mexican ancestry: $F = 3.82$, $p = 0.010$, $r^2 = 0.032$

^cIntra-ethnic test for those of Central American ancestry: $F = 0.24$, $p = 0.863$, $r^2 = 0.016$

Table 29. Social Group Composition By Ancestral Group

Ancestral Group	Social Group Composition						Overall %
	Immediate Family %	Extended Family %	Friends %	Compadres Comadres %	Organized Groups %	By Myself %	
Anglo (n = 140)	77.1	30.0	37.9	0.71	4.29	6.4	21.6
Mexican (n = 439)	88.9	50.6	28.5	8.2	5.7	1.1	67.9
Central American (n = 68)	80.9	39.7	17.7	10.3	22.1	1.5	10.5
Overall (n = 647)	85.5 (n = 553)	45.0 (n = 291)	29.4 (n = 190)	6.8 (n = 44)	7.1 (n = 46)	2.3 (n = 15)	100.0 (n = 647)
Chi-square	12.98	19.00	9.54	10.85	26.03	No Statistical Test Possible	No Statistical Test Possible
Significance	0.002	0.000	0.008	0.004	0.000		
Measure Of Association	0.140	0.169	0.121	0.128	0.197		

Table 30. Social Group Composition By Ancestral Group By Generational Status

		Social Group Composition					
Generational Status	n	Immediate Family %	Extended Family %	Friends %	Compadres Comadres %	Organized Groups %	By Myself %
<u>Mexican</u>							
Immigrant	310	90.0	50.7	26.5	9.0	7.1	1.0
First Generation	76	82.9	50.0	27.6	4.0	2.6	1.3
Second Generation	47	89.4	51.1	42.6	8.5	2.1	2.1
<u>Central American</u>							
Immigrant	66	80.0	38.5	18.5	10.8	23.1	1.5
First Generation	3	100.0	66.7	0.0	0.0	0.0	0.0
Second Generation	0	-	-	-	-	-	-
<u>Overall</u>							
Immigrant	357	88.3	48.5	24.8	9.3	9.9	1.1
First Generation	79	83.5	50.6	26.6	3.8	2.5	1.3
Second Generation	47	89.7	51.1	42.6	8.5	2.1	2.1
Total Sample	483	87.6 (n = 439)	49.1 (n = 246)	26.8 (n = 134)	8.4 (n = 42)	8.0 (n = 40)	1.2 (n = 6)
Chi-square		1.49	0.20	6.72	2.61	7.20	No Statistical Test Possible
Significance		0.476	0.907	0.035	0.272	0.027	
Measure of Association		0.054	0.020	0.115	0.072	0.119	

Table 31. Means And Standard Deviations Of Acculturation Levels By Ancestral Group By Social Group Composition

Ancestral Group	Social Group Composition											
	Immediate Family		Extended Family		Friends		Compadres Comadres		Organized Groups		By Myself	
	Mean	s.d.	Mean	s.d.	Mean	s.d.	Mean	s.d.	Mean	s.d.	Mean	s.d.
Mexican (n = 383)	2.44	1.22	2.45	1.22	2.63	1.26	2.20	0.90	1.99	1.07	3.30	0.76
Central American (n = 55)	1.85	0.81	2.00	0.84	1.79	0.87	1.39	0.56	1.93	0.87	1.00*	-
Overall (n = 438)	2.36	1.17	2.40	1.19	2.56	1.23	2.07	0.86	1.83	0.82	2.92	0.76
F-ratio	11.80		3.46		5.06		5.21		0.03		7.67	
Significance	0.0006		0.064		0.026		0.028		0.871		0.050	
Explained Variation	0.026		0.014		0.037		0.115		0.001		0.657	

*n = 1

Table 32. Mean Income Levels By Ancestral Group By Social Group Composition

Ancestral Group	Social Group Composition					
	Immediate Family	Extended Family	Friends	Compadres Comadres	Organized Groups	By Myself
	<i>Mean</i>	<i>Mean</i>	<i>Mean</i>	<i>Mean</i>	<i>Mean</i>	<i>Mean</i>
Anglo (n = 127)	\$33,763	\$36,500	\$29,688	\$60,000	\$26,667	\$32,500
Mexican (n = 378)	\$19,658	\$18,724	\$18,304	\$22,259	\$19,643	\$22,143
Central American (n = 54)	\$20,160	\$13,636	\$14,722	\$7,500	\$18,438	\$2,500*
Overall (n = 559)	\$22,557	\$20,773	\$21,294	\$22,095	\$20,571	\$23,958
F-ratio	4.64	22.70	9.28	6.68	0.73	1.09
Significance	0.020	0.0001	0.0001	0.004	0.491	0.376
Explained Variation	0.279	0.156	0.099	0.282	0.043	0.196

*n = 1

Table 33. Means And Standard Deviations Of Education Levels By Ancestral Group By Social Group Composition

Ancestral Group	Social Group Composition											
	Immediate Family		Extended Family		Friends		Compadres Comadres		Organized Groups		By Myself	
	Mean	s.d.	Mean	s.d.	Mean	s.d.	Mean	s.d.	Mean	s.d.	Mean	s.d.
Anglo (n = 107)	13.1	2.46	12.4	2.63	13.0	2.27	13.0*	-	12.7	1.21	13.7	1.50
Mexican (n = 371)	9.4	3.28	9.3	3.19	10.2	3.00	10.2	3.90	10.1	3.34	12.8	1.50
Central American (n = 52)	9.1	3.45	10.2	3.27	8.8	2.60	9.3	3.44	8.7	3.10	6.0*	-
Overall (n = 530)	10.1	3.15	9.9	3.12	10.9	2.89	10.2	3.87	10.0	3.06	12.9	1.50
F-ratio	59.1		17.37		21.98		0.41		3.58		11.77	
Significance	0.0001		0.0001		0.0001		0.665		0.037		0.0018	
Explained Variation	0.183		0.112		0.195		0.021		0.152		0.681	

*n = 1

Table 34. Response Items Within Each Cluster By Ancestral Group

Response Items	Ancestral Group			Overall %
	Anglo %	Mexican %	Central American %	
Cluster 1				
Not littering	16.7	7.1	6.1	8.9
Keeping it clean	23.3	20.3	6.1	19.3
No fires	0.0	2.8	0.0	2.0
No vandalism	1.7	2.8	3.0	2.3
Obey rules	0.0	1.9	3.0	1.6
Clean up after self, leave cleaner than found	20.0	2.8	0.0	5.9
Overall	61.7	37.8	18.2	40.0
Cluster 2				
Having safe place to come to	1.7	6.1	9.1	5.6
Having clean air and water	6.7	6.1	3.0	5.9
For children or future	0.0	6.1	12.1	5.6
Respecting God's creation	0.0	1.4	12.1	2.3
Peace, harmony, relaxation	0.0	2.8	6.1	2.6
Overall	8.3	2.8	3.0	22.0
Cluster 3				
Preservation	21.7	18.9	21.2	19.7
Respect nature	5.0	7.5	6.1	6.9
Overall	26.7	26.4	27.3	26.6
Cluster 4				
Respecting self	3.3	10.4	9.1	8.9

Table 35. Cluster Type By Ancestral Group

Ancestral Group	Cluster Type				Overall %
	Cluster 1 %	Cluster 2 %	Cluster 3 %	Cluster 4 %	
Anglo (n = 60)	61.7	8.3	26.7	3.3	19.7
Mexican (n = 212)	37.7	22.6	29.3	10.4	69.5
Central American (n = 33)	18.2	42.4	30.3	9.1	10.8
Overall (n = 305)	40.3 (n = 123)	22.0 (n = 67)	28.9 (n = 88)	8.9 (n = 27)	100.0 (n = 305)

$\chi^2 = 25.31$, $p = 0.000$, $c = 0.277$

Table 36. Cluster Type By Ancestral Group By Generational Status

Generational Status	n	Cluster Type				Overall %
		Cluster 1 %	Cluster 2 %	Cluster 3 %	Cluster 4 %	
<u>Mexican</u>						
Immigrant	130	25.9	28.2	31.1	14.8	65.5
First Generation	43	60.5	14.0	23.3	2.3	20.9
Second Generation	28	60.7	3.6	32.1	3.6	13.6
<u>Central American</u>						
Immigrant	32	18.8	43.8	28.1	9.4	96.9
First Generation	1	0.0	0.0	100.0	0.0	3.0
Second Generation	0	0.0	0.0	0.0	0.0	0.0
<u>Overall</u>						
Immigrant	160	24.4	29.4	31.9	14.4	69.0
First Generation	44	59.1	13.6	25.0	2.3	19.0
Second Generation	29	60.7	3.6	32.1	3.6	12.1
Total Sample	232	35.3 (n = 82)	23.3 (n = 54)	30.6 (n = 71)	10.8 (n = 25)	100.0 (n = 232)

 $\chi^2 = 33.33, p = 0.000, c = 0.354$

Table 37. Means And Standard Deviations Of Acculturation Levels By Ancestral Group By Cluster Type

Ancestral Group	Cluster Type									
	Cluster 1		Cluster 2		Cluster 3		Cluster 4		Overall	
	<i>Mean</i>	<i>s.d.</i>	<i>Mean</i>	<i>s.d.</i>	<i>Mean</i>	<i>s.d.</i>	<i>Mean</i>	<i>s.d.</i>	<i>Mean</i>	<i>s.d.</i>
Mexicana ^a (n = 207)	3.05	1.27	2.09	1.07	2.54	1.26	1.64	0.69	2.56	1.26
Central American ^b (n = 33)	2.04	1.13	1.66	0.72	1.95	0.86	1.00	0.00	1.78	0.85
Overall (n = 240)	2.98	1.29	1.99	1.01	2.46	1.22	1.56	0.68	2.45	1.16
F-ratio	3.73		1.82		2.05		2.49		11.03	
Significance	0.057		0.183		0.156		0.129		0.001	
Explained Variation	0.046		0.032		0.029		0.102		0.046	

^aIntra-ethnic test for those of Mexican ancestry: $F = 11.23$, $p = 0.0001$, $r^2 = 0.142$

^bIntra-ethnic test for those of Central American ancestry: $F = 1.33$, $p = 0.285$, $r^2 = 0.121$

Table 38. Mean Income Levels By Ancestral Group By Cluster Type

Ancestral Group	Cluster Type				Overall <i>Mean</i>
	Cluster 1 <i>Mean</i>	Cluster 2 <i>Mean</i>	Cluster 3 <i>Mean</i>	Cluster 4 <i>Mean</i>	
Anglo ^a (n = 56)	\$32,883	\$29,000	\$33,036	\$31,250	\$32,503
Mexican ^b (n = 179)	\$20,754	\$15,972	\$21,652	\$14,625	\$19,357
Central American ^c (n = 25)	\$5,417	\$18,438	\$12,813	\$6,250	\$11,800
Overall (n = 260)	\$23,776	\$17,704	\$22,788	\$14,700	\$21,076
F-ratio	20.62	2.47	3.85	3.40	30.23
Significance	0.0001	0.096	0.026	0.052	0.0001
Explained Variation	0.296	0.097	0.093	0.236	0.194

^aIntra-ethnic test for those of Anglo ancestry: $F = 5.20$, $p = 0.671$, $r^2 = 0.029$

^bIntra-ethnic test for those of Mexican ancestry: $F = 1.39$, $p = 0.242$, $r^2 = 0.023$

^cIntra-ethnic test for those of Central American ancestry: $F = 5.18$, $p = 0.008$, $r^2 = 0.425$

Table 39. Means And Standard Deviations Of Education Levels By Ancestral Group By Cluster Type

Ancestral Group	Cluster Type									
	Cluster 1		Cluster 2		Cluster 3		Cluster 4		Overall	
	<i>Mean</i>	<i>s.d.</i>	<i>Mean</i>	<i>s.d.</i>	<i>Mean</i>	<i>s.d.</i>	<i>Mean</i>	<i>s.d.</i>	<i>Mean</i>	<i>s.d.</i>
Anglo ^a (n = 59)	13.1	2.40	12.2	1.10	13.1	2.85	14.0	1.41	13.0	2.37
Mexican ^b (n = 204)	10.3	3.07	9.2	3.77	9.4	2.99	8.4	2.87	9.6	3.18
Central American ^c (n = 31)	8.7	3.39	8.6	3.67	9.1	3.67	8.0	2.65	9.0	3.29
Overall (n = 294)	11.1	3.27	9.3	3.68	10.1	3.48	8.7	3.10	10.2	3.28
F-ratio	13.58		1.77		8.91		3.81		31.51	
Significance	0.0001		0.180		0.0003		0.037		0.0001	
Explained Variation	0.195		0.056		0.182		0.241		0.182	

^aIntra-ethnic test for those of Anglo ancestry: $F = 0.39$, $p = 0.762$, $r^2 = 0.021$

^bIntra-ethnic test for those of Mexican ancestry: $F = 2.55$, $p = 0.057$, $r^2 = 0.037$

^cIntra-ethnic test for those of Central American ancestry: $F = 0.08$, $p = 0.970$, $r^2 = 0.009$

Table 40. Items And Factor Loadings Of The Place Attachment Question

Items	Factor Loadings		
	Factor 1	Factor 2	Factor 3
Coming here says a lot about who I am	0.565	0.256	0.085
Coming here offers me relaxation and enjoyment when pressures build up	0.547	0.247	0.077
Coming here is one of the most satisfying things I do	0.636	0.356	0.210
Being able to come here is important to me	0.754	0.179	0.072
This place means a lot to me	0.761	0.257	0.254
This place makes me feel like no other place can	0.397	0.668	0.216
I enjoy doing the type of things I do here in this area more than any other area	0.305	0.818	0.155
I wouldn't substitute any other area for doing the type of things I do here	0.209	0.804	0.104
I feel no commitment to this place	-0.284	-0.176	-0.526
The time I spent here could just as easily been spent elsewhere	-0.027	-0.090	-0.685
This area is the best place for what I like to do	0.456	0.583	0.185
I feel like this area is a part of me	0.584	0.504	0.139
I can relate coming here to other parts of my life	0.446	0.411	0.084
Eigen Values	6.22	1.19	1.13
Kronbach's Alpha	0.862	0.872	0.553

Table 41. Means And Standard Deviations Of Place Identity Scores By Ancestral Group By Study Site

Ancestral Group	Study Site									
	West Fork		East Fork		Lytle Creek		Forest Falls		Overall	
	<i>Mean</i>	<i>s.d.</i>	<i>Mean</i>	<i>s.d.</i>	<i>Mean</i>	<i>s.d.</i>	<i>Mean</i>	<i>s.d.</i>	<i>Mean</i>	<i>s.d.</i>
Anglo ^a (n = 153)	2.13	0.44	2.56	0.87	2.45	1.05	2.06	0.78	2.20	0.86
Mexican ^b (n = 428)	2.20	0.98	2.25	0.82	2.19	0.80	1.98	0.78	2.19	0.85
Central American ^c (n = 65)	2.00	0.84	1.89	0.76	2.43	0.80	-	-	2.01	0.81
Overall (n = 711)	2.16	0.93	2.23	0.82	2.23	0.84	2.04	0.78	2.17	0.85
F-ratio	0.66		3.36		1.51		0.30		1.40	
Significance	0.519		0.034		0.224		0.587		0.247	
Explained Variation	0.008		0.051		0.014		0.002		0.004	

^aIntra-ethnic test for those of Anglo ancestry: $F = 3.10$, $p = 0.030$, $r^2 = 0.060$

^bIntra-ethnic test for those of Mexican ancestry: $F = 0.95$, $p = 0.414$, $r^2 = 0.007$

^cIntra-ethnic test for those of Central American ancestry: $F = 1.05$, $p = 0.355$, $r^2 = 0.033$

Table 42. Means And Standard Deviations Of Place Dependence Scores By Ancestral Group By Study Site

Ancestral Group	Study Site									
	West Fork		East Fork		Lytle Creek		Forest Falls		Overall	
	<i>Mean</i>	<i>s.d.</i>	<i>Mean</i>	<i>s.d.</i>	<i>Mean</i>	<i>s.d.</i>	<i>Mean</i>	<i>s.d.</i>	<i>Mean</i>	<i>s.d.</i>
Anglo ^a (n = 152)	3.21	0.43	3.59	1.06	3.31	0.93	3.12	0.92	3.22	0.93
Mexican ^b (n = 419)	2.48	1.16	2.69	1.06	2.72	1.17	2.50	0.96	2.62	1.14
Central American ^c (n = 62)	2.47	1.07	2.68	1.10	2.94	1.32	-	-	2.59	1.10
Overall (n = 633)	2.51	1.12	2.82	1.10	2.81	1.14	2.94	0.93	2.76	1.08
F-ratio	1.62		5.20		3.70		12.08		17.91	
Significance	0.201		0.007		0.026		0.001		0.0001	
Explained Variation	0.019		0.079		0.035		0.085		0.054	

^aIntra-ethnic test for those of Anglo ancestry: $F = 0.89$, $p = 0.446$, $r^2 = 0.019$

^bIntra-ethnic test for those of Mexican ancestry: $F = 1.26$, $p = 0.289$, $r^2 = 0.009$

^cIntra-ethnic test for those of Central American ancestry: $F = 0.60$, $p = 0.553$, $r^2 = 0.020$

Table 43. Means And Standard Deviations Of Place Identity Scores By Generational Status By Ancestral Group

Generational Status	n	Factors			
		Place Identity		Place Dependence	
		<i>Mean</i>	<i>s.d.</i>	<i>Mean</i>	<i>s.d.</i>
<u>Mexican^a</u>					
Immigrant	300	2.10	0.86	2.52	1.15
First Generation	76	2.41	0.78	2.90	1.15
Second Generation	47	2.34	0.87	2.76	1.02
<u>Central American^b</u>					
Immigrant	62	2.03	0.82	2.58	1.11
First Generation	3	1.53	0.50	2.67	0.94
Second Generation	0	-	-	-	-
<u>Overall</u>					
Immigrant	362	2.10	0.85	2.53	1.14
First Generation	79	2.38	0.78	2.89	1.15
Second Generation	47	2.34	0.87	2.76	1.02
Total Sample	488	2.16	0.84	2.61	1.13
F-ratio		5.07		3.62	
Significance		0.007		0.027	
Explained Variation		0.020		0.015	
Significant At Site		3		4	

^aIntra-ethnic test for those of Mexican ancestry for:

Place Identity: $F = 4.96$, $p = 0.007$, $r^2 = 0.023$, significant at site 3

Place Dependence: $F = 3.67$, $p = 0.026$, $r^2 = 0.018$, significant at site 4

^bIntra-ethnic test for those of Central American ancestry for:

Place Identity: $F = 1.06$, $p = 0.306$, $r^2 = 0.017$

Place Dependence: $F = 0.01$, $p = 0.917$, $r^2 = 0.000$

Table 44. Pearson's Correlation Between Acculturation Levels And Place Identity And Place Dependence Scores

Ancestral Group	n	Factors									
		Place Identity					Place Dependence				
		West Fork	East Fork	Lytle Creek	Forest Falls	Overall	West Fork	East Fork	Lytle Creek	Forest Falls	Overall
Mexican	428	0.142	0.106	0.223*	0.191	0.159*	0.043	0.133	0.202*	0.488*	0.172*
Central American	65	0.211	-0.035	0.691	-	0.157	0.323*	-0.303	0.381	-	0.121
Overall	493	0.165*	0.104	0.223*	0.191	0.167*	0.087	0.062	0.200*	0.488*	0.166*

* Significant at the $p = 0.05$ level

Table 45. Pearson's Correlation Between Income Levels And Place Identity And Place Dependence Scores

Ancestral Group	n	Factors									
		Place Identity					Place Dependence				
		West Fork	East Fork	Lytle Creek	Forest Falls	Overall	West Fork	East Fork	Lytle Creek	Forest Falls	Overall
Anglo	139	0.502	0.353	0.231	0.208*	0.194*	-0.206	0.776*	0.331*	0.188	0.295*
Mexican	428	-0.044	0.171	0.195*	-0.135	0.059	-0.108	0.176	0.242*	0.062	0.108*
Central American	65	0.110	-0.404	0.716	-	-0.028	0.200	-0.045	0.498	-	0.147
Overall	623	0.004	0.173	0.234*	0.074	0.100*	-0.019	0.299*	0.289*	0.201*	0.223*

* Significant at the $p = 0.05$ level

Table 46. Pearson's Correlation Between Education Levels and Place Identity And Place Dependence Scores

Ancestral Group	n	Factors									
		Place Identity					Place Dependence				
		West Fork	East Fork	Lytle Creek	Forest Falls	Overall	West Fork	East Fork	Lytle Creek	Forest Falls	Overall
Anglo	139	-0.196	-0.007	-0.067	-0.111	-0.102	-0.346	0.364	-0.009	0.241*	0.164*
Mexican	428	0.256*	0.106	0.060	0.247	0.153*	0.147	0.142	0.090	0.401*	0.143*
Central American	65	0.128	0.180	0.783*	-	0.205	0.173	0.509*	0.532	-	0.329*
Overall	632	0.209*	0.159	0.100	0.035	0.109*	0.173*	0.291*	0.161*	0.387*	0.246*

* Significant at the $p = 0.05$ level

Table 47. Ethnic Composition Preferences By Ancestral Group

Ancestral Group	Ethnic Composition Preferences					Overall %
	All Like Me %	Most Like Me %	Variety %	No Preference %	Variety & No Preference %	
Anglo (n = 151)	2.7	13.9	17.9	64.2	1.3	24.0
Mexican (n = 419)	6.0	7.2	21.5	57.3	8.1	66.5
Central American (n = 60)	5.0	6.7	16.7	68.3	3.3	9.5
Overall (n = 630)	5.1 (n = 32)	8.7 (n = 55)	20.2 (n = 127)	60.0 (n = 378)	6.0 (n = 38)	100.0 (n = 630)

$\chi^2 = 20.58$, $p = 0.008$, $c = 0.178$

Table 48. Ethnic Composition Preferences By Generational Status By Ancestral Group By

		Ethnic Composition Preferences					
Generational Status	n	All Like Me %	Most Like Me %	Variety %	No Preference %	Variety & No Preference %	Overall %
<u>Mexican</u>							
Immigrant	293	6.1	7.5	16.6	60.3	8.8	70.7
First Generation	75	5.3	2.7	32.0	50.7	9.3	18.0
Second Generation	46	4.3	12.8	34.0	44.7	2.1	11.3
<u>Central American</u>							
Immigrant	57	3.5	6.9	15.5	69.0	3.5	95.1
First Generation	32	33.3	0.0	33.3	33.3	0.0	4.9
Second Generation	0	-	-	-	-	-	-
<u>Overall</u>							
Immigrant	350	5.7	7.4	16.6	62.3	8.0	73.8
First Generation	78	6.4	2.6	32.1	50.0	9.0	16.5
Second Generation	46	4.4	13.0	34.8	45.7	2.2	9.7
Total Sample	474	5.7 (n = 27)	7.2 (n = 34)	20.9 (n = 99)	58.7 (n = 278)	7.6 (n = 36)	100.0 (n = 474)

 $\chi^2 = 21.96, p = 0.005, c = 0.210$

Table 49. Means And Standard Deviations Of Acculturation Levels By Ancestral Group By Ethnic Composition Preferences

Ancestral Group	Ethnic Composition Preferences											
	All Like Me		Most Like Me		Variety		No Preference		Variety & No Preference		Overall	
	Mean	s.d.	Mean	s.d.	Mean	s.d.	Mean	s.d.	Mean	s.d.	Mean	s.d.
Mexican ^a (n = 429)	2.50	1.42	2.40	1.38	2.83	1.24	2.30	1.16	2.57	1.09	2.45	1.21
Central American ^b (n = 65)	1.00	0.00	1.25	0.50	2.48	0.73	1.77	0.79	3.13	0.18	1.86	0.84
Overall (n = 494)	2.33	1.42	2.26	1.35	2.79	1.20	2.22	1.13	2.60	1.06	2.38	1.18
F-ratio	No		No		No		No		No		13.29	
Significance	Statistical		Statistical		Statistical		Statistical		Statistical		0.0003	
Explained Variation	Test Possible		Test Possible		Test Possible		Test Possible		Test Possible		0.027	

^aIntra-ethnic test for those of Mexican ancestry: $F = 2.69$, $p = 0.021$, $r^2 = 0.032$

^bIntra-ethnic test for those of Central American ancestry: $F = 4.03$, $p = 0.003$, $r^2 = 0.269$

Table 50. Mean Income Levels By Ancestral Group By Ethnic Composition Preferences

Ancestral Group	Ethnic Composition Preferences					Overall Mean
	All Like Me Mean	Most Like Me Mean	Variety Mean	No Preference Mean	Variety & No Preference Mean	
Anglo ^a (n = 133)	\$29,375	\$38,833	\$34,028	\$33,140	\$37,500	\$33,180
Mexican ^b (n = 379)	\$12,222	\$26,190	\$18,269	\$19,777	\$19,597	\$19,432
Central American ^c (n = 52)	\$11,250	\$15,000*	\$23,750	\$15,608	\$7,500*	\$16,582
Overall (n = 564)	\$15,000	\$28,581	\$21,418	\$22,738	\$20,294	\$22,383
F-ratio	No	No	No	No	No	36.33
Significance	Statistical Test	Statistical Test	Statistical Test	Statistical Test	Statistical Test	0.0001
Explained Variation	Possible	Possible	Possible	Possible	Possible	0.120

^aIntra-ethnic test for those of Anglo ancestry: $F = 0.13$, $p = 0.970$, $r^2 = 0.004$

^bIntra-ethnic test for those of Mexican ancestry: $F = 1.95$, $p = 0.090$, $r^2 = 0.027$

^cIntra-ethnic test for those of Central American ancestry: $F = 0.65$, $p = 0.629$, $r^2 = 0.056$

*n = 1

Table 51. Means And Standard Deviations Of Education Levels By Ancestral Group By Ethnic Composition Preferences

Ancestral Group	Ethnic Composition Preferences											
	All Like Me		Most Like Me		Variety		No Preference		Variety & No Preference		Overall	
	Mean	s.d.	Mean	s.d.	Mean	s.d.	Mean	s.d.	Mean	s.d.	Mean	s.d.
Anglo ^a (n = 143)	14.3	2.63	12.9	2.62	13.0	2.77	13.2	2.45	13.0	1.41	13.2	2.49
Mexican ^b (n = 417)	9.4	3.41	9.4	4.23	9.7	3.46	9.5	3.13	10.6	2.81	9.6	3.27
Central American ^c (n = 62)	9.7	3.21	3.5	3.54	10.0	3.62	9.2	0.41	7.0*	-	9.1	3.41
Overall (n = 622)	10.7	3.61	10.6	4.22	10.3	3.56	10.4	3.39	10.6	2.83	10.4	3.12
F-ratio	No		No		No		No		No		70.29	
Significance	Statistical		Statistical		Statistical		Statistical		Statistical		0.0001	
Explained Variation	Test Possible		Test Possible		Test Possible		Test Possible		Test Possible		0.192	

^aIntra-ethnic test for those of Anglo ancestry: $F = 4.03$, $p = 0.003$, $r^2 = 0.269$

^bIntra-ethnic test for those of Mexican ancestry: $F = 2.69$, $p = 0.021$, $r^2 = 0.032$

^cIntra-ethnic test for those of Central American ancestry: $F = 4.03$, $p = 0.003$, $r^2 = 0.269$

*n = 1

Table 52. Cultural Group Identification Preferences By Ancestral Group

Ancestral Group	Cultural Group Identification Preferences				Overall %
	Anglo American %	Mexican American %	Latino %	Hispanic American %	
Mexican (n = 381)	1.3	36.8	39.4	22.6	87.2
Central American (n = 56)	1.7	1.8	71.4	25.0	12.8
Overall (n = 437)	1.5 (n = 6)	32.3 (n = 141)	43.5 (n = 190)	22.9 (n = 100)	100.0 (n = 437)

$\chi^2 = 30.24$, $p = 0.000$, $c = 0.254$

Table 53. Cultural Group Identification Preferences By Generational Status By Ancestral Composition

Generational Status	n	Cultural Group Identification Preferences				Overall %
		Anglo American %	Mexican American %	Latino %	Hispanic American %	
<u>Mexican</u>						
Immigrant	272	1.1	27.6	52.6	18.8	72.3
First Generation	65	0.0	69.2	9.2	21.5	17.3
Second Generation	39	5.1	51.3	0.0	43.6	10.4
<u>Central American</u>						
Immigrant	53	1.9	1.9	71.7	24.5	94.6
First Generation	3	0.0	0.0	66.7	33.3	5.4
Second Generation	0	-	-	-	-	-
<u>Overall</u>						
Immigrant	325	1.2	23.4	55.7	19.7	75.3
First Generation	68	0.0	66.2	11.8	22.1	15.7
Second Generation	39	5.1	51.3	0.0	43.6	9.0
Total Sample	432	1.39 (n = 6)	32.6 (n = 141)	43.8 (n = 189)	22.2 (n = 8)	100.0 (n = 432)

 $\chi^2 = 93.6, p = 0.000, c = 0.422$

Table 54. Means And Standard Deviations Of Acculturation Levels By Ancestral Group By Cultural Group Identification Preferences

Ancestral Group	Cultural Group Identification Preferences									
	Anglo American		Mexican American		Latino		Hispanic American		Overall	
	<i>Mean</i>	<i>s.d.</i>	<i>Mean</i>	<i>s.d.</i>	<i>Mean</i>	<i>s.d.</i>	<i>Mean</i>	<i>s.d.</i>	<i>Mean</i>	<i>s.d.</i>
Mexican ^a (n = 416)	2.65	0.99	2.89	1.23	1.85	0.81	2.73	1.36	2.46	1.21
Central American ^b (n = 61)	2.00*	-	1.00*	-	1.64	0.76	2.48	0.78	1.86	0.83
Overall (n = 477)	2.54	0.99	2.87	1.23	1.81	0.80	2.70	1.30	2.34	1.06
F-ratio	0.36		2.35		2.19		0.45		13.98	
Significance	0.583		0.127		0.141		0.505		0.0002	
Explained Variation	0.082		0.017		0.011		0.004		0.029	

^aIntra-ethnic test for those of Mexican ancestry: $F = 23.31$, $p = 0.0001$, $r^2 = 0.157$

^bIntra-ethnic test for those of Central American ancestry: $F = 4.60$, $p = 0.006$, $r^2 = 0.210$

*n = 1

Table 55. Mean Income Levels By Ancestral Group By Cultural Group Identification Preferences

Ancestral Group	Cultural Group Identification Preferences				Overall <i>Mean</i>
	Anglo American <i>Mean</i>	Mexican American <i>Mean</i>	Latino <i>Mean</i>	Hispanic American <i>Mean</i>	
Mexican ^a (n = 364)	\$25,000	\$22,377	\$17,370	\$17,244	\$18,971
Central American ^b (n = 49)	\$15,000*	\$25,000	\$14,375	\$18,750	\$15,761
Overall (n = 413)	\$23,333	\$22,398	\$16,796	\$17,444	\$20,350
F-ratio	1.49	No	1.54	0.08	36.40
Significance	0.231	Statistical Test	0.217	0.785	0.0001
Explained Variation	0.033	Possible	0.009	0.001	0.120

^aIntra-ethnic test for those of Mexican ancestry: $F = 3.42$, $p = 0.018$, $r^2 = 0.030$

^bIntra-ethnic test for those of Central American ancestry: $F = 0.35$, $p = 0.708$, $r^2 = 0.016$

*n = 1

Table 56. Means And Standard Deviations Of Education Levels By Ancestral Group By Cultural Group Identification Preferences

Ancestral Group	Cultural Group Identification Preferences									
	Anglo American		Mexican American		Latino		Hispanic American		Overall	
	<i>Mean</i>	<i>s.d.</i>	<i>Mean</i>	<i>s.d.</i>	<i>Mean</i>	<i>s.d.</i>	<i>Mean</i>	<i>s.d.</i>	<i>Mean</i>	<i>s.d.</i>
Mexican ^a (n = 404)	10.6	2.61	10.0	3.22	8.6	3.38	9.9	3.30	9.6	3.26
Central American ^b (n = 58)	8.0*	-	4.0*	-	9.2	3.58	9.7	3.43	9.1	3.38
Overall (n = 462)	10.2	2.61	9.9	3.22	8.7	3.43	9.9	3.32	10.3	3.12
F-ratio	5.51		3.43		1.03		0.03		70.55	
Significance	0.006		0.067		0.312		0.862		0.0001	
Explained Variation	0.107		0.025		0.006		0.000		0.191	

^aIntra-ethnic test for those of Mexican ancestry: $F = 4.96$, $p = 0.002$, $r^2 = 0.040$

^bIntra-ethnic test for those of Central American ancestry: $F = 0.85$, $p = 0.472$, $r^2 = 0.047$

*n = 1

Table 57. Means And Standard Deviations Of Number Of Family Members By Ancestral Group

Ancestral Group	Location Of Family Members					
	Southern California		United States		Ancestral Country	
	<i>Mean</i>	<i>s.d.</i>	<i>Mean</i>	<i>s.d.</i>	<i>Mean</i>	<i>s.d.</i>
Anglo (n = 144)	18.1	27.9	53.4	74.1	19.7	53.5
Mexican (n = 497)	31.3	51.8	44.3	67.9	40.1	62.2
Central American (n = 60)	8.5	8.2	14.7	17.1	29.6	53.7
Overall (n = 651)	25.9	44.4	43.2	66.0	36.0	59.9
F-ratio	9.79		7.12		4.50	
Significance	0.0001		0.0009		0.012	
Explained Variation	0.032		0.024		0.018	

Table 58. Means And Standard Deviations Of Number Of Family Members By Generational Status By Ancestral Group

Generational Status	n	Location Of Family Members					
		Southern California		United States		Ancestral Country	
		<i>Mean</i>	<i>s.d.</i>	<i>Mean</i>	<i>s.d.</i>	<i>Mean</i>	<i>s.d.</i>
<u>Mexican</u>							
Immigrant	290	19.7	24.5	29.3	43.3	39.1	61.1
First Generation	62	53.2	76.9	69.1	78.1	48.5	46.1
Second Generation	34	76.2	91.4	118.0	130.5	39.7	95.6
<u>Central American</u>							
Immigrant	58	8.4	8.3	14.8	17.4	30.1	54.6
First Generation	2	10.3	8.4	12.5	10.6	17.0	18.4
Second Generation	0	-	-	-	-	-	-
<u>Overall</u>							
Immigrant	348	17.9	23.0	26.9	40.5	37.6	60.1
First Generation	64	51.4	75.7	67.3	76.5	47.4	45.7
Second Generation	34	76.2	91.4	118.0	130.5	39.7	95.6
Total Sample	446	28.1	44.7	39.7	58.0	39.1	61.3
F-ratio		41.48		46.70		0.63	
Significance		0.0001		0.0001		0.533	
Explained Variation		0.156		0.174		0.003	

Table 59. Pearson's Correlation Between Acculturation Levels And Number Of Family Members

Ancestral Group	Location Of Family Members		
	Southern California	United States	Ancestral Country
Mexican (n = 416)	0.381*	0.435*	0.120*
Central American (n = 64)	0.123*	0.250*	0.570*
Overall (n = 461)	0.387*	0.437*	0.121*

* Significant at the $p = 0.05$ level

Table 60. Pearson's Correlation Between Income Levels And Number Of Family Members

Ancestral Group	Location Of Family Members		
	Southern California	United States	Ancestral Country
Anglo (n = 120)	-0.044	-0.075	-0.085
Mexican (n = 356)	0.140*	0.187	0.076
Central American (n = 52)	0.139	0.260*	0.072
Overall (n = 528)	0.057	0.135*	0.006

* Significant at the $p = 0.05$ level

Table 61. Pearson's Correlation Between Education Levels And Number Of Family Members

Ancestral Group	Location Of Family Members		
	Southern California	United States	Ancestral Country
Anglo (n = 128)	-0.185	-0.027	0.041
Mexican (n = 400)	0.146*	0.229*	0.031
Central American (n = 64)	0.223**	0.203	0.005
Overall (n = 592)	0.047	0.184*	-0.018

* Significant at the $p = 0.05$ level

**Significant at the $p = 0.10$ level

**The vita has been removed from
the scanned document**