CULTURE’S ROLE IN IMMIGRANT HEALTH:
HOW CULTURAL CONSONANCE SHAPES DIABETES AND DEPRESSION AMONG
MEXICAN WOMEN IN ALABAMA

by

COURTNEY ANDREWS

KATHRYN S. OTHS, CHAIR
WILLIAM DRESSLER
JASON A. DECARO
MICHAEL MURPHY
STEVEN B. BUNKER

A DISSERTATION

Submitted in partial fulfillment of the requirements
for the degree of Doctor of Philosophy
in the Department of Anthropology
in the Graduate School of
The University of Alabama

TUSCALOOSA, ALABAMA

2018
ABSTRACT

Mexican immigrants tend to be in better health upon arrival to the United States than their U.S.-born counterparts, despite living through the conditions that forced them to migrate initially and enduring what is often a traumatic migration and resettlement process. However, as they carry out their lives in the U.S., even as standard of living improves and they gain access to public health care, studies show that health outcomes often decline. For Mexican immigrant women, this is particularly true with regard to type 2 diabetes and depressive symptoms. Culture is often implicated in this process, and acculturation is the primary analytical framework used to study what happens as individuals transition from the sociocultural context of their upbringing to that of a host society. Typically measured as age at arrival, length of time living in the U.S., and English language proficiency, it is unclear what these proxy variables measure in terms of culture and why they may be implicated in health outcomes. Further, this research tends to obscure the socio-political conditions and structural constraints that shape illness for vulnerable populations. Focusing on Mexican immigrant women living in Alabama, this study uses cultural consonance theory and methodology to better understand how culture and culture change act on the body to produce predictable discrepancies in physiological functioning. Cultural consonance is the degree to which individuals, in their own beliefs and behaviors, live up to the prototypes for those beliefs and behaviors that are encoded in cultural models. I examine the link between cultural consonance and two health outcomes — percentage of Hemoglobin variant A1c (an
indicator of type 2 diabetes risk) and depressive symptoms — as well as the extent to which consonance buffers the effects of acculturation on these two outcomes. Instead of locating individuals along a continuum of culture, I consider how well respondents live up to the cultural standards defined in the new sociocultural environment and examine how this affects well-being. The results, and the ethnographic insight in which they are couched, offer a more tenable explanation for how the acculturative experience operates on the body.
DEDICATION

For Rip —

Thank you for being on my team.
**LIST OF ABBREVIATIONS AND SYMBOLS**

<table>
<thead>
<tr>
<th>Abbreviation</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>A1c / HbA1c</td>
<td>Hemoglobin A1c, measured as a percent of glycated hemoglobin</td>
</tr>
<tr>
<td>ARSMA</td>
<td>Acculturation Rating Scale for Mexican Americans</td>
</tr>
<tr>
<td>DACA</td>
<td>Deferred Action for Childhood Arrivals</td>
</tr>
<tr>
<td>HICA</td>
<td>Hispanic Interest Coalition of Alabama (in Birmingham, AL)</td>
</tr>
<tr>
<td>NAFTA</td>
<td>North American Free Trade Agreement</td>
</tr>
<tr>
<td>CES-D</td>
<td>Center for Epidemiological Studies Depression Scale</td>
</tr>
<tr>
<td>SSRC</td>
<td>Social Scientific Research Council</td>
</tr>
<tr>
<td>IRCA</td>
<td>Immigration Reform and Control Act of 1986</td>
</tr>
<tr>
<td>NAFTA</td>
<td>North American Free Trade Agreement</td>
</tr>
<tr>
<td>SSRC</td>
<td>Social Science Research Council</td>
</tr>
<tr>
<td>ICE</td>
<td>Immigration and Customs Enforcement</td>
</tr>
<tr>
<td>HB56</td>
<td>House Bill 56, Beason-Hammon Alabama Taxpayer and Citizen Protection Act</td>
</tr>
<tr>
<td>HPA</td>
<td>Hypothalamic-pituitary-adrenal axis</td>
</tr>
<tr>
<td>MDS</td>
<td>Multidimensional scaling</td>
</tr>
<tr>
<td>n</td>
<td>Number, in reference to sample size</td>
</tr>
<tr>
<td>PROFIT</td>
<td>Property fitting</td>
</tr>
<tr>
<td>p</td>
<td>Level of significance, probability of results</td>
</tr>
<tr>
<td>Symbol</td>
<td>Description</td>
</tr>
<tr>
<td>--------</td>
<td>-------------</td>
</tr>
<tr>
<td>*</td>
<td>In regression tables, represents significance at 0.05 level</td>
</tr>
<tr>
<td>**</td>
<td>In regression tables, represents significance at 0.01 level</td>
</tr>
<tr>
<td>r</td>
<td>Pearson product moment correlation</td>
</tr>
<tr>
<td>R²</td>
<td>Proportional reduction in error associated with a regression equation</td>
</tr>
<tr>
<td>SES</td>
<td>Socioeconomic status</td>
</tr>
<tr>
<td>s.d.</td>
<td>Standard deviation</td>
</tr>
<tr>
<td>t</td>
<td>Computed value of t-test</td>
</tr>
</tbody>
</table>
Primarily, I want to thank the women who agreed to participate in this study. I wish I could write an entire dissertation on each one of them. I came to think of and refer to them as my “mamas,” and I was continually in awe of their bravery and determination to make their lives better despite everything stacked against them. I am truly humbled by their willingness to talk to me and let me be a part of their lives. Thank you, Veronica, for all the time and energy you invested in this project, even while you were looking for a job and planning a wedding! Thank you for getting me through the interviews and the days where I thought I could not keep going. I relied on your steadfastness more than you know. Thank you, Xochitl, for setting up so many interviews for me and allowing us to use your apartment as a safe place. Thank you, Domingo, for driving me around and talking me through the different pockets of Birmingham where your people live, and thank you for setting me up with the women at the soccer games. I am indebted to the wonderful women at the Hispanic Interest Coalition of Alabama for all the hard work they do day in and day out for the immigrant population in this state and for allowing me to be a part of the team. Thank you, Cindy, for letting me take over your group sessions and use your facility to do interviews. I am also grateful for the women at La Casita who work tirelessly to provide services to the most vulnerable among us and for the time and space you gave me to do my research.
I am grateful to the University of Alabama anthropology department for being flexible with me and supportive of my life situation during this process. Living an hour away and having small children meant not being in Tuscaloosa as much as I would have liked, but I always felt welcome and supported and a part of the really important work going on there. I am honored and grateful for the funding provided by the Graduate Council Fellowship at UA.

Thank you, Kathy, for bearing with me as I abruptly switched directions in the middle of the program. I still hope to make it to Peru with you one day! Thank you Bill for inspiring my interest in medical anthropology from my first Culture, Mind and Behavior class as a Master’s student. And to my other committee members - Jason, Michael, and Steve - thank you for the time you spent helping me improve this work and for all the recommendations and advice along the way.

Uncle Bob and Aunt Beth, thank you for hosting a productive writing retreat for me and for offering your support and encouragement. I am so lucky to have you guys in my life. Thank you, Ever and Ollie, for making me a mama and for being with me on this journey. You gave me a perspective and an understanding I would not have otherwise had, and I think it helped me relate to my subjects on a deeper level. Finally, while I could not have done this work without the aforementioned individuals, I would not have completed this undertaking without the love and support and encouragement from my life partner, Rip. This was always as important to you as it was to me, and I am eternally grateful to you for being with me and helping me through this experience.
<table>
<thead>
<tr>
<th>CONTENTS</th>
</tr>
</thead>
<tbody>
<tr>
<td>ABSTRACT ................................................................. ii</td>
</tr>
<tr>
<td>DEDICATION ................................................................. iv</td>
</tr>
<tr>
<td>LIST OF ABBREVIATIONS AND SYMBOLS ..................................... v</td>
</tr>
<tr>
<td>ACKNOWLEDGMENTS ........................................................... vii</td>
</tr>
<tr>
<td>LIST OF TABLES ............................................................. xvii</td>
</tr>
<tr>
<td>LIST OF FIGURES ........................................................... xviii</td>
</tr>
<tr>
<td>LIST OF ILLUSTRATIONS ..................................................... xix</td>
</tr>
<tr>
<td>SECTION I: INTRODUCTION AND CONCEPTUAL BACKGROUND ............... 1</td>
</tr>
<tr>
<td>CHAPTER ONE: INTRODUCTION ................................................. 2</td>
</tr>
<tr>
<td>Study Background ............................................................ 3</td>
</tr>
<tr>
<td>Theoretical Perspective ..................................................... 5</td>
</tr>
<tr>
<td>Research Objectives ........................................................ 6</td>
</tr>
<tr>
<td>Research Design ............................................................. 8</td>
</tr>
<tr>
<td>Hypotheses ................................................................. 9</td>
</tr>
<tr>
<td>A Note on Terminology: Usage of “Hispanic” and “Latino” ............... 10</td>
</tr>
<tr>
<td>Chapter summaries .......................................................... 11</td>
</tr>
<tr>
<td>CHAPTER TWO: THE LATINO HEALTH PARADOX .............................. 18</td>
</tr>
<tr>
<td>Latino Immigrant Health in the United States .......................... 19</td>
</tr>
<tr>
<td>Paradox in the Mexican Subgroup ....................................... 21</td>
</tr>
</tbody>
</table>
Explanations for the Paradox ................................................................. 22

Selective Immigration Hypothesis ........................................................... 22

Cultural Buffer Hypothesis ........................................................................ 24

Social Support ......................................................................................... 27

Behavioral Health: Changes in Diet and Lifestyle ..................................... 29

Acculturative Stress .................................................................................. 31

Evidence against the Paradox ................................................................. 32

The Diagnosis Confound ......................................................................... 32

Return Migration Hypothesis .................................................................... 34

Differential Access and the Politics of Deservingness ................................. 35

Conclusions and Further Questions ......................................................... 36

CHAPTER THREE: ACCULTURATION AND HEALTH .............................. 38

Acculturation: A Conceptual History ....................................................... 40

Acculturation and Health Outcomes ....................................................... 45

Health of Subsequent Generations ......................................................... 48

Measuring Acculturation ......................................................................... 49

Theoretical Constraints ......................................................................... 51

Rethinking Acculturation ....................................................................... 54

Conclusion ............................................................................................. 56

CHAPTER FOUR: THE SOCIAL PATHOLOGY OF MEXICAN IMMIGRATION .. 58

The VIDDA Syndemic ............................................................................. 59

“Denouceability” and the Embodiment of Immigration Policy .................. 60
<table>
<thead>
<tr>
<th>Section</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>Life in Alabama Compared to Life in Mexico</td>
<td>138</td>
</tr>
<tr>
<td>Happy in Alabama?</td>
<td>140</td>
</tr>
<tr>
<td>Fear of Deportation</td>
<td>141</td>
</tr>
<tr>
<td>Maintaining Mexican Traditions</td>
<td>142</td>
</tr>
<tr>
<td>Mental and Physical Health</td>
<td>143</td>
</tr>
<tr>
<td>Tension</td>
<td>145</td>
</tr>
<tr>
<td>Summary</td>
<td>147</td>
</tr>
<tr>
<td>SECTION III: METHODS AND RESULTS</td>
<td>148</td>
</tr>
<tr>
<td>CHAPTER ELEVEN: RESEARCH METHODS</td>
<td>149</td>
</tr>
<tr>
<td>Project Overview</td>
<td>149</td>
</tr>
<tr>
<td>Selection of Cultural Domains</td>
<td>152</td>
</tr>
<tr>
<td>Research Purpose and Design</td>
<td>155</td>
</tr>
<tr>
<td>Hypotheses</td>
<td>156</td>
</tr>
<tr>
<td>Statistical Tests</td>
<td>157</td>
</tr>
<tr>
<td>Review of Research Setting</td>
<td>158</td>
</tr>
<tr>
<td>Sampling and Recruitment</td>
<td>160</td>
</tr>
<tr>
<td>Gaining Access and Building Rapport</td>
<td>161</td>
</tr>
<tr>
<td>Interview Procedures and Positionality</td>
<td>162</td>
</tr>
<tr>
<td>Ethnography and Key Informant Interviews</td>
<td>164</td>
</tr>
<tr>
<td>Cultural Domain Analysis</td>
<td>168</td>
</tr>
<tr>
<td>Cultural Consensus Methods and Analysis</td>
<td>171</td>
</tr>
<tr>
<td>SECTION IV: CONCLUSION, DISCUSSION, AND FINAL THOUGHTS</td>
<td>261</td>
</tr>
<tr>
<td>--------------------------------------------------------</td>
<td>-----</td>
</tr>
<tr>
<td>CHAPTER SIXTEEN: CONCLUSIONS AND FINAL DISCUSSION</td>
<td>262</td>
</tr>
<tr>
<td>Benefits of a Cognitive Approach to Acculturation</td>
<td>263</td>
</tr>
<tr>
<td>Interpretation of Results: A Multi-centric Model</td>
<td>264</td>
</tr>
<tr>
<td>Why It Matters in Terms of Health</td>
<td>266</td>
</tr>
<tr>
<td>Limitations</td>
<td>269</td>
</tr>
<tr>
<td>Future Research</td>
<td>269</td>
</tr>
<tr>
<td>Final Thoughts</td>
<td>272</td>
</tr>
<tr>
<td>AFTERWORD: REFLECTIONS ON FIELDWORK</td>
<td>273</td>
</tr>
<tr>
<td>REFERENCES</td>
<td>283</td>
</tr>
<tr>
<td>APPENDIX A: PHASE II QUESTIONNAIRE</td>
<td>308</td>
</tr>
<tr>
<td>APPENDIX B: IRB APPROVAL LETTER</td>
<td>317</td>
</tr>
</tbody>
</table>
LIST OF TABLES

Table 12.1: Sample 1 Characteristics ............................................................... 181
Table 12.2: Free list of la buena vida ................................................................. 182
Table 12.3: Free list of la familia unida ............................................................... 184
Table 12.4: Free list of características Mexicanas .............................................. 185
Table 12.5: Free list of las metas de vida ............................................................ 186
Table 12.6: Sample 2 Characteristics ................................................................. 187
Table 12.7: Sample 3 Characteristics and Cultural Consensus of la buena vida ........ 200
Table 14.1: Sample 4 Characteristics ................................................................. 222
Table 14.2: Bivariate Correlation Matrix of Acculturation Measures, Cultural Consonance, and Health Outcomes ......................................................... 230
Table 14.3: Regression Models of HbA1c .......................................................... 231
Table 14.4: Interaction Effects of Acculturation Variables and Cultural Consonance with la buena vida on HbA1c ................................................................. 233
Table 14.5: Interaction Effect of Time in the U.S. and Cultural Consonance on HbA1c ........ 234
Table 14.6: Regression Models of Depressive Symptoms ................................... 237
Table 14.7: Interaction Effect of Age at Arrival in U.S. and Cultural Consonance on Depressive Symptoms ................................................................. 238
LIST OF FIGURES

Figure 12.1: Cognitive Map of la buena vida ......................................................... 191
Figure 12.2: Cognitive Map of la familia unida ..................................................... 193
Figure 12.3: Cognitive Map of características Mexicanas ....................................... 195
Figure 12.4: Cognitive Map of las metas de vida ................................................. 196
Figure 12.5: Relationship of Mean Deviations from Combined Answer Key by Subgroups ... 202
Figure 12.6: PROFIT Analysis of Subgroup Answer Keys on Original MDS map of la buena vida ........................................................................................................................................ 204
Figure 14.1: Error Bar Graph of Depressive Symptoms by Diabetes Risk ................. 228
Figure 14.2: Interaction Effect of Cultural Consonance and Years in the U.S. on HbA1c ..... 235
Figure 14.3: Interaction Effect of Cultural Consonance and Age at Arrival on Depressive Symptoms .............................................................................................................. 240
LIST OF ILLUSTRATIONS
Photograph 9.1 and 9.2: Residential trailer parks in Birmingham …………………………… 126
Photograph 9.3: Women’s group meeting at HICA ………………………………………..… 128
Photograph 10.1: Typical home of Mexican immigrants …………………………………….. 136
Photograph 10.2: Makeshift stairs ……………………………………………………………. 136
Photograph 10.3 and 10.4: Mexican store ……………………………………………………. 142
Photograph 10.5: Ladies’ small group ……………………………………………………….. 146
Photograph 11.1: Woman doing pile sort …………………………………………………….. 157
Photograph 11.2: Preparing interview schedule ……………………………………………… 162
Photograph 11.3: Mexican woman at soccer game …………………………………………… 168
Photograph 15.1: Alma at día de la madre …………………………………………………… 250
Photograph 17.1, 17.2, and 17.3: Cars pulled close to homes ……………………………….. 277
Photograph 17.4: DACA rally ………………………………………………………………… 281

!xix


SECTION I:
INTRODUCTION AND CONCEPTUAL BACKGROUND
CHAPTER ONE: INTRODUCTION

This dissertation is about the thousands of women born in Mexico who found themselves so constrained by their life situations that they were forced to leave their homeland and start a new life in a new place, girded only with a cautious optimism that they would be better able to meet their daily living requirements and to provide a better education and more life opportunities for their children. They are women who made the journey safely across the border, gloria a Diós (thanks to God), but who now find themselves constrained by a whole new set of structural and institutional factors that limit their choice and movement and make their bodies vulnerable to disease. They are women who have made their way to Birmingham, Alabama, one of the newest immigrant destinations in the United States, where the infrastructure is inadequate to meet the needs of this growing population, and nativist hostility toward immigrants, and particularly Mexicans, is strong and pervasive in nearly all aspects of life. They are women who want and try to live in the shadows, under the radar, doing only what is necessary to get by day to day. They feel the burden of being unwelcome guests, and they do not wish to disturb the social fabric of their host community, so they practice extreme restraint in utilizing public services - waiting until conditions become emergent to seek medical treatment, not claiming tax credits even though they pay into Social Security, and limiting the time they spend outside of the home. While they are popularly imagined as living beyond the reach of government, every aspect of their lives is affected by policies at the state and federal level. They are subjects of vitriol and
discrimination even as they invest in their local economies and rarely complain when their rights are violated. They long for their native land, *México lindo,* even as they fear deportation. They strive to keep their families together even as their relationships become difficult to maintain and intergenerational tension drives parents and children apart. They yearn for community, but they fear venturing out of their homes and connecting with others. All of these forces coalesce to put them at high risk for discomfort and disease. And yet many of them are also strong and resilient, brave and determined; despite all of the factors working against them, they find creative ways to resist their oppression, to protect their families, to reconstruct their identities, and to ensure better futures for their children. This research is an exploration into the everyday lives of a small subset of these women; it is an effort to better understand who they are, where they are coming from, what they hope to gain from a new life in a new place, and how these expectations are either met or denied. And it considers what happens to their bodies along the way. Situating two health conditions for which Mexican immigrant women are at high risk — type 2 diabetes and depression — within the social, political, and historical contexts of Mexican immigration to Alabama, I consider how the daily constraints of lived experience and the ever-present tension and disorder that plague the processes of migration and resettlement are embodied and compromise the physiological functioning of these newcomers, as well as the socio-cultural factors that may protect against declining health.

**Study Background**

Known as the Latino or Hispanic Health Paradox, epidemiological research on immigrant health has shown that Latino immigrants tend to exhibit better all-cause mortality rates on
several key health indicators than their U.S.-born counterparts and other low-income minority groups, despite living through the adverse conditions that motivated or forced them to migrate initially, enduring what is often a traumatic migration experience, and adjusting to life in a new social and environmental setting, all of which are stressful life experiences known to have deleterious effects on the body (Markides and Coreil 1986, Franzini, Ribble, and Keddie 2001, Peréa 2012). And yet, as they carry out their lives in the United States, even as their standard of living improves and they gain access to public health services, health status tends to decline. This decline is particularly precipitous among immigrants from Mexico, especially Mexican women, and it holds for subsequent generations of immigrant families (Lara et al. 2005). Even though they are migrating from a less developed and more impoverished country where type 2 diabetes is the number one cause of death, risk of diabetes for women of Mexican origin increases in the United States, doubling that of the U.S. general population. Mental health symptoms - anxiety and depression - also rise significantly (Alderete, Vega, Kolody, and Aguilar-Gaxiola 2000), and these conditions exhibit high comorbidity, or co-occurrence, with type 2 diabetes in this population (Mendenhall 2012). There is a large body of epidemiological research linking acculturation — the process of transitioning from the sociocultural orientation of one’s upbringing to that of the host society — to declining health outcomes (Thomson and Hoffman-Goetz 2009), though the construct has been criticized from a theoretical perspective for failing to consider the sociopolitical conditions that shape the acculturation experience for certain groups (Viruell-Fuentes 2007) and from a methodological perspective for the lack of sound measurement techniques to operationalize and measure culture (Abraido-Lanza, Armbrister, Flórez, and Aguirre 2006). As acculturation is typically measured as a combination of age at
arrive, length of time living in the U.S. and English language proficiency (Cruz 2008) — none of which are known risk factors in themselves — it remains unclear what these variables are measuring in terms of cultural positioning and how they act discriminately on different bodies to produce disparities in health for certain groups of people.

Rooted in cognitive anthropology, cultural consonance theory has emerged as a way of exploring the relationship between cultural realities and health outcomes. Defined as the successful integration of cultural ideals as measured by continuity with the widely shared and highly valued understandings about how to live in a particular social context, cultural consonance is associated with lower blood pressure, fewer depressive symptoms, and better immune-response functioning (Dressler 2005). Methods are designed to elicit the meaningful ideas and behaviors from individuals in a social setting regarding how one ought to live and then measure the extent to which individuals approximate these shared expectations in their everyday lives. This research considers the utility of cultural consonance theory and methodology in clarifying the role of culture in the process of acculturation and elucidating the underlying pathways that link the acculturative experience with physiological functioning.

Theoretical Perspective

A biocultural perspective considers disease as much social as it is biological and is used to explore the ways in which macrolevel phenomena — such as poverty, structural violence, and discrimination — are internalized and produce predictable discrepancies in the biological functioning of disadvantaged groups. This study situates the acculturative experience for Mexican immigrant women in Alabama within a syndemics framework (Singer and Claire 2003),
a theoretical model that combines the terms *synergy* and *epidemic* to account for the patterned ways in which the lived experience of inequality imparts chronic assaults on the body that over time weaken the body’s natural defenses and expose vulnerable individuals and communities to a cluster of interacting diseases (Mendenhall 2012). To study what effects this experience has on the body, I expand on and combine two areas of social scientific research — one suggesting that the trend in declining health outcomes among Mexican immigrant women is linked to the acculturation process and another suggesting that cultural consonance, or the ability to achieve and maintain a culturally valued lifestyle in a particular social context, affects well-being. My objective is to make the role of culture more explicit in shaping immigrant health outcomes. A cognitive definition regards culture as what individuals in a particular context need to know in order to function effectively in that context and to interpret the behavior of others correctly. Rooted in this definition, cultural consonance theory offers a way of understanding what culture is, how it operates in our lives, and what is the nature of the relationship between culture and the individual. Instead of operating from generalizations and stereotypes about where people are coming from and where they are going in terms of cultural orientation, I systematically investigate how cultural expectations regarding how one ought to live are defined in the current socio-cultural reality for Mexican-born women in Alabama as well as how the ability to live successfully within these parameters affects well-being.

**Research Objectives**

Combining qualitative ethnographic research with quantitative cognitive methods, this study explores the everyday realities of Mexican immigrant women living in Birmingham,
Alabama, and considers the processes by which culturally valued ideals are shared and acted upon as well as the extent to which living successfully within a defined set of cultural parameters, or cultural consonance, may moderate the adverse effects of acculturation on glycated hemoglobin (HbA1c), which is an indicator of diabetes risk, and depressive symptoms. Broadly, the intent of the research is to better capture the interplay between cultural and structural factors in health at both the individual and the group level in order to improve understanding of what role culture plays in immigrant health outcomes as well as what social and institutional factors may limit the achievement of a culturally valued lifestyle, which may produce a loss of coherence and chronic assaults on the body that over a lifetime lead to poor health. Cultural consonance theory and methodology provide a way to bridge the gap between the epidemiological research that focuses on the relationship between proxy measures of acculturation and health outcomes and the ethnographic work that situates health in the broader political-economic and social conditions that shape daily realities for Mexican immigrants in the United States and inform the felt experience of acculturation. Beginning with a cultural models approach, I seek to empirically flesh out the specific and salient elements of *la buena vida* and a few other important domains of life among Mexican immigrant women in Birmingham, Alabama, and then examine how the ability to live successfully within the shared understandings of what constitutes *la buena vida* may impact type 2 diabetes risk and depressive symptoms. The primary objectives of the study are as follows:

1) To “resocialize epidemiology” (Horton 2016) by considering how the day to day reality of Mexican immigrant women in Birmingham, Alabama, is shaped by the socio-structural and
political-economic context of their lives and how their positioning in the social system makes them vulnerable to poor health.

2) To bring meaning and context to certain demographic variables and acculturation measures in order to clarify the pathways by which these act on the body to produce predictable discrepancies in health outcomes for Mexican immigrant women in Birmingham.

3) To use cultural consensus analysis to describe cultural models in a few salient domains of life among Mexican immigrant women living in Birmingham.

4) To use cultural consonance analysis to measure the extent to which women in the sample approximate the shared cultural prototype of *la buena vida* (the good life) and whether or not the ability to effectively act on these shared understandings and live within a set of social expectations moderates the effects of typical measures of acculturation on depressive symptoms and risk of diabetes.

**Research Design**

The study was carried out over sixteen months of ethnographic research from January 2016 to June 2017 that included interviewing, observing, and participating in the lives of Mexican-born immigrant women in Birmingham, Alabama, as well as systematic data collection consistent with cultural domain analysis and cultural consonance methodology. The ethnographic component of the research provides insight into women’s lives and their experiences from their own perspectives, while cognitive data collection techniques, including free listing and pile sorting, are used to elicit the substance and structure of a few salient cultural domains from the respondents themselves. Non-metric multi-dimensional scaling and
hierarchical cluster analysis are used to map out the cognitive organization of the domains, and cultural consensus analysis is used to measure the degree of sharing between informants regarding the importance and prioritization of certain elements within the domains as well as to detect residual agreement, or alternative patterns of agreement among certain informants that deviate from the agreement of the overall sample. Cultural consonance scales are calculated using the answer keys generated by consensus analysis, and respondents in the final sample are evaluated in terms of how well they approximate, in their own beliefs and behaviors, the agreed upon standard of what constitutes *la buena vida* for Mexican immigrant women in Birmingham. Multiple regression is used to explore statistical associations between cultural consonance and typical measures of acculturation, as well as the covariates of age, socioeconomic status, social support and neighborhood characteristics, and this is examined in relation to levels of hemoglobin A1c and depressive symptoms.

**Hypotheses**

For foreign-born Mexican immigrant women living in Birmingham, Alabama, it is hypothesized that:

1) Respondents will share an understanding of what kinds of things are important or necessary to achieve *la buena vida* (the good life), indicating that a cultural model for this domain does exist.

2) Typical measures of acculturation, including age at arrival in the U.S., number of years living in the U.S., and self-reported English proficiency, will be associated with levels of
hemoglobin A1c (HbA1c) and depressive symptoms and that there will be a positive correlation between these two health outcomes.

3) Higher cultural consonance, or greater success living within the defined parameters of *la buena vida*, will be associated with lower levels of HbA1c and fewer depressive symptoms.

4) The effects of typical measures of acculturation on health outcomes will be moderated by the ability of individuals to effectively act on these shared understandings and live within a set of social expectations, as measured by cultural consonance scores.

**A Note on Terminology: Usage of “Hispanic” and “Latino”**

This study focuses on women born in Mexico who are now living in the United States. I refer to them as Mexican women, though they often refer to themselves as Hispanic or Latina. While scholars and activists are increasingly using the gender-neutral term *Latinx* in an effort to accommodate a rising number of gender identities - an important effort that I fully support - the term is not so applicable here because I consider gender an important component and shaper of the immigrant experience for Mexican women. The literature reviewed in this dissertation includes work on immigrant groups from other Latin American countries, in which the terms “Hispanic” and “Latino” are used interchangeably, though neither are ideal in describing such a diverse group of people. According to the U.S. Census Bureau, “Hispanic or Latino” refers to a person of “Cuban, Mexican, Puerto Rican, South or Central American, or other Spanish culture or origin regardless of race.” The term “Hispanic” was originally used to unify ethnic and linguistic groups with historical ties to Spain, but scholars argue that it actually obscures diversity of the Latin American population, discounts their distinct histories and disconnects
them from their countries of origin (Stuesse 2016). While there may be a shared sense of common culture or community, Latin America does not comprise a single, distinct cultural group, and there is some evidence of hostility within the Latin American population as well as restrictionist views between U.S.-born and foreign-born Latinos (Zavella 2011). This makes a Pan-Latino identity questionable. Thus, research on the Hispanic/Latino population assumes that one exists, though membership and identity in this group are not well-defined beyond originating in one of over twenty countries and speaking Spanish (Rodríguez 2008). The process of immigration and the meanings attached to it as well as the felt experiences related to transnational movement are socially constructed and will differ between countries and regions, local communities and individuals. The meanings and experiences that are generally identified as common to the Mexican experience will not necessarily hold the same weight or be experienced in the same way for people from Honduras or El Salvador, and it is important to make that distinction in any study involving immigrants from this part of the world.

Chapter Summaries

Section I offers a conceptual background of the study, including a review of the literature on immigrant health research, as well as a description of biocultural medical anthropology, the theoretical framework in which the study is positioned. Chapter 2 considers the health consequences of the Mexican immigrant experience by reviewing the epidemiological literature on what has been termed the Hispanic or Latino Health Paradox. This chapter summarizes some of the research on Hispanic and particularly Mexican immigrant health in the United States and
discusses the explanations that have been offered to account for the paradoxical health trends observed in this population.

Chapter 3 considers what happens to Mexican immigrants’ health outcomes over time as they establish and carry out their lives in the United States. The term acculturation has been used to denote the cultural transition from the culture of one’s upbringing to that of a host culture, and it has been linked to health outcomes, some favorable and others not favorable. This chapter outlines the development of acculturation as a theoretical construct, considers how it has been measured and studied, reviews research on how it is implicated in health disparities, and critiques the utility of the construct in empirically describing the proximal pathways by which the acculturative experience affects well-being.

Chapter 4 considers the social, political-economic and historical context of Mexican immigration to the United States. I use the concept of the VIDDA Syndemic (Mendenhall 2012) to describe a clustering of interrelated and interacting conditions - social and health-related - that are endemic to the experience of Mexican immigrant women in the United States. I also consider how the cultural narratives and political rhetoric around Mexican immigration shape the everyday experiences for Mexican immigrants and their families.

Chapter 5 outlines the background and key concepts of biocultural medical anthropology, the theoretical framework in which this research is grounded. A biocultural perspective is used to explore how life experiences and the social conditions that shape them manifest in the body as pathologies and produce predictable discrepancies in physiological functioning, particularly for marginalized groups. It is particularly suited to research on immigrant health because immigrants are undergoing shifts and adjustments in cultural orientation, and this research is
designed to explore the pathways by which diverse migration experiences interact with local biologies to produce disease.

Chapter 6 provides a background of cultural consonance theory, which is based on a cognitive definition of culture that allows for the concept to be operationalized and relies on cognitive data collection techniques and cultural consensus analysis to infer the presence and structure of a cultural model upon which members of a community draw in order to know how to think and behave in certain situations. Cultural consonance is built on the notion that culture is shared knowledge, that this knowledge can be measured in empirically precise ways to derive an overarching cultural model, and that individuals can be measured against this model to determine how well they approximate the agreed upon cultural standard. It is then possible to look at this cultural variable in relation to health outcomes, thus helping to clarify the role of culture in physiological functioning and health disparities.

Section II reviews the history and current status of Mexican immigration to the United States and to the South and describes what life is like for Mexican immigrant women living in Alabama. Chapter 7 sets the stage for cultural transition by exploring the cultural milieu of Mexico, the sending community. I consider the historical context of Spanish colonialism, the political and economic development of the country as well as other aspects of culture — foodways, gender, religion, family, and health — and how these are changing as Mexico engages with the global community and greater numbers of Mexicans relocate to the United States.

Chapter 8 considers the context of Mexican immigration to the United States, describing how it has defied earlier migration theories, primarily because it has not been amenable to unilinear and inevitable trajectories that characterized European immigration of the early 1900s.
I discuss new immigrant destinations in the United States and the ways in which these communities are coping with an influx of foreign-born individuals and families.

Chapter 9 describes the setting in which this research was carried out — Birmingham, Alabama, one of the largest cities in the U.S. South and a relatively new destination for Latino immigrants. I briefly outline the historical context of Birmingham’s development, its legacy of racism and hostility toward newcomers, and the city’s reception of and reaction to a surge of Latino immigrants over the past two decades. Alabama’s economic growth is dependent on cheap, unskilled labor, which is typically provided by foreign-born immigrants, and yet it is also a place where anti-immigrant rhetoric is pervasive, and the country’s strictest immigration laws discourage the integration of Latinos into the mainstream.

Chapter 10 considers the results of the open-ended interviews carried out in the first phase of the study, examining the patterns and narrative themes related to life as a Mexican immigrant woman in Birmingham. This chapter discusses my informants’ reasons for migrating initially, the migration process itself, the resettlement experience, and the daily hardships they endure as they carry out their lives in a new social and environmental context.

Section III details the methodology used to carry out this study and explains the results of both the qualitative and quantitative analysis. Chapter 11 details the research methods used, beginning with the design of the project, sampling techniques and recruitment, the selection of cultural domains, cognitive tasks, and health metrics. The first sample (n = 31) participated in an open-ended interview as well as a cognitive task called free listing, in which respondents listed all the items they could think of in response to four questions about each cultural domain of interest. The second sample (n = 31) participated in a cognitive task called a pile sort, in which
respondents categorized the items from the free lists into groups based on their similarities. I analyze the results to infer the cognitive structure of the domains. Respondents in the third sample (n = 41) were then asked to rank order the items by evaluating them on the basis of their importance or prioritization within the domains. Cultural consensus analysis was used to measure the degree to which respondents agree upon their evaluation of the items as well as to show how subgroup agreement deviates from the overall group in systematic ways. Using the answer keys generated by consensus analysis, cultural consonance scores were calculated by weighting the items ranked most important more heavily and giving less weight to the items ranked less important. Respondents in the final sample (n = 70) completed a survey that asked about possession of or access to the items of interest — including material items, personal character traits, and daily activities — and this was used to calculate a consonance score for each individual. The CES-D survey was administered to calculate number of depressive symptoms, and a blood spot sample was taken and run through an A1cNOW+ kit to determine the average level of glycated hemoglobin (HbA1c) over an eight week period. Along with other covariates, the results were analyzed to test the association between acculturation variables, cultural consonance, type 2 diabetes risk and depressive symptoms.

Chapter 12 provides the results of the cultural domain analysis, which include a detailed analysis of the free lists, pile sorts and ranking tasks performed in the first three samples. Several analytical techniques are used to describe the structure of the cultural domains of interest, the agreement among respondents about the relative importance of the items in the domain, and the patterned ways that respondents deviate in their agreement. The result is two distinct subgroups that articulate notions of how to achieve *la buena vida* in different ways, one
group prioritizing items related to long-term self-improvement and fulfillment of familial, social, and religious duties, and another focused on having access to the desideratum of a middle class lifestyle, namely basic household goods and technological devices.

Chapter 13 discusses the results of the cultural consensus analysis, with particular emphasis on residual agreement, or the patterned ways in which members of the sample deviate in their agreement regarding the importance and prioritization of items in the domain. I discuss what accounts for subgroup membership and why these two groups articulate their understandings of the cultural model in distinct ways.

Chapter 14 describes the results of the final analysis — the relationship between cultural consonance and health outcomes and how the interaction of typical measures of acculturation and consonance provide a clearer picture of health status for Mexican immigrant women in Birmingham. Cultural consonance with *la buena vida* is determined to exert a main effect on health outcomes that moderates the effect of number of years living in the U.S. on type 2 diabetes risk as well as the effect of age at arrival on depressive symptoms.

Chapter 15 details the experience of three Mexican immigrant women in Birmingham, providing a glimpse into their lives, the daily hardships they face as well as their triumphs and hopes for the future. While their stories are unique, they all revolve around the experience of being a stranger in a foreign land and highlight the tension between longing for their childhood home and trying to establish their lives in a new place, renegotiating family dynamics, and working to provide a better life for their children.

The final section, chapter sixteen, provides a discussion in which I reflect on what I set out to do initially, what I discovered along the way, and what I believe the data reveals about
how the acculturative experience manifests in the bodies of Mexican immigrant women in Alabama. I describe the ways in which this study contributes to the research on immigrant health, the utility of cultural consonance in clarifying where and how culture fits into the theoretical construct of acculturation and how it can be empirically measured, and I make suggestions regarding future research on this topic. The afterword offers my own reflections on fieldwork, the tragedies and triumphs I experienced doing this work, and the balancing act between scientific investigation and advocacy for marginalized social groups.
CHAPTER TWO:  
THE LATINO HEALTH PARADOX

In 1986, Markides and Coreil documented a paradoxical trend in health outcomes among Hispanic immigrants. They noticed that despite lower socio-economic status, reduced access to resources and health care, and the stress of adapting to a new environmental and social context – all predictors of poor health – Hispanic immigrants living in the Southwestern United States had lower overall mortality rates than their U.S.-born counterparts and other minority groups. Key health indicators included infant mortality, life expectancy, cardiovascular disease and cancer. These findings, which contradict the consistent and robust relationship between socio-economic status and health outcomes (Williams and Collins 1995), have been replicated several times over the past three decades (Abraido-Lanza, Chao, and Flórez 2005, Zsembik and Fennell 2005, Morales et al. 2002, Salazar et al. 2016). For foreign-born Latino immigrants, lower mortality rates hold after adjusting for demographic and socio-economic differences, racial disparities, level of education, insurance status and rates of return migration (Lariscy, Hummer, and Hayward 2015, Franzini, Ribble, and Keddie 2001, Bzostek, Goldman, and Pebley 2007). However, studies have also shown that the health advantage experienced by foreign-born Latino immigrants is attenuated over time as duration of residence in the United States increases (Kaestner et al. 2009, Guendelman and English 1995, Antecol and Bedard 2006) as well as for subsequent generations of immigrants (Vega and Scribney 2010). Many studies show these
patterns — both in terms of the initial health advantage and its decline over time — to be most
consistent and the effects strongest in the Mexican subgroup of the Hispanic/Latino population
(Zsembik and Fennel 2005, Markides and Eschbach 2011). This chapter begins the discussion of
health outcomes in the Mexican immigrant population, reviewing the epidemiological literature
on the Hispanic paradox, unpacking the health advantages and disadvantages of Hispanic/Latino,
and particularly Mexican women, and discussing the explanations that have been offered to make
sense of these paradoxical trends in immigrant health research.

**Latino Immigrant Health in the United States**

As a group, Hispanics in the United States rank among the lowest in socio-economic
status with nearly 25 percent living below the poverty line (Franzini, Ribble and Keddie 2001). While
these indicators are closely aligned to those of African-Americans, mortality rates more
closely resemble those of Whites (Lariscy, Hummer, and Hayward 2014). Latinos in the United
States have 22 percent lower age-adjusted mortality rates than non-Latino Whites and 41 percent
(2002) found that despite higher poverty rates, less education and worse access to health care,
Hispanics living in the United States had lower overall mortality rates than their white
counterparts on most major health indicators, including mental health, pregnancy and birth
outcomes, and type 2 diabetes. Using national data from the vital statistics, Acevedo-Garcia,
Soobader and Berkman (2005) found that foreign-born Latina women were less likely to have
found no significant differences in birth outcomes between U.S.-born Latinas and Whites but
significantly improved outcomes among foreign-born Latinas compared with their U.S.-born counterparts. From birth to death, these health indicators effectively bracket the life span for this population, and significant disparities between foreign-born and U.S.-born Latinos appear to exist in nearly all of them.

In terms of mental health, lifetime prevalence of twelve psychiatric disorders (including anxiety and substance abuse or dependence) was found to be significantly lower for migrant farmworkers from Mexico than for Mexican-Americans whose primary residence was the United States as well as for the U.S. general population (Alderete, Vega, Kolody and Aguilar-Gaxiola 2000). Despite the risk factors associated with seasonal migration, primary residence in Mexico reduced the risk of alcohol and drug dependence by half compared to people of Mexican origin living in the United States. Adjusting for demographic and socio-economic differences, Alegria et al. (2008) found that for the Latino population foreign nativity protects against psychiatric disorders despite the stressful experiences of the immigration process and adjustment to a new life in a new place. Mendenhall and Jacobs (2012) found that U.S.-born persons of Mexican descent report higher rates of mental distress compared to those born in Mexico. Abraido-Lanza, Chao, and Flórez (2005) found that relative to whites, foreign-born Latinos were less likely to engage in unfavorable health behaviors such as smoking and abusing alcohol. These studies indicate that being born outside of the U.S. is somehow protective for Latino immigrants; however, describing these effects in terms of causality has eluded social science researchers.
**Paradox in the Mexican Subgroup**

When studying the health consequences of immigration, researchers advise breaking down the Hispanic or Latino population by country or region of origin to get a clearer picture of the strength and the direction of the effects (Zsembik and Fennell 2005, Cho et al. 2004). Most of the research done on the Latino paradox focuses on immigrants from Mexico because Mexican-origin persons make up a large majority of the immigrant population in the United States, and several studies have suggested that the paradoxical patterns are most noticeable in this subgroup. In fact, while Mexicans are more likely to be in the lowest income group, Mexican-born immigrants have the lowest rate of any psychiatric disorder, and Mexican-Americans have the highest rate of the Latino groups (Franzini, Ribble, and Keddie 2001). Alegría et al. (2008) found the protective effect of foreign born status on developing psychiatric disorders to be most notable in the Mexican subgroup. Acevedo-Garcia, Soobader and Berkman (2007) found the birth weight advantage for foreign-born Latina women to be strongest in the Mexican population, particularly for those with less than a high school education. McGlade, Saha and Dahlstrom (2004) corroborate evidence that Latina mothers, and particularly the Mexican-born, enjoy “surprisingly” favorable birth outcomes despite their social and economic disadvantages. They attribute this to the informal systems of prenatal care that protect Mexican women throughout their pregnancies and birth experiences and suggest that U.S.-born Mexican women lose this protection. It remains unclear in this area of research why these effects seem to be the strongest in the Mexican subgroup and what accounts for the distinctions in health outcomes between immigrant groups.
Explanations for the Paradox

In all of these studies, something appears to be moderating the negative consequences of poverty, discrimination and other stressors related to the immigration experience and the typical immigrant living situation among Mexican immigrants so that health outcomes in this population tend to be on par with the non-Hispanic white population and much better than other minority groups in the United States. Several explanations have been offered as to why Mexican immigrants arrive in better health than their U.S.-born counterparts and why their health advantage deteriorates over time. These include selective immigration theory, the cultural buffer hypothesis, disintegration of social support networks, changes in diet and lifestyle, and acculturative stress. Negative evidence and theories that question the existence of a paradox — such as the diagnosis confound and the return migration hypothesis — will also be discussed.

Selective Immigration Hypothesis

One plausible explanation for why immigrants appear to arrive in better health and have significantly longer life expectancies than subsequent generations that are born in the United States to non-native parents is that immigrants are positively selected from a group of prime-aged individuals with the financial resources to afford and the physical aptitude to endure the expensive and often grueling experience of migration in the first place (Riedel et al. 2011). The selective immigration hypothesis suggests that only those in good health are willing and able to make the journey initially, which explains why their health status is better than their U.S.-born counterparts upon arrival to the U.S. Though not all (see Palloni and Arias 2004), the majority of studies have found no evidence to support this hypothesis in explaining lower mortality rates
among foreign-born Mexican immigrants (Abraido-Lanza et al. 1999). Carter-Pokras et al. (2008) found that Mexican-origin persons living within 50 miles of the U.S.-Mexico border were in better health than persons on the Mexico side; however, Mexican Americans that live more than 50 miles from the border report better overall health. This is likely a consequence of living in poverty, though, as opposed to selective immigration, as the borderlands tend to be some of the poorest areas.

Selective immigration is problematic because it feeds into a narrative that the decision to migrate is a rational one in which potential migrants thoughtfully weigh the benefits and consequences of emigration and that these individuals have strong agency in controlling their destinies (Horton 2016). The idea that the healthiest and most financially secure members of a population are the ones emigrating depicts an inaccurate picture of the drivers of transnational movement. While immigrants tend not to originate from the lowest sectors of society or places of absolute poverty, they do tend to be people whose traditional lives and social networks have been irreparably disrupted by natural disaster, war, political crisis or violence, situations which have left them with few resources and fewer choices (Hirschman and Massey 2008). In many Mexican towns, industrial restructuring of small villages has put many people out of work, and it can be difficult to find and maintain steady employment. For people who do have jobs, the pay is sometimes so low that they struggle to survive day to day, with no opportunity to save or accumulate even a modest amount of money. These situations often force them to move, and individuals and families have to borrow money in addition to spending all the money they may have through assets to get across the border one way or another.
Further, most of these epidemiological studies come from an analysis of medical records and research surveys, which would likely produce a biased sample, considering that many Mexican immigrants, particularly the undocumented, seldom interact with the public health care system. On one hand, selective immigration can be understood as a genetic model, which is untenable as no gene variants that protect against the harsh conditions of daily life for many of these immigrants have been identified. On the other hand, the idea that first generation immigrants are well-positioned financially or socially obscures a dire political-economic reality that is often the motivating force for migration, particularly among immigrants from Mexico.

*Cultural Buffer Hypothesis*

Others suggest that there are some therapeutic elements of Mexican culture that may protect against the effects of immigration-related stress and that the further Mexican immigrants are removed from the sociocultural value system of their upbringing and the more they engage with U.S. mainstream culture, the greater the risk for declining health. In 1984, Mirowski and Ross wrote an article entitled “Mexican Culture and Its Emotional Contradictions,” in which they sought to identify therapeutic elements of Mexican culture that protected against depression and anxiety. The premise was that beliefs and conceptions of reality are socially conditioned, and that individuals would reproduce these in terms of their locus of control, depending on their sense of competence, power and effectiveness in dealing with life’s turmoils. An internal locus of control reflected a sense that one’s intentions, choices and behaviors affected his or her outcomes and was found to be more typical of Whites, while an external locus of control indicated the perception that outcomes were a consequence of luck, fate, or chance, and this was
reflected more in persons of Mexican origin. An external locus of control, which is typically associated with poverty and political-economic constraints, is associated with higher levels of depression and anxiety; however, the results showed better mental health outcomes for Mexicans compared to Whites. The authors surmised that it was Mexican culture, specifically the family structure and the balance of familial obligations and reciprocal ties, that accounted for this paradox. This may seem intuitive to individuals in situations of privilege; however, the authors fail to account for the social and political-economic reality of poverty. Having an internal locus of control is likely not beneficial for individuals in less fortunate situations because this would make them more inclined to blame themselves for their maladies, so it remains unclear what bearing this would have on health.

Studies that link a decline in favorable health outcomes with a loss of Mexican cultural values and traditions presuppose that Mexican culture is therapeutic and that American culture is dysfunctional (Hunt, Schneider and Comer 2004). Palloni and Arias (2004) tested the effect of the cultural buffer hypothesis on the Hispanic mortality advantage, though in the absence of data on interpersonal connections, social networks or integration into a community, the researchers relied on marital status and the type of community in which migrants live, this determined by its index of segregation or isolation of migrants. Clearly, these simple variables leave much to be desired in terms of fully encompassing what aspects of Mexican culture may or may not be protective, though it is important to note that the researchers found no significant effects of these measures on health outcomes, concluding that there was not enough evidence to support the cultural buffer hypothesis. Scholars have also suggested that the priority placed on positive interpersonal relationships, especially between mothers and children, counteracts the stressors
associated with immigration and re-settlement (Campos, Walsh, and Schenker 2007). With regard to pregnancy and birth outcomes, Fleuriet and Sunil (2014) suggest that because the Mexican cultural system esteems pregnant women more highly than American culture, the increase in status among recent Mexican immigrants may account for reduced prenatal stress in this population. Using the MacArthur Subjective Social Status scale to measure perceived social status relative to others in the immediate community, the authors found an independent connection between social status and self esteem, and they suggest that these subjective measurements along with other cultural values – meanings of family, desirability of children, access to and use of social support systems, nutrition, religious beliefs and use of cigarettes and alcohol – are potentially implicated in these health disparities and that further research should focus on making causal connections between these cultural factors and health outcomes.

The protective effects of familism and a built-in social support system pervade the literature on explanations for the Hispanic paradox, and researchers often point to the commitment to family values, maintenance of conventional gender roles and strong religious faith as characteristic of individuals of Mexican origin. Mexican culture is typically associated with strong families and large social networks that provide emotional, informational and instrumental support throughout life and particularly in times of crisis (Harley and Eskenazi 2006), whereas lack of family support, high stress and self-destructive behaviors are associated with mainstream American culture (Hunt, Schneider and Comer 2004). However, these ideals are not necessarily reflected in everyday lived experience, and culture cannot completely buffer the disorder and uncertainty immigrant families often experience (Boehm 2016). The restructuring of family dynamics, the newfound sense of autonomy for Mexican women, and
exposure to new expressions of faith are all changing as immigrants find their place in a new cultural landscape. Further, presuming the cultural characteristics of an ethnic group without providing evidence that these actually carry weight in people’s minds and are reflected in their actions makes any assertion that a particular culture has a protective quality untenable.

**Social Support**

The link between social support and better health follows that individuals who have large extended kin networks as well as non-relative *compadres* (co-parents) have more people they can rely on in times of need. Another way of thinking about this is that while economic forces drive global movement, it is social support networks that facilitate it. It is assumed that individuals are unlikely to make the journey across the border unless they know they have people they can rely on for help along the way. Observing that social support was associated with better quality of diet, increased likelihood of taking prenatal vitamins and decreased likelihood of smoking during pregnancy, researchers determined that the increased social support typical of more recent immigrants may prevent some of the unhealthy pregnancy behaviors in which Mexican women who have lived in the U.S. longer tend to engage (Harley and Eskenazi 2006). Bender and Castro (2000) found that recently arrived Mexican immigrants are more likely to have favorable birth outcomes than their U.S.-born counterparts despite the fact that they are less likely to have received adequate prenatal care in the Western biomedical system. They attribute this protective effect to a higher degree of social support during pregnancy as well as the hope recent immigrants have of improving their standard of living and providing better opportunities for their children.
Social support is a factor that is often used as a predictor of health status, and conclusions about why the epidemiological paradox exists are often based on the idea that changes in relationships and availability of social support lead to changes in health. Social support has long been considered a moderator of stressful life experiences (Cassell 1976, Janes 1990, Uchino 2006), but exactly what that means and what form it takes can differ by cultural context (Dressler et al. 2007). It is often assumed that because familism and extended kin networks are important cultural institutions in Mexico that Mexican immigrants’ health has benefited from these large social support networks and a strong sense of social cohesion and that as these are disrupted health suffers (Portes and Rumbaut 2014). However, Viruell-Fuentes and Andrade (2016) note that the relationship between social support and health outcomes is not often tested empirically, types of relationships are not differentiated, and the negative aspects of social support are rarely considered. One important consideration is that it is often the disruption of social support networks in Mexico that inform the decision to emigrate in the first place. Another is that increasing social support can mean increasing social responsibilities and obligations to others, which can be stressful (Viruell-Fuentes and Andrade 2016, Portes 1998). While some studies have found stronger social support among foreign-born immigrants due to maintaining their original cultural orientation, chain migration patterns and residence in ethnic enclaves (Almeida et al. 2009, Vega et al. 2011), other studies have found stronger social support for second-generation immigrants (Portes 1998, Vega and Amoro 1994). Viruell-Fuentes and Andrade (2016) found that U.S.-born Latinos have higher social support in general, but this includes higher negative social support, which may partially explain the increase in depressive symptoms for second generation immigrants. Further, foreign-born immigrants tend to perceive their social
support networks as less supportive but also less stressful in terms of reciprocal obligations. Disentangling the structure and meanings attached to certain relationships is an important aspect of understanding the role of social support in health outcomes. For example, perhaps those born in the United States are more individualistic and therefore more burdened by social obligations to others, whereas Mexicans are more family and community oriented and do not perceive of reciprocal ties as stressful. Almeida et al. (2009) found that only one form of social support - familial - had a significant inverse association with depressive symptoms for Mexican immigrants. The point is that social support systems are culturally constructed and serve different purposes in different contexts. Family relationships and support may look very different in one cultural context, and both the structure of these relationships and the advantages they offer must be reconsidered in a new social and environmental context. To this end, when exploring the causal links between a social variable and health trends, the social context must be taken seriously and interpretations must be contextually derived. Rather than assuming that social support systems are replicated in the context of immigration, the meaning and the benefits of social connections must be reevaluated in the new cultural context.

Behavioral Health: Changes in Diet and Lifestyle

One pervasive assumption regarding the decline in health among Mexican immigrants is that it is a result of adopting American food preferences for calorie-dense and processed foods over more nutritious fruits, vegetables and lean proteins. Szurek (2011) considered how differential access to social relations with white Americans affects Mexican immigrants’ ability to internalize on a cognitive level the knowledge and behavior of American food systems and
how this process alters their eating habits and diabetes risk. She found that the more interaction immigrants had with Whites, the less nutritious their diets and the greater risk for type 2 diabetes. Szurek argues that eating is a social production, one that is regulated by social structural factors that limit access to certain types of food as well as cultural knowledge about how to navigate multidimensional and complicated post-industrial food systems. With the transition to more sedentary lifestyles and a greater consumption of processed foods, the prevalence of diabetes has doubled in Mexico over the past two decades, and obesity rates there have surpassed those in the United States (Affable-Munsuz et al. 2013). Mexican immigrants are relocating to the United States, where the overall rate of diabetes is lower than in Mexico, and yet their risk for developing diabetes increases, doubling that of the general population (Cowie et al. 2010).

Adoption of a less nutritious diet may be more a matter of economic constraints and lack of access to culturally appropriate foods than it is an acculturative process of conforming to a new set of dietary guidelines, though this may compound the stress (Guarnaccia et al. 2011). Studies on behavioral changes related to diet must consider the socio-structural conditions that are implicated in changes in food accessibility and preferences.

In addition to dietary changes, studies on acculturation often attribute the decline in health to the adoption of unhealthy behaviors such as smoking and drinking as immigrants conform to the norms of their new social environment (Antecol and Bedard 2006, Guendelman and English 1995). Carter-Pokras et al. (2008) concluded that it is not length of time living in the United States that is responsible for worsening health outcomes among Mexican immigrants but a dramatic shift in health-promoting behaviors. This supports the notion that as immigrants assimilate to mainstream U.S. culture they cease to engage in protective health-related behaviors...
characteristic of traditional Mexican culture and adopt new behaviors that lead to adverse health outcomes (Morales et al. 2002). With regard to health-related behavior, to really understand why rates of alcohol consumption and smoking increase, underlying factors that motivate these behaviors need to be explored. The assumption that drinking and smoking are socially sanctioned activities in the United States and not in Mexico needs to be tested as well as the underlying causal factors that prompt people to assume these habits. Many studies do not consider the external forces that motivate people to migrate in the first place, what expectations they have upon arrival and how these are met or denied — all factors that may contribute to stress — nor the availability and accessibility of various coping mechanisms in the new context.

**Acculturative Stress**

The construct of acculturative stress theoretically accounts for the arousal of the hypothalamic-pituitary-adrenal axis experienced during the process of cultural adjustment and integration into a new system of beliefs, routines and social roles. Using the SAFE scale, which measures stress in social, attitudinal, familial and environmental dimensions, Hovey and Magaña (2000) found that acculturative stress was associated with higher levels of depression and anxiety among Mexican immigrant farmworkers and that family dysfunction, ineffective social support, low locus of control, more education and low religiosity were significantly implicated in higher levels of stress. Caplan (2007) notes that a measure of acculturation is sometimes used as a proxy for acculturative stress, but there is little empirical evidence linking the two and that concept analysis must be used to clarify the meaningful dimensions of acculturative stress in order to better understand how people experience it and why this matters in terms of health.
Caplan (2007) identified three dimensions of meaning with regard to acculturative stress — instrumental or environmental stressors, including financial stressors, language barriers, lack of health care, unemployment, exploitation and dangerous working conditions; social or interpersonal stressors, including loss of social networks, social status or family cohesiveness; and societal stressors, including discrimination, political and historical forces. However, these may also be considered among immigration-related stressors, and it is difficult to parcel out what is specifically stressful about the experience of transitioning from one cultural paradigm to another. Caplan (2007) concluded that the relationship between level of acculturation, stressors and health outcomes was ambiguous and complex and showed no consistent pattern across subethnic groups.

Evidence against the Paradox

Barcellos, Goldman, and Smith (2012) contend that the United States health care system has a vested interest in the health status of immigrants, as this will increasingly come to reflect the health status of the U.S. general population. While it is considered an empirical truth that recently arrived Mexican immigrants have better self-reported health status, recent research suggests that the data analysis does not accurately reflect this reality. This section discusses theories that contradict the findings consistent with the Hispanic Paradox.

The Diagnosis Confound

A more recent explanation of the Latino Paradox that has received little attention is that Mexicans are arriving in the United States with undiagnosed, pre-existing conditions and that as
they live in the United States longer, they engage with the public health system more, and this leads to more diagnoses (Barcellos, Goldman, and Smith 2012). In this case, the data would reflect worsening health trends but may obscure the reality of the onset of symptoms. The health care system in Mexico is notoriously underfunded and selective about who gets treatment, and many native Mexicans rely on traditional curers and home remedies to fight disease because they cannot afford treatment at the clinic and might be denied for any number of reasons (Melo and Fleuriet 2016). Barcellos, Goldman, and Smith (2012) found that in comparing foreign-born Mexican immigrants and their U.S.-born counterparts, the healthy immigrant effect holds for type 2 diabetes, but the magnitude of the effect is somewhat lessened when comprehensive measures of diabetes prevalence are used, namely values of glycated hemoglobin (HbA1c). They suggest that research must take into account high levels of undiagnosed disease among Mexican immigrants as well as the extent to which immigrants are selectively integrated into the formal health care system. Significant underdiagnosis of chronic disease for persons who have largely operated outside of the formal health care system may render the effect of immigrant-status an artifact of decontextualized data. Further, delineations of the “sick role,” which are socially constructed and will differ from context to context, coupled with lack of education about the warning signs and symptoms of certain conditions may lead recent Mexican immigrants to report better health initially, but as they are integrated into American perceptions of what constitutes dis-ease, self-reported health may decline. Again, research must be contextualized to reflect the lived experience of individuals and how this is shaped by the broader context of their lives.
Return Migration Hypothesis

Some scholars have indicated that perhaps the lower all-cause mortality rate of foreign-born Latinos may be a result of the “salmon bias,” which suggests that Latino immigrants engage in return migration to their country of origin and in doing so are rendered “statistically immortal” in U.S. databases, thereby conflating the mortality rates for this population (Carter-Pokras et al. 2008). In other words, those who migrate back home due to illness or unemployment are likely to remain in the population count but never appear in the death count. Abraído-Lanza et al. (1999) examined mortality rates among three Hispanic subgroups - Cubans, Puerto Ricans and Mexicans. Because Cubans face barriers against return migration and Puerto Ricans’ deaths in Puerto Rico are recorded by U.S. national statistics, it can be presumed that these groups are likely to be fully represented in U.S. mortality statistics. It was found that return migration does not account for the differences in mortality between U.S.-born and foreign-born individuals in these subgroups, from which the researchers surmise that the salmon bias does not fully explain the mortality differences in the Mexican subgroup either. In contrast, Palloni and Arias (2004) found that for older Mexican-origin persons, there is some evidence that return migration skews the mortality rates. However, current trends in Mexican immigration show that willful return migration is becoming much more rare due to structural constraints imposed by stricter border enforcement as well as social values like keeping the family together. In particular, foreign-born mothers who give birth to children in the United States are highly less likely to leave willingly (Zavella 2011). Though some may be forced to leave by the state, many more will remain, rendering this hypothesis mostly irrelevant.
Differential Access and the Politics of Deservingness

The statistical analysis may also be inaccurately interpreted because different individuals and different conditions intersect and interact with the formal health care system in distinct ways. Melo and Fleuriet (2016) consider differential access to care among undocumented Mexican immigrant women in Texas in seeking pregnancy and birth related treatment as opposed to diabetic care. They frame their study in terms of deservingness, considering how the health care system responds to and reinforces state mandated requirements regarding who is able to receive care and who is not. For pregnant women, no matter their legal status, there is a U.S. citizen to be considered, and women seeking prenatal care are more likely to be considered “deserving” by the health care system. This is not to say that they are treated well (see Kroelinger and Oths 2000), only that they do qualify for treatment regardless of their immigration status. On the other hand, diabetic patients are often left to fend for themselves, waiting until conditions become emergent to receive care because they do not have preferential access to outpatient dialysis. More research needs to be done on the extent to which Mexican-origin persons engage the public health care system in the United States, the creative ways in which the undocumented receive treatment despite lack of insurance or the ability to pay, and the efforts of health professionals to integrate newcomers into the biomedical system. Further, rather than analyzing statistical patterns from medical records, more longitudinal ethnographic analysis is needed to arrive at a more accurate picture of Mexican immigrants’ lived experience and its relation to health outcomes.
Conclusions and Further Questions

Clearly, Mexican immigrants face seemingly insurmountable stressors. These include a language barrier, which may lead to discrimination and difficulty finding jobs, shifts in socio-economic status, loss of social networks and disorienting cultural changes that make adjusting to life in a new place difficult. These difficulties are often compounded by poverty, substandard housing conditions and the stress of the migrant lifestyle (Harley and Eskenazi 2006). The rapid growth of the Hispanic immigrant population has generated a large body of research on the health and the health needs of this population (Caplan 2007), though it remains unclear why recent arrivals appear largely immune to the seemingly injurious health consequences of the immigrant experience. Explanations for the Latino paradox often obscure the adverse social conditions and severe structural constraints that Mexican immigrants face, both those that motivated or forced them to migrate initially and those that they face in the United States. No genetic variants have been linked to better health status for those who leave Mexico for the U.S., nor would this explain why health tends to decline over time in the U.S. Social support systems are often assumed to be protective, but empirical evidence of this is untenable because research often fails to consider how both social networks and the meanings attached to certain relationships change for Mexicans living in the U.S. as well as how these change again for U.S.-born persons of Mexican descent.

What may be moderating the effects of poverty, discrimination and other immigration-related stressors among Mexican immigrants and why this health advantage declines over time have been the subject of much debate, and there remains a great deal of theoretical ambiguity surrounding this epidemiological paradox (Bjornstrom and Kuhl 2014). Explaining these health
disparities requires specifying the proximal pathways through which context is implicated in
differential health outcomes as well as multifactorial analysis that identifies certain factors that
may moderate or mediate this relationship (Worthman and Khort 2004). Sudano and Baker
(2006) have called for the “conceptual disentangling” of risk factors from other outcomes in
order to better understand the pathways linking lived experience and health outcomes. Several
studies have found that despite evidence for the health advantage, Hispanics report poorer self-
rated health than non-Hispanic whites (Bzostek, Goldman, and Pebley 2007, Cho et al. 2006).
This highlights the importance of using and contextualizing sociocultural data in understanding
health disparities. For example, Bzostek, Goldman and Pebley (2007) found that the language of
the interview accounted for some difference, and while adjustments for socioeconomic status and
education narrowed the gap, it did not eliminate this disparity. Cho et al. (2006) used three
health measures - activity limitations, sick days in bed and self-reported overall health - to look
at differences in health outcomes between different subgroups of the Hispanic population.
However, researchers did not account for how understandings and justifications of the sick role
may differ between these groups. These constructs must be contextualized, and meanings must
be explored to begin to understand what these measures mean and why they matter in terms of
health status. Keogan (2010) notes that the very concept of the immigrant has become a social
category, one that takes on different meanings in different places. How meaningful experiences
are internalized is the subject of biocultural anthropology, and this study considers some of the
sociocultural determinants that structure the daily realities and the lived experiences of Mexican
immigrants in Alabama in an effort to elucidate the pathways by which the broader social context
of their lives affects health outcomes.
CHAPTER THREE:

ACCULTURATION AND HEALTH

The previous chapter reviewed the research on the Latino Health Paradox in the Mexican immigrant population and the explanations offered as to why foreign-born Mexican immigrants maintain lower all-cause mortality rates compared to their U.S.-born counterparts despite coming from a more impoverished country and enduring the often insufferable experience of migration and resettlement. From an epidemiological standpoint, Mexican immigrants arrive in better health than their U.S.-born counterparts, but what happens to this health advantage as they carry out their lives in the United States? Research suggests that their standard of living improves, they gain better access to health care and preventative services, and they get their children in better education systems to enhance their opportunities for the future (Lara et al. 2005). However, despite all of these improvements, their health tends to decline (Cho et al. 2006, Viruell-Fuentes 2007, Kaestner et al. 2009). While foreign-born Mexican immigrants maintain an advantage in mortality rates compared to Mexican-Americans, research suggests that health outcomes tend to decline with increased duration of residence in the United States. For the Mexican immigrant population, this is particularly true with regard to type 2 diabetes (Borrell et al. 2009, Cowie et al. 2010) and depressive symptoms (Gonzalez et al. 2009). This rapid decline in what are initially favorable physical and mental health outcomes among recently arrived Mexican immigrants has been the subject of much social scientific research (Horevitz and
Organista 2013). Within this body of research, many studies have pointed to changes in diet and daily activity, disruptions in social networks and support systems, and the stress of learning how to operate in a new cultural milieu as causes of declining health. Acculturation, or the process of adopting and adapting to the core beliefs, values and behaviors of a host culture, is the primary analytical framework used to describe what happens to individuals who have been brought up in one sociocultural context when they attempt to live in another (Berry 1997). Pervasive in the popular imagination is the idea that as Mexican immigrants adopt the dietary and activity patterns of mainstream U.S. culture, their health suffers. This narrative persists despite the fact that they emigrate from a more impoverished country where rates of obesity have surpassed those in the U.S. and where type 2 diabetes has become the leading cause of death. Further, persons of Mexican descent living in the United States are twice as likely to suffer from diabetes as the U.S. general population. As a construct, acculturation has been criticized from a theoretical perspective for oversimplifying the complex relationship between health, behavior, environment, and socio-political context (Viruell-Fuentes 2007) and from a methodological perspective for the lack of sound measurement techniques and over-reliance on proxy measures (Abraido-Lanza et al. 2006). This chapter outlines the development of the acculturation construct, its use in research on immigrant health and the problems associated with its conceptual and methodological utility, and suggests new ways to improve our understanding of the acculturative process and how it is embodied and results in disparities in health status for certain groups of people.
Acculturation: A Conceptual History

In 1936, the Social Science Research Council (SSRC) appointed a committee to analyze the work done and study the implications of the term “acculturation.” The resulting article - “Memorandum for the Study of Acculturation” - offered this definition of the term:

“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” (Redfield, Linton and Herskovitz 1936: 149).

To this day, this is the most cited article from the journal American Anthropologist, and it is the most commonly used definition of the term within the social sciences, though distinct understandings and ways of studying acculturation have developed within different disciplines — most notably in public health (Lara et al. 2005), community psychology (Kral et al. 2011) and cross-cultural psychology (Berry 1997). The year following the 1936 study, Herskovitz noted that the construct of acculturation remained weak because “concepts are still vague, methods anything but equivalent, and the ends in view diverse” and admonished that it had become “imperative that the position of acculturation studies in the anthropological repertoire be clarified and the contributions to be expected from them be made explicit” (Herskovitz 1937: 261). While the SSRC definition allows for cultural exchange to be bidirectional, scholars have typically characterized cultural contact within the framework of groups of individuals from a “subordinate” or “inferior” cultural system undergoing adjustments to accommodate - more or less successfully - a “dominant” or “superior” cultural system, which in the case of the United States is presumed to be the white Protestant, Anglo-Saxon culture of the American middle class (Lara et al. 2005). While these judgments are no longer used explicitly in the discourse, this
basic trajectory remains the starting point for understanding the process. As an individual-level phenomenon, acculturation has typically been understood and studied as a unilinear and inevitable process whereby a person moves along a continuum of culture in such a way that as his or her cultural orientation shifts to that of the host country, there is a corresponding reduction in the cultural practices and values characteristic of the country of origin (Cueller, Arnold and Maldonado 1995). In his book *Assimilation in American Life: The Role of Race, Religion, and National Origin*, Milton Gordon (1964) follows the sociologist Robert Park’s original definition of the term assimilation as the process by which an outsider becomes fully incorporated into a new society. Gordon and Park conceived of acculturation as the final product of the assimilation process, though these two terms, along with Americanization and sometimes urbanization, are often used interchangeably. In the case of immigration to the United States, Gordon outlined the trajectory of assimilation as initial contact with a new culture, which leads to conflict between old ways of knowing and being and new ways of knowing and being, which eventually leads to accommodation of the new culture and ultimately to a complete shedding of the traditional culture and total integration into the host culture (Escobar and Vega 2000). Acculturation, or the acquisition of the cultural elements of the dominant society was considered to be the process by which one could achieve this ultimate stage of assimilation (Lara et al. 2005). For decades, the prevailing idea was that immigrants needed to unlearn or shed their “inferior” culture and adopt the language, food choice, dress, music, and customs of the American mainstream in order to be accepted by the dominant social group. This process, according to early scholars was unilinear, unidirectional and inevitable, and the onus of successful integration was on the immigrant who was expected to expunge his or her own ethnic identity…and the sooner the better!
Two decades after the initial committee on acculturation, the Social Science Research Council characterized the field as suffering from a “theoretical lag” (Dohrenwend and Smith 1962). Seminar members noted the problem of an uneven approach to the study of acculturation, suggesting that it was impossible to determine uniformities in the process when acculturating groups under study ranged from large ethnographic areas to single tribes and while some scholars focused on group-level culture change while others concerned themselves with the results or effects of culture change on individuals. Defining culture as a set of ordered, interdependent activities that are governed by rules, Dohrenwend and Smith (1962) attempted to clarify acculturation as a theoretical construct by assessing change resulting from contact along four dimensions: alienation, in which the rules of the original culture are abandoned; reorientation, in which the rules are altered in order to bring them in line with the new culture; reaffirmation, in which people actively attempt to preserve or revive their cultural heritage; and reconstitution, which is characterized as a combination of reorientation and reaffirmation. It was assumed that the latter dimension would lead to the most successful outcomes. While this conceptual rethinking outlined different pathways and allowed for distinct outcomes, the understanding that immigrants were moving along a continuum of culture and that they were responsible for their own outcomes remained pervasive.

Since then, acculturation has undergone numerous iterations of conceptual frameworks that have attempted to provide guides for the systematic study of cultural transition, all describing four possible outcomes similar to Dohrenwend and Smith’s. When the 1965 immigration law sparked a rush of immigrants from Mexico and Central America to the United States, it was assumed that acculturation and assimilation models would guide the process in
much the same way as early European immigrant groups. When these newcomers did not seem to fit the anticipated model, it was the immigrants that were blamed for their inability to “unlearn their inferior culturally based behaviors” to facilitate acceptance into mainstream U.S. society (Lara et al. 2005: 369). The original Acculturation Rating Scale for Mexican Americans (ARSMA) to the United States measured nativity or generational status, citizenship status, age at arrival, length of residency in the U.S., and language preference (Cueller, Arnold, Maldonado 1995). In 1995, the ARSMA was amended to include measures of religious preference, education, association with U.S. mainstream culture, entertainment preferences, friendships with natives and other aspects that get at an individual’s level of acceptance and use of typical Anglo or typical Mexican ideas, customs, attitudes and beliefs. Other theoretical models emerged that challenged the linearity and the direction of previous models, suggesting that immigrants would follow unique trajectories in their adaptation and that there were multiple cultural reference groups to which immigrants could potentially assimilate. Segmented assimilation theory (Portes and Zhou 1993) holds that these pathways depend on three variables — human capital, governmental policies and native attitudes, and the structure and resources of immigrants’ families and communities — and will result in shifts and adjustments in the family structure depending on whether or not children and parents assimilate at the same or different rates. Outcomes ranged from dissonant acculturation, in which the child acquires the new cultural capital before the parent, which would disrupt parental authority, consonant acculturation, in which parental authority is maintained, or selective acculturation, in which a functioning ethnic community mediates the relationship between parent and child.
In 1997, cross-cultural psychologist John Berry focused on distinguishing between group-level and individual-level acculturation by suggesting that while cultural beliefs and behaviors change at the group level, individuals will experience a psychological acculturation as they adapt their beliefs and behaviors to fit within a new cultural milieu. Berry was interested in how immigrants negotiated a “complex pattern of continuity and change” in their interaction with one another as well as with members of the new cultural system. He suggested that several key variables must be considered in understanding individual-level acculturation, including pre-acculturation factors such as age, gender, education, status, migration motivation, expectations, language, religion, and locus of control as well as factors experienced during acculturation such as attitudes, coping strategies and resources, social support and experiences of prejudice and discrimination. This was the first real attempt to separate the individual from the group experience and to account for the diverse contexts in which acculturation occurs. Berry noted the importance of considering the meaning of experiences and the ways in which individuals evaluate certain types of stressors as more or less difficult as well as the economic and social resources they have available to help ease the burden of the stress, and he deemed it important to contextualize specific cases of acculturation by invoking different paradigms to be used depending on how individuals judge the intensity of the problems associated with acculturation.

Similar to Dohrenwend and Smith’s 1962 model, Berry’s bidimensional model outlines four possible outcomes: assimilation, or complete acquisition of the new culture; separation, characterized by rejection of the new and complete maintenance of the original; integration, in which the individual embraced both the original and new cultures simultaneously; or marginalization, in which an individual is excluded from both cultural groups. While Berry
acknowledges that separation or marginalization can result from socio-structural forces outside of the individual’s control, the model mostly assumes that individuals exert their own agency in choosing the trajectory of their acculturative experience (Mendenhall 2012). More recently, Riedel et al. (2011) expanded Berry’s conceptual model by combining it with Antonovsky’s salutogenic model in an effort to better capture the impact of social resources and coping mechanisms on the acculturative process. No matter how much individuals may conform to “white standards,” darker skin pigmentation is a meaningful and powerful marker of “otherness.” One reason assimilation models of the past failed to reckon with Latino immigration is that despite the ethnic tensions, people with light skin at least stood a chance of integrating themselves into the American mainstream by conforming to a new set of values and beliefs. Acculturation scales do not capture the effects of these cultural markers on the path to becoming fully integrated into the white dominated mainstream.

**Acculturation and Health Outcomes**

In their review of the acculturation literature, Lara et al. (2005) found that most studies suggest an unfavorable effect of acculturation on health behaviors and health outcomes, though some found mixed or beneficial effects. On the other hand, most of the studies reviewed showed a positive effect of acculturation on the use of preventative services and an increase in self-reported health. With regard to nutrition and dietary patterns, less acculturated Latinos tend to eat more nutritious diets - more protein and fiber, less fat and sugar (Szurek 2011). However, other studies have found that lower acculturation only partially ameliorated the negative effects of poverty on diet, suggesting that something else is buffering the very strong correlation
between poverty and poor dietary patterns (Hidalgo, Garcés-Palacio, and Scarinci 2012).

Stimpson and Urrutia-Rojas (2007) found acculturation (measured as country of origin, language of interview and years of residence in U.S.) to be associated with lower intake of fruits and vegetables, as measured by serum carotenoid levels.

Hidalgo, Garcés-Palacio, and Scarinci (2012) found that for Mexican immigrant women in Birmingham, Alabama, lack of health insurance, not speaking English and the idea that if someone is not sick there is no need to go to the doctor were the main reasons Mexican immigrant women cited for not seeking preventative care in the United States. Length of time living in the U.S. was positively associated with seeking preventative care — women living longer in the U.S. being 26 percent more likely to seek care than those living in the U.S. for shorter periods. However, after performing multivariate logistic regression, time in the U.S. was found to no longer be statistically significant. On the other hand, the barriers to seeking medical care - lack of insurance, language barrier, and cost - did remain significantly associated with both preventative and curative care.

Breaking down the Hispanic population into subgroups based on country of origin and measuring self-reported health status, health conditions and activity limitations, Cho et al. (2004) found that Mexicans had more favorable health outcomes than U.S.-born Whites when socio-economic factors were controlled for and that this effect decreased in intensity with duration of residence in the United States, particularly with regard to self-reported health. Puerto Ricans had the worst overall health of the Hispanic subgroups, though there was no significant foreign-born advantage nor any significant decrease in health outcomes with longer duration of residence. Cuban immigrants’ socioeconomic profiles were most similar to Whites, and this subgroup
displayed the most favorable health outcomes of the Hispanic subgroups. Antecol and Bedard (2006) found that immigrants to the United States tend to be in better health upon arrival than their native counterparts but that this health advantage erodes over time as immigrants converge to native health status levels, particularly with regard to body mass index. Guendelman and English (1995) found that healthy birth outcomes among Mexican immigrants disappear within five years of living in the United States. Applying the concept of allostatic load to the immigration experience, Kaestner et al. (2009) suggest that the repeated physiological assaults on bodily systems in the process of adapting to the stress of immigration accumulates and intensifies over time with devastating effects on health outcomes. Allostatic load is a composite score of ten biomeasures including blood pressure, body mass index and C-reactive protein, which measures immune response functioning. Researchers found that Mexican immigrants in the 45 to 60 age bracket tended to have lower allostatic load scores upon arrival than U.S.-born Mexican-Americans, Whites and Blacks but that these scores increased with duration of residence in the U.S. For individuals living in the United States for more than twenty years, the odds of having a high allostatic load were twice as high compared to Whites after controlling for gender and demographic variables. Alderete et al. (2000) found that increased time living in the United States increased the likelihood of experiencing a psychiatric disorder, suggesting that cultural adjustment problems may lead to the progressive deterioration of mental health in this population. Zambrana et al. (1997) found acculturation to be significantly associated with greater levels of prenatal stress and higher risk of preterm delivery and low birth weight births for pregnant Mexican-American women as compared to Mexican immigrants. Fleuriet and Sunil (2014) confirm these findings, suggesting that differences in subjective social status during
pregnancy may be implicated in differences in stress levels. Mendenhall (2012) found that more
time living in the U.S. among foreign-born Mexican women as well as second-generation
Mexican immigrant status was associated with greater risk for type 2 diabetes and depressive
symptoms, these two conditions having high co-morbidity in this population.

Health of Subsequent Generations

The decline in health outcomes holds for subsequent generations of Latino immigrant
families. Individuals born in the United States to Mexican immigrants as well as those who
immigrate in early childhood were found to be at greater risk for substance use disorders
(Alegría et al. 2008). Adjusting for socio-economic status and lifestyle factors, Affable-Munsoz
et al. (2013) found a statistically significant increase in the risk of type 2 diabetes among second-
generation immigrants and an even greater risk among third-generation immigrants relative to
those born in Mexico. Barcenas et al. (2007) found that Mexican-born men and women in Texas
had a lower risk of obesity than those born in the United States but that the risk of obesity
increased with duration of residence, especially among females. Through interviews with first-
and second-generation Hispanic immigrants, Viruell-Fuentes (2007) found that foreign-born
immigrants had better health despite lower socioeconomic status. She attributed declining
mental health outcomes in second-generation immigrants to the increase in exposure to
“othering” messages, meaning they experienced higher levels of perceived discrimination that
may play a critical role in their health disadvantage. Hunt, Schneider, and Comer (2004) found
that Mexican-Americans were at greater risk of all-cause, cardiovascular, and coronary heart
disease mortality than non-Hispanic Whites. Vega and Scribney (2010) found that risk of
depression and alcohol or substance abuse advances progressively across generations of Hispanic immigrants, particularly those of Mexican origin. They suggest that both genetic predisposition, environmental conditions and the interaction of the two are implicated in the aggregation of behavioral problems in subsequent generations, and that vulnerability is compounded with acculturation of individuals and families. These studies suggest that whatever health advantage foreign-born Mexican immigrants may have initially, it disappears within a generation.

**Measuring Acculturation**

Several constructs have been developed to measure acculturation, though most of them rely heavily on generational status or age at arrival, length of time living in the United States and language preference or proficiency (Lara et al. 2005). Even more sophisticated acculturation measurement constructs have high correlations with these three variables, suggesting that these more advanced scales do little to enhance accuracy in measuring level of acculturation (Cruz 2008, Cuellar et al. 1995). However, identifying the underlying mechanisms linking culture change to health has been difficult as acculturation is typically measured through a series of proxy variables and often fails to adjust for possible confounding factors (Lara et al. 2005). In terms of measurement, the traditional acculturation model is linear and unidimensional, it provides only constricted measures of the process and fails to capture the nuances of actual lived experience, and it merely assumes causality without describing the underlying mechanisms between specific components of the acculturation process and health outcomes (Abraido-Lanza et al. 2006). It is unclear the extent to which these variables capture the internalization of cultural knowledge much less the external forces that limit the ability to reproduce that
knowledge in lived experience. Even studies that attempt to capture the multilinetal and multidirectional nature of the acculturation process assume the existence of two distinct cultures—a traditional or ethnic one and a modern or mainstream one. However, the specific elements of what are conceptualized as opposite ends of the spectrum remain speculative, and sweeping assertions and generalizations are typically offered to explain observed correlations (Hunt, Schneider and Comer 2004). This is based on the notion that as immigrants are introduced to a new set of cultural values and as these are reinforced through sustained exposure, individuals will replace their old values with the new ones. In response to a greater awareness of the complexity of acculturative movement and change, Cuellar et al. (1995) amended the Acculturation Rating Scale for Mexican Americans to include an overall index of change from Mexican orientation to Anglo orientation as well as separate Mexican and Anglo orientation subscales and bicultural typology scores (Campos, Walsh, and Schenker 2007). This more sophisticated and flexible construct was intended to capture greater complexity in the acculturative process; however, Cuellar et al. (1995) indicated that it had considerable overlap with the traditional model of concurrent change from one cultural pole to the other. While recent research has attempted to account for immigrants’ intentionality in remaining connected to their communities of origin in physical, social and economic ways, there is little consideration of how specific cultural values and behaviors are translated and carried out in a new social and environmental context (Guarnaccia et al. 2011). Further, the actual changes in values, beliefs, attitudes and behaviors are not described but merely presupposed as duration of residency increases and language use shifts (Thomson and Hoffman-Goetz 2009). Hovey and Magaña (2000) note that biculturalism does not necessarily denote the equal embrace of both cultures, but
more of a fluid movement between the two. For example, bicultural individuals may choose to speak Spanish in the home and with the family and speak English at work or in social situations with non-Latinos, so really knowing what language proficiency or preference measures can be complicated.

Even with the increase in sophistication and complexity of acculturation scales, the process by which acculturation affects health outcomes is not well understood. While traditional measures of acculturation appear to have some predictive efficacy in declining health outcomes for Mexican immigrants, there remains substantial ambiguity over what the process of acculturation looks like, how it takes shape and the utility of proxy variables in measuring cultural positioning. While these studies provide important information about health outcomes in immigrant populations, they do not provide empirically convincing *causal* associations between cultural variables and health outcomes (Escobar and Vega 2000). Anthropologists have largely abandoned the term because the central construct of the discipline - culture - is often obscured, the relationship between culture and the individual is not clarified, and the ways in which culture change actually happens are not well understood (Szurek 2011, Hunt 2005).

**Theoretical Constraints**

Even beyond the lack of consistency in acculturation measurement, the central assumptions of the construct remain “implicit, poorly stated, simple, ambiguous and inconsistent” (Hunt, Schneider and Comer 2004: 976). In their review of the acculturation literature, Hunt, Schneider and Comer (2004) found that most studies indexed under the key word “acculturation” do not define culture, which is implicitly understood to be a “cluster of
nebulous characteristics carried by ethnic group members.” Culture is not defined in terms of what it is and how it functions as a motivator of human behavior, nor are the specific elements of a culture empirically shown to hold meaning and carry weight among a specified group of people. Assigning cultural characteristics to individuals based on the language they speak and their country of origin is tautological and ignores both the historical, political and economic ties between nation-states that have existed for centuries as well as the notion of individuals as active participants in shaping the world around them. Treating “Mexican” and “American” culture as two distinct cultural traditions is in no way reflective of the true cultural realities within which people in either place carry out their lives. With advances in technology and communication, it is naïve to assume that Mexican immigrants arrive in the United States without an idea of how life in the U.S. might be different from life in Mexico or how they might retain their cultural identity in a new place. Further, the idea of individuals moving away from a “primitive” cultural orientation to a “modern” one is ethnocentric and unhelpful in discovering how people structure their understanding of the world and how they act on and within that understanding. And finally, while culture change is often implicated in diminishing health outcomes, research has failed to specify how this process unfolds and the specific mechanisms by which adjustments in cultural orientation impact physical and mental health.

Additionally, culture is too often understood as a characteristic of the individual that is separate from the social structure and the structural constraints that limit access to resources and confine individuals to a certain position in the social order (Viruell-Fuentes 2007). Studies that do consider the impact of socioeconomic variables often fail to analyze their value in terms of shared meaning within a particular social context. Defining and operationalizing culture and
then identifying what aspects of life matter the most to people are necessary precursors to exploring the impact of the acculturative process on health outcomes. Little consideration is given to the context of acculturation; that is, the context prior to immigration, the context of the immigration experience and the resettlement context. Individuals may differ in their reasons for immigrating, their expectations surrounding the immigration experience, and their coping capacity for responding to stressful life experiences. Past research is not consistent in measurement of acculturation or in adjustments for possible confounding factors — the most important overall finding is that effect of acculturation (or assimilation to mainstream U.S. culture as it is often understood) on Latino behaviors and health outcomes is very complex and not well understood (Lara et al., 2005). The idea is that the health advantage deteriorates and eventually disappears as changes in lifestyle and diet as well as the stress of adaptation and adjustment to a new environment wreak havoc on the body (Antecol and Bedard 2006, Cho et al. 2004). Goldman et al. (2014) studied current Mexican migrants to try and discover the point at which deterioration of health outcomes begins, determining that the migration process itself and the experience of the immediate post-migration period detrimentally affect recent immigrants’ health status and that this deterioration accelerates at a rate much faster than acculturation progresses. In other words, the stress of border-crossing (especially for undocumented migrants) as well as the physical and psychological costs of simply being an immigrant will cause a decline in physical and mental health long before a person can assimilate to a new set of cultural ideals.

Research on immigrant health tends to be carried out within the paradigm of Western biomedicine, which isolates disease from the social and political contexts that produce it (Mendenhall 2012). Research often fails to account for aspects of the acculturative experience
for certain groups of people that make them vulnerable to certain kinds of diseases. This often leads researchers to seek a genetic answer to questions about health disparities. In the case of immigration, it has been suggested that new environmental conditions trigger a genetic response in people of a particular race or ethnicity, one that existed pre-immigration (Dressler, Oths, and Gravlee 2005). Many researchers have clung to reductionist models such as these, perhaps in an attempt to avoid facing the larger and more difficult concern of systemic racism and its role in producing health discrepancies in disadvantaged populations (Gravlee 2009). This does not imply that biological variation does not exist to some extent between ethnic groups, rather that this comes into play only after sociocultural data has accounted for privilege and status, or simultaneously, in interaction with these variables. For example, Salinas, Eschbach, and Markides (2008) found higher rates of hypertension among Mexican-origin persons in the United States than their counterparts in Mexico that persisted after adjusting for rates of obesity and smoking. This indicates that the negative health behaviors purportedly associated with acculturation are not fully to blame. For these reasons, researchers must pay more attention to how the stress associated with migrant experience damages the body over the years.

**Rethinking Acculturation**

In 1964, sociologist Milton Gordon described the process of assimilation as the acquisition of the appropriate cultural knowledge and behavior to participate effectively in mainstream U.S. society. The assumption was that if immigrants could integrate new cultural information and reproduce that knowledge effectively in their lifestyles the more accepted they would be by the host culture and the better off they would be in the new setting. This puts the
burden of integration on the immigrant as well as the blame for not being accepted by the larger society. Gordon failed to account for the fact that culture is not static - immigrants are changing the cultural landscape even as they are trying to find their place in it. Further, the structural constraints that limit choice and movement as well as native attitudes regarding the belonging and deservingness of immigrants can be impediments to effectively participating in the new cultural milieu. According to Escobar and Vega (2000: 737), “the challenge, which is still pending resolution, is to identify the necessary and sufficient dimensions of culture salient to cultural orientation. This specification problem is at the heart of confusion about the value and consistency of acculturation measurement.” While there is strong empirical evidence that acculturation leads to declining health, there are no theory-driven pathways by which cognitive mechanisms or behaviors are influenced by acculturation or how potential social and contextual factors might mediate the relationship between acculturation and health (Escobar and Vega 2000, Allen et al. 2014). For these reasons, many anthropologists have called for the discontinuance of the construct until these problems can be resolved (Escobar and Vega 2000, Lara et al. 2005). As Herskovitz noted in 1937, for the construct to be useful the relationship between culture and its human carriers needs to be clarified. The problem with this way of thinking is that cultures are not static, they do not exist on a continuum, and individuals play a pivotal role in the dynamic forces that shape their realities. The task is to identify which “key features of one culture are truly distinctive from those of another culture, why they matter, or how a metric approach could or should detect meaningful differences” (Escobar and Vega 2000: 737). This study attempts to do just that and relies on the construct of cultural consonance to resolve these problems.
Conclusion

By 2020, the Latino population is expected to exceed 50 million people, making it by far the largest ethnic minority in the United States (Cho et al. 2006). Currently, nearly sixty-five percent of the Latino population identifies as Mexican, and forty percent is comprised of first-generation immigrants (Guarnaccia 2011). The paradoxical trend in health outcomes in this population is of increasing concern to social scientists, and the idea that culture plays an important role in moderating or mediating health outcomes is virtually uncontested. And yet, there continues to be much speculation and little empirical analysis of what cultural realities actually look like and to what extent they matter to individuals. That health outcomes among Mexican immigrants tend to decline with increased time in the United States is well-documented, though the specific role of culture and cultural adjustment in this process is less tenable. Acculturation scales fail to capture the context of lived reality as experienced by Mexican immigrants and how these are implicated in physiological functioning. One question that this research begs is acculturation to what? The notion that immigrants move along a continuum of culture from their country of origin to their host country is difficult to operationalize. For these reasons, a conceptual redirection in thinking about and studying the role of culture in immigrant health is needed. The following chapters describe the social pathologies that surround Mexican immigrant women in the United States and argue that a biocultural perspective — one that more seriously considers the socio-structural and political-economic context of health and the explicit role of culture — is better suited to understanding the proximal pathways by which life experience gets under the skin and produces predictable discrepancies in the physiological functioning of certain bodies depending on their positioning in the social structure. From this
basis, I will then describe how culture can be operationalized and analyzed in relation to health outcomes in a more empirically satisfying way.
CHAPTER FOUR: 

THE SOCIAL PATHOLOGY OF MEXICAN IMMIGRATION

“The social space of "illegality" is an erasure of legal personhood—a space of forced invisibility, exclusion, subjugation, and repression that materializes around [the undocumented] wherever they go in the form of real effects ranging from hunger to unemployment (or more typically, severe exploitation) to violence to death—that is nonetheless always already confounded by their substantive social personhood.”

- De Genova 2002

My aim is to frame the health problems of Mexican immigrant women in Birmingham in the social and political contexts that often go unaccounted for in the epidemiological literature on acculturation and immigrant health. The syndemics model (Singer and Claire 2003) holds that diseases do not exist in a social vacuum, that they are created and sustained by sociopolitical circumstances and expressed as a pattern of diseases and adverse conditions that cluster around certain vulnerable populations. This chapter considers how Mexican immigrants embody the social pathologies that constrain their choices and limit their life options. I draw on the work of Sarah Horton, Emily Mendenhall, and Angela Stuesse to explore themes of victim blaming, misconceptions of cultural stereotypes, intensification of nativist hostility, the embodiment of immigration policy, and the comorbidity of certain diseases. Horton (2016) examines agricultural deaths among undocumented Mexican and Salvadoran immigrants in California in the context of the broader social and political conditions of which they are symptomatic. Mendenhall (2012) develops a syndemics framework specific to Mexican immigrant women
living in the U.S. that considers how structural violence, immigration-related stress, depression, type 2 diabetes, and interpersonal abuse coalesce around this population. Stuesse (2016) traces the influx of Mexican immigrants to the South to the neoliberal restructuring of the poultry industry and the powerful ways that the state supports corporations’ efforts to render their bodies as exploitable commodities. These ethnographers have captured a dire reality within which many Mexican immigrants carry out their lives, and they make clear the connection between the social and physiological pathologies that surround this vulnerable population.

The VIDDA Syndemic

Emily Mendenhall (2012) developed a syndemic model that incorporates the synergistic interactions of *Violence, Immigration-related stress, Depression, Diabetes, and Abuse*, that characterize the everyday lived experience for so many Mexican immigrant women in the United States. She discusses how the social contexts of their lives are intrinsic to the occurrence and comorbidity of depressive symptoms and type 2 diabetes in this population. A quarter of Mexican-origin persons in the U.S. who have diabetes report symptoms of depression, and this is the case for 58 percent of Mexican women over age 65. While epidemiologists have mostly focused on how the physiological symptoms of diabetes contribute to the development of depression, more research is currently being devoted to better understanding the bidirectional pathways by which these two conditions influence and inform one another. Mendenhall insists that attention must be given to the structural, social and emotional forces specific to the Mexican immigrant experience that are implicated in the comorbidity of depression and diabetes.
“Denounce-ability” and the Embodiment of Immigration Policy

During the 1930’s, the U.S. government decided it would be responsible for the welfare of its citizens and implemented new progressive social policies and protections called the New Deal. However, as “neoliberal logic began to take hold, the state assumed less and less responsibility for social welfare, and citizens were increasingly expected to fend for themselves” (Stuesse 2016:75). The increased competition to maximize profits and control the market led to the recruitment of the cheapest and most expendable labor, what Stuesse (2016:75) refers to as the “neoliberal race to the bottom.” Economists have argued that a labor shortage was the primary “pull” factor in increased rates of Mexican immigration; however Stuesse (2016: 77) argues that rationalizations of an alleged labor shortage “delegitimizes individuals’ reasons for avoiding dangerous conditions and below-poverty wages in the plants while disregarding the industry’s violations of federal labor law, health and safety regulations, and human rights.” The Immigration Reform and Control Act (IRCA) of 1986 made it a punishable offense to knowingly hire undocumented immigrants; however, the word “knowingly” has been interpreted rather loosely, and in a minimal effort to insulate themselves from federal scrutiny, employers began to hire through subcontractors. IRCA legalized nearly three million undocumented immigrants, but rather than curbing companies’ reliance on undocumented labor, corporations engendered complex maneuverings to avoid penalties that served to heighten the precarious status of these workers (Stuesse 2016). In order to reduce labor costs and maximize productivity, employers strategically exploit workers’ undocumented status by threatening them with federal compliance. No-match lists and the government-mandated E-verify program are designed to match individual workers with one legitimate social security number. These systems
are used as threats when it is convenient for employers, and they bolster the black market of document falsification (Horton 2016). With the passage of the Personal Responsibility and Work Opportunity Reconciliation Act of 1996, the Clinton administration denied aid to children born to women on welfare, and implemented a “workfare” program that required welfare recipients of two years to work off their benefits in public or private sector jobs. This act denied benefits to immigrants and banned state and local governments from providing all but emergency services to the undocumented, and it shifted the burdens and risks of capitalism from states and corporations to individuals, forcing those at the bottom of the labor market into low-paying and unsafe industries.

That same year, the Illegal Immigration Reform and Immigrant Responsibility Act, otherwise known as the Mexican Exclusion Act, sought to identify and remove “criminal aliens” by expanding the list of deportable offenses to include minor crimes (Horton 2016). The aftermath of September 11, 2001 saw the increase in both border control and more intensified scrutiny of the interior. The establishment of Immigration and Customs Enforcement (ICE) strengthened efforts to enforce immigration law by forming partnerships with local law enforcement and elevating minimal crimes to deportable offenses. A rise in racial nativism and the fear of linguistic and cultural differences undermining white supremacy have driven some states to pass immigration laws that criminalize everyday activities like driving, and local police officers have taken on the de facto role of enforcing these laws.

Alabama has been no exception — in 2011, House Bill 56 (HB 56), the Beason-Hammon Alabama Taxpayer and Citizen Protection Act, made it a crime for undocumented immigrants to reside in the state of Alabama, prohibited financial transactions between undocumented
immigrants and government agencies or private individuals, denied the undocumented access to medical care, social services, utility hook-ups, and public universities, required employers to check the legal status of their employees through the E-Verify program, and criminalized citizens for housing or transporting undocumented immigrants (Mohl 2016). No funds were allocated to the implementation of these provisions, and the task of enforcing them was largely left to local police forces (ibid). Positioning in the social hierarchy and the “bodily, material and subjective states that such structures produce” leads to an entrenched vulnerability and susceptibility to disease (Horton 2016:5). For Mexican immigrant women this often manifests as risk or complications due to type 2 diabetes as well as emotional suffering (Mendenhall et al. 2010).

Strict immigration laws leave undocumented immigrants, and anyone perceived to be an undocumented immigrant, in a constant state of what Horton (2016) calls “denounce-ability.” It is a form of legal violence that targets this population and systematically impedes them from long term incorporation into U.S. society. Fear of interacting with the state in any capacity is a fact of life for unauthorized immigrants, and it is commonly understood that if they have any infraction on their record they are at risk of deportation. According to Zavella (2011: 26), Latino illegality “includes a spatialized sociopolitical condition caused by ubiquitous immigration sweeps, detainment, interrogation, deportation, or harassment, which push the undocumented into clandestine lives.” This raises questions, both legal and symbolic, regarding the deservingness of Mexican immigrants in the United States (Fleuriet and Melo 2016).
Victim Blaming

In line with the theoretical model and the cultural narrative that immigrants are to blame for their own maladies because they are rational actors who exert control over their own destinies, immigrant health problems are often isolated from their work situations and the labor and immigration policies that shape them. Following the critical medical anthropologist Paul Farmer, Horton (2016:4) warns that this framing “uncritically assumes the unfettered agency of vulnerable populations, endowing their behaviors with a misplaced sense of autonomy.” Even efforts to protect those with undocumented status from exploitation can sometimes cause more damage than good if policies are designed based on the idea that individual behaviors are largely responsible for health problems. For example, Horton showed how heat deaths among farmworkers in California continued to increase despite far-reaching regulations because these were focused on individuals taking better care of themselves, thus perpetuating the narrative that heat deaths were a result of poor decision making rather than a work environment that demanded maximum productivity. Workers were penalized for taking breaks or requesting time off, so they were forced to constantly choose between protecting their health and losing their jobs, and yet victims of heat death continue to be blamed for not letting their supervisors know that they needed a water break.

Worker Exceptionalism and Exploitation

Since the days of slavery, social, political, and economic relations have been and continue to be predicated on the subjugation of Black Americans, and while the white dominant class has by no means embraced Latinos or facilitated their integration into white America, many nativist
Whites have seized the opportunity to use Latinos to further distance themselves from Black people (Stuesse 2016). This plays out in different ways, but perhaps the most striking evidence of this is the perpetuation of the popular narrative that Latinos are “exceptional workers” (Horton 2016). The exceptional worker ideology serves as a contrast to the false narrative of the black “welfare queen” and further promotes the idea that Black people are lazy and unwilling workers. From a purely legal sense, African Americans gained a lot of ground during the Civil Rights movement of the 1960s, finding themselves better positioned to contest their status as half-class citizens, to look for better educational and employment opportunities and to demand improved wages and working conditions. The neoliberal restructuring of the 1970s thwarted these achievements by actively recruiting less skilled and more expendable workers and relying on the intensification of labor. Stuesse (2016) and others suggest that this narrative of Mexican exceptionalism is used in an antagonistic way toward African-American workers who tend to be portrayed in the labor sector as lazy and unwilling to work hard. Unlike African-Americans who fought long and hard to improve their own working conditions, albeit nominally, undocumented Mexican immigrants experience a form of super exploitation — in order to afford the basic necessities of life in the U.S. as well as to send remittances home to their families or to pay the fees to bring their families to the U.S., they have no choice but to work without even the minimal advantage of a social safety net to cushion them. It is their exclusion from public insurance programs and the precarious nature of their job status that demands exceptionalism as the only means of economic security available to them. Undocumented workers are not naturally endowed with a strong work ethic or an eagerness to work the lowest-paid and most dangerous jobs in country; rather, it is the reality of the neoliberal, globalist economy that forces them into a
system of forced labor, akin to slavery, by making them completely expendable and utterly replaceable.

**Why It Matters in Terms of Health**

Cartwright (2011) calls the immigration system in the United States a “powerful pathogen” as immigration status interacts with local biologies and the toxic social conditions that envelop Mexican immigrant women constrain their life possibilities and put them in harm’s way. While institutions such as schools, hospitals, and other social services are designed to help individuals and families, they are increasingly required to ask for proof of citizenship and to deny services if individuals are unable to provide documentation. Further, some institutions work with ICE to identify suspected undocumented individuals (Cartwright 2011). In Birmingham, schools are ostensibly safety zones, and yet women are often afraid to drop their children off at school because they fear immigration officers may arrest them as they come out of the school. I could never find proof of this happening, but the rumor is certainly pervasive among the women who participated in the study. Living in a perpetual state of “denounceability” coupled with the awareness that if you or your partner is detained and deported it could send your family into abject poverty overnight is a burden so large that the body cannot handle it. These everyday experiences of violence are embodied, and the adverse circumstances of daily life weaken the body’s natural defenses, exposing a vulnerable population to a set of “intertwined and mutually aggravating ailments” (Horton 2016:126).

When the mind and the body have to brace themselves each day to endure demanding physical labor and exploitative conditions, discriminatory treatment by employers and the state,
and assaults on their personhood, dignity and sense of worth, the hypothalamic-pituitary-adrenal system becomes hyperaroused, meaning there is a constant release of the stress hormone cortisol that weakens the organ systems and makes the immune system less resistant to pathogens (Horton 2016, Scheper-Hughes and Bourgois 2011). As chronic stress is embodied, the body’s ability to return to normal homeostasis declines, and it becomes embroiled in a state of continual adaptation. Known as the allostatic load (see chapter 5), the frequent firing of the neural or neuroendocrine system in response to stress wears the body down over time. In the case of undocumented Mexican immigrants, the cumulative effects of devalued status combined with the constant threat of deportation (for oneself or others) and the increasing resentment and perceived powerlessness to change one’s life situation are implicated in the onset of many chronic conditions such as hypertension, obesity, and diabetes (Kaestner et al. 2009).

Diseases that tend to cluster in certain populations must be considered in light of the sociopolitical conditions in which they emerge. Prevalence of type 2 diabetes in the Mexican-origin population in the United States is twice that of the general population (Cowie et al. 2010). It is estimated that one in three Mexican-Americans with diabetes also suffer from depression (deGroot et al. 2006). Mendenhall et al. (2012) argues that depression functions both as a contributor to diabetes as well as a consequence. Health care for unauthorized immigrants with type 2 diabetes is irregular and fragmented; it is a byproduct of state definitions regarding who is deserving of publicly funded care (Melo and Fleuriet 2016). Further, regimens of self-care are often dismissive of cultural expectations that emphasize the role of Mexican women as the primary caretakers of the family (Weaver and Mendenhall 2014). These policies stem from and reinforce public opinion and stereotypes about immigrants and influence what kind of health care
is available. As many undocumented immigrants are popularly characterized as “illegal,” they are excluded from the health care system and at increased risk for poor health and suffering. Largely uninsured and unable to pay out of pocket for dialysis treatment, the only source of diabetic care for undocumented immigrants with type 2 diabetes is the emergency room.

Conclusion

By 2007, numbering around 45.5 million, Latinos made up the largest ethno-racial group in the country, 15 percent of the total population. Today, it is estimated that 11 million Latino immigrants in the United States are unauthorized and that half of these are of Mexican origin. Undocumented immigrants, however, make up only five percent of the labor force, and Latinos are disproportionately represented at the bottom of the wage and occupational structure (Zavella 2011). From 1999 to 2004 the poverty rate for Latinos was at 38 percent, 30 percent for African Americans and 15 percent for Anglos (ibid). Latinos in the United States have a higher risk of developing type 2 diabetes than non-Latino whites, and those of Mexican origin bear the highest risk of the Latino subgroups, and the risk for Mexican women is significantly higher than for Mexican men (Lara et al. 2005). Blaming victims for health disparities is a way of diverting attention away from the structural injustices to which vulnerable people are subject.

Undocumented immigrants are excluded from the health care system; as a result, they do not seek treatment for health conditions until they become emergent (Fleuriet and Melo 2016). Immigration law has done little to abate the hiring of undocumented immigrants, but combined with labor policies, it has served to segment the labor force, weaken worker power, undermine
unions, and allow companies to evade regulations, essentially shifting the burden to the most vulnerable people and rendering their bodies nothing more than expendable commodities.
CHAPTER FIVE:

BIOCULTURAL MEDICAL ANTHROPOLOGY — A THEORETICAL PERSPECTIVE

“Disease is not a biological fact but a decision of society.”
- Erwin Ackerknecht (1971)

The previous chapters have reviewed the health consequences of the acculturative experience and the clustering of social and physiological pathologies that surround Mexican immigrants in the United States. This section lays out the theoretical perspective in which this study is situated, the aim of which is to refine the concept of acculturation, delineate how it can be better operationalized, and clarify the underlying pathways by which the process of cultural adjustment may impact health outcomes. In 1998, Goodman and Leatherman called for a “biocultural synthesis” that would combine theories and methods in biological and cultural anthropology in an effort to better study and understand how the physical constraints of lived experience produce predictable discrepancies in the physiological functioning of human beings and social groups. While the traditional biomedical model practiced in Western health care systems detaches disease from the social, political and historical contexts in which they occur, biocultural medical anthropology considers how socio-cultural meaning systems and political-economic processes interrelate and interact with local ecologies to shape biologies (Mendenhall 2012). A biocultural approach is particularly suited for research on how immigration and sociocultural change impact health because it examines how culture shapes and is shaped by human biology, and it traces the social patterns of disease in different cultural and ecological
contexts (Goodman and Leatherman 1998, Dressler 2005). From this perspective, disease is as much social as it is biological. While other disciplines look at the statistical relationship between proxy variables of acculturation and health outcomes, biocultural medical anthropology provides a theoretical and methodological foundation for contextualizing and exploring the relationship between cultural realities and their effect on individual health in a more empirically satisfying way. The goal is an enhanced understanding of how life events and situations alter the physiological responses of the individuals who experience them. While shifts and adjustments in cultural orientation are empirically linked to health, this research delves into why this might be the case and how it works on a physiological level. This chapter outlines the development of biocultural theory and the key concepts it encompasses as well as its utility in clarifying the ways in which the stress of lived experience impacts physiological functioning for certain social groups, particularly those undergoing rapid sociocultural change.

**Background and Significance**

Medical anthropology was professionalized as a subfield of anthropology in the 1960’s as the global influence of North America and Europe expanded after World War II. Diseases associated with modernization and culture change - malnutrition and infectious disease - were rampant among the world’s poor, and it became an imperative of developed societies to respond to the growing needs of these vulnerable populations. The assumption was that by making Western medicine available to non-Westerners, it would automatically be identified as superior to local health care systems and natives would choose it over the traditional practices they had relied on for generations (Joralemon 2010). It turned out to not be that simple, and it quickly
became apparent that there must be some attempt to understand local constructions of health, illness and treatment choice in the specific contexts from which they emerge. In 1977, George Engel challenged the biomedical model as reductionist and impervious to social and environmental conditions. He called for a new model - the biopsychosocial model - that incorporated social, psychological and biological issues as well as life experiences into patients’ symptoms. For Engel, the biomedical model was nothing more than a folk model for the West, one into which Western health care professionals are indoctrinated long before they even choose a career in medicine. In this model, the body operates like a machine, where disease is the breakdown of that machine, and it is the doctor’s responsibility to isolate the defective part and repair the machine. It is anatomical lesions that cause disease, independent of the human context, and when these cannot be identified, biomedicine looks to hereditary predisposition and behavioral risk factors as the source (Finkler 1997). The problem is that the sick role, the doctor/patient relationship, the etiology of illness, the meaning imbued in certain types of illness and every single other aspect of health and health care are all socially constructed, and these will affect illness episodes both pathologically, experientially, and socially. Further, social pathologies endemic to certain populations make certain bodies more vulnerable to discomfort and disease (Singer and Claire 2003). Engel’s model promotes a holistic, systems-oriented, comparative approach to understanding health and illness. Rather than consider the physiology of disease as an isolated event, it draws on general systems theory as a conceptual approach that treats related events as parts of an integrated system. Because medical anthropologists consider the structural and cultural determinants of disease and treatment choice, they are in a unique
position to address the social, environmental, and biological dimensions of these global health concerns (Goodman and Leatherman 1998).

Researchers in immigrant health have called for more in-depth analysis of how changes in social conditions such as family dynamics, access to social support, religious beliefs, and dietary patterns are linked to declining health among Mexican immigrants. These are shaped by the socio-political conditions in which immigrants live and must be considered in relation to health. The point is to look at all dimensions of life - from macro-level phenomena like poverty, structural violence, and racism to issues of cohesive efficacy in neighborhoods and household relationships - and to consider how the conditions of life are connected and internalized to produce predictable discrepancies in the biological functioning of disadvantaged groups (Singer and Claire 2003, Gravlee 2009, Vega et al. 2011). Merrill Singer’s concept of the syndemic - a combination of *synergy* and *epidemic* - expands on Engel’s model in considering how “historical, social, emotional, and biological factors synergistically interact to perpetuate these parallel and interactive epidemics” (Mendenhall 2012: 21). The focus is on the whole process of sickness and how it plays out in daily life. The synergistic interaction of multiple stressors amplify negative health consequences in people for whom these conditions constitute daily reality. The weathering hypothesis (Geronimus 1992) and the concept of the allostatic load (Duru et al. 2011) have emerged to better understand how the lived experience of inequality continually imparts chronic assaults on the body that over time weaken the body’s natural defenses and expose vulnerable individuals and communities to a cluster of interacting diseases. Evident in these findings is the fact that the accumulation of physiological dysfunction as a result of repeated or
chronic stressors in daily life have a negative influence on the health and lifespan of individuals who experience them.

A critical-interpretivist perspective in medical anthropology considers meaning to be central to the illness process and seeks to understand how meaning shapes the body on metabolic, behavioral and symbolic levels. Kleinman (1980) distinguishes between disease - measurable physiological irregularities in bodily functioning - and illness - the culturally structured, personal experience of being unwell. Young (1976) added the concept of sickness as constituting the social aspects of the illness process. Illness is not thought of as an individual experience, and medical anthropologists consider aberrations in physiological functioning in relation to how the illness episode is experienced, what significance it has to the individual as well as the family and the community, and what it communicates. Collective meaning translates to individual behavior and conditions our responses to various insults, and illness episodes have socio-culturally relevant causes and require culturally defined and socially mediated responses. While social and psychological issues influence decisions, culture provides a foundation that allows individuals to interpret information in a meaningful way, and this is what largely defines the illness experience from diagnosis to treatment and recovery. In other words, humans imbue illness with meaning, and this shapes their experience in profound ways. According to Landy (1983), sickness provides a model that orders and reaffirms a reality. For example, Mendenhall et al. (2010) suggest that for Mexican immigrant women for whom it is considered inappropriate to talk about emotional problems, type 2 diabetes provides an idiom of distress (Nichter 1981), or a socially sanctioned way to “link social and emotional distress with somatic symptoms that are culturally relevant at a particular time and place” (222).
Studying Health Disparities

Dressler, Oths, and Gravlee (2005) identified four primary models used to explain health disparities, and research on the Hispanic epidemiological paradox tends to fall under one of these four models. The racial-genetic model is based on the notion that genetic factors that predispose people to certain kinds of health problems can be identified on the basis of race or ethnicity. The health-behavior model is built on the idea that certain behaviors - amount of physical activity, smoking, alcohol consumption - are the primary contributors to disease risk. A socio-economic model suggests that unstable environmental conditions and reduced access to resources explain why some people are at greater risk for certain kinds of diseases. A psychosocial model of stress attempts to identify stressors that are unique to a particular ethnoracial group’s experience and how these in turn affect health outcomes. Finally, a structural-constructivist approach is designed to elaborate and operationalize Bourdieu’s (1990) notion that lived experience can be understood at the intersection of the external social constraints imposed on individuals and the culturally constructed meanings created within a particular reality. The authors propose that the final two approaches - a psychosocial model and a structural-constructivist model - have the most promise in moving research beyond the conflation of race and biology toward a consideration of how social inequality and the meanings that develop around a particularly disadvantaged experience are implicated in health disparities. While biological reductionism seeks to isolate the origin of physiological dysfunction to pathogens in the body or to genetic or behavioral factors, this approach considers the broader context of illness within lived experience. The extent that genetic factors explain propensity to illness at all, these are partial explanations
that must be considered in the context of social conditions (Gravlee 2009). Diseases do not just appear; they develop over time as individuals interact with their environments and within the individual through patterns of gene expression and physiological regulation.

**Stress and Sociocultural Change**

Social scientists have long noted the link between stress and rapid culture change (Dressler 2011). The disruptive effects of colonialism and modernization are implicated in shifts in diet, physical activity, and access to medical care, and individuals in positions of marginality are at increased risk of disease in these contexts. As early as 1960, Cassel described the experience of migration as one in which an individual who was born and socialized into a particular cultural milieu is forced to learn a new set of cultural expectations and to implement these through a process of trial and error. Cassel suggested that repeated failures to demonstrate successful integration of cultural ideals puts one at increased risk for sustained disease. For example, Scotch (1963) found that among members of the Zulu tribe in South Africa, those who attempted to retain the traditional beliefs and practices in a more modern, urban setting had higher blood pressure while those who conformed their behaviors to the new cultural milieu had lower blood pressure. Conversely, those who tried to modernize within the traditional context were more likely to have higher blood pressure than those who maintained the traditional culture.

Early research on the stress process made it clear that shared meaning is central in the sense that sources of stress as well as moderators of stress will be determined by what is collectively meaningful among individuals in a particular community of reference (Lazarus 1966). In 1956, Hans Selye identified the specific physiological pathways and biological
processes through which stress operates on the body. He showed how the experience of being stressed activates the adrenal cortical and medullary stress hormones to produce specific biological outcomes. One primary contribution of biocultural anthropologists has been connecting these specific mechanisms to larger ideological and political systems to demonstrate how they take shape and become meaningful (Dressler 2011). For immigrants, who are undergoing shifts and adjustments in cultural orientation in addition to other immigration-related stressors, it is important to be specific about what is perceived of as stressful and why. These will change as people move around and settle into a new life in a new place. From a cultural constructivist viewpoint, the stressfulness of an event is not a matter of individual perception but is socially defined, so it is important to explore the meanings and perceptions attached to certain life events.

In addition to understanding what specifically constitutes stress in a particular context, it is important to consider what resistance resources are available to individuals in that context that may combat or at least neutralize the effects of stress (Cohen 1988). Social scientists have long recognized the influence of social support networks on health status (Uchino 2006). Social support can be emotional, financial or logistical. These networks become integral in providing information and access to resources to marginalized individuals with limited access to medical care. As a variable in sociocultural research on health, social support is measured as the number of social ties through marriage, kinship, friendships and religious group affiliations, as well as the functional components of satisfaction with these relations and the perceived availability of material and emotional support when needed (Uchino 2006). As an adaptive strategy for migrants experiencing sociocultural change, an individual’s real and perceived social support
network will influence health-related behaviors (either positively or negatively), moderate stressful events, and affect a person’s self-esteem and ability to face troubling situations (Cohen 1988). Social support networks are rooted in a larger sociocultural framework, and the size of networks, the appropriateness of asking certain individuals for help and the expectations of reciprocity will all be conditioned by the structural factors within which networks form. With regard to migration and resettlement, learning how to operate successfully in a new social and environmental setting is a costly process and one that bears heavily on biological functioning. The less successful a person is at adapting to the ways of the new dominant culture, the higher his or her risk of disease (Dressler 2004).

Conclusion

Biocultural medical anthropology reminds us that health and illness must always be considered in a larger structural framework that accounts for all aspects of lived experience, including cultural norms and values, access to resources, poverty, discrimination, public policy and social change because it is within this context that certain aspects of life take on meaning and are embodied. Explanations of the effects of acculturation on health outcomes often center around the therapeutic effects of Mexican culture, but what is protective and what is harmful will inevitably depend on the social and cultural environment, not necessarily on the elements of culture itself. Social networks change dramatically with immigration to a new place, as will the role of certain kinds of social support in acting as an antidote to stress. Discrepancies in knowledge of shared meaning and the ability of individuals to re-present this meaning in their beliefs and behaviors are embodied; as such, they are implicated in differences in biological
functioning, which will in turn affect health outcomes. In this way, medical anthropologists are uniquely qualified to analyze health disparities by “radically contextualizing” the high burden of chronic disease among marginalized social groups (Berggren and Chapman 2005). The acculturation studies mentioned in the previous chapter suggest that incongruity with one or more meaningful components of life can stimulate the stress response; however, they all lack the theoretical and methodological sophistication to identify how this shared value system manifests in particular communities of reference and the degree to which individuals are able to act on them in ways that produce predictable discrepancies in health outcomes. Subsequent chapters will discuss how a cultural consonance approach may resolve some of these issues and show how the acculturative experience takes on meaning and is implicated in the ability to successfully adapt to a new life in a new place.
“The practice of medicine is a social process, subject to the same laws, and to be studied by the same methods as other social processes.”
- William H.R. Rivers

Social scientists and philosophers have long contemplated the relationship between culture and the individual, though demonstrating empirically how this relationship develops and to what effect has proven difficult. In an effort to distinguish itself from psychology in the 1950s, anthropology adopted the concept of culture as the central construct of the discipline (Blount 2011). However, culture has remained a rather elusive concept to define and measure, which has made investigating the influence of culture on individual adaptation virtually untenable (Dressler and Oths 1997). A key concern of biocultural anthropology has been making culture explicit through theoretical and methodological precision (Dressler 1995). To this end, a theory of cultural consonance has developed to make empirically investigating the link between culture and the individual more precise. It has been shown that the link between poor living conditions and health problems is moderated by the relative ability of people to live up to a widely agreed upon standard for what it means to be successful in a particular social context or in a particular domain of life (Dressler 2005). Though anthropology has a long-term interest in acculturation, the central construct of the discipline – culture – is often lost or obscured in this area of research, and while typical measures of acculturation have empirically validity in
predicting health outcomes, it is unclear what exactly these variables are measuring in terms of culture and why they are implicated in health outcomes. Using techniques from cognitive anthropology to operationalize and measure culture, cultural consonance theory is better equipped than other theoretical constructs to explain the association between the immigrant experience of cultural transition and health outcomes. This chapter presents how a cognitive approach to acculturation may clarify the specific role of culture in health changes for certain immigrant populations.

A Cognitive Definition of Culture

Defining what culture is and what it does is the first step in understanding its relationship to health and well-being. The concept of culture has undergone several important iterations in the past fifty years. Starting with Tylor’s definition in 1871, the central feature of culture was regarded as knowledge. In 1956, Ward Goodenough applied the structural and taxonomic principles of linguistics to cultural phenomena with a definition of culture as that which one needs to “know or believe in order to operate in a manner acceptable to its members” (3). This definition retained knowledge as its core, and it also allowed for the use of discovery procedures to uncover the content and organization of that knowledge. Starting with culture as discrete traits or technologies then shifting to the perspective of culture as a system of shared meaning (Keesing 1974), the emphasis in anthropological research eventually became understanding how individuals store and transmit cultural information that orders the beliefs and behaviors of a social group (Dressler and Oths 1997). Cultural information about how to order the elements that make up life is encoded in overarching cultural models, which provide individuals with the
knowledge they need to think and behave in certain ways under certain conditions so that they can act in ways that are meaningful and appropriate to others as well as interpret the behavior of others in meaningful ways (Dressler 2005). In other words, culture is a complex arrangement of collective representations that hold information about particular arenas of life. While an individual’s representation of cultural knowledge may be inaccurate or incomplete, the aggregation of these provides a sense of how most people in a particular social group think about the world. While cultural traits may be mostly arbitrary or may only make sense in a particular social and environmental context, they have considerable causal potential in that they influence people to behave in certain ways and invoke unpleasant social repercussions when they are violated (Searle 2006). Searle refers to these rules as constitutive because they define reality in a specific setting. This happens, according to Searle, because people agree that a certain thing counts as that thing in a specific context, and they behave accordingly. For the most part, this takes place on a subconscious level, and these understandings become so deeply embedded in the neuronal pathways in the brain that they come to represent some ultimate truth about the correct way to live, conflicts with which can be difficult to process. The idea of culture as shared knowledge moves it out of the realm of abstraction and allows for it to be described and measured in concrete terms. In this way, culture exists within individual minds but also between minds - thus the emphasis on collective meaning. An operational definition of culture is important because it makes the link between lived experience and biopsychosocial expression more tenable than theoretical approaches that do not consider how meaning is structured and acted on by individuals. Fleshing out the structure of particular cultural models requires systematic data collection techniques, including cultural domain analysis and cultural consensus
analysis, which measures the degree of sharing among individuals. Bringing it back to the individual, it is then possible to measure people against the cultural models to which they (or at least most people in their social group) subscribe. Cultural consonance, or the successful integration of cultural ideals and behavioral continuity with the widely shared and highly valued ideas about how to live, has been linked to better health outcomes (Dressler 2007).

Cognitive Methods in Biocultural Anthropology

Cultural Domain Analysis

The first step in cultural domain analysis is identifying the most salient and meaningful domains of life that carry weight in people’s minds and inform their behavior. Understanding the cognitive structure of a cultural domain as represented by a particular social group requires eliciting the salient items that make up that domain and then analyzing the dimensions along which individuals categorize the elements within the domain (Bernard 2011). Essentially, it is an effort to understand what aspects of life are considered most important within a particular cultural context, and how do individuals think and talk about these things. Along with ethnographic data, this can be accomplished through engaging informants in the cognitive tasks of free listing, in which they recall all the items that come to mind when they reflect on a particular domain of life, and pile sorting, in which they group items together based on like qualities. Rather than imposing certain restrictions on respondents’ understandings or assuming a priori what beliefs or behaviors really carry weight in terms of shared meaning within a group, cultural domain analysis allows researchers to elicit the salient items of a particular domain of life and examine the cognitive structure of that domain.
Cultural Consensus Theory

One distinguishing feature of a cognitive approach to culture is that knowledge is assumed to be unevenly distributed in the population such that individuals will vary in their ability to reproduce the shared knowledge of the group. Based on unique life experience, differences in socialization and position in the social structure, the extent to which each individual internalizes cultural knowledge will differ. In other words, individuals exhibit variable degrees of cultural competence, or knowledge about how one is expected to think and act with regard to certain cultural domains (Keesing 1974). As Boster (2011) explains, collective representations emerge out of individual efforts to understand the world around us so that we may respond appropriately and engage in meaningful social interaction with others. Cultural consensus theory (Romney, Welder and Batchelder 1986) provides an analytical tool that combines those individual efforts to arrive at a continuous whole; it operationalizes and measures the shared meaning that Keesing theorized. Originally, cultural consensus analysis was developed to help ethnographers identify primary informants, those who had the most knowledge of particular domains of life in a given social group. This involves systematically collecting individual representations of a cultural model and then measuring the degree of sharing between individuals to arrive at an aggregate set of cultural knowledge. Those whose individual models more closely reflect the overall consensus of the group are weighted more heavily in the analysis. These individuals might be identified as cultural experts, which may or may not be obvious through ethnographic investigation. Consensus analysis can also be used to graphically represent the distribution of knowledge in a sample and infer which items are being given priority or
significance over others. To detect the presence of a shared and salient cultural model, it must be
determined whether or not respondents tend to agree about the relative importance of the items in
the domain. Cultural consensus analysis quantifies agreement and examines how meaning is
distributed in a population so that the “elusive aggregate quality of culture can sensibly be
grasped” (Dressler 2005: 26). A high degree of agreement in a particular domain of culture
suggests that a cultural model for that domain does in fact exist and carry weight in people’s
minds. The cultural model represents the set of shared knowledge on which individuals structure
their understandings of how one ought to live. If membership in a cultural group indeed
accounts for most of the distribution of knowledge, then researchers can safely surmise the
presence of a cultural model and delineate it in empirically derived ways.

Residual Agreement

As a form of principal component analysis, the first factor generated by cultural
consensus analysis only explains part of the underlying variation in the respondent correlation
matrix (Dressler 2016). To reasonably conclude that respondents are drawing from a shared
cultural model, the eigenvalue ratio of the first to second factor should be greater than three to
one. However, there may be patterned variation in agreement that extends beyond cultural
membership and may help identify subcultures or alternative models within the sample. Known
as residual agreement, this is found in the second factor loadings generated by consensus
analysis. Because some individuals will tend to agree with one another more than with others, it
may be prudent to divide the sample into groups based on residual agreement scores; in other
words, to look at smaller contingents of respondents who tend to agree with one another rather
than with the overall sample. Combined with ethnographic analysis, this provides a sense of how members of a cultural group articulate their understandings regarding the correct ways to think and behave in distinct ways.

**Cultural Consonance Theory**

Cultural consonance theory is based on the idea that humans make a constant effort to meet the demands imposed on them by the social systems in which they live their lives and that lack of success in achieving these defined goals may produce measurable effects on biological systems (Dressler 2005). A person with low consonance may see him or herself as unable to act on the widely shared understanding of how life ought to be lived, and this has been linked to depressive symptoms (Dressler 2007), high blood pressure (Dressler and Bindon 2000) and low immune response functioning (Dressler et al. 2014). By operationalizing culture in terms of shared meaning and linking culture to the individual in terms of how well an individual is able to live within the framework of that shared meaning, researchers can begin to understand how intracultural variation in behavior is patterned and how this relates to health outcomes.

From a methodological perspective, studying cultural consonance is very straightforward. It considers the meaningful components of life as recounted in individual descriptions of lived experience and then uses these terms to develop a scale that is based on the degree to which people agree on what those meaningful components of life are. It then measures the extent to which individuals in a particular cultural setting approximate those shared ideals. In other words, cultural consonance links qualitative ethnography with quantitative methods in order to get at specific operational indicators of what causes stress and what moderates stress in culturally
sensitive ways. Cultural consonance then measures the ability of each individual to meet those shared expectations to which people hold themselves and are held by others.

**Finding the Culture in Acculturation**

Whereas the process of acculturation is often conceived of as acting in the same way and at the same rate on individuals, one distinguishing feature of a cognitive approach is that cultural knowledge is assumed to be unevenly distributed in the population such that individuals will vary in their ability to reproduce the shared knowledge of the group. For example, in his study of the cultural adaptation process in an effort to understand what factors may ameliorate mental health outcomes in the Latino population, Torres (2009b) found that general competence and intercultural competence partially mediate the inverse relationship between attributions to discrimination and depressive symptoms. Cultural competence was defined as a multidimensional process that determines one’s ability to perform specific cultural activities or fill certain social roles. It involves having specific skills and characteristics that facilitate this process, and it emerges from the interactions between individuals in a particular social and historical context. Proposing that the skills that facilitate cultural interactions are likely to affect psychological well-being, general competence was measured as the relative ability of individuals to set their lives up in ways that are compatible with their long term goals and the proactive agency to work toward those goals, while intercultural competence measured the ability of individuals to navigate between and engage successfully in both the U.S. mainstream culture and the Latino immigrant culture. This study considers the cultural context in which both interpersonal and intergroup interactions take place and shows that the ability to successfully
navigate and negotiate these experiences will have predictable effects on mental health. Additionally, Torres (2009a) found that Latino intercultural competence contains multiple domains or sets of skills that promote successful cultural navigation and which are embedded within cultural values from both the U.S. and Latino cultures. In order of importance, these domains include ambition and the desire to succeed, maintaining interpersonal connections, perseverance and hard work, maintaining traditional Latino culture, communication skills (in both Spanish and English), and community-orientation and activity. By “understanding the characteristics of intercultural competence, as defined by the Latino community, rather than outlining strategies that have been drawn from a mainstream frame of reference,” Torres (2009: 578) has successfully shown that what people know has an effect on their health outcomes. Cultural consensus analysis provides insight into the community’s definitions and beliefs about the mechanisms associated with effective cultural functioning. Whereas acculturation theory does not fully capture the complexities of the cultural adaptation process because it does not define or identify the particular elements associated with successful adaptation within a particular social context, a cognitive approach begins by clarifying the shared values of the group being considered. However, it also acknowledges that knowledge of how one is expected to behave will not necessarily be reflected in actual behavior. An individual’s ability to enact a cultural model in his or her real life will depend on several factors – personal agency or intentionality, socioeconomic standing, access to resources, and social support. A study of cultural consonance measures not only what people know but also what they do in terms of living out this shared cultural knowledge in their everyday lives. The ability to live up to a widely
agreed upon standard of appropriate and decent living is strongly correlated with positive health outcomes (Dressler et al. 2007).

Conclusion

A cognitive approach to acculturation involves systematically eliciting meaningful aspects of a particular domain of life from the respondents themselves and analyzing the structure of that domain in terms of what kinds of things are thought of as going together and why. The extent to which respondents agree on these cognitive configurations indicates that they are drawing from the same knowledge base to structure their understandings of the world around them and how they ought to live in that world. Individual representations are a function of personal experience combined with the integration of knowledge that a person has gained through social interaction (Dressler 2005). While individual representations of a cultural model may not be wholly accurate because knowledge is unevenly dispersed, taken together they form the basis of collective thought, or an overarching cultural prototype that represents the most likely configuration of a particular set of knowledge.

Culture consonance works as a theoretical construct as well as a methodologically sound means of analysis for several reasons. First of all, it is domain-specific and allows for cultural knowledge to be operationalized and measured, and it better captures the complexity of cultural phenomena and avoids the social-psychological reduction of culture into “attitudes, values, beliefs, and customs” of an “ethnic” group. Secondly, both specific and general effects of consonance can be identified. Third, it is designed to work in different cultural settings by drawing the meaningful components of life from the individuals who experience them. Fourth, it
has high predictive efficacy in that even when accounting for different variables, the effects of consonance do not disappear. Prospective studies of consonance have shown that the effects remain even over time, therefore discounting the notion of temporal ambiguity (Dressler et al. 2007). As a distinguishing feature, cultural consonance does not disregard an individual’s position in the social structure or the ways in which an individual’s ability to achieve a desired lifestyle is constrained by political and social forces over which he or she has no control. It allows for specific cultural elements to be considered within their social and historical context so as to avoid sweeping and speculative assertions about what is valued and why people behave in the ways that they do. A study of cultural consonance among Mexican immigrants living in the Southern United States could prove useful in better understanding the Mexican immigrant experience as well as the paradox in health outcomes and specifically the ways in which culture is implicated in the differences in biological functioning.
SECTION II:

MEXICAN IMMIGRATION TO THE UNITED STATES — BACKGROUND AND CURRENT STATUS
CHAPTER SEVEN:
MEXICO — THE SENDING COMMUNITY

It is impossible to understand the current reality of an immigrant population without acknowledging the historical context in which its sociocultural identity developed. For much of its history, notions of identity and loyalty among people living in Mexico were very much divided along regional lines. The twentieth century witnessed the emergence and the strengthening of a Mexican national consciousness while simultaneously incorporating even the most remote areas of Mexico into a process of modernization that has and is altering material lifestyles, dietary patterns, gender roles and belief systems. Constructing a comprehensible view of the broad patterns and themes endemic to Mexican culture necessitates a brief description of life during pre-Hispanic times, a consideration of how the arrival of the Spanish and the four centuries under Spanish rule disrupted life and set the region on a new social, political and economic trajectory, as well as how incorporation into an increasingly global community has impacted life in Mexico and propelled many north of the border. In addition to the political history and economic development of Mexico, I discuss notions of gender and constructions of family, including how these are changing as a result of the broader structural changes that have ensued during this process.
Political History

Hernán Cortés arrived in present-day Veracruz in 1519, and by 1521 the Spanish conquistadors had taken the Aztec capital at Tenochtitlán (present-day Mexico City) and captured the last Aztec emperor, Cuauhtémoc II. Despite the highly advanced social and economic system as well as a thriving intellectual and artistic class, the superior technology of the Spanish and the new diseases they brought with them were no match for the once powerful Aztec Empire (Hamnett 2006). Additionally, the Spanish were able to mobilize the indigenous people that had lived under subjugation to the Aztecs against their subjugators, thereby ensuring a Spanish victory (Buchenau 2012). Over the next century, the native population dropped precipitously to an estimated one million (Hamnett 2006). Cortés built modern day Mexico City upon the rubble of the razed city of Tenochtitlán, thus creating the colony of New Spain that would claim dominance over the land for the next four centuries. The conquerors ruled over the natives with a heavy hand, imposing forced labor first through the encomienda system, which gave the conquistadors dominion over the indigenous communities, and later through the hacienda system, which further subjugated the native population and made them increasingly dependent on the Spanish conquistadors.

When Napoleon invaded Spain in 1808, the colonial government fell into disarray, thus paving the path for Mexican independence. In 1810, Hidalgo made his famous Grito de Dolores (Cry of Dolores), which instigated a rebellion against the colonial government that initially gained a lot of momentum but was ultimately defeated. Despite being captured and executed during the rebellion, Hidalgo continues to be recognized as the instigator and first leader of the independence movement, and Mexico still celebrates Independence Day on September 16th,
marking the anniversary of his famous *grito* (Buchenau 2012). However, it was not until 1821 that the Treaty of Córdoba was signed, marking the official beginning of an independent Mexico, which was to be ruled by the emperor Augustín de Iturbide with Roman Catholicism as the official state religion.

From the beginning, Mexicans were divided over which form the new government would take, with conservatives pushing for a monarchy and liberals a republic. Over the next several decades, Mexico went through a series of leaders pushing either a conservative or liberal political agenda, many coming into power by succeeding in a coup d’etat against the current regime (Bunker and Macías-González 2014). In 1829, Mexico was so broken that Spain attempted reconquest, but the general Santa Anna succeeded in defeating these efforts, though the country remained vulnerable. As part of a massive expansion effort, the United States declared war on Mexico in 1846. Ending with the Treaty of Guadalupe Hidalgo, the United States incorporated much of what is now the American Southwest. The war with the United States strengthened a Mexican national consciousness while at the same time exposing many of Mexico’s rural peasants to new lifestyles, new technology and Protestantism (Buchenau 2012, Portes and Rumbaut 2014). Precipitated by the Liberal Constitution in 1857, 1858 marked the beginning of the final phase of the ongoing civil war between liberals and conservatives, further weakening the economy and devastating communities across Mexico. The economic stagnation and the social disintegration suffered as a result of decades of factionalism and war continue to plague much of the country, leaving what Wolf (1962) calls “an open wound upon the body of Middle American society to this day.”
In 1877, Porfirio Díaz took control of the government and instituted an impressive modernization campaign in hopes of strengthening Mexico and making the country a competitor in the global economy. By encouraging foreign investment (particularly from the United States and Britain), Díaz intensified commercial and economic development in Mexico (Good 2011, de Alcántara 1984) and turned Mexico City into a bustling metropolis. Díaz’ tenure essentially lasted until 1911 — his modernization efforts benefitting the upper class and serving to widen the gap between the rich and the poor (Bunker and Macías-González 2014), and this growing inequality led to the Mexican Revolution that began in 1910. Francisco Madero, a new leader promising democracy, agrarian reform and better protection for the poor, forced Díaz out of office but ultimately accomplished little in actualizing his promises. His failure to effect the promised social and political reforms led Emiliano Zapata in the south and Francisco Villa in the north to mobilize the peasants in a revolt against the government. From 1920 to 1924, Alvaro Obregón took on the task of putting Mexico back together by initiating a cultural revolution that reformed the education system, fostered women’s liberation, organized the workers, and loosened the reigns of the Catholic Church’s power in Mexico (Bess 2014, Buchenau 2012).

Today, power continues to oscillate between these two parties, with Mexicans rigidly divided along class lines (Bunker and Macías-González 2014). The Partido Revolucionario Institucional (PRI) rose to power and ruled over Mexico from 1929 to 2000. Plagued by corruption and electoral fraud, the PRI finally lost power when Vicente Fox – a former Coca-Cola executive and leader of the Partido de Acción Nacional (PAN) – won the presidential election in 2000 (Napolitano 2002). With the election of the current president, Enrique Peña Nieto, the PRI was reinstated, and Peña Nieto has vowed to modernize Mexico’s electoral
system, though his victory has been tainted by accusations of vote buying and fraud. The Zapatista National Liberation Army (EZLN) – formed in 1994 and named for the peasant revolutionary Zapata – is a political movement that demands greater protection of and autonomy for the indigenous people living in Chiapas (Buchenau 2012). Originally an effort characterized by guerrilla warfare, its current iteration revolves more around high-profile, peaceful political demonstrations and protests designed to put pressure on the government to consider the needs of Mexico’s indigenous population. These political divisions are the result of different parties trying to manage the expansion of neoliberalism and the structural changes that have ensued. Further, drug cartels have a lot of power and influence in the government and in people’s lives, and drug-related violence remains an overwhelming problem facing Mexico’s communities (Bunker and Macías-González 2014) and is one of the primary motivators of emigration.

**Economic Development**

Beginning in 1876 and lasting thirty five years, the government of Porfirio Díaz — known as The Porfiriato — promoted material improvements to Mexico’s infrastructure, including 15,000 miles of railroad track (Bess 2014). This facilitated economic development and political centralization, marking the beginning of industrialization in Mexico (other than textiles). Silver and copper mining boomed, the first modern post office as well as the first department store were built, and electrical lighting was installed in all of downtown Mexico City (Bunker and Macías-González 2014). More recently, the state sponsored economic development of the 1950s and 1960s led to rapid economic growth and established Mexico as one of the most developed of the developing countries (Bess 2014). Sometimes referred to as a period of Americanization, it was
during this time that Mexicans were introduced to hamburgers, Coca-cola, and television (Bunker and Macías-González 2014, Buchenau 2012). The economic crisis of 1982 prompted the Mexican government to seek a free trade agreement with the United States, and the North American Free Trade Agreement (NAFTA) went into effect in 1994 (Broughton 2008). Trade liberalization was supposed to bring economic stability and give Mexico better standing in the world economy. However, NAFTA implemented agricultural provisions that flooded the Mexican market with subsidized corn being imported from the U.S., which rendered many small family farms unsustainable. Poverty and income disparity continue to plague much of the country, and families are increasingly reliant on remittances from immigrants living abroad to support the household.

Further, during the negotiations of NAFTA, Mexico eliminated the constitutional right to ejidos (communal farming lands) leading thousands more to seek a non-agrarian life elsewhere, and rural peasant communities that remained suffered social, political and economic marginalization (de Alcántara 1984). However, there are significant downsides to abandoning these communities. The allure of better jobs and aspirations for a higher standard of living compel people to move from these areas to more densely populated and industrial areas (Lomnitz 1974), but high rates of unemployment as well as a housing crisis have made the fulfillment of these expectations hard to achieve (Bunker and Macías-González 2014). In the 1940s, Mexico experienced what is often referred to as the “Mexican Miracle,” in which sustained economic growth propelled the country toward a modern, middle-class material lifestyle (Bess 2014, Buchenau 2012). Material goods such as refrigerators and cars became increasingly accessible for a wider range of the population. The government encouraged a sense of Mexicanidad that
sought to standardize material consumption in households across the country. Education, changes in diet, and assimilation to Western material lifestyles was promoted heavily in indigenous communities as well. However, with devastating inflation in the 1970s that worsened with the economic collapse of the 1980s, many people – specifically the urban working poor – lost the purchasing power necessary to maintain such a lifestyle. Urban workers, many of whom had recently immigrated to urban centers from the countryside, could not rely on the subsistence agriculture practiced by the rural peasantry, nor did they have the social support systems to buffer the effects of economic disparity (Bunker and Macías-González 2014). Efforts to improve food distribution and provide better housing and other social services have not been sufficient to relieve the devastating effects of social, political and economic marginalization for many Mexicans, and this has resulted in what is increasingly considered forced (not willful) immigration to the United States. The countryside of Mexico has become unlivable, and out-migration to larger urban areas of Mexico or to the United States has rendered many communities desolate (Cartwright 2011).

**Gender**

Pervasive throughout Latin America, gender constructs in Mexico depict men as strong, hyper masculine and authoritative and women as passive and nurturing (Ingoldsby 1991, Villegas, Lemanski and Valdéz 2010). This dichotomy between the *machismo* and *Marianismo* gender role themes is highly salient in the Mexican cultural milieu. Based on conceptions of the Virgin Mary, the ideal woman is considered a gentle and generous mother who puts the interests of her husband and children above her own. She is non-sexualized, and her identity is rooted in
her role as wife and mother (Napolitano 2002). According to Villegas, Lemanski and Valdés (2010), *Marianismo* is characterized by a “sense of collectivism, self-sacrifice, devotion to family, and nurturance, and [also] dependency, submissiveness, passivity, and resignation in the face of oppression.” At the opposite end of the spectrum, the hypermasculinity of *machismo* is marked by dominance over women in every area of life, sensitivity to insult (especially the suggestion of weakness), and the desire to demonstrate self-worth through displays of aggression and sexual conquest (Gutman 2006). At the same time, men derive a sense of honor from being good providers and protectors and maintaining the well-being of their families (Kanaiaupuni 2000).

Of course stereotypes and ideal models of men and women are just that – ideal – and they are not necessarily reflected in the everyday reality of life in Mexico. Notions of masculinity and femininity are fluid, and they are shaped by dynamic processes of identity negotiation and decision-making in response to structural changes in social and political-economic forces (Broughton 2008). Studies have shown that watching television, particularly American TV shows, is altering perceptions about femininity and masculinity (Villegas, Lemanski and Valdés 2010, Murphy 1995). Gutman (2006) contests the notion that there is a singular meaning of *ser hombre* (being a man) among men in Mexico and argues that expressions of masculinity are negotiated and renegotiated by men and women daily and in both public and private spaces. Notions of female identity and virtue in Mexico are dominated by wifehood and motherhood, though these are being contested as well (Napolitano 2002). For example, *la quinceanera*, the coming of age celebration for Mexican girls, highlights the tension between the honor of becoming a woman and the expectation of her acquiescence to the family’s control over her
Additionally, while most studies have suggested that for women in Mexico the ideal family size is three to five children and that infertility is a great shame and misfortune, Browner (1986) found that peasant women in the small municipality of San Francisco Ixhuatán in the state of Oaxaca “express sharply negative attitudes about childbearing and child rearing.” Villegas, Lemanski and Valdés (2010) describes the polarization of female gender roles into two categories – one is the more traditional, family-oriented, non-sexual wife and mother, and the other is the independent, sexually liberated professional woman who works and socializes outside of the home. Referred to as *la mujer traicionera* (the unfaithful or treacherous woman), this construct derives from the historical figure La Malinche, an indigenous woman who aided Cortes in the Spanish conquest. Men may blame their own shortcomings on this “type” of woman, thus justifying her oppression and providing men a means of evading personal culpability for their own failures (Peña 1991). Female subjugation is a pervasive reality in Mexico, particularly in poor urban areas; however, as more men choose migration, females are forced (or allowed) to become more self-sufficient (Napolitano 2002, Broughton 2008). While there is no doubt that notions of gender identity and gender relations are changing as part of a broader process of social transformation, the constructs of *machismo* and *Marianismo* still serve as a baseline for gender identity in Mexico, and they cannot be overlooked in attempts to understand other aspects of the culture as well as how individuals interact and carry on relationships with one another both within the household and the larger community. The concept of women working outside the home and being dual providers with their husbands or partners is more socially acceptable in the United States and much more common among Mexican immigrants living in the U.S., though this necessitates a restructuring of the family and
household dynamic for many immigrants that is quite different from the one within which they were raised.

Family and Community

Familismo is another important aspect of life in Mexico. The centrality of the family is a core feature of Mexican culture, and family members are bound to one another through a system of responsibilities and obligations that are strongly prioritized in everyday life (Ingoldsby 1991). The central tenet of familismo is the prioritizing of the family over the advancement of individual interests, and this is especially the case for women. Gender roles define expectations for how individual family members should behave and what kind of power dynamic should exist between them (Kanaiaupuni 2000). While it does not always reflect reality, the ideal situation is for women to take responsibility for the domestic duties and for men to provide for their families and participate in the local political system in some capacity. The ideal family pattern is patrilocal residence whereby the son brings his wife to live in or near his father’s home where she is expected to be submissive to her mother-in-law and the rest of the man’s family (Dressler et al. 1986). For Mexicans, the family is the primary source of economic, emotional and social security (Kanaiaupuni 2000). Children are very important to a mother’s self-image and to her social status in the community, and mothers gain respect with age. Many teenage and adult children work to supplement the family’s household income, and children are expected to comply with parental rules and regulations in the arenas of dating and marriage (Ingoldsby 1991).
Today, the nuclear family is the typical unit of social organization, but the extended family is also very important. Additionally, a system of fictive kinship is extremely important in Mexican social organization. In the sixteenth century, the Spanish settlers introduced a system of compadrazgo, or ritual godparenthood, as a way of formalizing the relationship between the natives and the conquistadors (Foster 1967). As native communities had been devastated by disease and forced into a system of peonage, this ritual provided a way for natives to extend a formal social tie to their overlords in exchange for guaranteed labor and material support for their families (Dressler et al. 1986). The overlords benefited by assuring the native’s continued loyalty to the hacienda. Additionally, it was a means of ensuring baptism into the Catholic Church and continued education and guidance in the Church’s teachings (Mintz and Wolf 1950). In baptism, the ritual kinship between a child, his or her parents and the selected godparents was established, and this was reinforced throughout the child’s life as he or she performed other sacraments like confirmation and marriage. The godparent-godchild relationship extends beyond religious events to other important moments in the child’s life as well. The relationship between compadres (co-parents), however, outweighs the godparent-godchild relationship in social and economic importance (Mintz and Wolf 1950). It sets up a system of social support through reciprocal relationships that provide people with a sense of social and economic security. It strengthens both horizontal relationships among people in the same social class as well as vertical relationships as people ask for support from those higher on the social ladder (Dressler et al. 1986). This system of fictive kinship continues today and is an important mechanism in promoting social stability and security in Mexican communities, and the disruption of these social support networks with emigration to the U.S. can be very difficult to overcome.
Summary and Conclusion

Mexico’s rich cultural heritage must be understood as a blending of pre-Hispanic and sixteenth century Spanish cultural products and institutions that have been renegotiated and redefined throughout centuries of domination and resistance, continuity and change. While the Spanish sought to transplant their political, economic and religious systems in Mexico, elements of the strong and vibrant culture of the indigenous people could not be completely squelched. Mexican national identity continues to be shaped as Mexico becomes more deeply embedded in the global market and as more and more Mexicans create new lives for themselves in the United States.

I outline these dominant themes in the Mexican cultural milieu as a point of reference to better understand how life changes for Mexican immigrants in the United States, but it is important to note that Mexico is changing as well. Emigration has impacted all aspects of the Mexican village. From the English language to the American diet to fashion and music, the impact of U.S. culture on Mexico is undeniable (Bunker and Macías-González 2014). A culture of migration has taken shape, and family structure and social networks have been disrupted as members of so many households take up permanent residence in the United States. Money coming in from family members in the U.S. has changed the standard of living for many families and communities, creating a dependence on many material and household items that would have seemed outlandishly luxurious a decade ago. I mention this because my research focuses on the health effects of cultural transition, and while many scholars conceive of this process as beginning with physical relocation, I think it is important to note that for many people cultural
transition starts taking place long before the decision to relocate is even made. Upon arrival, knowledge of American culture and ways of life is unevenly distributed among immigrants, and this may affect how the process of adaptation and integration plays out for different individuals. Migration is driven by economic forces, for the desire to improve one’s standard of living and ensure better educational and career opportunities for the children, and aspirations of achieving a modern, middle class lifestyle are the primary motivators in migration and resettlement. However, other facets of the Mexican cultural and religious values system are not lost in this process, and one way that migrants maintain a sense of cohesion and solidarity with their communities of origin is by continuing to enact these less tangible ideals even while they distance themselves in other ways. Migrants are tasked with making sense of and responding to new experiences in distinct cultural environments, though in doing so, they must draw on the cultural knowledge and meanings they have accrued throughout their lives in a different sociocultural context. The specific ways that this plays out will be discussed in subsequent chapters.
CHAPTER EIGHT:

MEXICAN IMMIGRATION TO THE UNITED STATES

Transnational forces structure all aspects of immigration – from the decision to migrate initially and the actual journey from one place to another to the establishment of life in a new setting as well as the way immigrants are received by the natives in their new homes (Schiller et al. 1995). For this reason, immigration is best understood and patterns more accurately anticipated when viewed from a transnational perspective (Portes and Rumbaut 2014). While classical theories of immigration predict continuity over change (Lee 1966), the United States has seen several distinct waves of immigration that upend this notion. A fresh look at how the structural conditions in both origins and destinations as well as how “push” and “pull” forces and incentives are changing is necessary to understand the decisive factors distinguishing these periods of migration and what this means for the incorporation of immigrants into American society. Understanding the meaningful ways in which Mexican immigrants attempt to integrate themselves into their new homes while remaining meaningfully connected to their communities of origin is important in rounding out the experience of these newcomers as they come and go and move between. In this chapter, I outline the history of Mexican immigration to the United States, considering the structural and individual forces that have driven migration in the past as well as the more recent dispersal to other parts of the country, and I discuss how the Mexican cultural milieu laid out in the previous section is translated into a new social and environmental
context as immigrants find their place and shape their identities in a society that is often hostile to their presence.

**Setting the Stage: The Context of Mexican Migration**

Postindustrial capitalism has generated great wealth for a few, though it has also destabilized local economies and livelihoods and forced many into poverty (Chavez 2001). Macro processes of globalization, restructuring of regional economies, and increased migration are all interrelated as the poor are displaced from underdeveloped regions and move in search of work in other labor markets (Zavella 2011). Simultaneously, it has fostered new desires and aspirations for higher standards of living – what Suarez-Orozco (2005) calls an “imaginary of consumption” – that more often than not goes unfulfilled. Globalization theory (Appadurai 1995) holds that new developments in communication and technology have precipitated a reconfiguration of time and space that has allowed for movement and social interactions to take place across the globe, which has fundamentally changed the ways in which local economies and daily realities are shaped by global forces. Under the auspices of not interfering in the market, neoliberal economic theory (Harvey 2005) has in actuality given the state even greater authority in regulating - or deregulating - industry, shifting blame for adverse living situations to the poor, recruiting while simultaneously criminalizing immigrant laborers, weakening unions and worker protections, investing public funds into private enterprise so that the wealthy get wealthier and the divide between the wealthy and the middle class becomes increasingly stark (Horton 2016). Subject to less scrutiny, private enterprise has the liberty to outsource labor, contract part-time employment and wield greater domination over labor unions (Stuesse 2016). The deskilling and
intensification of labor made Mexican immigrants an ideal workforce by rendering them hyperexploitable. The neoliberal business model prioritizes controlling labor to maximize profits and reducing costs by recruiting the cheapest and most expendable workers in order to expand and acquire as much of the market as possible.

Individuals and families articulate with the global capitalist economy in complex ways as they are simultaneously drawn to it and oppressed by it (Ong 1999, Appadurai 1995). It is not absolute poverty nor the poorest places in the world that are associated with high levels of migration; rather, it is the places where events such as natural disasters, war, political crises and violence have disrupted traditional ways of life and forced the restructuring of economic production and social networks for individuals, families and communities (Hirschman and Massey 2016). As countries and communities are incorporated into the international capitalist economy, social and political disruptions ensue – the natural outgrowth of which is forced dislocation or willful migration (de Alcántara 1984). While neoclassical economic theories (Lee 1966) regard the individual migrant as a self-interested economic agent who rationally weighs present and potential earnings in alternative locations, this theoretical model obscures the social context of immigration and disregards the human agency and subjectivity that inform these processes. Further, while immigration trajectories are commonly regarded as linear, the comings and goings, both willful and forced, challenge this understanding (Boehm 2016). The effects of globalization reverberate on the local level and often force individuals to move around in order to find their place in a changing sociopolitical and economic system. However, this process is wrought with uncertainty, as detention and deportation of unauthorized persons are at an all-time high, and undocumented immigrants must take calculated risks in pursuing better
opportunities. Both internal and international immigrants tend to move from rural villages to urban communities, and they both experience linguistic and cultural discontinuities as well as bureaucratic and legal restrictions and discriminations (Lomnitz 1974, Napolitano 2002). At the same time, immigrants to the United States are embedded in broader transnational social fields; they draw on various forms of sociocultural resources to make sense of their journeys and to recreate the homeland abroad. However, stark changes in sociocultural and environmental context force them to renegotiate certain ideals and ways of being, thus transforming personal identities, household structures, and social support networks in significant ways. While it is a process wrought with tension, immigrants are carving out their place in the social and political landscape of the United States, making it clear that they are here to stay.

**History of Mexican Immigration to the United States**

Marking the end of the Mexican-American war in 1848, the Treaty of Guadalupe-Hidalgo allowed for the incorporation of what is now much of the American Southwest, and the 2,000-mile border between Mexico and the United States was created. Over the next fifty years, the Mexican-origin population grew slowly as Mexicans migrated to these areas, eventually reaching 150,000 by 1900 (Massey and Capoferro 2008). In 1882, after anti-immigrant attitudes and policies cut off the Asian labor source, California and Texas ranchers intensified the deliberate recruitment of Mexican workers through economic incentives (Portes and Rumbaut 2014). As a result, Mexican immigration to these areas surged. There was an initial honeymoon phase with Mexicans as ideal migrant laborers because they were willing to do incredibly hard work for low wages, and they could easily go back to Mexico at any time. In 1911, the Dillingham
commission issued a report to the U.S. Congress that warned of promoting long-term settlement, admonishing employers that while Mexicans worked well as temporary laborers, they were less desirable as citizens because they were not easily assimilated (Hondagneu-Sotelo 1994). The 1924 National Origins Act exempted Mexico from the immigrant quota imposed on European countries, and in 1929, Mexican commuters were given legal status. By 1930, the Mexican immigrant population had reached 740,000, but the Great Depression transformed Mexicans from sought-after workers into unwanted guests (Massey and Capoferro 2008). By 1940, mass deportation campaigns had reduced the Mexican population by half. During the Bracero Program, a guest-worker program instituted after World War II that lasted from 1942 to 1964, two million Mexicans were registered to work legally in the United States (Bunker and Macías-González 2014). In another round of mass deportation in 1954, Operation Wetback rounded up over one million Mexican workers and sent them back to Mexico. The termination of the Bracero program in 1964 was expected to squelch Mexican immigration once and for all. In 1965, Congress passed the Immigration and Nationality Act, which allowed for family reunification for immigrants living in the U.S. and incentivized the small-scale recruitment of occupational specialists, mostly from Europe and Asia (Hirschman and Massey 2008). A massive, long-term surge in immigration was not expected, and it certainly was not anticipated to originate in Latin America and specifically Mexico (Foley 2014).

However, with the rise in demand for low-wage workers, easily accessible mass transportation, and the aspirations of achieving a higher standard of living, immigration to the United States became an increasingly compelling option for many Mexicans starting in the 1970s. An economic crisis in Mexico and the industrial restructuring of the American economy
— from large-scale, capital-intensive production and a well-paid, unionized, native workforce to a labor-intensive, low-paid, non-unionized, foreign workforce — accounted for the surge in Mexican immigration (Mohl 2002, Foley 2014). While the vast majority of Mexican migrants have relocated within Mexico, and the U.S. diaspora constitutes a small minority, the next three decades experienced an unanticipated surge in immigration from Latin American countries, particularly Mexico, to the United States. Rural peasant communities in states such as Zacatecas, Michoacán, and Jalisco have long traditions of U.S.-bound migration; more recently, larger urban centers such as Gaudalajara, Puebla, and Distrito Federal have emerged as sending communities (Hondagneu-Sotelo 1994). Most immigrants settled in large metro areas in New York, California, and Texas (Hirschman and Massey 2008). At first, Mexican immigrants were mostly single men working seasonal jobs and sending money home to their families in Mexico. Even the lowest status jobs in the United States paid substantially more than the same kinds of jobs in Mexico, which were hard to come by anyway (Foley 2014). In 1990, California, Texas, New York, Florida, Illinois, and New Jersey contained 78% of the U.S. Latino population, and immigrant communities in gateway cities such as Los Angeles, Houston, Dallas, New York City, Miami, and Chicago became firmly established. Between 1995 and 2000, however, these destinations accounted for less than half of new arrivals (Massey and Capoferro 2008). The twenty first century has witnessed a new wave of immigrant settlement, characterized not by large metropolitan destinations of the 1970’s and 80’s but smaller, more rural towns in the South and Midwest.
New Destinations

In an unanticipated shift in immigrant settlement, new arrivals began to disperse all over the country, eventually establishing a presence in all fifty states. Between 2000 and 2010, the Latino population in the South grew by 57%, more than four times the total population growth (2010 U.S. Census). Massey and Capoferro (2008) cite four main factors in the geographic transformation of immigrant settlement in the 21st century. First, the passage of the Immigration Reform and Control Act (IRCA) of 1986 granted amnesty to 2.3 million Mexicans, who could now move freely around the country. Second, the increased militarization of the border made clandestine entry much more dangerous, particularly for women because they are more vulnerable to being assaulted or raped (Steusse 2016). While IRCA made going back and forth much harder, this did not deter unauthorized crossings; rather, it pushed them to different locations, increased smuggling fees, and maximized risks in crossing the border (Zavella 2011).

The price of a coyote, a human smuggler, increased 75% between 1965 and 1985. Up from around twenty three people in the early 1990’s, it is estimated that more than 300 people die crossing the border each year (de Leon 2015). The perils associated with crossing the border sin papeles, or without authorization, are numerous. Starting in the 1990s, state-issued anti-immigration efforts like Operation Blockade in El Paso, Operation Gatekeeper in San Diego, and Operation Safeguard in Arizona made crossing the border into these areas more difficult, and while this did not deter Mexicans from crossing the border illegally, it served to channel them to less visible locations along the border. Once across, they sought out places where enforcement was not as tough. Third, the passage of Proposition 187 in 1994 made California a less appealing destination because in addition to prohibiting public services and education to
undocumented immigrants and children, it served as a clear message that Mexicans were not welcome there. And finally, because job opportunities and economic incentives are huge motivators for migration, the changing geography of labor demand served as the most dominant force in this dispersal, particularly in the South. Labor markets in California and other popular immigrant destinations were saturated, and there was a growing demand for low-skill, low-wage labor in the southern job market, particularly in agriculture, manufacturing, and poultry processing (Foley 2014, Stuesse 2016). New arrivals flocked to these new destinations, many of which saw exponential increases in the Hispanic population in short order. This has radically altered the demographic profile of these communities, many of which had little or no history of immigrant settlement and have struggled to accommodate such a rapid increase in the foreign-born population (Marrow 2008).

The shift in geography of immigrant settlement has been especially dramatic for Mexicans in the 21st century. According to Griffith (2008), new immigrant destinations tend to be characterized by several common developments. One commonality is previous experience of communities with a sudden and drastic restructuring of the social landscape to accommodate non-whites. This is true for many southern towns, where the Civil Rights Era had forced these kinds of changes in nearly all aspects of life. Another commonality is a developing food industry, which is always directly tied to economic progress and is heavily dependent on foreign labor. This was again true for the South, which came to be the nation’s primary source of poultry processing and meatpacking. In the South, new immigrants tend to be younger, less educated, more recently arrived, and more Mexican (Hirschman and Massey 2008). They also tend to be unauthorized (Vásquez et al. 2008), which renders them hyperexploitable and forces them to
endure excruciating conditions for very little pay. Jobs in poultry processing plants, meatpacking, construction and agriculture were fairly easy to come by in Southern rural towns starting in the 1990’s.

While the primary drivers of global movement are economic forces, it is social networks that facilitate it (Horton 2016). As information about job opportunities spread, a rush of chain migration brought more Mexicans looking for work as well as women and children joining their husbands and fathers. Anthropologists and labor migration specialists have long understood that social networks play a crucial role in shaping immigration patterns, which benefits industries that no longer have to spend resources on active recruitment — the social networks do it for them (Stuesse 2016). The decision to migrate requires the ability to mobilize exchange through social networks, and this begins long before migration happens (Zavella 2011). This process of cumulative causation broadened the base of migration so that the original push-pull factors became less relevant and other incentives — family reunification, better education for children, establishing permanent roots — kicked in (Hirschman and Massey 2008). Mexicans are still sending money home to their families in Mexico, but they are also seeking to establish a new home in the United States and slowly and carefully integrating themselves into the fabric of their new communities.

**Reception and Reaction**

With the passage of the Treaty of Guadalupe-Hidalgo, the United States government declared upwards of 50,000 Mexicans living in the area of incorporation American citizens unless they formally declared intent to remain citizens of Mexico (Foley 2014). While the treaty
guaranteed Mexican property rights would be respected, the system of common property was not recognized by the United States, and land-seeking individuals could simply claim a piece of land for themselves when the people living there could not prove ownership through documentation (Foley 2014). This set the stage for the incorporation of Mexicans into U.S. society, the ambiguous nature of which continues to define this process today. Though this was not necessarily the case in the nineteenth and much of the twentieth centuries, recent changes in the political climate and the economic restructuring of American industry has led the United States to skirt a fine line with Mexican immigration — a private position that encourages and depends on it and a public position that discourages and even demonizes it (Portes and Rumbaut 2014). This turmoil ensues because as an economic enterprise, it cannot be denied that Mexican immigration has been a life source for American business — both in terms of labor and keeping small towns alive by investing locally — but government services have had a much more difficult time meeting the demands of a new and needy population. Because of this, immigrants are simultaneously celebrated and condemned, embraced and despised.

In what politicians often refer to as “our immigrant problem,” immigrants from Latin America and particularly Mexico have come to dominate immigration discourse and policy (Chavez 2001). At the end of the 1980’s, the cover of Time magazine posed the question: “What will the United States be like when whites are no longer the majority?” (Foley 2008). The aftermath of September 11, 2001, led to the “objectification of migrants as threats to the nation” (Zavella 2011). While both countries had been engaged in an ongoing conversation regarding how to manage Mexican immigration to the U.S. in ways that were mutually beneficial to both countries, this discussion abruptly ended on 9/11, and the United States focused on
strengthening border security and increasing the policing of the interior (Alba 2016). In 2007, as part of an operation called Return to Sender, Immigration and Customs Enforcement (ICE) raided work places and made “collateral arrests” if individuals could not show documentation of legal working status (Zavella 2011). Xenophobic fears of racial diversity, cultural dilution and economic competition have driven a lot of anti-immigrant hostility, especially in small towns where nativism and fear of social change runs high.

So, where do immigrants fit in conceptually to the larger society? Essentially, they are from outside, but they live inside, and this perpetuates a constant struggle (Chavez 2001). They may remain connected to their communities of origin in meaningful ways even as they adapt their beliefs and behaviors to those of their new sociocultural environment (Schiller et al. 1995). Even as low-wage immigrant workers have become a cornerstone of capitalistic enterprise, they have also become a threatening presence, and an increasingly hostile anti-immigrant sentiment has emerged as a social and political concern (Chavez 2001). Much of this hostility is directed toward Mexicans, and it seems to be intensifying even as Mexican migration trends have reversed themselves in recent years (Massey and Capofero 2008). Chavez (2001) discusses the irony in the dual nature of American sentiment surrounding Mexican immigration: Americans like to conceive of the United States as a welcoming land, a country that embraces the poor and downtrodden and provides a better life for them; however, many Americans perceive immigrants as threatening and dangerous, which often leads them to act hostile and unwelcoming towards those they assume to be immigrants, particularly unauthorized ones. This plays out in the irony of hiring Mexicans as employees (nannies, gardeners, housekeepers) and supporting their persecution (Portes and Rumbaut 2014). Further, there is a false perception that all immigrants
are illegal, and this appears to be fueling the growth of anti-immigrant sentiment in the United States, particularly toward Mexicans and Central Americans.

Several factors predict how certain groups of people will feel about immigration and respond to immigrants in their social space (Espenshade and Hempstead 1996). Low socioeconomic status and marginalization from mainstream society are predictors of low levels of tolerance for immigration and a heightened sense of threat toward immigrants with whom they may interact. This does not bode well for the South (see Chapter 4). However, noticeable efforts within the community to welcome immigrants work against state-mandated immigration policies. The Catholic Church tends to be on the front lines of welcoming and meeting the needs of immigrants by offering a range of services, including English language classes, education on immigrant rights, translation assistance and a place to socialize and feel safe. Throughout the South, both Catholic and Protestant churches have taken on this burden and through these efforts successfully recruited many of these new arrivals. School systems in these new destinations are tasked with accommodating foreign-born students and providing them a platform for successful integration into American society. Another way communities accommodate and welcome these new arrivals is by sponsoring festivals on important Mexican holidays like Cinco de Mayo and Día de los Muertos (Day of the Dead). These serve as cultural performances and send powerful messages. Traditional Mexican dances are performed, traditional foods served, and local Mexican businesses promoted. These are educational and cultural experiences for the native community, but more importantly, they send a message to Latinos that it is okay for them to be here. For individuals living in fear of deportation or hostility in interactions with natives, this is an important way that the community embraces their presence. This facilitates the process of
establishing locality and helps immigrants figure out where they fit in the narrative of place (Shutika 2008). However, Chavez (1991) contends that the full incorporation of Mexican immigrants into American society depends not on their own attitudes and behaviors but on the larger society’s perception of who they are and why they are here. Until they are recognized as contributing members of the community, they will remain marginalized and treated with hostility. More research is needed on how immigrants elaborate their residence within these new communities and how these institutions facilitate (or inhibit) the successful integration of new arrivals.

From a labor perspective, the economic basis of immigration has often been at odds with the cultural reaction. Portes and Rumbaut (2014) describe what they call an “American waltz between labor demand and identity politics.” IRCA made labor crews the primary source of work for undocumented migrants by making it a punishable offense to knowingly hire unauthorized persons. Rather than curbing the employment of this workforce contingent, employers began to hire through subcontractors in attempt to insulate themselves or rotate the workforce so as to not attract federal scrutiny. This also precipitated a black market for labor documents, another mechanism by which the undocumented are exploited. Neoliberal restructuring made American companies absolutely dependent on migrant labor, which is hyper exploitable and readily expendable. In what some have termed the “race to the bottom,” companies compete over acquiring the cheapest and most expendable laborers so as to increase the profits for the top earners. Horton (2016) suggests that under the auspices of protecting American jobs, labor laws have exerted a “downward pressure of the labor hierarchy that reverberates most forcefully at the lowest level.” Immigrant workers become desirable to
employers because they are perceived as being reliable and flexible, willing to work hard or
dangerous jobs for low-pay with no real prospects of upward mobility. While there was a
legitimate economic basis to the anti-immigrant sentiment during the days of heavy European
immigration (fueled by the replacement of skilled craftsmen with cheap, migrant labor), there is
little legitimacy to the perceived threat today with regard to Mexican laborers “stealing”
American jobs (Alba and Nee 1997, Garcia 2005). And yet this perception continues to fuel anti-
immigration feelings and legislation. A lot of claims are made about Mexican immigrants in the
United States – how many are here illegally, how many cannot speak English, what kind of
financial drain they are putting on the health care system. Durand and Massey (1992) say that
much of this is speculation, that it is not based on actual evidence but that because immigration is
such a politically charged issue, the facts are obscured and anti-immigrant sentiment is stoked.

Gendered Transitions and Changing Family Dynamics

As an analytic category, gender is often overlooked in immigration theory; however,
gender relations within families and social networks intersect with political-economic
restructuring to shape patterns of migration and settlement in profound ways. Since the passage
of IRCA in 1986, which was intended to restrict immigration and particularly unauthorized
immigrant settlement, more women and families began participating in both. Increased border
security made going back and forth more difficult, which propelled many women and children to
make the journey out of fear that the husband would start a new family and neglect his
obligations to them. In the 1970’s, Mexican women’s labor force participation increased more
than 50 percent, and by 1995, women made up 57% of unauthorized immigrants from Mexico.
Hondagneu-Sotelo (1994) argues that gender and immigration are reflexively intertwined as men and women make distinct calculations in their decisions to migrate, face different obstacles getting across the border, and play unique roles in solidifying settlement. Further, gender relations are reconstituted in the context of life in the U.S. The patriarchal relations characteristic of Mexican families are weakened as both men and women respond to the pressures exerted by structural and economic transformations, which often results in the strengthening of women’s position and autonomy in the household, a fact that bears heavily on the migration and resettlement experience for the entire family.

While Mexican men tend to make the decision to migrate quickly out of fear of missing an opportunity, women tend to spend more time and energy brooding and strategizing their migration plans (Hondagneu-Sotelo 1994). Fear of the treacherous journey across the river and the desert, of being left alone, of being sexually or otherwise assaulted, the humiliation of being caught and not completing the journey, and the knowledge of having no other recourse consumes them leading up to and during the journey. Women who endure are often considered to be muy machas, a term typically reserved for men that means strong and determined. While completing the journey successfully may bring some reprieve, the sense of loss, the grieving of the people and the life left behind, the feeling of being unwanted and undeserving in their new home make the goal of re-creating their lives in the U.S. immensely more challenging (Zavella 2011). Upon arrival, undocumented Mexican immigrant women tend to seek employment in domestic work, child care, food service and garment manufacturing. Women are more likely than men to express the desire to settle permanently in the United States, though the desire does not always reflect the reality. They tend to be more active in establishing community-wide social ties, working in
relatively stable, year-round jobs, and utilizing institutional forms of assistance, including health and financial services (Hondagneu-Sotelo 1994). Along these dimensions, women are key players in consolidating and shaping patterns of settlement in the United States.

Second-generation immigrants face both new opportunities never afforded to their parents or grandparents as well as new challenges. For many recent arrivals, particularly women and children, family reunification is often a deciding factor in the decision to migrate (Garcia 2005). Considering the centrality of the family in Mexico, this makes sense. Immigrants do not exactly reproduce old relationships, but the cultural understandings that they bring with them do play a role in the reconstruction of family life in a new context (Boehm 2008, Foner 2005).

Reconstructing and redefining family life is not an act of passive resistance, although it is shaped by the interplay between structure, culture, and personal agency as well as social, economic and political forces. Pre-migration cultural conceptions and social practices are restructured, redefined and renegotiated in response to the changing environment (Alba and Nee 1997, Boehm 2008). Portes and Rumbaut (2014) identify three prominent barriers to the children born in the United States to one or more foreign-born parents: racial discrimination, an expanding gap in the labor market, and the drug-use and street violence endemic to inner cities in the United States where many migrant communities take hold. Studies show that children quickly internalize the values placed on certain physical features, such as brown skin, dark hair and short stature, in whatever social context they find themselves and that the ways in which they perceive themselves as having or not having certain features and the ways they perceive others perceiving them have dramatic effects on their aspirations, academic performance and occupational mobility (Geschwender 1967, Portes and Rumbaut 2014). Alba and Nee (1997) have found that most
immigrants and their children strive to learn English and integrate themselves into their new environment; however, the relative ability to succeed in this process spans a wide range, and for those with limited resources, the ability to accomplish this remains low.

Summary

Global movement is contingent upon changing circumstances — macro-structural changes in the global economy as well as shifts in social networks — in both the origin and the host country. Immigration policy in the United States has at times reflected the absolute dependence of United States industry on migrant labor and at other times reflected public discourses that paint migrants as a threat to U.S. — and ultimately white — society. These tend to coincide with economic gains and losses. The twentieth century witnessed the first barriers to Mexican immigration with the Immigration Act of 1917, which imposed a head tax and literacy test on those entering the U.S., the creation of Border Patrol in 1924, and the repatriation of 400,000 Mexicans during the Great Depression. However, this century also saw the national quotas lifted for immigrants from Mexico, the development of the Bracero program, and the active recruitment of Mexican labor by U.S. industries. The state has been actively involved in both recruitment of Mexican workers and massive deportation efforts that are extremely disorienting and disruptive for all affected. The contrasting migration trajectories between Mexican men and women as well as the distinct efforts women make in solidifying resettlement play a pivotal role in the integration of immigrants into the social and political fabric of American society, though this is often met with resistance and outright hostility at both the community and the state level. While global processes instigate and define immigration processes, it is individuals, families, and
communities that bear the brunt of macro-structural forces beyond their control and must adapt to the disruptions they cause.
CHAPTER NINE:
MEXICAN IMMIGRATION TO THE HEART OF DIXIE —
THE RESEARCH SETTING

“When state geologists mapped the Birmingham District’s mineral resources in the mid-1800s, they found great quantities of the three ingredients necessary for the manufacture of foundry iron: coal, limestone, and iron ore. The availability of these three ingredients and the ability to recruit a large and inexpensive pool of labor made Birmingham’s industry possible.”
- Plaque at the Vulcan Museum in Birmingham

The U.S. South experienced a 57 percent increase in the Hispanic population between 2000 and 2010 - four times the growth of the total population in this region - and individuals of Mexican-origin make up around 30 percent of this population (U.S. Census 2010). The South is home to eight of the top ten poultry-producing states in the nation, and the poultry industry’s heavy recruitment of and reliance on immigrant labor has quickly and dramatically changed the demographic landscape of the region. During the 1990s, over half a million Latinos moved to the South, and every southern state has experienced a Hispanic growth rate of greater than 100 percent since 2000 (Stuesse 2016). Alabama had the second fastest growth rate of the southern states (145%), with the number of Latino immigrants living in the state increasing from 76,000 to 186,000 from 2000 to 2010, according to the U.S. Census. While no Latin American country was among the top ten source countries for migrants in Alabama before the turn of the century, Mexico rose to number one in 2000 (Gawronski 2006). Most social workers, public school employees, and public health professionals consider this a gross underestimation as census
numbers for Hispanics tend to be conservative for this “hidden” population (Mohl 2002). The intensity and the breadth of this growing trend was unanticipated, and most southern states do not have the adequate infrastructure or resources to support the growth. Further, nativist hostility is strong and pervasive throughout the region, and many native southerners perceive the Hispanic growth rate as a direct threat to economic opportunities and the cultural centrality of the white mainstream. As a result, these newcomers are mostly left to fend for themselves. This chapter looks at the history of Mexican immigration to Alabama, and particularly Birmingham, demonstrating how the state’s legacy of racism and oppression has largely defined the immigrant experience, both through state policy and public opinion.

**Birmingham, Alabama**

With the discovery of coal, iron ore, and limestone - the three ingredients of steel - the population of Birmingham jumped from 3,000 to 40,000 between 1880 and 1900, and the city became the South’s foremost industrial center of the day (Gawronski 2006). Foreign-born immigrants, mostly from Eastern Europe, rushed to the “Magic City” to work in mines and mills as well as other burgeoning industries. In response to this influx, the Ku Klux Klan incited a growing fear that foreigners intended to take over the country and displace the white ruling class. In the 1940s, Hugo Black, a U.S. Supreme Court justice from Alabama and at one point a member of the KKK, called for a five-year ban on all immigrants. In 1980, the five counties that make up the Birmingham Metropolitan Area claimed 8,000 foreign-born residents. Fifty two of them were Mexicans (Gordon 2017).
Starting in the 1990s and coinciding with a period of robust economic growth, Alabama experienced a rapid influx of mostly young, foreign-born Mexican men. With structural changes in both Mexico and the United States, new immigration policies and labor laws, and a tightening of border security that made crossing the border much more dangerous, the number of women and children began to increase as well (Mohl 2002). Six thousand Mexican immigrants from Acambay, a municipality in the Estado de México (State of Mexico), arrived in Birmingham over a 15-year period (ibid). Mohl estimates that the true number of Latinos is close to double what is recorded in the census and that 40 to 50 percent are unauthorized, which makes it difficult to get a clear picture of the demographic landscape. Seventy-five percent of Latinos in Alabama live in Birmingham (White et al. 2014), and the vast majority of these are from Mexico. Places of origin include the more recent sending states of Veracruz, Oaxaca, and Chiapas in southeastern Mexico, as well as the more traditional sending states of Guanajuato, Michoacán, and San Luis Potosí.

Mexicans in Birmingham tend to work in restaurants, landscaping, roofing, construction, and factories (Mohl 2002). Industries are reliant on Mexican workers, not only for the unskilled labor but on the recruitment carried out through social networks, though this reliance has not squelched anti-immigrant rhetoric and state-mandated restrictions on access to public services. Employers make little effort to verify documentation (though they use this as a threat to workers they presume to be undocumented), which is required by law, and there is an extensive black market for social security cards that subject undocumented immigrants to another level of oppression and exploitation (Mohl 2010). Those who work outside of the formal economy are also victims of exploitation from controlling employers.
There are dozens of trailer park communities near the Birmingham metropolitan area where Latino immigrants have taken up residence, though immigrants are interspersed throughout residential neighborhoods as well. Mexican immigrants are often victims of housing discrimination and predatory landlords that take advantage of their precarious status (Mohl 2016). Many have achieved a modicum of residential stability, living in small, often crowded dwellings with modified nuclear-family households. The popular stereotype of the “dirty Mexican” justifies landlords overlooking the unsanitary conditions in which their tenants live, and overcrowding, pot hole-laden roads, and trash piles are commonly understood as “what they are used to.” Little recourse exists for contesting these conditions or the high rent, which forces individuals to split the cost of living spaces, which reinforces the perception that this normal and desirable. While many Mexican immigrants consider themselves “permanent” residents, the word permanent should be used cautiously because the undocumented status of one or more members of a household renders their living arrangement precariously uncertain (Boehm 2016).
Photographs 9.1 and 9.2: Two predominantly Latino residential trailer parks in Birmingham, hidden away and poorly maintained.

Reaction to Newcomers

In the last decade, Hispanics have come to account for more than 30 percent of the population in many small towns in Alabama. At first, the reception was mostly positive. Mexican immigrants were perceived as hard workers who spent their money locally and boosted the economy of these struggling towns. Franklin County in northwest Alabama has the highest percentage of Latinos in the state, and Russellville - the county seat - has seen a massive increase in Latino immigrants since the construction of a poultry plant in 1989, currently the county’s largest employer (Thompson 2011). While residents of the town were leaving in droves, the influx of Mexican and Guatemalan immigrants counteracted this mass departure so much that the total population did not change between 2000 and 2010. And the newcomers have been largely responsible for the revitalization of this small town as Mexican entrepreneurs set up businesses
to cater to new arrivals. Dubbed “little Mexicos,” growing immigrant populations are taking over previously abandoned town centers all over the state. By 2000, Mexican grocery stores were more common, Spanish language soap operas were on television, weekend soccer leagues started up, churches started having services in Spanish, and government agencies started hiring bilingual employees (Mohl 2002).

However, beginning in the early 2000s and exacerbated by the economic recession starting in 2008, a wave of nativism and anti-immigrant hostility surged among Alabamians who felt their job security was threatened. Few Alabamians understand why so many Mexicans are coming to Alabama, and many misconceptions and unfavorable stereotypes have reinforced the fear of immigrants taking over (Gawronski 2006). Very quickly the notion that all Mexicans are immigrants and all immigrants are illegal became the pervasive narrative. In 2009, nearly 90 percent of the state voted to amend the constitution to make English the official state language, sending a clear message to Mexican immigrants that they are not welcome. Politicians are pushing stricter immigration control, and the passage of House Bill 56 (HB 56) by the Alabama State Legislature in 2011 made it a crime for undocumented immigrants to reside in the state of Alabama, prohibited financial transactions between undocumented immigrants and government agencies or private individuals, denied the undocumented access to medical care, social services, utility hook-ups, and public universities, required employers to check the legal status of their employees through a federal program called E-Verify, and criminalized citizens for housing or transporting undocumented immigrants (White et al. 2014). One of the men who wrote the bill admitted that he hoped it would force undocumented immigrants to “self-deport” (Mohl 2016). The legislature touted HB 56 as a jobs creation bill, with the idea of giving jobs in agriculture,
construction and poultry processing that had been held by undocumented workers to legal residents. However, because these industries were not prepared to offer living wages or employer protections, citizens of Alabama did not want them, and they went largely unfilled. Mexicans abandoned jobs and left the state in huge numbers, and eventually the legislature was forced to ease up on the bill, though they did not tone down the hateful rhetoric. With the election of Donald Trump in 2016, a new wave of fear and confusion swept over the Hispanic population in Birmingham - in the weeks after the election, mothers were scared to let their children go to school, people did not show up for work, and church attendance dwindled. Hispanic interest agencies encouraged immigrants to stay in their homes as much as possible. Hispanic-interest agencies as well as churches and libraries are committed to providing safe spaces for immigrants seeking health care, legal advice and other social services. Finally, the city council of Birmingham recently passed a resolution to make Birmingham a sanctuary city, declaring their intent to not tolerate federal immigration officials coming into the city and detaining or deporting immigrants. The former governor of Alabama expressed his rejection of the resolution, and it is yet to be seen what kinds of policies will be put in place and how they will be executed.

Photograph 9.3: A Women’s group meeting at the Hispanic Interest Coalition of Alabama (HICA), a place where Mexican women in Birmingham can find support and solidarity.
Legacy of Racism and Labor Control

Alabama has a rather sordid history of discrimination and violence toward non-Whites, and this has held true in the reaction to Latinos. According to Gawronski (2006: 75), Birmingham is “no longer a Black and White city, and the latest influx of Mexican immigrants is rekindling some old racist stereotypes and generating new ones.” Race and racism are historically, politically, and locally constructed, and racial divisions emerge to protect and enforce white privilege (Zavella 2011). Stuesse (2016) considers how the political, economic, and social fabric of the U.S. South, which has long centered around the subjugation of African Americans, is being renegotiated in the context of Mexican immigration. She explores how race serves as the principal lens through which people live out the demographic changes around them, arguing that “rather than reconfiguring the area’s rigid social hierarchies of race, immigrants’ arrival is largely reinforcing a system in which whiteness maintains its privilege and Blackness persists at the very bottom” (95), while immigrants occupy some “nebulous and mutable position between white and Black.” After the outlaw of slavery in 1865, “white southerners continued to innovate new ways to delineate the color line” (Stuesse 2016: 33), and the legacies of slavery and segregation have produced a deeply ingrained social order that these new arrivals are altering even as they try to find their place in it. From the immigrants themselves to their reluctant hosts, Stuesse explores the different ways that individuals and communities experience immigration, highlighting the ways in which perceptions and meanings are shaped by the historical and contemporary political economies of the black/white color line in the U.S. South and considering how Latino newcomers are “carving out a contested third space between white and Black” (22). White working men frequently compliment the Mexican work ethic and industriousness, as a
slight to Black people, while denigrating them for not having the same standards of sanitation.

Stuessse concludes that neoliberal restructuring of the global economy and industry’s “race to the bottom” - the calculated and intensely unjust effort of corporations to find and maintain the most low-skilled, expendable and completely dependent labor force - has pitted these two vulnerable groups against one another and allowed for white privilege and white supremacy to remain strong. Additionally, despite heavy recruitment of immigrant labor by companies, there is little effort to welcome newcomers, facilitate their integration into the community, or to assuage the fears of long-time residents in these communities who are witnessing dramatic shifts in their social and cultural landscapes.

Stuessse attributes the strategic recruitment of immigrant labor not to the commonly cited “labor shortage” but to the neoliberal restructuring that the American poultry industry experienced starting in the 1970s. Advanced capitalism depends on disempowering low wage workers, and it “weaken[s] both immigrant and local workers’ prospects for collective bargaining by cultivating divisions along lines of race, nationality, language, gender, and legal status” (Stuessse 2016: 92). It denotes what Stuessse calls “plantation capitalism with a twist” (127), as neocolonial relations control people of color through strenuous physical labor and benefit from racial and ethnic separations among workers. Just as federal agricultural policy hurt Black farmers by creating an incentive to keep cotton fields fallow, trade deals like NAFTA flooded the Mexican market with US corn, rendering small farming in Mexico unsustainable and forcing movement to urban centers, many of them north of the border.

Poultry processors control labor by taking advantage of the divisions by segregating manufacturing tasks along lines of race and gender. While everyone complains of exploitation,
injuries and abuse, without the ability to work together to fight these harmful conditions, they continue (Stuesse 2016). Collective bargaining is hindered by the distinctive ways in which different groups experience and embody different practices as well as the corporate effort to exacerbate workers’ perceptions of difference and incompatibility. International trade agreements are designed to benefit capitalists at the expense of the poor and vulnerable, and workers’ social and economic precarity renders them “hyperexploitable” (Stuesse 2016). Their heightened vulnerability makes them a “docile” labor force, weakening workers’ potential for collective bargaining and putting downward pressure on wages for everyone. The state’s selective enactment and enforcement of immigration laws and labor protections facilitates this exploitation. This enables corporations and their share-holders to maximize profits, which, under neoliberalism’s economic and cultural logic, is the ultimate objective. Debilitating and demoralizing abuses are rampant, but U.S.-born workers are in somewhat of a better position to seek medical treatment or workers’ compensation, a benefit denied the undocumented.

The Role of Women in Shaping Mexican Migration and Resettlement

While it is widely regarded that migration began with single men, women and children have always comprised a significant portion of the immigrant population, and this is even more true today (Hondagneu-Sotelo 1994). Mexican women tend to work in cleaning, cooking and other service jobs. Many work outside of the formal job market, making them more vulnerable to exploitation and mistreatment by employers. However, women are less likely to report wanting to return to Mexico and are therefore instrumental in the family’s decision to permanently settle in the United States (Hondagneu-Sotelo 1994). This appears to be predicated
on better living conditions and the desire to educate their children in U.S. schools. Mexican immigrant women tend to engage more in public and institutional services than men and are commonly accused of disproportionately taking advantage of local, state, and federal resources. Public policy has targeted them by limiting their access to basic health care and education for their children (White et al. 2014). The narrative that women immigrate to the United States illegally and immediately start having children, who are by default U.S. citizens, fuels resentment and intensifies anti-immigrant rhetoric, and blame for economic and social ills are often cast on these newcomers.

Summary

The United States abolished slavery in 1865, though U.S. industries developed new forms of social control to ensure the continued subjugation of African Americans, and institutionalized white supremacy found new expressions. The Civil Rights movement of the 1960s succeeded in changing the laws, and at least nominally guaranteeing more protections for African-American workers, but the neoliberal restructuring of industries and the intensification of labor in the South propelled companies to look for a new demographic of workers to exploit. In the absence of legal protection, Mexican immigrants proved ideal. The rapid influx of Mexican immigrants to Alabama over the past two decades, including the establishment of long-term family settlement, has been the source of much tension in Alabama. The state has not been subtle in its message to undocumented immigrants that they are not welcome, though community efforts have taken on the cause of accepting and integrating newcomers into public life. As a new immigrant destination, Alabama is a fertile ground to study how settlement patterns, acculturative processes,
and social networks are distinct from areas with more established immigrant communities and what this means with regard to health outcomes over the long term.
CHAPTER TEN:

LIFE AS A MEXICAN IMMIGRANT WOMAN IN ALABAMA

This chapter summarizes the ethnographic investigation carried out in this research project. Data collection for my first sample consisted of a semi-structured interview that prompted women to talk about some of the issues facing Mexican immigrant women in Birmingham. While I had worked with Mexican immigrant women in the community before, this phase of the study was largely a mission of ethnographic reconnaissance. My research assistant and I recruited twenty women to participate in an open-ended interview, which took place in homes, restaurants, parks, and at Hispanic interest agencies in town. The interview schedule included questions about basic demographic information like current age, year and age of arrival in the U.S., occupational status, household income, and English proficiency. I asked respondents what their reasons or motivations were for coming to the United States and specifically to Alabama, what the journey was like, how their lives in Alabama are different than their lives in Mexico, and if they were happy living in Alabama or if they ever wished they had stayed in Mexico. I also asked them about their personal health - both physical and mental - and what they considered to be the biggest health problems facing Mexican immigrant women in Alabama. The purpose of the interview was primarily to get women talking about their lives, to hear from them about the things that were most important to them and relevant to their current situations. Some were eager to tell their stories while others clearly did not want to revisit past
traumas or disclose vulnerable details about their lives. Some were more reflective and thoughtful while others warned of the dangers that come with thinking too much. While all of their perspectives and their stories are unique, this chapter considers some of the defining features of life as a Mexican immigrant woman in Birmingham and some of the major themes that permeated our conversations.

**Demographics**

The average age of the sample was 36, with a range from 19 to 70. Most of the women were married or living with their partners. They mostly came from rural areas in central or southeastern Mexico, though some from urban centers like Mexico City or Monterrey. Nearly one third of the sample described their occupations as *ama de casa* (housewife); others worked in *limpieza* (cleaning houses) or restaurants, and one (the only professional) worked as a bilingual family therapist at a non-profit counseling agency. Most household incomes were between $10 and $15,000, with the exception of the one professional who did not provide her household earnings. Most of the women had completed primary school, though two had no schooling at all, and three had at least some college experience. The average age at arrival was 25 (range 10 to 60), and 50 percent of the sample arrived between 2004 and 2009. The average length of time living in the U.S. was 12.39 years (range 2 to 40).

**Reasons for Migrating**

I asked respondents what motives or reasons they had for moving to the United States and how they got to Alabama. This is a difficult question to ask because I do not contend that
these women are necessarily making rational “choices” or that they have the social, political, and economic capital to exert control over their destinies, but I wanted to hear from their perspectives how they ended up in Alabama. The most common answers were *mejorarse* or *superarse* (literally, to make themselves better or improve their lives), to find work and save money (for themselves as well as to send home to Mexico) and to get their children in better educational systems. Others cited family reunification, which usually meant that they came to join their husbands who were already living and working in Alabama. Some cited escaping government corruption and gang-related violence in Mexico, and one woman said she had fled an abusive partner. For some it was a combination of several factors. Most of them came straight to Alabama, though for a few, Birmingham was their second destination. As is reflected in the literature on the dispersal of migrant communities all over the United States, while political-economic forces drive migration, it is social networks that facilitate it (Horton 2016), and most of the women I interviewed ended up in Birmingham because they had relatives or friends already living there.

**Photograph 10.1:** A typical home for many respondents (left)

**Photograph 10.2:** Makeshift stairs providing an entrance to a trailer (right)
El Viaje (The Journey)

Most of the women in my study made the journey across the Mexico/U.S. border on foot. Typically, they traveled with at least one person that they knew from home, either a partner, relatives or friends. Most paid a coyote (human smuggler) to lead them across the border clandestinely. The length of the journeys ranged from four days to three months, depending on how many times they were caught and sent back or had to wait in the desert for someone to come get them and take them to the next checkpoint. For the women who crossed the border sin papeles (without documents), the journey was difficult and scary. One respondent described the journey as “la más fea de mi vida” (the worst experience of my life). They described the physical toll of walking through the desert, usually at night to avoid detection, being terrified crossing the river because the rocks were slippery, and never knowing for sure if someone would be there to take them to the next check point. One woman hid in the trunk of a car, one under the seats of a van; others had purchased authorization papers on the black market. A few described being assaulted by gente mala (bad people) along the way or the authorities if they were caught and put in detention centers. Not all of the women I interviewed entered the U.S. illegally — some had temporary visas or came to join their husbands who had gained permanent resident status — but for those that did, the journey was irreparably traumatic, not only because of the things that actually happened to them along the way, but because all they could carry with them (other than a bag of dry clothes) was the knowledge of what they had left behind - children, parents, the only life they had ever known - and an uncertainty about what the future held if and when they made it across.
Life in Alabama Compared to Life in Mexico

I asked women about how life is different in Birmingham compared to Mexico. One common theme was that life in the U.S. is much more fast-paced and more stressful. “Es muy rápido aquí,” (It’s very fast here) one woman said, “en mi pueblo, tranquilo” (In my hometown, it was very calm). Another common misgiving they expressed was the lack of liberty, not having the freedom to move around, even just to walk down the street in some cases. Women felt very confined to their homes, fearful of venturing out too often, and this led to a sense of isolation and loneliness. They expressed remorse over a lost sense of community and an extended kinship system in Mexico that brought them comfort and set them at ease. In Mexico, they knew that no matter how bad things got, there was always someone they could depend on for support. Women often lamented that in the U.S. you have to work and provide for yourself, you cannot depend on anyone else to help you. In their hometowns, many of them small ranch communities in Mexico, women recalled that everyone knew everyone else, and they were constantly in and out of each others homes and active participants in each other’s lives. “La puerta se queda abierta” (our door was always open), one woman told me speaking of her hometown in Guerrero, “pero aquí les dicen que no abran la puerta a nadie, es peligroso” (but here they tell you not to open the door to anyone, it’s too dangerous).

Another big change for women migrating from Mexico to Birmingham was the absolute necessity of having a car. “Here, you can’t do anything without a car,” one respondent said, “you can’t get to work, to the store, get the kids to school.” Public transportation in Birmingham is historically unreliable, and many of these women live on the outskirts of the city where the bus does not even run. In Mexico, most of the women were accustomed to walking everywhere or
taking public transportation. One woman told me that when she was still living in Mexico but she knew it was time for her to join her husband in Alabama, he told her that she needed to wait because he did not have a car yet. She said she could just walk everywhere, and he told her she was crazy, which she thought meant he did not want her to come. He was right though, she said, and the hardest thing for her initially was not being able to walk everywhere.

Family dynamics change considerably in the context of migration and resettlement. Many of the women I spoke with expressed discomfort that they did not know their children’s friends or their parents. They worry that American children have more freedom and that they are more likely to disrespect parental authority. One respondent told me that she does not like how her children’s attitudes have changed. Another source of family discord is language — many women related to me that they worried a great deal over their children not being able to speak Spanish very well and that they would lose it quickly because they preferred English. While they want their children to learn English because they believe it will help them get ahead, they felt that the Spanish language was the only thing keeping them connected to their roots, and they worried the children would lose sight of this. It also caused tension in the household when parents could not understand their children; one woman said it made her feel left out and like her children were making fun of her. Several women expressed that their children would get frustrated with them for not learning English: “They were young when they started with English. Me, I’m too old, and for me it just doesn’t stick.” Mothers of children with some proficiency in English often rely on them to translate in communication with employers, teachers, or health care professionals. This constitutes somewhat of a reversal of parenting roles — it is uncomfortable
for parents to rely on their children to function day to day, and children are wont to express resentment at having to play this role.

Happy in Alabama?

I asked respondents if they were happy living in Alabama. I used the word happy (feliz) because I wanted to gauge their reaction to that word, and most of the time I got the sense that they had never really thought about it much. Most answered this question affirmatively, though with quite a bit of ambivalence, as if the question did not seem to make a lot of sense to them. It seemed that happiness did not really matter to them, that it was not the goal or the aspiration. One woman did respond enthusiastically that yes, she was happy living in the United States because it is a very clean country and very safe. A few responded negatively, lamenting that while they may be better off economically, they find little happiness in their day to day lives. When asked if they ever considered that it might have been better to remain in Mexico, respondents became a bit more animated. This question seemed to resonate with them more. Most women related that they did not regret moving to the United States because it is much easier to get a job and to move ahead, plus there are more opportunities for the children, but that they do miss Mexico, la patria (the homeland). One woman said this is not really something that is worth thinking about, though, because as much as she would like to be in Mexico, her life is here now, and she knows she cannot change that.
Fear of Deportation

I was not able to confirm these occurrences, but I often heard stories of Immigration and Customs Enforcement (ICE) agents showing up unannounced at homes of Mexican immigrants and taking anyone who could not provide legal documentation, regardless of whether or not they had a warrant to do so. Sometimes, several women told me, ICE would use another Hispanic person to knock on the door, so that the resident would be more likely to answer. I also heard stories (again, unconfirmed) from my respondents as well as on local Spanish-language radio shows and social media sites that ICE agents had set up traffic blockades on major roadways where they were stopping commuters to verify documents or conducting raids in certain majority-Hispanic trailer parks. Whether or not these things were actually happening, there was a palpable sense of fear and distrust that permeated my respondents’ lives. One woman recalled that she and her daughter were about to walk in Walmart to buy something the child needed for school when they spotted an immigration officer standing in the entrance. Shaking, they got back in the car and drove away. On the way home, the mother reminded her sobbing daughter of the plan in case she is one day detained — a conversation mixed-status families have to have all too often. With the increase in deportations over the past ten years, many churches with Hispanic congregants have started to keep files on each family, detailing what to do if one of the parents does not come home one day. One woman mentioned signing over custody of her younger children to her eighteen year old daughter, a legal resident, in case she was deported, so that the family would not be separated in her absence. I interviewed a few women whose partners had recently been detained or deported, and this was always an agonizing experience. One woman that I interviewed related to me that her brother had gone to the courthouse to pay a
drunk driving fine, and when he left the building, immigration officials were waiting for him. They detained him and eventually deported him, and the family was in a state of panic trying to figure out what to do.

**Maintaining Mexican Traditions**

I asked respondents whether or not it was important to them to stay meaningfully connected to their country of origin, and if so, how they did this. Speaking Spanish, and specifically making sure their children retained their native tongue, was a common response, as was eating Mexican food and celebrating Mexican holidays. Respondents often smiled as they listed the holidays they enjoy celebrating — _el 16 de septiembre_ (Mexican Independence Day), _el día de los muertos_ (Day of the Dead), _el día de la madre_ (Mother’s Day), and _el día de la virgen_ (the Day of the Virgin of Guadalupe). Going to church was also offered as a way to sustain a connection with both the family and the homeland. Others related that celebrating Mexican traditions was not important to them, that as much as they may enjoy the festivities, they had more important things to focus on in their daily lives.

**Photographs 10.3 and 10.4:** Mexican tienda (store) in the center of one of the trailer parks; carries traditional Mexican foods and beverages
Mental and Physical Health

I asked respondents about their personal wellbeing and also about health problems facing the Mexican immigrant community. I learned quickly that mental distress and specifically depression are not common topics of conversation among Mexican immigrant women. They are willing to say it is a problem, but many speak of depression in a general sense, as a problem for others, not for themselves. One woman I spoke with, a bilingual family therapist from Mexico, suggested that a lot of Mexican women go through their whole lives without necessarily knowing they have mental health problems because it is considered taboo to seek help for emotional problems. Depression is stigmatized, so it is not a label anyone would put on themselves, and it is not something that comes into their consciousness. The counselor lamented that “depression is a big problem in this community — it is caused by women devoting their time and energy to taking care of others while neglecting themselves. Most of these women have never heard of the term cuidado personal (self-care). I try to tell them that depression is a real disorder, that there is no shame in seeking help or even taking medication for it, that sometimes it is okay to be selfish.”

Women were willing to talk about being sad, often attributing this to leaving loved ones behind in Mexico and the separation of family. All of the respondents were leaving behind someone important to them, either their children or their parents or their brothers and sisters, or in some cases, all of these. At the same time, they expressed disappointment over family reunification, lamenting that the family dynamic is not the same as it was in Mexico. The process of family stage migration can take a drastic toll on family bonds, rendering relationships irreparable even if the family is reunited. Further, children tend to engage with American culture
more readily and learn English more quickly, and this can be a major source of discord within the family.

None of the women I interviewed made an explicit connection between diabetes and depression. However, a few of them did attribute their poor physical health to mental distress. “Things accumulate,” one woman told me, “the things that have happened to me in my past still haunt me. It makes me constantly tired, too tired to exercise or eat healthy.” For the most part, the women I spoke to identified poor diet and lack of exercise as the primary causes of diabetes; however, it was clear that many do feel that inadequate resources and stressful life situations can make it more difficult to maintain a healthy diet and regular exercise schedule. Women related that it is much more difficult to eat healthy in the United States than in Mexico. “There, it is easier to buy fresh fruits and vegetables, whereas in the U.S., it is easier to buy sodas and snacks.” One woman said that she did not eat very healthy in Mexico because she mostly ate meat and not vegetables, but she walked everywhere so she counteracted her eating habits. Women often spoke of diabetes as being “in my blood,” suggesting that the disease was inevitable for them because a parent or close relative had it.

To stay healthy, respondents related that it is necessary to eat well, which means cooking your own food and not eating fast food, to rest well, have a car and a house, not to have debt, and to be united with family and friends. It is important to be agreeable and not fight with others, to get along with everyone. “Have a positive attitude and a lot of prayer - so that God will help us,” one respondent told me. It is also important for family members to listen and talk to one another, to ask for advice. Several woman suggested that depression is a result of “thinking too much,”
whether it be about getting deported or worrying about financial stresses, insisting that it is better to stay positive and not let your mind dwell on upsetting things.

**Tension**

While all of their perspectives were unique and their stories different, one theme underlying all of their descriptions of daily life was tension — tension between longing for their homeland and embracing a new life in a new place, tension between wanting more opportunities and better lives for their children while struggling with the shifting dynamics of the mother-child relationship, tension between wanting and needing a stronger sense of community and support but being distrusting and fearful of nearly everyone outside of the household. I believe this tension is rooted in the struggle to find a sense of place and belonging in a host community that is often hostile to their presence. Zavella (2011) centers her ethnographic account of Mexican immigrant women on the notion of living between cultures, in a state of liminality in which they have distanced themselves physically and emotionally from their cultures of origin and yet are not fully accepted by members of the dominant society. She describes this state of liminality with the expression “*no soy de aquí ni de allá*” (I’m not from here nor from there). I found that among the women in my study, the more resonant theme was a redirection of Zavella’s notion. Most of the women in my study said they did not plan on returning to Mexico, that their lives were here now, and many of them had lived more than half their lives in the U.S. In this sense, they considered themselves *de aquí y de allá* (from here and from there), carving out their space in a new cultural landscape and resettling into a new way of life. And they tried to remain positive about this, framing their losses in terms of their gains. While they acknowledge that life
is hard in the United States, they insist that it is better than the alternative because of the poverty and lack of chances for improvement in Mexico. They mourn the loss of the mother-child bond that they had in Mexico, but they feel certain that their children will have more opportunities and better lives than children in Mexico. They long for more independence and autonomy in their interactions with the general population and the state, but they are in a better position to exert more control over the family’s decisions than they would have been in Mexico. This tension is also reflected in the absolute dependence of Alabama’s labor economy on Mexican immigrants juxtaposed with the hateful rhetoric of state legislation that seeks to limit their access to public services and worker protections. This tension was also reflected in my quantitative data, as a breakdown of cultural models - one more oriented towards the status-seeking elements of lifestyle, like household items and technological devices, and another towards self-improvement and self-sacrifice, like health care, positivity, and getting the children in better education systems.

Photograph 10.5: A ladies Bible study/small group that meets weekly to talk about issues they face living in Alabama and to offer support and guidance to one another
Summary

This chapter has outlined some of the dominant themes that seem to characterize life as a Mexican immigrant woman in Alabama. It is all too easy for many of my respondents to dwell on past traumas related to the migration experience, the agony of leaving behind loved ones in Mexico, or the daily hardships of their lives. However, for those who manage to focus on the more positive aspects of their lives — the economic gains, the reunification of family, and the better life opportunities their children will be afforded — life is more bearable and sometimes even enjoyable. They find ways to ease the burden of adjusting to life in a new place by creating spaces to laugh together and cry together and find solidarity with others. Many of the women I got to know during this process — women I came to think of as my mamas — are strong and resilient in spite of all the forces working against them, determined to take care of their families and improve their lives even in the face of seemingly insurmountable obstacles. I am truly honored and humbled by their willingness to talk to me, to be vulnerable with me, to let me into their homes and their lives, and to offer their guidance and assistance throughout this process. They touched my life and my spirit in profound ways, and I will forever be grateful for the opportunity to get to know them.
SECTION III:

METHODS AND RESULTS
CHAPTER ELEVEN:
RESEARCH METHODS

Project Overview

Biocultural anthropology explores the ways in which biology and culture intersect and interact to produce discrepancies in the physiological functioning of individuals and social groups. Generally, a mixed methodology that involves the collection of both qualitative and quantitative data is employed so that conclusions are based on both empirical objectivity and interpretive experience. To ensure a high degree of data reliability and validity, the research process would ideally follow the scientific method, whereby a problem is identified, research methods are developed within the context of a theoretical framework, data is collected and analyzed, and hypotheses are either confirmed or denied (Bernard 2011). However, Handwerker (2011: 118) notes that the process of collecting data from human beings actually goes more like this:

Design each observation and question to test at least one part of your growing theoretical understanding. Note errors. Ask for clarification. Rethink the theory. Link micro-level observations and interviews with historical records and macro-level trends that only time-series data can reveal. Try again.

Because research is conducted in the “field,” that is to say in spaces where real people are living their real lives, and not in a laboratory, data collection and analysis must also facilitate reflexive interpretation that provides meaning and context for the results (Dressler 1995). Measurement
procedures are developed and administered in the context of local meaning, and data collection and analysis involves constantly switching back and forth between the *emic* (insider’s) view and the *etic* (detached observer’s) view, interpreting and reinterpreting both empirical data and personal experience, and analyzing how different types of data mutually inform and reinforce one another.

A biocultural perspective is well-suited for research in medical anthropology, the founding principle of which is that disease is as much social as it is biological. Health in a given context is understood as a social production, and cultural realities are analyzed at both the individual and the group level within the broader context of socio-political forces that inflict structural violence and limit choice and movement for certain groups (Mendenhall 2012). This perspective is particularly suited for research on immigrant populations because they are undergoing shifts and adjustments in cultural orientation as they adapt to life in a new social and environmental setting, the stress of which may have physiological consequences. However, isolating culture as an operational variable and empirically analyzing the relationship between culture and the individual has long eluded social scientists (Dressler and Oths 1997), and research is unclear on how and when culture is therapeutic or harmful, cohesive or dysfunctional (Viruell-Fuentes and Andrade 2016). Acculturation scales ostensibly allow researchers to array individuals along a continuum of culture (from the original cultural orientation of one’s early life to a that of the host culture in which one currently resides), but they are based on untested assumptions regarding how cultural knowledge is structured, the degree to which it is shared and agreed upon and the ways it is acted upon at a specific time in a specific place within a specific cultural environment. It is assumed that the longer an individual resides in the United States and
the more proficient she is in the English language, the more “acculturated” she is, meaning the more she will conform to mainstream U.S. culture. While this may seem intuitive, the empirical stamina of this assumption is weak. Even individuals still living in the cultural context in which they were raised will differ in their representation of knowledge vis-a-vis the larger social group and will possess more or less knowledge of different domains of life. Further, it remains unclear why certain proxy variables used to measure acculturation — age on arrival, length of time living in the U.S., and English proficiency being the most common — constitute different levels of risk for certain individuals and groups.

To better understand the culture of Mexican immigrant women in Birmingham, Alabama, I use a cultural models approach to study four salient domains of life — *la buena vida* (“the good life”), family life, characteristics of Mexican women, and life goals. Fundamentally, the goal of this research is to describe the cultural reality of Mexican immigrant women in Birmingham in an empirically precise way and then measure individuals against their own cultural prototypes to observe how well they conform to the shared model of how to live and how this in turn relates to their risk of type 2 diabetes and depressive symptoms. Cultural consensus theory and methodology provide a way to infer the presence of and describe the specific attributes of a cultural model in a particular domain of life based on the extent to which individuals share certain ideas about that domain. Cultural consonance - or real-life approximation of the shared ideal - can then be analyzed in relation to health outcomes. This provides a more empirically satisfying way of locating individuals in the cultural space than do typical acculturation scales, which rely on proxy variables. The point is to determine if cultural consonance serves as a better predictor of health outcomes than typical measures of acculturation and then to analyze how the
interaction between consonance and acculturation may alter these effects. This chapter reviews recruitment and sampling procedures as well as the methods used to determine how the four cultural domains of interest are structured, what kinds of things hold particular importance or salience within each domain, the degree to which respondents share cultural knowledge about each domain, and ultimately how individuals’ consonance is analyzed in relation to health outcomes and other variables.

Selection of Cultural Domains

It was anticipated that the domains of lifestyle, family life, national identity, and life goals would be particularly salient among Mexican immigrant women in Birmingham. Lifestyle is generally regarded as an indication of one’s socioeconomic status and expressed in terms of material possessions and leisure time activities (Dressler 2005). However, several of the women in my sample stressed the importance of other aspects of life - for example, close family relationships, providing better opportunities for their children, spiritualism, and being positive - over material items when asked about what kinds of things they believed were important to achieve what they referred to as *la buena vida*, or the good life. For example, one respondent related that “material things are not important to me, it doesn’t interest me because you could lose it all in one moment.” When I asked women what their reasons or motivations were for moving to the United States, nearly all of them said that they came in hopes of having a better life. But what does this mean exactly? What does it look like for these particular women? Originally I asked women what kinds of things were necessary or important to have *una vida buena* (a good life), but I quickly realized that the more appropriate terminology used to describe
this domain was *la buena vida* (the good life). It seems that in this phrasing *buena*, or “good,”
denotes both a common “standard of decency” (Veblen 1899: 68) in terms of material lifestyle as
well as the quality of being a principled individual, one who invests in the continual process of
self-improvement and seeks to fulfill her responsibilities to others. It also serves as a contrast to
*la mala vida*, which is a salient cultural trope in Mexico, especially among women, that denotes
lack of financial support, overwork, mistreatment, and an insidious or indecent lifestyle (Finkler
1997).

Family life was another domain of interest because of the pervasive literature on familism
in Mexican scholarship and particularly because of the changes in family dynamics and
relationships that take place in the context of immigration. Originally I asked women to describe
a loving family, though it became clear that the more salient terminology was *una familia unida*
(a united family). Respondents used the word *unida* (united) both figuratively in terms of the
closeness of family relationships but also literally, in terms of proximity, as one of the main
motivations for immigrating to the United States as well as staying in the United States was
keeping the family together. Therefore, I asked respondents to list the characteristics of *una
familia unida*.

In his work in Brazil, Dressler found national identity to be a highly salient domain that is
both talked about commonly and written about extensively in literature on Brazilian culture
(Dressler et al. 2007). Mexican national identity is a complex phenomenon, especially in the
Mexican diaspora, and I thought it would be interesting to explore how this gets renegotiated and
expressed in the context of immigration, particularly at a time and in a place where nativist
hostility is high. When the United States incorporated Mexican territory that is now much of the
American Southwest, many of the indigenous people living there did not identify as citizens of Mexico or were even aware of the existence of the state. The geographic and cultural diversity of Mexico made separate regions quite distinct. Owing to the extreme differences in terrain and the economic conditions around which cultural meaning systems develop, regional identity in Mexico has always been strong - in some sense, much stronger than a national identity (Buchenau 2012). It was not until the 20th century that the Mexican government began efforts to foster a Mexican national consciousness, and this has always been intricately tied to the processes of globalization and Mexico’s relationship with the United States. For these reasons, I was interested in how national identity is represented as individuals and families from all over Mexico converge in a relatively new immigrant destination in the U.S. I asked specifically about the characteristics of Mexican immigrant women, as I was also curious about how gender constructions change in the context of migration and resettlement as women gain more authority over household decisions and are somewhat loosened from the bonds of patriarchal power (Hondagneu-Sotelo 1994). And finally, I was interested in if and how women remain meaningfully connected to Mexico and to Mexican culture while also establishing their lives and recreating their identities in a new place.

Finally, it was anticipated that life goals would serve as an overarching domain that encompassed the other domains and would give me an idea of the long-term plans these women had. I asked them to list their metas de vida, or goals in life, which consisted of their long-term objectives for themselves and their families.
Research Purpose and Design

This research is a cross-sectional study designed to do three things: to better understand how Mexican immigrant women living in Birmingham, Alabama, organize their thinking and their behavior as they adjust to life in a new environmental and social context; to investigate the extent to which cultural expectations about how to live are learned and shared within this community; and to determine if the ability to live within these culturally defined parameters affects the mental and/or physical health of individuals. I used both detailed participant observation procedures as well as analytic hypothesis testing to develop a series of cultural models in four salient domains of life. The study proceeded in two phases; the first phase included three samples of Mexican immigrant women living in Birmingham, Alabama, ranging in size from 31 to 42, and the second phase included one sample of 70 participants. The goal of the first phase was to get a sense of what the Mexican immigrant experience is like for women in Birmingham and to better understand why these women are here, what they expect or hope to gain from a new life in a new place, the tragedies and triumphs of their daily lives, and finally how the cultural domains of *la buena vida, la familia unida*, characteristics of Mexican women, and life goals are structured within this population. In the first sample, I used ethnographic analysis and qualitative interviews to elicit central themes and meanings in the everyday lives of the informants. This involved participant observation in Mexican immigrant homes, clinics, grocery stores, parks, and gatherings at Hispanic interest agencies, the purpose of which was to build relationships and establish rapport, as well as semi-structured interviews with women about their life experiences. I also asked respondents in this sample to participate in a cognitive task called free listing, in which I asked them to list the items that they associated with each of the four
domains. Based on the frequency with which the items were mentioned in the free lists, I selected several items for further review. Participants in the second sample engaged in another cognitive task called an unconstrained pile sort, in which they grouped items together based on like qualities. I used non-metric multi-dimensional scaling in ANTHROPAC (Borgatti 1993) to map out the organization of the domains and generate a visual representation of the structure of each domain. For the domains of *la buena vida* and *la familia unida*, the third sample participated in a ranking task in which respondents rank ordered the items based on their importance or the extent to which they felt people in the community prioritized those items. I used cultural consensus analysis to measure the degree of sharing among respondents and to infer the structure of a prototypical model that individuals draw on to structure their understanding of the domain. In the second phase, I used this information to construct a survey of cultural consonance in these two domains in order to measure the extent to which individuals live up to these cultural ideals in their everyday lives, and I examined consonance in relation to two health outcomes - levels of glycated hemoglobin (HbA1c) and depressive symptoms.

*Hypotheses*

I tested the following hypotheses:

1) Respondents will share an understanding of what kinds of things are important or necessary to have *la buena vida* (the good life) and *la familia unida* (the united family).

2) Typical measures of acculturation, including age at arrival in the U.S., number of years living in the U.S., and self-reported English proficiency, will be associated with level of
HbA1c and depressive symptoms, and there will be a positive correlation between these two health outcomes.

3) Cultural consonance, or success living within the defined parameters of *la buena vida*, will be directly associated with lower HbA1c and fewer depressive symptoms.

4) The effect of typical measures of acculturation on health outcomes will be moderated by the ability of individuals to effectively act on the shared understandings of *la buena vida* and live within this set of social expectations, as measured by cultural consonance scores.

**Photograph 11.1**: Participant doing a pile sort at Xochitl’s apartment.

**Statistical Tests**

In the final analysis, I use multiple regression analysis to test for the main and moderating effects of acculturation and cultural consonance on health outcomes while controlling for other
variables known to influence those outcomes. This is a particularly useful statistical technique for anthropologists because it allows us to take qualitative variables and measure the influence of other variables on the outcome variable of interest (Dressler 2015). With the addition of each new variable, multiple regression analysis measures its effect on the outcome variable while controlling for or holding the other variables constant, thus helping to “disentangle the relative effect” of each variable in question (Chavez 1994).

**Review of Research Setting**

Alabama is a relatively new destination for Mexican immigrants, so it is particularly suited to anthropological research on why they choose and how they adapt to new destinations as well as how long-term settlement in these smaller metropolitan areas affects knowledge, behavior and health for this new population (Szurek 2011). Seventy-five percent of Latinos in Alabama live in Birmingham (White et al. 2014), and the vast majority are from Mexico. While many first generation immigrants are U.S. citizens (around 20%), they are subject to the same forms of discrimination and hostility as the undocumented (Horton 2016). Both documented and undocumented women participated in this study, though I did find this to be a distinguishing factor in lived experience.

Alabama experienced a rapid influx of mostly young, foreign-born Mexican men in the 1990s and early 2000s, which coincided with a period of robust economic growth. In a more recent rush of chain migration women and children and in some cases aging parents have arrived from Mexico to join the men or other family members (Mohl 2002). Common sending communities include Veracruz, Oaxaca, and Chiapas in southeastern Mexico, as well as the more
traditional sending regions of Guanajuato, Michoacán, and San Luis Potosí. There are dozens of trailer park communities near the Birmingham metropolitan area where Latino immigrants have taken up residence. For the most part, these are owned and operated (sometimes minimally) by white landlords. It is estimated that twenty-five percent of Latino immigrants in Alabama live in poverty, and 65 percent rent their residences (Kochhar, Suro and Tafoya 2005). Mexican women tend to work in cleaning, cooking and other service jobs. They often find work outside of the formal labor economy, so as to avoid having to produce status documents. Seventy-two percent of foreign-born Hispanics are uninsured, and most foreign-born Mexican immigrants speak little or no English (White et al. 2014). Churches, libraries and other resource centers around Birmingham offer services in Spanish as well as ESL (English as a second language) classes. However, anti-immigrant hostility is widespread, and nearly ninety percent of the state voted to amend the constitution to make English the official state language, sending a clear message to Mexican immigrants that they are not welcome. Politicians are pushing stricter immigration control, and the recent passage of HB56 in 2011 has limited access to health services in this population (White et al. 2014). This is fueled by the inability of the current system to adequately meet the needs of this growing population, which is precisely why a better understanding of what the needs are and more effective ways of addressing them are desperately needed. Following the 2016 presidential election, there was a strengthening of anti-immigrant hostility with calls for a border wall as well as stricter enforcement of HB56. At the same time, in an effort to set the Hispanic community somewhat at ease, the city council voted unanimously to make Birmingham a sanctuary city. It remains unclear what exactly this will mean in terms of immigration law enforcement going forward, and while most immigrants are unaware of the decision, it was a
gesture intended to ease some of the pressure on undocumented immigrants following the election.

**Sampling and Recruitment**

The Institutional Review Board at the University of Alabama approved this study and the sampling procedures used to recruit participants (IRB protocol #15-OR-292-R2). Based on several studies that advise breaking down the Latino population into country or region of origin (Zsembik and Fennell 2005) and because the rise in both depressive symptoms and diabetes risk seems to be the highest in the Mexican immigrant population (McGlade, Saha, and Dahlstrom 2004) and particularly in females (Mendenhall 2012), the participants in this study were all women born in Mexico who now have primary residence in Birmingham, Alabama. The focus on women was an effort to reduce the scope of the project as there are substantial differences between men and women in terms of their motivations for migrating, their lifestyles and how these change in the United States, and the social, economic and behavioral risk factors that shape the acculturative experience in distinct ways (Gorman, Read, and Krueger 2010). Further, gender is an important aspect of the immigration experience, though it is often neglected as an analytic category in the literature (Hondagneu-Sotelo 1994).

For most of the participants in this study, it would be inaccurate to describe their decision to move to the United States as a choice - so often people have exhausted every other option to the point where it feels as if they are being forced by some external pressure. However, I point out that the majority of the sample are true first-generation immigrants - they came on their own volition - while a few came either with or at the request of their parents.
I recruited participants through flyers and by word of mouth in churches, grocery stores and Hispanic advocacy agencies, though I mostly relied on participants to recruit more participants, though no more than two from the same household. This is called respondent-driven sampling, and when recruiting participants from what is considered a hidden population, it is the best procedure for obtaining a representative sample (Heckathorn 2011). I identified several primary informants early on in the process—these were women who seemed to have a high degree of social awareness or connectedness and had the ability to express themselves and describe their experiences and their perceptions of the experiences of others in great detail. Because of the clandestine and vulnerable nature of the population, it was difficult to draw a purely random sample, though efforts were made to ensure that participants ranged in socio-economic positioning, location and type of residence, place of employment, and that they did not all know one another.

Gaining Access and Building Rapport

The first thing I did before embarking on this field work was find a research assistant. Veronica Santos was born in Mexico; her parents immigrated to the U.S. when she was three years old and sent for her a few years later once they had gained legal status for themselves and their four children. Veronica arrived in the U.S. at age seven, attended high school and college in Alabama and is currently working at the Department of Human Resources while she saves money for graduate school, where she plans to seek a degree in social work. She is bilingual and very comfortable interacting in both Spanish and English. Veronica’s assistance in setting up interviews and accompanying me to many of them was invaluable. I also recruited assistance
from the director of the Hispanic Interest Coalition of Alabama (HICA), and she introduced me to several employees who both participated in the study and recruited others. We used a conference room at HICA to conduct some interviews as this provided a safe, neutral space for women. La Casita is another agency in town that serves the Latino population and provided another safe space to recruit participants and conduct participant observation and interviews. One participant offered her home as another space to conduct interviews.

![Photograph 11.2](image): Xochitl and Veronica working on the interview schedule at Xochitl’s apartment.

**Interview Procedures and Positionality**

Many women expressed interest in the study and were eager to talk to me and tell me about their lives. They invited me into their homes and their churches; they cooked for me and shared with me and made me feel comfortable and welcome. I, in turn, tried to position myself as an ally and an advocate and to provide resources for women who were in need of health services and legal aid. I conducted interviews in several different places - informants’ homes, a
local educator’s apartment, Sunday recreational league soccer games, the Hispanic Interest Coalition of Alabama, La Casita, McDonald’s, and Starbucks, to name a few. I made great efforts to ensure that each respondent felt safe and comfortable, and I took precautions to protect her personal information. In order to ensure anonymity, I did not request or record respondents’ names, addresses, phone numbers and legal status. All participant names in this document have been changed. The interview schedule was written in Spanish, though a few women switched back and forth between Spanish and English in their responses. Interview times ranged from 30 minutes to two hours. If several people were in the room, I might leave the recorder going after I finished each interview and keep the conversation going between the women.

After the 2016 election, many Mexican immigrants went into hiding. Hispanic interest agencies encouraged members of the community to avoid exposure by only getting out when it was completely necessary, driving very carefully, and using extreme vigilance in being aware of the presence of police officers and immigration officials. It became even more important to me to make people feel safe and comfortable and to recruit only in neutral and public spaces (as opposed to knocking on random doors in Latino neighborhoods). At the beginning of my final survey, I added a brief statement explaining the project and its intentions, reassured participants that their information would be kept private and offered them a list of local clinics and agencies that serve this population, as I hoped this would set them at ease and build trust and openness between us.

I made myself adaptable and amenable to conducting the research in less than ideal settings or situations. I found that the group setting was much more conducive to building rapport and really getting women to open up about their lives and their experiences than one-on-
one situations. This was not always the case, and it would not have been my preference, but it often happened this way, and I always ended up getting a lot out of these kinds of field experiences. I think this is because the women felt more natural and comfortable, as opposed to a stranger asking them questions, which I think they often found intimidating. As an ethnographer, it was important for me to adapt to situations like this (even when it was difficult for me to keep up with the conversation) because that is what my informants seemed to prefer. As a scientist, my commitment to accurate and reliable data collection methods often conflicted with my equally important commitment to really accessing these women and participating in their lives in an authentic way. Bernard (2011) emphasizes the importance of constantly switching back and forth between an \textit{emic} or insider’s perspective and an \textit{etic} or detached scientific observer’s perspective. Both tend to inform one another; however, they are both valuable in their own right. This was not an easy or intuitive bridge for me to cross. Sometimes I was forced to loosen control over the data collection process, in some cases even having to discard the quantitative results, and yet I walked away from many of these types of experiences with the deepest and most coherent understanding of my informants and their lives than at any other point in the research.

\textbf{Ethnography and Key Informant Interviews}

Ethnographic investigation allows for a holistic perspective that situates illness in the broader social, political and historical contexts that produce it. In this way, ethnographic insight can complement epidemiological research by uncovering invisible pathways through which migrants’ precarious social positioning and everyday experiences of vulnerability and
dehumanization operate on the body in harmful ways (Horton 2016). Ethnographers are positioned to look not only at the statistical correlations between individual-level factors like generational status, length of time in the U.S. and language proficiency - the primary measures of acculturation - and health outcomes, but they seek to illuminate why these factors constitute risk for certain people in certain contexts. Early in the research process, I asked my friend Domingo - a bilingual college student from Mexico - to drive me around to different pockets where Mexicans live in and around Birmingham. We explored trailer park communities, residential neighborhoods, and apartment complexes. If residents were out and about we would stop and engage in brief, informal conversations about how long they had lived in the neighborhood, whether or not they liked living there, who they lived with, and what kind of work they did. We went in shops and grocery stores and restaurants to get a sense of where Latinos live and work and play. I did not use this time to recruit participants, but I did talk about the research if asked, and people were helpful in giving me suggestions about where to recruit and who to talk to. Sometimes women would invite us in while they were cooking and offer us food. I learned never to go into the field on a full stomach because I would always be fed! One time we came upon *fiesta de quinceañera* rehearsal in a park, and I watched that for a long time. This is the birthday celebration for 15 year old girls - it is a very important ritual in Mexican culture, and it is something that has survived in the United States. It is a cultural celebration that carries great meaning in Mexican culture, so naturally I was interested in watching it. I was struck that the participants, who were teenagers, all spoke to each other in English, while the adults, the parents and the woman directing the performance, spoke in Spanish. I suspect that even in Mexico, the
young people are more interested in the party component, while the adults are invested in the meaning that the ritual holds.

I identified several key informants early in the research process. These were women who seemed particularly interested in the study and were willing and able to help me recruit other participants. One of these women often let me set up at her apartment where she tutored other Mexican immigrant women. She was very well connected with different Hispanic-interest agencies in the community, and she organized several interviews for me throughout the process. She would call me and say that she had more “mamas” for me to interview — this always made me smile, and I began to think of the women in the study as my mamas. Other key informants were women who willingly gave me their phone numbers and seemed to enjoy talking to me about their experiences. I have stayed in contact with some of them, and they often call to check on me and see how the research is going.

For several weeks I attended soccer games on Saturday mornings at a local high school where Latinos have set up a recreational league. This was always a fun and informative experience. A husband and wife set up a grill and made tacos. The women mostly sat under the tent and socialized while the men played. Several of the women agreed to do the interview, though it was difficult to find private spaces in this setting. Sometimes we would sit in the owner of the taco truck’s car or behind a small concession stand. When the weather got warmer, I had difficulty keeping my A1cNow+ kits at room temperature, so one of the women brought a cooler and offered to let me use it. I was grateful that for the most part, the women seemed interested in the study and eager to help me in any way they could. On one occasion, a police car showed up, and two police men got out of the car and started walking toward the field. There
was a commotion, and a few of the men got up to hide. I was never sure why the officers were there, but they left after a short period and everything went back to normal. I understood that this was a common experience. Just sitting around, spending unstructured time, and listening to women’s casual conversations were some of the most informative and clarifying experiences of the field work process.

For the first sample (n=20), I conducted semi-structured interviews that asked specific questions about the immigrant experience and its related stressors. Following Mendenhall (2012), who found that most Mexican immigrant women she interviewed were willing to talk about even the difficult aspects of their lives when approached with sensitivity and space to speak freely, I guided the conversations by beginning questions with phrases like “Can you tell me about…” or “What was ____ like for you?” This inductive technique allowed respondents to talk about what matters in their own lives rather than imposing a priori assumptions on their narratives. I asked women basic demographic information as well as about their reasons for moving to the United States, their journeys across the border, and what they hoped to gain from living in the U.S. I asked about how life is different in the United States as compared to the life they knew in Mexico, how family dynamics and relationships have changed since moving north, and what kind of toll the process had taken on them physically, mentally and emotionally. I also asked generally about the health problems — physical and emotional — that women believed were prominent among Mexican immigrant women and why they believed this to be the case.
Photograph 11.3: Mexican woman who sets up a taco truck at the recreational soccer games at Carver High School, where locals eat and socialize during the games.

Cultural Domain Analysis

I asked participants in the first sample (n=31) to list as many items as they could think of that they believed to be relevant to each of the four cultural domains. For the lifestyle domain, I asked participants what kinds of things are necessary or important to achieve *la buena vida*, or the good life. For family life, I asked what a *una familia unida* (united family) looks like. For the domain of national identity, participants were asked to describe Mexican immigrant women in terms of their qualities or characteristics. Finally, participants were asked to list their goals in life. Because it proved quite difficult to elicit very many items during the individual free lists (for *la buena vida* women would often insist that material things were not important to them or they would just say house and car and leave it at that) and because I noticed that women seemed more comfortable and talkative when other Mexican women were around, I decided to adapt the free list activity to a group setting. I organized with the director of community education at the Hispanic Interest Coalition of Alabama (HICA) in Birmingham, who agreed to let me lead this
activity during a weekly support group meeting for Latina women in the area. I put up a flyer at HICA, inviting any Mexican-born women to participate in a research study about health in the Mexican immigrant community in Birmingham. On the day of the event, I provided light refreshments and child-care services. After a few minutes of meet-and-greet time, I had all the women sit down at tables that were organized in a square so that everyone could clearly see and hear everyone else. I introduced myself, thanked the women for their willingness to participate and briefly described the purpose of my study. I then explained the activity to the twelve women in attendance and asked them again if they were willing to participate. I read the consent form and had each woman sign the form, signifying that she understood what was being asked of her and that she was willing to participate. Next, I gave each woman a notecard and asked them all to write down at least ten items in response to the question “What kinds of things are important or necessary to have ‘the good life’.” One of the women, an older lady, could not read or write, but her granddaughter was with her, so she wrote down the items that the woman called out to her. I asked her to do this quietly because I did not want the responses to influence others’ responses. But this was not really a problem, as the women were actually very protective of what they were writing and did not want their neighbors stealing their ideas! Once individuals finished writing down their ten items, I selected one volunteer to read her list out loud. I wrote each item down on a big piece of paper and then asked the other women to raise their hands if they had also listed that item. We went around the room this way until we had all the items listed on the board and the number of times each item was listed. The participants became very animated during this process, and it was interesting to observe the reactions of the other women to particular items. This was a fun way of getting the women talking, and it was very helpful in
eliciting more items. I analyzed the free lists in ANTHROPAC to get a sense of what kinds of things come to mind when respondents think about these particular domains of life. Based on the frequency with which an item was listed, the free lists were reduced to a set of particularly salient items.

The next sample (n=31) participated in a pile sorting activity in which items in each domain were grouped together based on like qualities. For each domain, items selected from the free lists were written down on an individual notecard, and I asked respondents to organize the items on the notecards based on similarities or like qualities. The only stipulations were that they had to have more than one pile and they could not group all of the items individually. Once each respondent had sorted the notecards into piles, I asked her to explain why she had grouped certain items together and to give each pile a categorical name if possible. This might be something like household goods or technological items or self-improvement. The purpose of this unconstrained pile sort is to get an idea of how each domain is structured semantically and how people organize the items relative to others. In other words, this task offers insight into how the cognitive space of each domain is constructed. This data was analyzed in ANTHROPAC (Borgatti 1993) using multidimensional scaling (MDS), which generates an aggregate proximity matrix by placing items at relative distance from one another based on the frequency with which they were grouped together, and hierarchical cluster analysis, which further demonstrates which items tend to cluster together. This provides a mental map of the semantic space, which can be graphically represented to show how items are cognitively distributed within a domain.

It turned out that the domain of *la buena vida* was the overarching domain that encompassed all the others. Nearly all of the items listed in the life goals domain were also
listed in the domains of *la buena vida* or *la familia unida*, the one exception being the goal of eventually returning to Mexico. Because of the overlap, the domain of life goals was dropped from the next cognitive task. The domain of national identity was not used in the next cognitive task because the items broke down into good or bad qualities or characteristics of Mexican immigrant women and this was not conducive to a rank ordering task.

**Cultural Consensus Methods and Analysis**

The third sample (n=41)\(^1\) participated in a ranking task in which each respondent was asked to group the items for each domain into four relatively equal piles based on whether she considered those items to be regarded by the community as extremely important, somewhat important, a little important, or not very important at all. I asked respondents to think in terms of how most Mexican immigrant women perceive the relative importance of each item, not on how they as individuals felt about them or on what may or may not be true for their own lives. Once a respondent had the items sorted into four piles, I asked her to put the items in each pile in order of their importance. The result was a rank ordering of all the items in each domain. This was analyzed in ANTHROPAC using cultural consensus analysis, which measures the degree to which informants agree on the relative importance of certain items. By detecting patterns of agreement between respondents, consensus analysis generates an “answer key” based on the extent to which cultural knowledge is shared. The answer key provides the best representation of how the aggregate prioritizes the items in the domain. If the eigenvalue ratio of the first factor to the second is greater than three, it can be reasonably inferred that respondents in the sample are

\(^1\) One respondent was dropped from this sample because she did not seem to understand the task.
drawing from the same set of cultural knowledge to structure their understanding of how to live successfully with regard to these arenas of life. Respondents whose answers tend to reflect the overall agreement are given more weight in the estimation of an overarching cultural model. The first factor coefficients provide each individual’s competence, which is measured as how closely her ranking of the items lines up with the aggregate set of rankings. The second factor measures residual agreement, which can be used to infer sub-distributions within the sample that reflect patterned ways that smaller groups of respondents deviate from the overall model detected in the analysis (Dressler, Balieiro, dos Santos 2015). Property Fitting Analysis (PROFIT) measures the correspondence of the attributes of the items and the location of the items in multidimensional space and can be used to confirm the hypothesized dimensions of the mental schemas, in this case the relative importance of the items in achieving success within a particular domain of life.

**Cultural Consonance Methods and Analysis**

The fourth and final sample consisted of a non-random group of seventy Mexican immigrant women in Birmingham. I wrote the survey questions in English, then had a bilingual speaker translate the survey into Spanish, and then had a Spanish speaker proofread the questions. I then translated the survey back into English to make sure meanings remained consistent. I used the answer keys from the cultural consensus analysis to construct a survey that asked respondents whether or not they possessed certain items or the extent to which they agreed with certain statements with regard to their life or family situations. Possession of basic household items like refrigerator or computer was asked as a series of yes/no questions, while items that depended on the respondent’s personal interpretation of her life circumstances or her
personal character were asked about in a series of Likert-response statements with which respondents could agree not at all, a little, more or less, or definitely. For example, for the item “nice home,” the survey said “Yo vivo en una casa agradable” (I live in a nice home), and respondents’ answers would reflect the extent to which they agreed with that statement. Some questions were asked in the reverse, for example, “Me gustaría tener más ropa” (I would like to have more clothes), and these answers were recoded in the dataset so that higher scores reflected greater access to or possession of the items in consideration.

For both the domains of la buena vida and la familia unida, there was no overall consensus within the sample, as indicated by an eigenvalue ratio of less than three. In the domain of la buena vida there was a large gap in the residual agreement coefficients, with those above zero being more similar in their responses and those below zero also tending to agree with one another more. For this reason, I decided to divide the sample into two groups. Running consensus analysis on each subsample, both groups did meet the three to one threshold, indicating that within-group agreement was high enough to infer consensus. One group tended to prioritize basic household items and technological devices more highly, and the other prioritized non-material items related to personal values, self-improvement, and long-term objectives. Each of these answer keys was used to construct a measure of cultural consonance, one that weighted material items more highly and one that weighted non-material items more highly. This meant that participants in the final sample received two consonance scores for this domain. Likewise in the domain of la familia unida, the sample was divided into two subgroups based on residual agreement, and two answer keys were generated, one prioritizing items related to maintaining Mexican cultural traditions more heavily and the other valuing items related to
family intimacy more. These two groups did not meet the three to one threshold for consensus; however, I once again weighted the consonance scales according to how the items pulled apart in the residual agreement. Participants in the final sample were given two consonance scores in this domain as well. As it turned out, however, while consensus analysis in both domains showed that the two subgroups deviated in their agreement on the extent to which certain kinds of items should be prioritized, the analysis of consonance scores in the final sample showed high bivariate correlations between the scores for each domain, indicating that an individual’s consonance with one answer key was highly indicative of her consonance with the other answer key. This justified calculating a composite score of cultural consonance for each domain, and it was this combined consonance score that was analyzed in relation to health outcomes and other variables of interest in the final analysis.

Covariates and Health Outcomes

In addition to the three acculturation measures — age at arrival, number of years living in the U.S., and self-reported English proficiency — covariates included current age, socioeconomic status (which was a composite measure generated by adding weekly household earnings, education level, and highest occupational status in the home), marital status, and state of origin. Because social support is so often implicated in the health status of Mexican immigrant women, I constructed a scale of social support that included four questions that measured the extent to which women had friends or relatives on whom they could rely for financial, informational, emotional or logistical help (Almeida et al. 2009). Additionally, four questions about the neighborhoods people lived in - whether or not they were majority Latino,
how well respondents knew their neighbors and how safe they felt in their homes and neighborhoods - were used to get a general sense of how living in a neighborhood with other Latinos might correlate with other variables (Vega et al. 2011, Bjornstrom and Kuhl 2014).

Diabetes risk and depressive symptoms were measured because of their high prevalence in Mexican immigrants and particularly women, their pattern of increasing over time in the U.S., and their comorbidity in this population. Twenty five percent of Mexican immigrants who have diabetes also report depressive symptoms, and this is especially true (58%) for women over 65 (Mendenhall 2012). While age is the primary indicator for diabetes risk, these numbers reflect a substantially increased risk for women of Mexican descent. Further, Mexicans in the United States have a 36 percent higher prevalence of type 2 diabetes than Mexicans living in Mexico (Stern et al. 1992). An increase in glycated hemoglobin is the result of insufficient insulin secretion and/or insulin resistance, which if poorly controlled can lead to severe complications such as microvascular problems, kidney failure, loss of eyesight and nerve damage (Mendenhall 2012). Glycemic control is a good measure of diabetes risk, and hemoglobin variant A1c is the easiest variant to measure. As a diagnostic measure, an A1c percentage of 6.5 or greater indicates the condition of type 2 diabetes, while percentages between 5.7 and 6.4 are markers of pre-diabetes or high risk for developing diabetes (World Health Organization 2011). To measure HbA1c, I used an A1cNOW+ kit, which requires a blood spot sample from a finger prick and provides an average of glycated hemoglobin over the preceding eight week period. The device takes five minutes to turn out a reading, during which time I measured depressive symptoms using the Center for Epidemiology’s Depression scale (CES-D), which has been adapted for Spanish-language respondents. The CES-D is a widely used 35-item questionnaire designed to
assess the major symptoms of depression, including depressed mood, changes in appetite or sleep, low energy, feelings of hopelessness, low self-esteem, and loneliness.

I did not measure body mass index (BMI). This was primarily because of the variable settings in which I conducted interviews, some of which would not have been conducive to carrying a scale and measuring tape and taking weight and height measurements. I was concerned that in some cases self-reported weight and height would not be accurate and that with such a small sample this might be a confounding factor in the analysis. Further, in U.S. Hispanic populations, BMI and age are highly correlated, meaning BMI is likely at least partially controlled for by age in my analysis (Abraido-Lanza, Chao, and Flórez 2005).

The History Confound

I had to deal with a troubling and unanticipated history confound. I conducted my field work in 2016, the year of the most contentious election season in modern times. Early on, Donald Trump’s name came up a few times, but it was always in the context of an unlikely worst-case-scenario. In one particular meeting, one woman passed around a funny meme mocking Trump, and everyone sort of light-heartedly joked about him deporting everyone. The severity of what a Trump win would actually mean never really set in, and I did not make the election a central component of my study. I had several interviews set up for the weekend after the election. One by one, they all cancelled. Women we had interviewed months before called or texted to ask again what we were doing and to make sure that their names or information would not be used against them in any way. It was a scary time. An already vulnerable population became a lot more vulnerable overnight, and I worried that all the work I had done to build
rapport with these women had been futile in light of the current situation. I wanted to comfort my informants, protect them and assure them that I meant them no harm and that I was willing to advocate for them in whatever ways I could. I also wanted to be sensitive to the fact that if they did not want to talk to me, that was understandable. In some ways, all of the information I had collected, the conclusions I was starting to come to based on the research thus far, seemed irrelevant. People were scared about what might happen in the coming weeks, months, years. What impact would this have on depressive symptoms, dietary patterns, glycemic index? How might cultural models change in light of this event? Further, to the extent that they ever felt truly welcome in the United States, the election of a man who held deportation of 11 million undocumented immigrants (read: Mexicans) as a central component of his platform was a pretty clear message that they were not welcome or wanted. It should be noted that while the state of Alabama voted overwhelmingly for Trump, Clinton actually won Jefferson County, which was home to most of my informants. This was a point I made to everyone I talked to after this — I am not sure if it offered any consolation or not. I adjusted my interview schedule to include some more in-depth questioning related specifically to the election and the way people were feeling and how they were coping.

Summary

Following Dressler (1995), this research utilizes an “ethnographic critique of theory” in order to ensure that the theoretical and methodological objectives of the research are instantiated in culturally appropriate and relevant ways. A mixed methodological approach captures the interplay of qualitative and quantitative data and analysis; it is built on an empirical foundation
that integrates the subjective experience of the participants. Ethnographic insights and interpretation of informants’ statements are considered in tandem with the results from cognitive tasks in an effort to bring into view the cultural models around which Mexican immigrant women in Birmingham structure their lives. In the final analysis, consonance with these models is considered in relation to well-being, specifically diabetes risk and depressive symptoms, and conclusions are drawn regarding how the ability to achieve a culturally desired life affects health outcomes in the context of the acculturation experience for these women.
CHAPTER TWELVE:
CULTURAL DOMAIN ANALYSIS

This chapter reviews the results of the first phase of quantitative data collection, including cultural domain analysis, the purpose of which is to better understand the cognitive structure and organization of a few salient domains of life, and cultural consensus analysis, which measures the extent to which this structure is shared and agreed upon by individuals in the sample. Ethnographic investigation allows researchers to peer inside the minds and lives of their informants, and systematic data collection techniques in cognitive anthropology can be used to provide empirical validation to the subjective interpretation of the qualitative data. While culture has long been the subject of theoretical debate, it is generally understood to be shared, and the cultural consensus model allows for that core assumption to be operationalized and tested (Dressler 2015). This is useful in detecting the presence of an overarching cultural model on which people draw to inform their own understanding about how to live successfully within a set of cultural expectations. Additionally, because cultural knowledge is unevenly distributed in the population, the consensus model can also be utilized to detect systematic variation in meaning within the semantic space by showing how individuals deviate in patterned ways in their agreement with one another. Three different samples of foreign-born Mexican immigrant women in Birmingham were recruited for this phase of the research. The first involved a cognitive task called free-listing, the purpose of which is to elicit from the respondents
themselves the most salient terms associated with the cultural domains of interest. In the second sample, I administered an unconstrained pile sort in which respondents grouped the most commonly listed items in the free lists in terms of similarities and differences. This was analyzed to better understand how the domain is cognitively organized based on what kinds of things go together and why. A third sample was then asked to rank order the items in the domains of la buena vida and la familia unida based on their necessity or importance in achieving success within that domain. This data was analyzed for consensus as well as residual agreement to arrive at an understanding of how Mexican immigrant women in Birmingham think about and articulate the ideas, behaviors, and goals that define success in these domains of life.

Sample 1: Free List Results

As a first step in examining the elements that make up a cultural domain, I recruited a non-random sample of thirty-one respondents to participate in free listing. Table 12.1 shows the mean, range and standard deviation for each covariate. The mean age for this sample was 36.5, and the mean age at arrival in the United States was 25.0. All of the women were born in Mexico and had immigrated to the U.S. between the years 1976 and 2014, the average number of years living in the U.S. being 12.39. Most women described their occupation as ama de casa (housewife) or a low-skilled profession such as cleaning houses. Most of the sample had not completed a secondary education (high school), spoke little or no English, and earned an average household salary of less than $600 per week.
Table 12.1: Sample 1 Characteristics

<table>
<thead>
<tr>
<th>Sample Characteristics (n=31)</th>
<th>Mean (range, s.d.)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Age</td>
<td>36.52 (19 - 70, 12.73)</td>
</tr>
<tr>
<td>Age at arrival in U.S.</td>
<td>25.03 (10 - 60, 11.06)</td>
</tr>
<tr>
<td>Year of arrival in U.S.</td>
<td>2004 (1976 - 2014, 6.83)</td>
</tr>
<tr>
<td>Years living in U.S.</td>
<td>12.39 (2 - 40, 7.12)</td>
</tr>
<tr>
<td>Occupational status*</td>
<td>0.74 (0 - 3, 0.81)</td>
</tr>
<tr>
<td>Household weekly salary**</td>
<td>1.26 (0 - 3, 0.86)</td>
</tr>
<tr>
<td>Highest level of education completed***</td>
<td>1.58 (0 -3, 1.21)</td>
</tr>
<tr>
<td>English proficiency****</td>
<td>1.29 (0 - 3, 1.24)</td>
</tr>
</tbody>
</table>

*Occupational status measured as (0) does not work outside home, (1) unskilled worker, (2) skilled worker, (3) professional/business owner

**Average weekly salary of household measured as (0) <$300, (1) $300-600, (2) $600-1000, (3) >$1000

*** Highest level of education measured as (0) no school or primary school, (1) secondary school, (2) preparatory school, (3) university

**** Self-assessed English proficiency reported as (0) none, (1) a little, (2) good, (3) very good

Free listing involves having informants name all the elements that come to mind when they think of a particular domain of life. I asked participants to list as many items as they could in response to the following questions:

(1) What kinds of things are necessary or important to have the good life? (*la buena vida*)

(2) What are the characteristics of a united family? (*la familia unida*)

(3) What are the most common characteristics of Mexican immigrant women in this community? (*características Mexicanas*)

(4) What are your goals in life? (*metas de vida*)

In analyzing the data, terms that I could be sure meant the same thing (e.g., “guide kids” and “teach kids” or “good health” and “be healthy”) were combined into one, and the items were analyzed for frequency and salience in ANTHROPAC (Borgatti 1993). The following tables list
the most frequently mentioned items in each of the domains as well as a few infrequently mentioned items to demonstrate a full range of the semantic space. These were the items chosen for further review in the next phase of cognitive tasks. In the domain of la buena vida, respondents mentioned basic household items and access to transportation (which in Birmingham means a car because the public transportation system is very unreliable) as necessary for being comfortable, but they also mentioned items related to being a good person like fulfilling familial and social responsibilities and practicing their faith. The characteristics of la familia unida included items like love and respect and trust but also items related to maintaining Mexican cultural identity, a task that Mexican immigrant women often take on (Romo and Mogollon-Lopez 2016). When asked about the most defining characteristics of Mexican immigrant women, respondents answered with both positive and negative character traits. Interestingly, they also mentioned depression and diabetes as problems so prevalent in this community that they are considered defining features. Goals in life included both short-term and long-term goals, both for the individual and for the family as well. The items are listed in the Spanish form with my translation in parenthesis and include the number of times the item was mentioned (frequency), the item’s average rank in the order of items listed by each respondent, and the item’s salience.

Table 12.2: Free List of la buena vida

<table>
<thead>
<tr>
<th>Term</th>
<th>Frequency</th>
<th>Average Rank</th>
<th>Salience</th>
</tr>
</thead>
<tbody>
<tr>
<td>Casa (House)</td>
<td>17</td>
<td>2.35</td>
<td>0.47</td>
</tr>
<tr>
<td>Tiempo con familia (Family time)</td>
<td>17</td>
<td>4.12</td>
<td>0.37</td>
</tr>
<tr>
<td>Concept</td>
<td>Number</td>
<td>Rating</td>
<td>Probability</td>
</tr>
<tr>
<td>--------------------</td>
<td>--------</td>
<td>--------</td>
<td>-------------</td>
</tr>
<tr>
<td>Coche (Car)</td>
<td>16</td>
<td>2.94</td>
<td>0.40</td>
</tr>
<tr>
<td>Positiva (Be positive)</td>
<td>13</td>
<td>6.77</td>
<td>0.14</td>
</tr>
<tr>
<td>Buen trabajo (Good job)</td>
<td>10</td>
<td>2.60</td>
<td>0.27</td>
</tr>
<tr>
<td>Dinero (Money)</td>
<td>9</td>
<td>4.33</td>
<td>0.19</td>
</tr>
<tr>
<td>Comida (Food)</td>
<td>8</td>
<td>5.13</td>
<td>0.15</td>
</tr>
<tr>
<td>Tiempo para estudiar (Study time)</td>
<td>6</td>
<td>6.17</td>
<td>0.09</td>
</tr>
<tr>
<td>Ropa (Clothes)</td>
<td>5</td>
<td>7.00</td>
<td>0.06</td>
</tr>
<tr>
<td>Aprender inglés (Learn English)</td>
<td>5</td>
<td>5.00</td>
<td>0.09</td>
</tr>
<tr>
<td>Educación para niños (Education for children)</td>
<td>5</td>
<td>7.6</td>
<td>0.05</td>
</tr>
<tr>
<td>Refrigerador (Refrigerator)</td>
<td>5</td>
<td>5.2</td>
<td>0.10</td>
</tr>
<tr>
<td>Internet (Internet)</td>
<td>4</td>
<td>3.00</td>
<td>0.09</td>
</tr>
<tr>
<td>Acceso a medicina (Affordable medicine)</td>
<td>4</td>
<td>9.75</td>
<td>0.02</td>
</tr>
<tr>
<td>Cuidado de salud (Health insurance)</td>
<td>4</td>
<td>6.75</td>
<td>0.05</td>
</tr>
<tr>
<td>Amigas (Friends)</td>
<td>4</td>
<td>6.50</td>
<td>0.05</td>
</tr>
<tr>
<td>Ayudar a otros (Help others)</td>
<td>4</td>
<td>6.50</td>
<td>0.04</td>
</tr>
<tr>
<td>Religiosa (Be religious)</td>
<td>4</td>
<td>4.50</td>
<td>0.08</td>
</tr>
<tr>
<td>Rezar (Pray)</td>
<td>3</td>
<td>9.67</td>
<td>0.02</td>
</tr>
<tr>
<td>Humilde</td>
<td>3</td>
<td>6.33</td>
<td>0.05</td>
</tr>
<tr>
<td>Horno/estufa (Oven/stove)</td>
<td>3</td>
<td>4.00</td>
<td>0.07</td>
</tr>
<tr>
<td>Tiempo libre (Free time)</td>
<td>3</td>
<td>5.67</td>
<td>0.06</td>
</tr>
<tr>
<td>Televisor (Television)</td>
<td>3</td>
<td>6.33</td>
<td>0.05</td>
</tr>
<tr>
<td>Ejercicio (Exercise)</td>
<td>3</td>
<td>6.67</td>
<td>0.03</td>
</tr>
<tr>
<td>Celular (Cell phone)</td>
<td>3</td>
<td>4.33</td>
<td>0.06</td>
</tr>
<tr>
<td>Ser amable (Be kind)</td>
<td>2</td>
<td>8.00</td>
<td>0.02</td>
</tr>
<tr>
<td>Luz (Electricidad)</td>
<td>2</td>
<td>4.50</td>
<td>0.04</td>
</tr>
<tr>
<td>Cama (Bed)</td>
<td>2</td>
<td>6.00</td>
<td>0.04</td>
</tr>
<tr>
<td>Term</td>
<td>Frequency</td>
<td>Average Rank</td>
<td>Salience</td>
</tr>
<tr>
<td>-------------------------------------------</td>
<td>-----------</td>
<td>--------------</td>
<td>----------</td>
</tr>
<tr>
<td>Ir a la iglesia (Go to church)</td>
<td>2</td>
<td>6.00</td>
<td>0.02</td>
</tr>
<tr>
<td>Ser saludable (Be healthy)</td>
<td>2</td>
<td>5.50</td>
<td>0.03</td>
</tr>
<tr>
<td>Ser simpática (Be nice)</td>
<td>2</td>
<td>8.50</td>
<td>0.01</td>
</tr>
<tr>
<td>Tiempo para relajarse</td>
<td>2</td>
<td>5.50</td>
<td>0.03</td>
</tr>
<tr>
<td>Viajar (Travel)</td>
<td>2</td>
<td>5.00</td>
<td>0.04</td>
</tr>
<tr>
<td>Computadora (Computer)</td>
<td>2</td>
<td>2.50</td>
<td>0.05</td>
</tr>
<tr>
<td>Tiempo con amigas (Time with friends)</td>
<td>1</td>
<td>7.00</td>
<td>0.02</td>
</tr>
<tr>
<td>Ser espiritual (Be spiritual)</td>
<td>1</td>
<td>5.00</td>
<td>0.02</td>
</tr>
<tr>
<td>Música (Music)</td>
<td>1</td>
<td>4.00</td>
<td>0.02</td>
</tr>
<tr>
<td>Cable (Cable)</td>
<td>1</td>
<td>5.00</td>
<td>0.02</td>
</tr>
<tr>
<td>Ser paciente (Be patient)</td>
<td>1</td>
<td>2.00</td>
<td>0.03</td>
</tr>
</tbody>
</table>

\( n = 31 \)

Average response length = 8.74; Range = 5 - 13
Total items listed = 85

**Table 12.3: Free List of la familia unida**
Table 12.4: Free List of *características Mexicanas*

<table>
<thead>
<tr>
<th>Term</th>
<th>Frequency</th>
<th>Average Rank</th>
<th>Salience</th>
</tr>
</thead>
<tbody>
<tr>
<td>Trabajan duras (Work hard)</td>
<td>16</td>
<td>2.47</td>
<td>0.39</td>
</tr>
<tr>
<td>Hablan español (Speak Spanish)</td>
<td>13</td>
<td>5.77</td>
<td>0.21</td>
</tr>
<tr>
<td>Mantener tradiciones mexicanas (Maintain Mexican traditions)</td>
<td>13</td>
<td>4.08</td>
<td>0.28</td>
</tr>
<tr>
<td>Religiosa (Religious)</td>
<td>10</td>
<td>3.50</td>
<td>0.23</td>
</tr>
<tr>
<td>Comer comida mexicana (Eat Mexican food)</td>
<td>9</td>
<td>3.56</td>
<td>0.20</td>
</tr>
<tr>
<td>Deprimidas (Depressed)</td>
<td>8</td>
<td>4.75</td>
<td>0.11</td>
</tr>
<tr>
<td>Diabetes (Diabetes)</td>
<td>7</td>
<td>5.86</td>
<td>0.11</td>
</tr>
<tr>
<td>Humildes (Humble)</td>
<td>5</td>
<td>3.25</td>
<td>0.09</td>
</tr>
<tr>
<td>Cocinan (Cook)</td>
<td>4</td>
<td>4.25</td>
<td>0.08</td>
</tr>
<tr>
<td>Cuidan los niños (Take care of children)</td>
<td>4</td>
<td>4.22</td>
<td>0.08</td>
</tr>
<tr>
<td>Violencia domestica (Domestic violence)</td>
<td>4</td>
<td>6.03</td>
<td>0.06</td>
</tr>
<tr>
<td>Sumisas (Submitive)</td>
<td>4</td>
<td>5.09</td>
<td>0.06</td>
</tr>
</tbody>
</table>

\[ n = 31 \]

Average response length = 6.74; Range = 4 - 11

Total items listed = 71
Table 12.5: Free List of *las metas de la vida*

<table>
<thead>
<tr>
<th>Term</th>
<th>Frequency</th>
<th>Average Rank</th>
<th>Salience</th>
</tr>
</thead>
<tbody>
<tr>
<td>Estudian los niños (Kids study)</td>
<td>11</td>
<td>2.91</td>
<td>0.23</td>
</tr>
<tr>
<td>Aprender inglés (Learn English)</td>
<td>10</td>
<td>1.70</td>
<td>0.27</td>
</tr>
<tr>
<td>Mejor futuro niños (Better future for kids)</td>
<td>7</td>
<td>1.86</td>
<td>0.18</td>
</tr>
<tr>
<td>Ser dueña de una casa (Own house)</td>
<td>7</td>
<td>4.0</td>
<td>0.10</td>
</tr>
<tr>
<td>Ser dueña de un negocio (Own business)</td>
<td>6</td>
<td>4.17</td>
<td>0.08</td>
</tr>
<tr>
<td>Ser buen ejemplo para hijos (Good example for children)</td>
<td>5</td>
<td>3.60</td>
<td>0.08</td>
</tr>
</tbody>
</table>
Sample 2: Unconstrained Pile Sort Results

While the free list analysis provides a first glimpse of the semantic space by calculating the frequency with which items were mentioned and their salience within the domain, the next step is to understand how that domain is organized in terms of what kinds of things are cognitively perceived of as going together and why. To this end, a second sample of Mexican immigrant women in Birmingham (n = 31) was recruited to participate in another cognitive task called an unconstrained pile sort. Sample characteristics are listed in Table 12.6 and are consistent with the first sample.

<table>
<thead>
<tr>
<th>Item</th>
<th>Count</th>
<th>Mean</th>
<th>Median</th>
</tr>
</thead>
<tbody>
<tr>
<td>Regresar a México (Return to Mexico)</td>
<td>5</td>
<td>2.60</td>
<td>0.10</td>
</tr>
<tr>
<td>Viajar sin limitación (Travel freely)</td>
<td>3</td>
<td>2.00</td>
<td>0.07</td>
</tr>
<tr>
<td>Casarse por la iglesia (Marry in church)</td>
<td>3</td>
<td>4.67</td>
<td>0.05</td>
</tr>
<tr>
<td>Ayudar a otros (Help others)</td>
<td>3</td>
<td>3.00</td>
<td>0.07</td>
</tr>
<tr>
<td>Ahorrar dinero (Save money)</td>
<td>2</td>
<td>1.50</td>
<td>0.06</td>
</tr>
<tr>
<td>Mejorarse (Improve self)</td>
<td>2</td>
<td>3.50</td>
<td>0.09</td>
</tr>
<tr>
<td>Familia unida (United family)</td>
<td>2</td>
<td>2.00</td>
<td>0.09</td>
</tr>
<tr>
<td>Ser buena amiga (Be good friend)</td>
<td>2</td>
<td>4.00</td>
<td>0.03</td>
</tr>
<tr>
<td>Ser buena madre (Be good mother)</td>
<td>2</td>
<td>1.00</td>
<td>0.04</td>
</tr>
<tr>
<td>Lograr independencia (Achieve independence)</td>
<td>1</td>
<td>3.00</td>
<td>0.02</td>
</tr>
<tr>
<td>Buena salud (Good health)</td>
<td>1</td>
<td>2.00</td>
<td>0.02</td>
</tr>
<tr>
<td>Ser buena esposa (Be good wife)</td>
<td>1</td>
<td>5.00</td>
<td>0.01</td>
</tr>
<tr>
<td>Mejor trabajo (Better job)</td>
<td>1</td>
<td>1.00</td>
<td>0.03</td>
</tr>
<tr>
<td>Aprender manejar (Learn to drive)</td>
<td>1</td>
<td>7.00</td>
<td>0.01</td>
</tr>
</tbody>
</table>

n = 31
Average response length = 4.03; Range = 2 - 8
Total items listed = 44
Table 12.6: Sample 2 Characteristics

<table>
<thead>
<tr>
<th>Sample Characteristics (n=31)</th>
<th>Mean (range, s.d.)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Age</td>
<td>40.13 (27 - 58, 9.09)</td>
</tr>
<tr>
<td>Age at arrival in U.S.</td>
<td>27.03 (12 - 51, 8.69)</td>
</tr>
<tr>
<td>Years living in U.S.</td>
<td>12.87 (2 - 36, 8.09)</td>
</tr>
<tr>
<td>Occupational status*</td>
<td>0.29 (0 - 2, 0.59)</td>
</tr>
<tr>
<td>Household weekly salary**</td>
<td>1.26 (0 - 3, 0.73)</td>
</tr>
<tr>
<td>Highest level of education completed**</td>
<td>1.55 (0 -3, 1.03)</td>
</tr>
<tr>
<td>English proficiency****</td>
<td>1.16 (0 - 3, 0.82)</td>
</tr>
</tbody>
</table>

*Occupational status measured as (0) does not work outside home, (1) unskilled worker, (2) skilled worker, (3) professional/business owner
**Average weekly salary of household measured as (0) <$300, (1) $300-600, (2) $600-1000, (3) >$1000
***Highest level of education measured as (0) no school or primary school, (1) secondary school, (2) preparatory school, (3) university
****Self-assessed English proficiency reported as (0) none, (1) a little, (2) good, (3) very good

For the unconstrained pile sort, each of the items selected from the free lists was written down on an index card, and I asked participants to group the items based on similarities. In other words, they grouped items together that they felt naturally belonged together. They could make as many piles as they wanted to, and the piles could be of any size, though they were asked to avoid putting all of the cards in one pile or sorting each card into individual piles. This task does require some degree of literacy, at least the ability to recognize the words on the card. Most of the women in the sample had at least some primary school education and were able to do this without any problem. A few asked us to clarify some of the terms. For all the respondents, once they finished sorting the cards, I asked them to tell me why they grouped certain items together.
The purpose of this task is to get a better sense of the meaning of the terms and the underlying attributes used to organize them.

Once the items are sorted and the piles defined, ANTHROPAC generates a full square similarity matrix of terms for each respondent in which each term is arrayed in relation to every other term depending on how frequently they were sorted into the same pile or not. This aggregate proximity matrix can then be analyzed using non-metric multidimensional scaling (MDS) to arrive at a two-dimensional graphic representation of the cognitive domain, which provides a visual map of the semantic space. Items that respondents tended to group together appear closer to one another on the map, and terms that were not often grouped together are displayed at greater distances from one another. The stress value of the MDS graph measures the goodness of fit between the original and the transformed distances. Sturrock and Rocha (2000) argue that to verify the existence of an underlying structure to the MDS map depends on the number of hypothesized dimensions and the number of objects being mapped. For an MDS analysis of 35 items along two dimensions, a stress of 0.3 or lower indicates that the solution satisfactorily represents the data within a 99 percent confidence interval. This means that it is unlikely that the map is organized at random but that it follows some logical pattern. Further, hierarchical cluster analysis can identify additional structure in the MDS map by determining the strength of the association between terms and how they cluster together in the cognitive space. The MDS maps are represented in the following figures, and I provide a synopsis of the defining features of the clusters, which are circled.
La buena vida

Figure 12.1 shows the results of the MDS graph for la buena vida, which consists of the necessary or important items in achieving “the good life.” Respondents tended to organize this domain according to basic household items (top left), technology and communication devices (bottom left), family engagement and self-improvement (top right), and leisure time and social activities (bottom right). I found that respondents often organized this domain on the basis of importance or the degree to which they considered the items priorities. One woman organized the items into three piles, one consisting of “lo que necesitamos en casa para estar a gusto (that which we need in the house in order to be comfortable/satisfied),” another of “lo que tratan de hacer para no perder la cabeza o su estabilidad emocional (things you try to do in order to stay sane),” and a final category of things that “no son prioridades pero lo hace si le queda tiempo y energía (are not priorities but that you do if you have time and energy).” One respondent emphasized the importance of items related to being a good person and fulfilling your duties as a mother and a person of faith — “es lo principal para llevar la buena vida (this comes first to have the good life)” — and considered basic household items “lo que necesitas para la vida diaria para vivir cómodamente (what you need for daily living to be comfortable),” but she reinforced that “si tienes lo primero, esto viene segundo, per si no lo tienes no es necesario para la buena vida (if you have the first, then these things come second, but if you don’t have them, they are not necessary for the good life).” Related to items that revolve around positive character traits, one woman said, “es lo que necesitas hacer para sentirse bien de sí mismo (that which you need to do to feel good about yourself).”
Figure 12.1: Cognitive Map of *la buena vida* (Stress = 0.12)

*La familia unida*

Figure 12.2 shows that in the domain of family, items related to Mexican heritage comprise one cluster and include speaking Spanish, eating Mexican food, celebrating Mexican traditions, and going to church, though there was disagreement over whether or not these items were important for maintaining a united family. Respondents would often emphasize the importance of cooking Mexican food and celebrating Mexican traditions, and it was very important to many of them that their bilingual children speak only Spanish in the home. For this
contingent of women, fostering in the children a knowledge and appreciation of their roots was a strong priority. For example, one woman said “sin ellas, no hay un buen ambiente en el hogar... es necesaria mantener nuestras tradiciones” (without these things there is not a good environment in the home...it is necessary to maintain our traditions). Another respondent emphasized these things with regard to the children because “es importante para no olvidar quiénes son and de donde vienen” (it is important not to forget who they are and where they came from). Communication, putting the family first and love clustered together, as these were often considered the most important elements of the united family — “son las características y cualidades que una familia debe tener para vivir en paz y armonía” (the characteristics and qualities that a family should have in order to live in peace and harmony). Going up from there, one cluster pertains to trustworthiness and general affection between family members, another to being available to one another, and the top cluster relates to proximity, spending time together as a family.
Características Mexicanas

Figure 12.3 depicts the cognitive map of the defining characteristics of Mexican immigrant women. The left side consists of positive characteristics of Mexican women, and the right side more negative associations with this group. The positive/negative distinction is a clear statistical representation of a common trope in Mexican culture, which is the distinction between La Virgin de Guadalupe, the patron saint of Mexico and the pure, humble, mother figure, and La Malinche, the indigenous woman who helped Cortes defeat the natives and is depicted as a treacherous and deceptive female who is associated with sexual promiscuity and a debased
lifestyle. This came as little surprise to me, as I found there to be a significant amount of distrust and sometimes disdain between the Mexican women that I interviewed, and many of my respondents related to me that Mexican women tended to change upon moving to the U.S., that they became more self-centered and greedy. The cluster of negative character traits includes being jealous and discriminatory towards one another and dressing provocatively. One woman characterized these things as “cosas que uno aprende aquí en los estados unidos” (things one learns in the U.S.), and she said, “la mayoría de las personas vienen aquí y no tienen nada, y cuando tienen no saben lo que hacer” (the majority of women come here and don’t have anything, and when they have it, they don’t know what to do). On the left side, there is a cluster related to the primary duties of Mexican women - taking care of the home, working hard, and being faithful - below which is a cluster of other positive character traits like being strong and honest, determined and honorable, humble and nice. Interestingly, this domain included a clustering of health issues, which consisted of depression and diabetes, suggesting that these problems are not relegated to the domain of health but are so pervasive in this community that they are identified as defining characteristics of Mexican immigrant women, an aspect of their national identity. Further, within the larger cluster of health conditions, naivety (lack of knowledge) and depression cluster together while stress and diabetes cluster together. One respondent said that many Mexican women suffer from depression and stress because adapting to a new place is hard, and they spend all their time in the house cooking and eating. A review of the Mexican health paradigm (Weller et al. 2008) as well as my own ethnographic experience confirms that mental health and physical health are cognitively linked in the minds of the women.
I interviewed. These two health conditions are explored in relation to cultural consonance and other covariates in the final sample.

Figure 12.3: Cognitive Map of características Mexicanas (Stress = 0.09)

Metas de vida

When my informants spoke of their goals in life, they focused not only on themselves but also their children. Ensuring a better future for their children through education was a common theme among my informants and an oft repeated reason for immigrating to the United States.
One woman said, “my main goal is for my children to study and that they have a better future than I have…that is why we live here.” As depicted in Figure 12.4, these items cluster together in a group of goals related to being a good wife and mother. The middle cluster consists of goals related to self-improvement in terms of economic security and maintaining health. Helping others and being a good friend cluster together as elements related to social life. The lower left cluster consists of long-term goals related to economic security and independence, which would include the ability to gain some form of formal citizenship in the United States. These items were not mentioned often as they are not the primary focus in the day to day lives on most of my informants. Being able to travel freely and eventually returning to Mexico form the final cluster.

Figure 12.4: Cognitive Map of *metas de vida* (Stress = 0.14)
Cultural Consensus on Pile Sorts

Multidimensional scaling arrays the items in cognitive space based on their similarities and differences by reducing the aggregate similarity matrix to a two-dimensional map of the distances between terms. The lower the stress value, the better the fit between the original and transformed distances. While my stress values were all well below the thresholds laid out in Sturrock and Rocha’s guidelines, I wanted to measure the extent to which respondents agreed on the cognitive structure of the domain as represented by the MDS maps. This can be performed using cultural consensus analysis, from which it can be inferred whether or not respondents share the same basic mental schema for organizing the items. Borgatti (1994: 275) states that before aggregating pile sort data an effort must be made to “analyze the pattern of agreements among respondents, to ensure that the pattern is consistent with a single culture, rather than two or more conflicting groups.”

In the domain of *la buena vida*, the eigenvalue ratio rendered in consensus analysis was 10.4, indicating strong agreement among respondents with regard to how items should be grouped together. The family domain did not achieve the 3 to 1 threshold for consensus, though at an eigenvalue ratio of 2.6, it is close. With eigenvalue ratios of 6.7 and 6.9 respectively, there was considerable agreement in the domains of Mexican characteristics and life goals. Consensus analysis on the pile sort data indicates that overall, my informants do seem to be following the same logic in sorting the items based on similarities and differences. The next section will discuss how respondents evaluated the items in *la buena vida* and *la familia unida* along the dimension of importance. Because the domain of defining characteristics of Mexican women was not conducive to an evaluation on the basis of importance and because the domain of life
goals was basically a reiteration of *la buena vida*, these two domains were dropped from the remainder of the analysis.

**Sample 3: Cultural Consensus and Residual Agreement**

After getting a better idea of what terms are used to talk about certain domains of life, how these terms fit together in respondents’ cognitive schemas and the extent to which they agree on the similarities and differences of the items, the next step was to have respondents evaluate the items in terms of their importance. In other words, which items are the most important in achieving success within a domain? Respondents in the third sample (n = 41) divided the terms into four relatively equal piles based on whether they considered them very important, somewhat important, less important and least important in achieving *la buena vida* and *la familia unida*. Then they sorted the items in each pile in order of importance, resulting in a full rank ordering of all the items for each domain. Respondents were reminded not to organize the cards based on their own wants, needs, or real-life situations, but on how they perceive that Mexican immigrant women in general prioritize these items in their lives. Using the rank-ordered data, cultural consensus analysis allows the researcher to do three things: 1) infer the existence of a cultural model for a particular domain, which indicates that respondents are drawing from the same knowledge base to structure their understanding of how best to achieve success in that domain; 2) to calculate a composite ranking to represent the group as a whole, also known as the “answer key,” which is an aggregation of individual responses that serves as the best estimate of the collective model; and 3) to observe how patterns of agreement within smaller subgroups of the sample deviate from the full sample. The cultural consensus
model assumes that cultural knowledge is unevenly distributed in the population, and as a form of factor analysis, consensus detects patterns of agreement between respondents, which can be used to infer how cultural knowledge about a particular domain is distributed within a sample (Weller 2007).

La buena vida

In the domain of *la buena vida*, there was no overall consensus, as indicated by an eigenvalue ratio of the first factor to the second factor of 1.5. This suggests that the answers are not well explained by a single factor, that is, membership in a particular cultural group did not account for the largest shared intersection among the items. However, it appeared that several women in the sample did cluster together in the second factor loadings, which measure residual agreement, or the degree to which certain respondents diverge from the overall agreement of the group in their agreement with one another. Even though there was no overall consensus, I decided to divide the sample into subgroups and test for consensus within each subgroup. The sample was divided into respondents with residual agreement coefficients of less than zero (n = 14) and those greater than zero (n = 27). The results showed that when the sample was broken up in this way, consensus analysis within the larger group yielded an eigenvalue ratio of 3.1 and the smaller group a ratio of 3.0. As an aggregate, both groups highly ranked having a good job and having food to eat, but the larger group (n=27) prioritized items related to long-term goals regarding self-improvement, better opportunities for children, and positive character traits. This included items such as spending time with family, good education for the children, learning English, going to church and being positive. This group listed things like television, computer,
and internet access as the least important items. On the other hand, the smaller group (n=14) tended to be more concerned about the more immediate needs of daily life, such as household goods, transportation and technological devices, as opposed to the more future-oriented aspects of improving one’s (and one’s family’s) position in life and being a good person. Table 13.5 shows how the two groups broke down by covariates. The larger group tended to be older upon arrival to the U.S., less proficient in English, and lower in socioeconomic status.

Table 12.7: Sample 3 Characteristics and Cultural Consensus of *la buena vida*

<table>
<thead>
<tr>
<th></th>
<th>Group 1</th>
<th>Group 2</th>
<th>Combined</th>
</tr>
</thead>
<tbody>
<tr>
<td># of Respondents</td>
<td>27</td>
<td>14</td>
<td>41</td>
</tr>
<tr>
<td>Age</td>
<td>36.74 (22 - 54, 8.34)</td>
<td>32.07 (19 - 43, 6.78)</td>
<td>34.81 (19 - 54, 8.27)</td>
</tr>
<tr>
<td>Age at Arrival</td>
<td>22.52 (9 - 48, 8.62)</td>
<td>17.77 (6 - 28, 6.31)</td>
<td>20.68 (6 - 42, 8.29)</td>
</tr>
<tr>
<td># of Years in U.S.</td>
<td>14.26 (6 - 29, 4.39)</td>
<td>13.14 (2 - 21, 4.93)</td>
<td>13.83 (2 - 29, 4.50)</td>
</tr>
<tr>
<td>English Proficiency*</td>
<td>1.93 (1 - 3, 0.78)</td>
<td>2.86 (1 - 4, 1.03)</td>
<td>2.29 (1 - 4, 0.99)</td>
</tr>
<tr>
<td>SES**</td>
<td>4.00 (2 - 6, 1.21)</td>
<td>5.31 (4 - 7, 1.12)</td>
<td>4.46 (2 - 7, 1.32)</td>
</tr>
<tr>
<td># of Negative Competence Scores</td>
<td>1</td>
<td>2</td>
<td>1</td>
</tr>
<tr>
<td>Average Competency (range, s.d.)</td>
<td>0.50 (-0.36 — 0.87, 0.26)</td>
<td>0.54 (-0.21 — 0.90, 0.36)</td>
<td>0.42 (-0.74 — 0.87, 0.32)</td>
</tr>
<tr>
<td>Eigenvalue ratio</td>
<td>3.06</td>
<td>3.01</td>
<td>1.508</td>
</tr>
</tbody>
</table>

*Self-assessed English proficiency reported as (0) none, (1) a little, (2) good, (3) very good
*SES measured as average weekly salary of household (0 - 3) and highest education level completed (0 - 3)
To formally test the distribution of respondents along the second factor, I performed a test of significance to identify what accounted for subgroup membership. Two variables - socioeconomic status and proficiency in English - showed significant bivariate correlations with residual agreement (RA) coefficients (for RA and SES, r = -0.40, p =0.01; for RA and English, r = -0.40, p = 0.01). This indicates that the smaller group of respondents with higher socioeconomic status and more proficiency in English clustered together in prioritizing basic household items and technological devices, and the larger group with lower socioeconomic status and less English proficiency clustered together in their prioritization of items related to self-improvement and fulfilling familial obligations.

Subtracting the aggregate answer key (the weighted average rankings) from each subgroup’s answer key provides a measure of residual agreement of each item for each subgroup. These items’ deviation scores can be plotted to show how the two groups diverge and where they might overlap in their agreement. Items ranked more important by a subgroup receive a lower rank order score and hold negative residual values. Conversely, items ranked less important were given higher rank scores and have residuals with positive coordinates. If there was little deviation between the groups’ ranking of the item and the overall model, the item would lie at or near the origin (0,0). Thus, items along the x-axis decrease in value for group 1 (n = 27), while items least important for group 2 (n = 14) are located higher along the y-axis. Figure 13.5 depicts the structural representation of residual agreement for the two groups. There is a strong inverse association between the two sets of deviation scores (r = -0.86, p = 0.00), which indicates that the items ranked as more important by one group are ranked as less important by the other group and vice versa. It can be seen that there are a few items that both groups tend to prioritize.
These are having a good job (this could mean personally or for a partner) and having food to eat. Agreement really diverges over the importance of technology like cell phone, computer, internet access, television and cable. These items ranked highly important by one subgroup were ranked least important by the other subgroup, so much in this case that it accounted for more variation than membership in the larger group did.

Figure 12.5: Relationship of Mean Deviations from Combined Answer Key by Subgroups
Property Fitting Analysis

The answer key from each subgroup can then be used to predict the placement of items on the MDS dimensions from the unconstrained pile sorts. This data was analyzed in ANTHROPAC using property fitting analysis (PROFIT). The multiple R yielded in PROFIT analysis indicates whether or not the distances between the items displayed in the MDS graph are associated with a hypothesized evaluative dimension. Generally, an R-squared of higher than 0.5 suggests the existence of a shared cognitive criterion by which respondents organize the terms. Figure 12.6 shows how each subgroup tended to prioritize the items in the domain. This is further indication that in their articulation of the importance of these items, respondents with higher SES and greater English proficiency tend to prioritize material possessions and technological devices while respondents with lower SES and lower English proficiency tend to articulate their commitment to familial duties and long-term self-improvement.
La familia unida

In the domain of family life, the sample did not achieve overall consensus, as indicated by an eigenvalue ratio of the first factor to the second factor of 1.39 with three negative competence scores. When divided into subgroups based on residual agreement coefficients, one group (n = 20) rendered an eigenvalue ratio of 2.35 and the other subgroup (n = 21) a ratio of 2.84, both of which are approaching consensus but do not quite meet the 3:1 threshold. However, within these groups, the first factor does account for more variation in the data than the
second factor, and neither group had any negative competence scores. The PROFIT analysis in which the answer keys from each subgroup are imposed on the MDS map yielded an R-squared of 0.346, suggesting that the guiding principle by which respondents rank the items does not match up very well with the logic used to sort the items into like categories. The main source of contention seemed to be in the maintenance of Mexican heritage — some respondents ranked these elements as the most important aspects of family life and others as the least, favoring instead love and open communication. This is not terribly surprising considering that immigration and acculturation can wreak havoc on family dynamics and result in major shifts in priorities within the family. It appears that for the Mexican immigrant women in my sample, the domain of family life is a contested one, with little agreement among respondents as to how to establish and maintain *la familia unida* in this new context.

**Summary**

It turned out that *la buena vida* constitutes the overarching domain that encompasses all the others — it includes elements associated with everyday household goods, informational technologies, personal values and character traits, commitments to others, as well as long-term objectives related to improving oneself and providing better life opportunities for one’s children. That the samples did not achieve overall consensus in the domains of *la buena vida* and *la familia unida* initially came as a surprise to me; however, this came to make sense as I reflected on my ethnographic experience and the tension that permeates my respondents’ lives. My original hypothesis that Mexican immigrant women orient themselves around a shared model of *la buena vida* and *la familia unida* was not confirmed, though the residual agreement analysis
did indicate that there was a substantial amount of sharing in the domain of *la buena vida*, even though respondents deviated in their articulations of what kinds of things should be prioritized in order to achieve success in this domain. The following chapter will discuss the possible reasons and potential implications of these findings.
CHAPTER THIRTEEN:
CULTURAL CONSENSUS, RESIDUAL AGREEMENT, AND CULTURE CHANGE

The previous chapter reviewed the systematic data collection techniques used in this study to better understand the semantic space of a few cultural domains and how meaning and significance are constructed within that space. My focus in this chapter is on interpreting these results by situating them in the context of culture change as well as the broader political-economic and social forces that shape the lives of Mexican immigrant women in Alabama. Theoretically, acculturation assumes movement away from one sociocultural orientation towards another; however, there is little effort to empirically describe the cultural parameters within which immigrants operate at a particular moment in time. As Portes (2005) points out, in all of the literature on acculturation and assimilation, one question that goes unanswered (and often unasked) is “assimilation to what?” An acculturation framework ostensibly arrays individuals along a continuum of culture that extends from the culture of origin to that of the host community, but culture is a multidimensional construct that is not easily transposed into linear form. The cognitive approach to acculturation used here, however, does not treat the acculturation process as a “wholesale change in socio-cultural identity” but rather as a domain-specific process that is based on immigrants’ immediate needs and goals in the new cultural context (Schrauf 2002). The respondent-by-respondent correlation matrix generated in consensus analysis reflects the elements of a cultural domain on which most of the sample
agrees; however, because cultural knowledge is assumed to be unevenly distributed in the population, it also detects which individuals in the sample tend to agree with one another more than they do with the overall sample (Dressler et al. 2015). Individuals within a cultural group do not have to agree on everything to feel meaningfully connected to one another; cultural ties may undercut domains, and individuals' understandings of how to live will vary under different conditions. What is important is to demonstrate where the diversity lies as well as what fosters the sense of connection. The focus is on what is at stake for people and why it matters to them (Kleinman 1980). The patterned ways in which individuals deviate in their articulation of cultural knowledge regarding how to be and act in order to demonstrate success in a particular domain will depend on the economic and social context of their lives, both the availability of resources and their engagement with other immigrants as well as with the native population of their host communities. The cultural consensus model allows for the study of systematic variation in cultural models, which may be especially pertinent when studying a newly arrived immigrant population, where patterns of agreement are in flux. I suggest that the lack of overall consensus in the sample regarding what is needed to achieve *la buena vida* does not preclude the existence of a cultural model upon which individuals draw in order to structure their understanding of how to live; rather, the systematic clustering of respondents into two subgroups that do exhibit consensus independently reflects the distinct ways that these women articulate their cultural identity. This chapter considers the utility of the cultural consensus model in detecting variation, why this may be particularly pertinent in situations of acculturation, and why Mexican immigrant women articulate their understandings of how to achieve *la buena vida* in distinct ways.
Using Cultural Consensus to Study Variation

The cultural consensus model (Romney et al. 1986) was developed to operationalize and measure the theoretical assumption that culture is shared. If an overall cultural model is detected, the first factor identifies the largest shared intersection among a set of variables, and the second factor accounts for the largest shared intersection that remains (Handwerker 2002). The first factor loadings reflect individuals’ cultural competence, or the degree to which they share in the overall consensus. Those whose answers more closely reflect those of the aggregate are given more weight in the calculation of a cultural answer key, which provides the best estimate of responses that a culturally competent individual would likely give. The second factor loadings reflect residual agreement, or how individuals systematically deviate from the overall agreement in their responses (Dressler et al. 2015). The cultural consensus model assumes that cultural knowledge is unevenly distributed in the population; however, what if the knowledge is so unevenly distributed that consensus analysis does not detect the presence of a single cultural model? Residual agreement scores can be used to observe who is clustering together in their responses and to determine if there is any subcultural agreement within the sample. In my analysis of *la buena vida*, the first factor did not sufficiently account for over 50 percent of the variance in the overall response matrix; however, based on my ethnographic research as well as the statistical relationship between residual agreement coefficients and certain covariates (socioeconomic status and English proficiency), it appears that individuals in the sample articulate their priorities in distinct ways based on their positioning in the cultural landscape. Women with lower socioeconomic status and less proficiency in English were more likely to emphasize the importance of factors related to being a good person and fulfilling social, familial,
and religious duties, while women with higher socioeconomic standing and more proficiency in English were more likely to focus on obtaining the basic materials that characterize a modern, middle class lifestyle, namely technological and communication devices. The two subgroups prioritized these items in opposite ways. Perhaps for the more socioeconomically disadvantaged, emphasizing certain character traits or commitment to others as equally or more important than material possessions that reflect status is a way of articulating that one can be a good person even if she has not attained the material aspirations typical of a modern middle class lifestyle. The concept of alternative cultural scripts is useful in further explaining why these articulations of the priorities within the domain of *la buena vida* deviate in patterned ways.

**Scripts, Schemas and the Reconstruction of Culture**

The guiding principle of cognitive anthropology is that humans learn about the world at a particular time and place from the way that those around them communicate a specific set of cultural rules through their language and their actions (Boster 2011). Systematic data collection techniques allow researchers to decipher what these rules are in an empirically precise way, rather than merely equating cultures with social or ethnic identities (Handwerker 2002). Delineating culture requires more than classifying people based on socially constructed categories of race or ethnicity; rather, it necessitates an empirical analysis of shared meanings, attitudes, and practices (Kral et al. 2011). Further, as circumstances change - as is the case when macroeconomic forces disrupt social networks and lead individuals to seek resources in new ways - so do the rules that guide behavior. In order to make sense of the world around us, humans process their sensory experiences and develop ways of thinking about those experiences,
and our minds use this information to respond to different experiences in socially constructed ways. Handwerker (2002: 109) explains that culture is “constructed in an individual’s mind out of the unique set and sequence of experiences that mark the trajectory of a person’s life, embodies who that person is as an individual, what he or she knows and does, at specific points along that trajectory.” Thus, a cognitive approach to acculturation examines the similarities and differences between acculturating individuals at a given point in time and within specific domains of life, rather than attempting to order them along a continuum of culture, which is untenable because culture is a “moving target” (Handwerker 2002). Culture change is particularly relevant to immigrants, as they are faced with a whole new set of experiences that their minds must process. For Mexican immigrant women in Alabama, these experiences will be informed by the larger structural forces that limit choice and movement and expose them to discrimination and hostility from natives. How they make sense of these experiences will depend on several factors - age, education, socioeconomic positioning, and access to social support. Paying attention to variability in cultural knowledge within a singular cultural group allows us to more precisely locate cultural boundaries and detect sources of contention within the group. As Handwerker (2002) reminds us, culture changes because cultures change. This is because individuals - the carriers of culture - change their responses as the situations around them change. As individuals inhabit new social spaces, their cognitive and behavioral schemas change to accommodate living within this space (Bourdieu 1977). In his discussion of the habitus framework, Bourdieu posits that our expectations are based on our past experiences; therefore, the historical context in which those mental schema were forged originally must be considered as immigrants settle in new social environments. The process of renegotiating how to
live in a new cultural and environmental context will be to some extent influenced by both the cultural understandings of one’s upbringing as well as the conditions in which one currently lives. This puts immigrants in the unique position of carving out space in a dynamic cultural landscape that they are changing even as they attempt to find their place and integrate themselves into that landscape.

**Competing Cultural Frames of Reference**

Zavella (2011) describes immigrants as operating within a “dual frame of reference,” in which they constantly compare and contrast situations in the host country with previous experiences from their former lives. This process forces them to reflect on the values, beliefs and behaviors informed by their culture of origin as well as the points of contrast with a new cultural meaning system (Schrauf 2002). They are faced with the decision of maintaining the cultural understandings and expectations with which they have grown up or renegotiating their beliefs, behaviors, social relationships and long-term goals to be more compatible with their new life circumstances. Drawing on the work of Gloria Anzaldúa, Zavella (2011: 9) explains that experiences of transition are “constructed through the process of displacement through migration or the segregation of social life in which each social milieu has its own system of meaning, values, and practices, that is, power relations that produce normative hierarchies of meaning regarding the social order as well as material structures that shape identity.” Zavella describes immigrants as living in a perpetual state of liminality, in which they are not fully accepted in either culture. It is within the contradictions and ambiguities that result from living with competing cultural frames of reference that new meanings develop. In the “ongoing process of
identity formation,” the social context is critical for understanding how and why individuals articulate their realities in the ways they do. Cultural hybrids emerge in moments of historical transformations. Migrants may “articulate the opposite cultural tradition precisely because the historical transformations make them feel unmoored, desolate, or disconnected by the ‘unhomeliness’ of migrancy” (Zavella 2011: 13). These contradictory processes and the ambiguous sense of belonging lead to fluid articulations of identity. This all happens as individuals begin to understand who they are and where they belong within the new sociocultural environment and how they are expected to operate within that environment, a process by which “the personal and local must confront the societal in seeking out the resources necessary for self-determination and empowerment, holding tightly to one’s sense of cultural self while confronting a system of power, oppression, and liberation” (Kral et al. 2011: 51).

Articulating Cultural Standing

Strauss (2004: 161) argues that while anthropologists have tended to focus on describing “highly sedimented world views — those that are taken for granted or are the consensual common opinion,” there has been a more recent effort to recognize contested views as well in order to arrive at a full range of cultural meaning. The concept of cultural scripts reflects the notion that different ways of speaking make sense in terms of different local cultural values or priorities and will relate to different aspects of thinking, speaking and behavior (Goddard and Wierzbicka 2004). Strauss (2004: 162) states that in any given society at any given moment in time, “some ideas are up for grabs and others are more settled.” As individuals articulate their cultural knowledge, they are reflecting their own “cultural standing,” which Strauss defines as
one’s position on a viewpoint continuum that ranges from highly controversial to taken for
granted in the relevant opinion community. Further, as individuals relate their beliefs about the
ideal ways to think and behave in order to be successful in a particular domain of life, they will
do so in ways that reflect their assumptions about the hearer’s opinions, which are based on
stereotypes such as clothing, age, sex, ethnicity, education level or lifestyle. These beliefs -
regarding both an individual’s effort to articulate her own cultural standing as well as her
assumptions about the cultural standing of the person with whom she is speaking “undergird the
anticipatory work speakers do in conversation, modifying both how speakers phrase their
assessments and whether they venture an assessment at all” (2004: 164). In my research
experience, respondents had alternate ways of articulating the relative importance of certain
items in the domain of la buena vida. This may reflect an effort by some to establish themselves
primarily as “good” in terms of being morally upstanding, while others were more concerned
about approximating the modern middle class lifestyle and took for granted the items related to
being a good person. Reflecting on her own Mexican heritage, Gloria Anzaldúa (1987: 40)
captures the former sentiment well:

In my culture, selfishness is condemned, especially in women; humility and
selflessness, the absence of selfishness, is considered a virtue. In the past,
acting humble with members outside the family ensured that you would
make no one *envidioso* (envious); therefore he or she would not use
witchcraft against you. If you get above yourself, you're an *envidiosa.* If you
don't behave like everyone else, la gente (the people) will say that you think
you're better than others, que te crees grande (that you think you’re a big deal).
With ambition (condemned in the Mexican culture and valued in the Anglo)
comes envy. *Respeto* (respect) carries with it a set of rules so that social categories
and hierarchies will be kept in order.
On the other hand, achieving “the good life” may be cognitively perceived as going hand-in-hand with improving one’s standard of living. Finkler (1997) points out that in Mexico, *la mala vida* (the bad life) encompasses both a defunct character and financial destitution, so it makes sense that the reverse would be true for *la buena vida*. In other words, perhaps this articulation of *la buena vida* reflects the Weberian notion that success in the material realm of life is indicative of good standing in the spiritual realm. In essence, articulating one or the other is a matter of semantics; in reality, both sets of priorities exist in tandem. An individual may be striving to achieve success at both ends of the spectrum, but what they feel compelled to articulate when speaking of priorities reflects what kind of person they consider themselves to be.

**Cultural Exchange**

The learning and sharing of culture happens and is reinforced through social interaction. I suppose it should not be surprising that women who are in the process of renegotiating their cultural understandings in a new social context and who remain largely isolated out of fear or discomfort interacting with and engaging this new context do not exhibit a high degree of consensus overall regarding cultural ideals and the prioritization of certain aspects of life or family over others. Many researchers have emphasized the importance of breaking down the Latino immigrant population into subgroups based on country of origin as the socio-political and historical context of immigration from distinct countries may change the trajectory of life in the United States. The problem of delineating cultural boundaries is further complicated by the fact that Mexico consists of many diverse regions and traditions. Mexican immigrant populations in
the U.S. cannot be understood independent of the “deep, multithreaded, and everyday bidirectional ties with various sending communities in Mexico” (Mendenhall 2012). Community psychology has focused on the community as the most important mechanism by which culture is internalized. By this token, in the absence of a distinctly delineated community, cultural meanings may become obscured, and with the lack of shared social engagement, collective identities may be slower to form. Further, in her ethnographic work with Mexican immigrants, Zavella (2011) notes a prejudice toward one another that is born of cultural and linguistic diversity and competition over scarce resources and opportunities. Within marginalized populations, for individuals who aim to be upwardly mobile, there is often a sense that there are a limited number of spots available for people of their background in the Western middle class lifestyle and that if someone else gets in, that reduces their own chances. All of these facets of the immigrant experience complicate cultural sharing in immigrant communities, particularly in newer immigrant destinations like Alabama.

**A Cognitive Approach**

Theoretically, acculturation is typically studied by comparing cultural meaning systems between culturally distinct groups and arraying individuals along a continuum from the culture of origin to the host culture. Schrauf (2002) proposes a cognitive approach to the study of acculturation, one that focuses research on culture within immigrant groups in contrast to the traditional focus on comparisons between distinct cultural groups. Schrauf suggests that it is the “interference from immigrants’ culture of origin, in their attempt to adapt to the culture of adoption, that brings the experience of acculturation into awareness so that it can be reflected
upon.” For example, among my respondents, speaking Spanish in the home was listed frequently as an important element to have a *familia unida*. This would not have been a conscious priority in Mexico because there would have been no point of contrast, but because children often learn to speak English quickly after starting school in the U.S., it often becomes very important to mothers that their children communicate in their native tongue - because on the one hand, they want to be able to understand what their children are saying, and on the other hand, because retaining some form of their Mexican heritage becomes a conscious intention for a lot of women. On the other hand, some women may be so focused on their children’s integration into the U.S. mainstream that retaining Spanish is less of a priority. Further, individuals bring to bear remnants of their culture of origin to the process of renegotiating their cultural identity in a new setting. Emphasizing the importance and prioritization of character traits and fulfillment of social and familial and religious obligations may be a way for Mexican immigrant women to remain meaningfully connected to the cultural value system of their upbringing even as they distance themselves from the socioeconomic reality of their lives in Mexico. For example, the objective understanding that one’s current situation requires her to have a car in order to get by day to day (which is the case in Alabama because the public transportation system is not reliable) may not begin to take hold on a visceral level as something that is necessary for “the good life” if this has historically not been the case for an individual. In a discussion about whether or not she had changed since she arrived in the U.S., one respondent said, “I think so, because if I were to live in Mexico I would not look the way I look now. Sometimes I tell my husband that we are different and have changed and that if we go to Mexico they are going to know the difference even though we can’t see it.” I think she is articulating that her standard of living has improved
significantly, which she worries has changed her in some fundamental way. Articulating her commitment to being a good wife and mother, going to church and practicing her faith by helping others, and constantly working towards self-improvement is one way of convincing herself and those around her that while her lifestyle has changed, her character has not. My respondents often related to me that certain material items were important for being comfortable but that if a person’s moral character was compromised, she could not achieve la buena vida.

Summary

My ethnographic investigation made it clear that the primary motivations that drive migration from Mexico to the United States are the desire for a better life, in terms of an improvement in standard of living that reflects a Western middle class lifestyle and better educational and career opportunities for the children, which reflects a sense of maternal duty. A central aspect of this research is to understand what exactly constitutes a better life for Mexican immigrant women living in Birmingham, Alabama. This was the primary motivation for exploring the domain of lifestyle, conceptualized here as la buena vida, or “the good life.” It seems clear that for these women improving one’s standard of living goes hand in hand with being a good person, fulfilling familial and communal duties, and actively practicing one’s faith. Both ends of this spectrum are important, though women may articulate their priority of certain aspects over others when asked what is most important to achieve la buena vida. My analysis reflects that obtaining the material goods reflective of a Western middle class lifestyle is an important aspect of the acculturation process; however, displaying one’s good moral character and continually reenacting familial and social commitments may be a way of remaining
meaningfully connected to one’s cultural upbringing and maintaining relationships with those left behind, which is also important.

While most acculturation metrics attempt to locate individuals along a bidirectional pathway, cultural consensus theory resolves several theoretical and methodological weaknesses endemic to acculturation research by considering how cultural meanings are both shared and contested within a cultural group. The goal of this phase of the study is to more precisely describe the cultural realities that shape the everyday lives of Mexican immigrant women in Birmingham, in order to better understand the felt experience of acculturation so that the pathways by which this experience gets under the skin can then be explored. Along with the semi-structured interviews, this data allows me to start getting an idea of what kinds of things come to mind when women think about what is important in life. It also provides some insight into how cultural realities are shifting for these women. This is a statistical representation of the tension that pervades nearly every aspect of life for Mexican immigrant women as they struggle between remaining meaningfully connected to their culture of origin but also accepting that their lives and their children’s lives are in the U.S. now and the sense of urgency in integrating themselves into the new setting in cohesive ways. The cultural consensus model evaluates what individuals say about how one ought to think and act under certain conditions in order to demonstrate success within a particular domain of life; however, this may or may not be reflected in their actual beliefs and behaviors. The next chapter presents the results of cultural consonance analysis and begins to consider how the ability to live successfully within a set of cultural expectations is related to health outcomes.
This chapter reviews the results of the second phase of the research, culminating with how consonance with two cultural models influences well-being among Mexican immigrant women in Birmingham. The preceding chapters focused on cultural domain analysis, which provides empirical evidence regarding how cultural knowledge is cognitively organized, and cultural consensus analysis, which measures the extent to which that knowledge is shared within a population as well as how subgroups of respondents deviate from the overall pattern of agreement. As Weller (2007) reminds us, consensus analysis provides a summary of what people say, how they articulate their understanding of how people ought to believe and to act, but they are not necessarily reflective of what people do, how they actually live their lives. Berry’s (1997) model of acculturation is based on the premise that people tend to act in ways that correspond to cultural influences and expectations. What Berry misses is that this is not a matter of pure agency and that there are limiting factors to achieving coherence with these expectations. It may seem axiomatic to suggest that what people say may have little or no bearing on what they do, but cultural consonance theory suggests that the greater the discontinuity between the shared cultural understanding of how one ought to live and how one actually lives does matter a great deal in terms of health (Dressler 2005). Cultural consensus provides a theoretical and methodological mechanism to operationalize and measure culture, and cultural consonance provides a mechanism to analyze the extent to which an individual approximates, in her own
beliefs and behaviors, the shared cultural prototypes of her social group. When examined in relation to health outcomes, this provides an empirically satisfying way to demonstrate how culture shapes the well-being of individuals. Further, this resolves the theoretical ambiguity of culture as a variable in acculturation research. I predicted that cultural consonance would serve as a better predictor of type 2 diabetes risk than typical measures of acculturation and that the interaction of these variables with cultural consonance would explain a significant amount of the variation in the effects on both health outcomes. I consider each of my hypotheses in turn, but I begin with an explanation of the interview procedure and the covariates examined. All data was analyzed using SPSS v.23.

Sample 4 Survey

This data was gathered through a survey that included a 35-item depressive symptoms scale (CES-D) and a blood spot sample to test for percent of hemoglobin A1c (HbA1c). A non-random sample of foreign-born Mexican immigrant women living in Birmingham, Alabama, was recruited to participate. The interview schedule began with basic demographic information, including where the respondent was born, her current age, year of and age at arrival in the United States, number of years living in the United States, number of years living in Birmingham, marital status, occupational status of the respondent and if applicable, her partner, average weekly salary of the household, highest level of education completed, and self-reported English proficiency. The remainder of the interview included questions pertaining to cultural consonance, perceived social support, and neighborhood characteristics, and this was followed by the depressive symptoms scale and the HbA1c test.
Sample 4 Characteristics

The demographic characteristics of the sample are presented in Table 14.1. The majority (47%) rent their homes, while some (30%) owned their own homes and pay mortgages on them. Another 18 percent rent trailers, and 4 percent were living with relatives or friends at the time of the interview. Fifty-four percent of respondents reported being married, 33 percent described their marital status as “living with partner,” usually indicating that their partnership had not been officiated by the church, 7 percent were single, 4 percent divorced, and one respondent was a widow. Socioeconomic status was calculated as a composite score of the highest occupational status in the home, level of education, and average weekly salary, all of which demonstrated strong bivariate correlations. Sixty percent of the sample occupied the lowest bracket of socioeconomic status, which is representative of the Mexican immigrant population in Birmingham.

Table 14.1: Sample 4 Characteristics

<table>
<thead>
<tr>
<th>Sample Characteristics (n=70)</th>
<th>Mean (range, s.d.)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Age</td>
<td>37.44 (19-66, ±10.07)</td>
</tr>
<tr>
<td>Age at arrival in U.S.</td>
<td>23.43 (2-48, ±9.69)</td>
</tr>
<tr>
<td>Year of arrival in U.S.</td>
<td>2003 (1976-2015, ±5.96)</td>
</tr>
<tr>
<td>Years living in Birmingham</td>
<td>11.72 (1-24, ±4.86)</td>
</tr>
<tr>
<td>Years living in U.S.</td>
<td>13.31 (2-29, ±5.02)</td>
</tr>
<tr>
<td>Occupational status*</td>
<td>.61 (0-3, ±.91)</td>
</tr>
<tr>
<td>Occupational status of partner*</td>
<td>1.20 (0-3, ±.84)</td>
</tr>
<tr>
<td>Household weekly salary**</td>
<td>1.11 (0-3, .94)</td>
</tr>
<tr>
<td>Highest level of education completed***</td>
<td>1.29 (0-3, ±1.00)</td>
</tr>
</tbody>
</table>
In addition to the questions pertaining to cultural consonance (discussed below), I included four questions on perceived social support and four questions on neighborhood characteristics. The social support questions asked if respondents had friends or relatives that they could rely on in situations where they needed a loan, advice, emotional counsel, or assistance with childcare. These were asked because of the extensive literature on how social networks and access to social support can change dramatically in the context of migration, and these changes are often linked to changes in health status (Viruell-Fuentes and Andrade 2016). A study that focused on the relationship between social support and health would need a much more nuanced and sophisticated scale that measured different types and sources of social support separately and also considered the negative aspects of social support systems for certain individuals; however, for my purposes, it seemed appropriate to have at least a basic measurement of social support to use as a covariate. All four of the social support variables (financial, emotional, informational, and logistical) had significant bivariate correlations, which justified a composite measure of social support that encompassed all four types.

Neighborhood characteristics appear to have a relationship with health outcomes as well, so I wanted to include a very basic measurement of what Vega et al. (2011) calls “collective efficacy,” which encompasses neighborhood social control and social cohesion. It is essentially a

<table>
<thead>
<tr>
<th>Sample Characteristics (n=70)</th>
<th>Mean (range, s.d.)</th>
</tr>
</thead>
<tbody>
<tr>
<td>English proficiency****</td>
<td>.94 (0-3, ±.915)</td>
</tr>
</tbody>
</table>

*Occupational status measured as (0) does not work outside home, (1) unskilled worker, (2) skilled worker, (3) professional/business owner
**Average weekly salary of household measured as (0) <$300, (1) $300-600, (2) $600-1000, (3) >$1000
*** Highest level of education measured as (0) no school or primary school, (1) secondary school, (2) preparatory school, (3) university
**** Self-assessed English proficiency reported as (0) none, (1) a little, (2) good, (3) very good
measure of collective trust and common values among residents of a community. As Birmingham is a relatively new immigrant destination and my sample varied quite a lot in terms of living in proximity with other Hispanic or Mexican immigrants, I suspected that this sense of collective efficacy within neighborhoods would yield different results than in places where a Latino immigrant presence is well established. Based on Vega et al. (2011), the neighborhood questions asked if respondents lived in a majority Hispanic neighborhood, if they felt safe in their homes, if they felt safe walking around their neighborhoods, and if they knew their neighbors and had good relationships with them. Living in a majority Hispanic neighborhood was significantly and inversely correlated with feeling safe in the home \( r = -.25, p = .035 \) and feeling safe walking around the neighborhood \( r = -.49, p = .000 \). Somewhat surprisingly, there was no significant relationship between living in a majority Hispanic neighborhood and knowing your neighbors or having a good relationship with them.

**Cultural Consonance**

To measure cultural consonance in the domains of *la buena vida* and *la familia unida*, I asked about the items garnered from the original free lists and used in the consensus analysis. Access to or possession of basic household items was asked as a series of yes or no questions. This list included car, electricity in the home, refrigerator, television, internet, cell phone, oven, stove, washer, dryer, cable, hot water, computer, and bed. These items were coded as 0 or 3, so as to match the scale used in the next part of the survey. The remainder of the survey consisted of a 4-point Likert-response scale based on the extent to which the respondent agreed with a statement. Possible answers were “not at all” (coded as 0), “a little bit” (1), “generally” (2), or
“definitely” (3). Following Dressler (2005), the direction of the statements varied throughout the interview. For example, one statement might read “Yo tengo suficiente dinero para pagar mis gastos y para otras cosas que quiero” (I have enough money to pay my expenses and for other things that I want). Another statement might read “Me gustaría tener más ropa” (I would like to have more clothes). This style of questioning forces respondents to think about each statement rather than just getting in an acquiescent response pattern of answering all the questions in the same way. Further, it helps keep respondents more honest in their answers, particularly with questions regarding personal characteristics or family relationships. For example, asking respondents if family members love one another, most people will respond affirmatively, but asking if there could be more love between family members might give them pause to say well, yes, I suppose we could do a better job of loving each other.

Cultural consensus analysis indicated that while respondents tended to organize the domain of la buena vida in similar ways, there was some disagreement over which elements of the domain should be more or less prioritized. Using the two different answer keys generated by cultural consensus analysis, I calculated two different consonance scores for each respondent, one that more heavily weighted money, household items and technological devices (cell phone, internet, television, and computer), and another that weighted items associated with self-improvement, such as having a good character (being patient, having a positive outlook) and fulfilling familial responsibilities higher (educating children, going to church, spending time with family). Recall that Figure 13.5 graphs the mean deviations of the items in each subgroup’s answer key from the combined sample’s answer key — the items furthest from zero indicate that there was strong disagreement between the two subgroups over the importance of these items.
One cultural consonance score was calculated to reflect the higher weight of items at the top and lower weight of items at the bottom of the graph, and another consonance score was calculated to reflect the opposite weightings. The lack of consensus in the domain of *la familia unida* — both in the way respondents organized the items in the domain and the ways in which they prioritized certain items over others — indicated that the family is a contested space, and among my respondents there is no clear sense of what success in this domain entails. Nevertheless, because the second factor loadings indicated that certain respondents were grouping together in their responses and the eigenvalue ratios within each group indicated that the subgroups were at least approaching consensus, I calculated two consonance scores for this domain as well — one that gave greater weight to items related to remaining connected to Mexican culture — speaking Spanish, eating Mexican food, and celebrating Mexican traditions — and one that weighted items such as love and spending time together more heavily and the items related to Mexican culture the lowest.

Despite the apparent divergence in the articulation of priorities, the two cultural consonance scores for each domain had very strong significant correlations (*r* = 0.997, *p* = 0.00 for *la buena vida* and *r* = 0.946, *p* = 0.00 for *la familia unida*). This indicates that while respondents may be diverging in the ways they articulate which items in the domain *should* be emphasized or prioritized in terms of having *la buena vida* and *la familia unida*, those who are consonant tend to be consonant with both versions of the model. In other words, both the materialistic items such as household items and technological devices and the more idealistic items related to self-improvement and long-term objectives are encompassed in the culturally salient model of achieving “the good life,” and in terms of well-being (as I will demonstrate)
both ends of the spectrum are important. The high bivariate correlations between consonance with the two different answer keys justified performing a factor analysis of the two consonance scores for each model that generated one cultural consonance score for each respondent. It is this combined score that is used throughout the analysis and referred to as cultural consonance with *la buena vida*. Likewise, cultural consonance with *la familia unida* is also analyzed as a combined factor of consonance with the two different versions of the hypothesized model for this domain.

**Correlations between Depressive Symptoms and Glycated Hemoglobin (HbA1c)**

My hypothesis that there would be a significant correlation between number of depressive symptoms and level A1c was confirmed ($r = 0.29, p = 0.016$). This supports evidence in the epidemiological literature as well as Mendenhall’s VIDDA syndemic model, which suggests that type 2 diabetes and depression cluster together among Mexican immigrant women due to the social, political and economic conditions that shape their daily realities and define their lived experience. It also lends credence to Mendenhall’s notion that diabetes is an idiom of distress, a culturally-sanctioned physiological manifestation of a compromised mental state of being. While 0.29 is not a particularly strong correlation, it should be noted that most comorbidity studies take place in a clinical setting, where individuals are seeking treatment for diagnosed diabetes. My sample was not drawn from a clinical population; in fact, only two women in the sample had ever been diagnosed with diabetes. For women with HbA1c levels greater than 5.6, indicating high diabetes risk or full-blown diabetes, the average number of depressive symptoms was 34.7 ($n = 30$, s.d. = 22.7). For women with HbA1c levels lower than 227...
this threshold, the average number of depressive symptoms was 22.7 (n = 40, s.d. = 14.6). It is disturbing that out of the seventy women interviewed, nearly half of them had levels of HbA1c that indicated high diabetes risk, though only two were aware of their condition. Further, the number of depressive symptoms for women with higher levels of HbA1c is significantly higher than for those not at risk.

![Error Bar Graph of Depressive Symptoms by Diabetes Risk](image)

**Figure 14.1: Error Bar Graph of Depressive Symptoms by Diabetes Risk**

**Correlations between Acculturation Variables and Health Outcomes**

I hypothesized that typical measures of acculturation would be significantly associated with higher levels of HbA1c and more depressive symptoms. Because all of my informants were foreign-born Mexican women, acculturation variables included age at arrival, number of years
living in the U.S. and self-reported English proficiency. Cruz (2008) suggests that while some acculturation scales are much more sophisticated, these three proxy variables exhibit high correlation with more comprehensive acculturation scales and are therefore satisfactory constructs in measuring acculturation level among the majority of Hispanics in the U.S. Interestingly, typical measures of acculturation were not significantly correlated in my sample and did not justify a composite score. That was not a problem because I always intended to look at the variables separately, and I interpreted this as further validation that while typical measures of acculturation have empirical validity in predicating health outcomes, it is unclear what acculturation scales are actually measuring in terms of culture or cultural positioning.

While there were no significant correlations between the sub-constructs of acculturation, individual bivariate correlations with the two measures of health were significant. Table 14.2 shows the correlation matrix for health outcomes and the covariates of interest. In terms of well-being, English proficiency was negatively correlated with depressive symptoms \((r = -0.295, p = 0.013)\) and diabetes risk \((r = -0.278, p = 0.020)\), signifying that a better command of English lowered the risk for these adverse health outcomes. Age at arrival was positively associated with more depressive symptoms \((r = 0.247, p = 0.039)\) and higher diabetes risk \((r = 0.373, p = 0.001)\), meaning the older upon arrival, the greater risk for poor outcomes. More time living in the United States was positively associated with HbA1c \((r = 0.303, p = 0.011)\) but not with depressive symptoms. Other known predictors of diabetes include age and socioeconomic status, and bivariate correlations showed both of these to be significantly correlated with diabetes risk, such that being older and less well positioned socioeconomically, the greater the risk of developing diabetes \((r = 0.539, p = 0.000\) for age and \(r = -0.319, p = 0.007\) for SES). There were no associations
between social support and the outcome variables. As stated, age at arrival and English proficiency were the only variables significantly correlated with depressive symptoms, though in opposite directions. With the exception of perceived social support, all of the predictor variables have significant bivariate correlation with level of Hemoglobin A1c, with age ($r = .539$, $p = .000$) and cultural consonance ($r = -.444$, $p = .000$) exerting the strongest effects. Age at arrival ($r = .247$, $p = .039$), self-reported English proficiency ($r = -.308$, $p = .009$), and cultural consonance ($r = -.295$, $p = .013$) came in as significant predictors of depressive symptoms.

Table 14.2: Bivariate Correlation Matrix between Acculturation Measures, Cultural Consonance and Health Outcomes

<table>
<thead>
<tr>
<th></th>
<th>Age at Arrival</th>
<th>Years in U.S.</th>
<th>English Proficiency</th>
<th>HbA1c</th>
<th>Depressive Symptoms</th>
<th>Cultural Consonance</th>
</tr>
</thead>
<tbody>
<tr>
<td>Age at Arrival</td>
<td>- - -</td>
<td>-0.27*</td>
<td>-0.24*</td>
<td>0.37**</td>
<td>0.24*</td>
<td>-0.12</td>
</tr>
<tr>
<td>Years in U.S.</td>
<td></td>
<td>0.06</td>
<td>0.30*</td>
<td></td>
<td>-0.09</td>
<td>-0.16</td>
</tr>
<tr>
<td>English Proficiency</td>
<td></td>
<td>-0.29*</td>
<td>-0.31**</td>
<td></td>
<td>0.51**</td>
<td></td>
</tr>
<tr>
<td>HbA1c</td>
<td></td>
<td></td>
<td>0.29*</td>
<td></td>
<td>-0.44**</td>
<td></td>
</tr>
<tr>
<td>Depressive Symptoms</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>-0.30*</td>
<td></td>
</tr>
</tbody>
</table>

*Significant at 0.05 level
**Significant at 0.01 level
Regression Analyses

Diabetes Risk

The basic analytic strategy in biocultural medical anthropology is to isolate and measure a cultural variable and then examine its effect on certain health outcomes while controlling for other factors that are known to influence those outcomes (Dressler 2015). The first set of models tests the association of cultural consonance with *la buena vida* with levels of HbA1c. Age and socioeconomic status are known predictors of diabetes risk, and in the first regression equation they do exert significant effects on levels of HbA1c. With the addition of cultural consonance in model two (B = -0.32, p = 0.03), however, socioeconomic status drops out, suggesting that it is not the possession of socioeconomic resources in itself that affects health outcomes but the utility of those resources in achieving cultural consonance. Consonance exerts an inverse effect such that higher consonance is significantly associated with lower levels of HbA1c. In model three, the three acculturation variables are entered into the equation but in the presence of cultural consonance none of them exert a significant effect on diabetes risk.

Table 14.3: Regression Models of HbA1c

<table>
<thead>
<tr>
<th></th>
<th>Unstandardized Coefficients</th>
<th>Standardized Coefficients (Beta)</th>
</tr>
</thead>
<tbody>
<tr>
<td>MODEL 1</td>
<td></td>
<td></td>
</tr>
<tr>
<td>(Constant)</td>
<td>5.68</td>
<td>- - -</td>
</tr>
<tr>
<td>Age</td>
<td>0.34**</td>
<td>0.51**</td>
</tr>
<tr>
<td>SES</td>
<td>-0.18**</td>
<td>-0.27**</td>
</tr>
<tr>
<td></td>
<td></td>
<td>R² = 0.35; p = 0.00</td>
</tr>
<tr>
<td>MODEL 2</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Interaction Effects

Next, the interaction of acculturation variables and cultural consonance was tested to determine whether or not the direct effect of cultural consonance scores moderates the effects of acculturation variables on glycated hemoglobin levels. Does the ability to live within a shared set of cultural expectations (cultural consonance) buffer the effect that time living in the U.S. typically exerts on type 2 diabetes risk? Model four shows that there is an interaction between number of years living in the United States and cultural consonance scores such that the longer one has lived in the U.S. the more profound the effect - in both directions - of cultural consonance on diabetes risk.
Table 14.4: Interaction Effects of Acculturation Variables and Cultural Consonance with *la buena vida* on HbA1c

<table>
<thead>
<tr>
<th></th>
<th>Unstandardized Coefficients</th>
<th>Standardized Coefficients (Beta)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>MODEL 4</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>(Constant)</td>
<td>5.68</td>
<td>- - -</td>
</tr>
<tr>
<td>Age</td>
<td>0.30</td>
<td>0.45</td>
</tr>
<tr>
<td>SES</td>
<td>-0.05</td>
<td>-0.08</td>
</tr>
<tr>
<td>Cultural Consonance</td>
<td>-0.20</td>
<td>-0.29*</td>
</tr>
<tr>
<td>Age at Arrival</td>
<td>0.03</td>
<td>0.45</td>
</tr>
<tr>
<td>Years in U.S.</td>
<td>0.10</td>
<td>0.15</td>
</tr>
<tr>
<td>English Proficiency</td>
<td>-0.04</td>
<td>-0.06</td>
</tr>
<tr>
<td>Age at Arrival x Cultural Consonance</td>
<td>-0.08</td>
<td>-0.15</td>
</tr>
<tr>
<td>Years in U.S. x Cultural Consonance</td>
<td>-0.16**</td>
<td>-0.31**</td>
</tr>
<tr>
<td>English Proficiency x Cultural Consonance</td>
<td>0.06</td>
<td>0.08</td>
</tr>
</tbody>
</table>

R² = 0.41; p = 0.00

\( n = 70 \)

* = significant at 0.10 level; ** = significant at 0.05 level

Removing the variables that do not have significant associations with the dependent variable, Model 5 shows a moderately strong effect of the interaction between number of years living in the United States and cultural consonance with *la buena vida* on levels of HbA1c while controlling for age and socioeconomic status (B = -0.231, p = .02). While time in the U.S. drops out of the equation, the interaction of cultural consonance with time in the U.S. does exert a significant effect on diabetes risk (B = -0.23, p = 0.02). When the interaction is entered into the
regression model along with age, SES, amount of time living in the U.S. and cultural consonance, the interaction effect explains an additional five percent of the variance and bringing the total adjusted R-squared to 0.43.

Table 14.5: Interaction Effect of Time in U.S. and Cultural Consonance on HbA1c

<table>
<thead>
<tr>
<th></th>
<th>Unstandardized Coefficients</th>
<th>Standardized Coefficients (Beta)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>MODEL 5</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>(Constant)</td>
<td>5.68</td>
<td>-</td>
</tr>
<tr>
<td>Age</td>
<td>0.25**</td>
<td>0.38**</td>
</tr>
<tr>
<td>SES</td>
<td>-0.04</td>
<td>-0.06</td>
</tr>
<tr>
<td>Cultural Consonance</td>
<td>-0.23*</td>
<td>-0.35*</td>
</tr>
<tr>
<td>Years in U.S.</td>
<td>0.09</td>
<td>0.13</td>
</tr>
<tr>
<td>Years in U.S. x Cultural Consonance</td>
<td>-0.12*</td>
<td>-0.23*</td>
</tr>
<tr>
<td></td>
<td></td>
<td>$R^2 = 0.43; p = 0.00$</td>
</tr>
</tbody>
</table>

$n = 70$

* = significant at 0.05 level; ** = significant at 0.01 level

The regression coefficients can be used to calculate the difference in A1c levels by cultural consonance scores depending on how long an individual has lived in the United States. Dividing the sample into three groups based on number of years living in the U.S., the following equation was used to calculate the strength of the interaction effect:

$A1c = \text{YearsUS (0.13)} + \text{CC (-0.35)} + (-0.23)(\text{YearsUS x CC})$

Years in the United States and cultural consonance scores are standardized in order to calculate the average difference in A1c levels associated with one standard deviation difference in
consonance. Non-significant coefficients are included in the estimation equation because it is not appropriate to trim the model of insignificant conditional effects before interpreting the modifier effects (Cleary and Kessler 1982). An individual with a cultural consonance score that is one standard deviation below the mean will have a measure of glycated hemoglobin that is approximately 0.35 standard deviations higher than average, no matter their number of years in the U.S. The longer one lives in the United States, the greater the difference in A1c levels depending on the individual’s consonance. Those who have lived in the United States the longest (1 s.d. above the mean number of years) and who have the highest consonance (1 s.d. above the mean) are at the lowest risk for developing diabetes, while those who have lived in the U.S. the longest but have low levels of consonance are at the greatest risk. Using the above equation, figure 15.2 shows the graphic representation of the effect of cultural consonance on levels A1c for individuals depending on the number of years they have lived in the United States.

Figure 14.2: Interaction Effect of Cultural Consonance and Years in U.S. on HbA1c
Depressive Symptoms

The next set of models tests the association between cultural consonance scores in the domain of *la buena vida* and number of depressive symptoms as measured by the 35-item CES-D scale. Once again, the variables are standardized in order to preclude collinearity and in order to show the change in depressive symptoms with one standard deviation increase or decrease in the independent variable. The dependent variable, depressive symptoms, remains in the original metric. In model one, age and socioeconomic status are not shown to exert significant effects on number of depressive symptoms at 0.05 level; however, I point out that both variables are approaching significance, with age exerting a positive effect (the older an individual, the more likely she is to have a greater number of depressive symptoms) and SES exerting an inverse effect (the higher SES, the fewer depressive symptoms). Model two shows the addition of the three acculturation variables, none of which exert significant effects at or below the 0.05 level, though proficiency in English is approaching significance and exerts an inverse effect on depressive symptoms, such that more proficiency in English is associated with fewer depressive symptoms. Again in model three, none of the acculturation variables exert a significant effect on depressive symptoms, but in model four, the interaction between age at arrival and cultural consonance is significant (B = -0.26, p = 0.05), suggesting that the older one was on arrival, the greater the moderating effect of cultural consonance on number of depressive symptoms.
Table 14.6: Regression Models of Depressive Symptoms

<table>
<thead>
<tr>
<th>Model</th>
<th>Unstandardized Coefficients</th>
<th>Standardized Coefficients (Beta)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>MODEL 1</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>(Constant)</td>
<td>27.86</td>
<td>- - -</td>
</tr>
<tr>
<td>Age</td>
<td>3.66</td>
<td>0.19</td>
</tr>
<tr>
<td>SES</td>
<td>-3.02</td>
<td>-0.16</td>
</tr>
<tr>
<td></td>
<td></td>
<td>$R^2 = 0.04; \ p = 0.10$</td>
</tr>
<tr>
<td><strong>MODEL 2</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>(Constant)</td>
<td>27.86</td>
<td>- - -</td>
</tr>
<tr>
<td>Age</td>
<td>2.73</td>
<td>0.14</td>
</tr>
<tr>
<td>SES</td>
<td>1.94</td>
<td>0.10</td>
</tr>
<tr>
<td>Cultural Consonance</td>
<td>-6.60*</td>
<td>-0.34*</td>
</tr>
<tr>
<td></td>
<td></td>
<td>$R^2 = 0.07; \ p = 0.04$</td>
</tr>
<tr>
<td><strong>MODEL 3</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>(Constant)</td>
<td>27.86</td>
<td>- - -</td>
</tr>
<tr>
<td>Age</td>
<td>2.17</td>
<td>0.11</td>
</tr>
<tr>
<td>SES</td>
<td>2.68</td>
<td>0.14</td>
</tr>
<tr>
<td>Cultural Consonance</td>
<td>-5.64</td>
<td>-0.29</td>
</tr>
<tr>
<td>Years in U.S.</td>
<td>-2.20</td>
<td>-0.11</td>
</tr>
<tr>
<td>English Proficiency</td>
<td>-3.71</td>
<td>-0.19</td>
</tr>
<tr>
<td>Age at Arrival</td>
<td>0.71</td>
<td>0.04</td>
</tr>
<tr>
<td></td>
<td></td>
<td>$R^2 = 0.08; \ p = 0.07$</td>
</tr>
<tr>
<td><strong>MODEL 4</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>(Constant)</td>
<td>27.47</td>
<td>- - -</td>
</tr>
<tr>
<td>Age</td>
<td>3.79</td>
<td>0.20</td>
</tr>
<tr>
<td>SES</td>
<td>3.86</td>
<td>0.20</td>
</tr>
<tr>
<td>Cultural Consonance</td>
<td>-4.20</td>
<td>-0.22</td>
</tr>
</tbody>
</table>
Removing the variables that do not exert significant effects on depressive symptoms, model five shows the effect of the interaction of age at arrival in the United States and cultural consonance.

Table 14.7: Interaction Effect of Age at Arrival in U.S. and Cultural Consonance on Depressive Symptoms

<table>
<thead>
<tr>
<th></th>
<th>Unstandardized Coefficients</th>
<th>Standardized Coefficients (Beta)</th>
</tr>
</thead>
<tbody>
<tr>
<td>MODEL 5</td>
<td></td>
<td></td>
</tr>
<tr>
<td>(Constant)</td>
<td>27.27</td>
<td>- - -</td>
</tr>
<tr>
<td>Age</td>
<td>-1.47</td>
<td>-0.08</td>
</tr>
<tr>
<td>SES</td>
<td>1.44</td>
<td>0.08</td>
</tr>
<tr>
<td>Cultural Consonance</td>
<td>-4.54</td>
<td>-0.24</td>
</tr>
<tr>
<td>Age at Arrival in U.S.</td>
<td>5.05</td>
<td>0.26</td>
</tr>
<tr>
<td>Cultural Consonance x Age at Arrival</td>
<td>-4.32*</td>
<td>-0.27*</td>
</tr>
</tbody>
</table>

\( n = 70 \)

\* = significant at 0.10 level; ** = significant at 0.05 level
Plugging in number of depressive symptoms (in the original metric) and the standardized regression coefficients for age at arrival and cultural consonance, the same moderation equation was used to graph the interaction effect between age at arrival and cultural consonance on number of depressive symptoms. Figure 14.3 shows that among those who immigrated to the United States at a younger age (1 s.d. below the mean), depressive symptoms are low and there is virtually no effect of cultural consonance. However, for those whose age at arrival is closer to the mean, not only are depressive symptoms higher, but they are significantly higher for respondents with lower levels of cultural consonance. This effect is even stronger for those whose age at arrival is one standard deviation above the mean, indicating that the combination of being older upon arrival and having low consonance puts one at the greatest risk for experiencing more depressive symptoms. On the other hand, for those who were older upon arrival and have managed to achieve higher levels of cultural consonance, their risk of experiencing depressive symptoms is basically equivalent to respondents who were younger upon arrival.

\[ R^2 = 0.13; \ p = 0.01 \]

\[ n = 70 \]
\[ * = \text{significant at 0.05 level} \]
La familia unida and Other Covariates

Cultural consonance scores in the domain of family were calculated based on the two answer keys given in the consensus analysis of the two subgroups. Recall from chapter 13 that neither of these subgroups quite met the criteria for consensus, suggesting that the model is contested or perhaps that it is just not well established. The bivariate correlation between consonance scores with the two answer keys was very high \((r = 0.946, p = 0.00)\), which justified calculating a factor score that combined consonance scores, as was done in the domain of la buena vida. However, cultural consonance in family life did not render any significant relationships with either acculturation measures or health outcomes. Family relationships clearly
play an important role in Mexican immigrant women’s lives as indicated by the fact that many respondents prioritized items related to family in the domain of *la buena vida*. However, these tend to be items related to the future of the children - better educational and career opportunities - while there was not a clear consensus on what the ideal family looks like right now, and it was not shown to have any bearing on health status. Clearly, shifting family dynamics is a source of stress for immigrants, and consensus and consonance in family life should continue to be explored. The same is true for levels of social support and neighborhood characteristics, which did not factor into the regression models in any significant way and were left out of the final analysis. These scales were not very detailed, which is probably why they were subsumed by other variables in the analysis, though more sophisticated measures of these variables are still worth considering.

**Summary**

Cultural consonance in the domain of *la buena vida* had a significant inverse relationship with risk of diabetes and depressive symptoms. In fact, consonance turned out to be a better predictor of health status than any of the acculturation measures used in this study. Further, the interaction between consonance and acculturation measures did yield additional explanatory power in predicting health outcomes, lending credence to the notion that one underlying pathway by which typical measures of acculturation act on the body is in the ability to successfully act on culturally valued ideas about how to live well. To borrow the terms from Brown and Harris (1978), the interaction effects show that cultural consonance acts as a “provoking agent” that exerts direct effects on health outcomes, while acculturation measures serve as “vulnerability
factors” that make certain bodies more or less susceptible to disease depending on their level of cultural consonance (see Cleary and Kessler 1982). Even though my respondents differed in their articulations of what kinds of things should be prioritized in order to achieve *la buena vida*, consonance with one aspect of the domain signified consonance with the most prioritized items overall, and this success was indicative of lower diabetes risk and fewer depressive symptoms, especially for women who have lived in the U.S. longer and were older upon arrival. The final chapter discusses the implications of these findings and the utility of exploring cultural consonance in concert with acculturation measures in immigrant health studies to better understand what impact culture and culture change have on well-being. First, I want to put this analysis in perspective by bringing back in the ethnographic component of the research.
Previous chapters have reviewed some of the themes permeating my conversations and experiences with Mexican immigrant women in Birmingham as well as the statistical patterns detected by the quantitative analysis; however, this dissertation would not be complete without taking a more detailed look into the life histories and current realities of a few of my informants. I have chosen three women whose stories, while all unique, demonstrate some of the obstacles associated with the migration process for Mexican women as well as the aspirations of achieving a better life. Ethnography is an investigatory process in which the investigator records things that people in a given social group are saying and doing and how they are thinking and feeling in order to work out a systematic understanding of a particular cultural space. While social scientific research often tries to eliminate statistical “noise” in the process of determining causality among independent and dependent variables, anthropologists are uniquely positioned to contextualize known statistical patterns by actually listening to the ethnographic noise found in individual accounts of lived experience and “examining the chaff that disappears from epidemiological accounts” (Horton 2016). It helps “flesh out the existing statistics” by elucidating the invisible pathways through which social positioning puts certain groups of people at greater risk for certain diseases. While epidemiological research considers individual-level factors such as generational status, length of time living in the U.S., and language use in the
study of immigrant health outcomes, understanding why these variables constitute risk factors for certain individuals requires a broader perspective of the sociopolitical conditions that structure daily realities for individuals in these communities. This research is an attempt to bridge the gap between the epidemiological research on acculturation and the ethnographic work that “dwell(s) in the particular” of everyday life and to “unravel the conundrum of locality as lived experience in a globalized, deterritorialized world” (Zavella 2011). It is an effort to “resocialize epidemiology” by bringing some clarity to known statistical patterns (Horton 2016). It is my contention that the data, the systematic analysis of which will be discussed in subsequent chapters, find a home in these stories; they take shape and garner meaning in the voices and the lives of these women. And this is why it matters.

**Alma**

Alma is a native of a small ranching community called Cocula in Jalisco, Mexico. She married young and, as was customary, moved to her husband’s town of Tequila. Twelve years ago, at age 34, Alma’s husband lost his job, and it was clear that he would not be able to find sustainable work on the ranch in Tequila, a town that has been decimated by emigration. Alma’s husband made the decision to move north, and while it was his decision, he did make some effort to convince her that it was the only option for him, that it was for the sake of the family. He had relatives in Tennessee and was sure he could find work there. He said he would send remittances home to her and the children, but Alma would not agree to this. Nervous that the distance would cause him to abdicate his responsibilities to the family, as she had seen so many migrant
husbands do, Alma undertook the clandestine journey with him, leaving their three children behind with his mother and sister.

It was my husband’s idea leaving and I always wanted my family united. I didn’t want him to come alone and leave us in Mexico. Because in our country, Mexico, you always see that families are left alone, the husband comes to the U.S and starts a new family. So I told my husband you go alone and we’ll go and get a divorce, you do your life in the U.S and I’ll do mine with my kids in Mexico. But in the end we decided that we were coming to the U.S., he and I first, and we were going to see how things were here and then we were going to decide if we bring the kids or not.

The couple joined a small group of men from her husband’s hometown who had paid a coyote (human smuggler) to take them across the border. The journey was long and arduous, and Alma was scared the whole time: “Yo tenía miedo todo el tiempo, nunca se quita” (I was scared the whole time, the fear never left). She describes the journey as “la más fea de mi vida” (literally, the ugliest or the worst experience of my life).

The journey was very scary. We were a group of eight men, I was the only woman. The others were from the town of my husband, of Tequila. We stayed on the border for eight days until they told us we could go and we started walking. We walked at night, obviously very scary. I could hear the animals very close by, but I could not see anything. They told me that if I could not walk fast enough they would leave me. During the day we hid under the branches. It is very rocky, I fell and hurt myself and we had to wait a whole day in the desert for someone to come get us in a car.

The couple finally arrived in Bisbee, Arizona, where a relative picked them up and drove them to Tennessee. Despite assurances that there was plenty of work in Tennessee, her husband struggled to find steady employment. Alma, on the other hand, did secure a job in a factory. After a few months, she fell on the job, and her injury rendered her unable to continue working there. She received no workers’ compensation or any time off to recover. She decided to move to Alabama to be near her relatives who could provide her a place to stay and care for her while

245
her foot and nose healed. In Birmingham, her husband found work as a daily contract laborer for construction crews. As soon as they could, they moved to a place of their own, a little trailer outside the city limits. After six months they sent for their three children, paying the exorbitant coyote fees in order to reunite their family. Alma and her husband remain in the shadows of unauthorization, but their children are participants in the Deferred Action for Childhood Arrivals program, DACA, which allows them to go to school and work legally in the United States. This was a huge, celebratory moment for their family; it gave Alma hope and made her sure that she had made the right decision bringing the kids to the U.S. When Alma thinks about her life in the U.S. and whether or not moving north was the right thing to do, she focuses on her children:

Right now I think about it and I believe it was worth it, when I see my children’s future. I like the future they have, economically speaking they have a better life than my nephews in Mexico. It’s hard for them too because they study and work, but I think if they keep going they’re going to have a good future.

When I ask Alma to reflect on how her life in Birmingham is different than her life in Mexico, she sighs and says “it is totally different…the language and driving are two of the most important things in order to succeed in this country, and I try and try, but I can’t. I have to learn how to drive, but I didn’t know in Mexico, and it makes me panic. I need to learn English, but it just doesn’t stick.” Her biggest regret is the loss of independence that this causes her: “aquí no soy independiente, y esto me frusta mucho” (Here I am not independent, and this frustrates me a lot). Because she cannot drive and she cannot speak the language, she has to rely on others to take her to the store and to her appointments: “I can’t be [at the doctor’s office] by myself, I have to have an interpreter.” This is a source of frustration for her children as well. Alma is
trying to learn English because she believes it would help her move forward. “My kids say it’s up
to me to learn,” she says, “but I can’t learn! I have a lot of trouble.”

Another difficult adjustment has been the lack of friendships. Alma spends most of her
time alone in the house, and she laments not being able to walk around her neighborhood and
visit her companions. “The kind of friends you have in Mexico you can’t find here, so you don’t
socialize like in Mexico. I had friends and good neighbors in Mexico and I don’t have that here,”
she tells me. Her youngest daughter works at the Hispanic Interest Coalition of Alabama, and
she tries to participate in events that they have. But she is reluctant to make friends here because
she is very distrusting. I attended the Mother’s Day event that HICA put on, and when I arrived,
I saw Alma - all dressed up and clearly happy to be out of the house - sitting at a table by herself,
looking around longingly. She was excited to see me, a familiar face, and eager to have some
social interaction, but I could tell it has become difficult for her since she has so little in her day-
to-day life now. This has happened, she says, because people are not the same as they were in
Mexico.

And also the people…we change a lot! I am speaking from México, a Mexican from
México, and here in the U.S - they change a lot, mostly bad. In México people help you
with everything, your friends help you without asking for anything in return, and here in
the U.S they don’t let you rise and succeed. They’re always cold and I don’t like it;
they’re always negative. If they help you it is not because they want to and sometimes
they humiliate you. Even family members, they always show you that they’re better than
you. They always see one as how much money you have and not as who you are, but
what you have.

I ask Alma if she has changed at all since moving to the U.S., and she says, “I think so, because
if I were to live in Mexico I would not look the way I look now. Sometimes I tell my husband
that we are different and have changed and that if we go to Mexico they are going to know the
difference even though we can’t see it.” She still speaks to her sisters and her mother in Mexico, but it is not the same. When I first met Alma, her mother had been visiting for several months, but now she has gone back to Mexico. Alma says it was nice having her mother here, but it was also stressful, trying to make her comfortable. But she is trying to accept that this is her life now, and she takes great comfort in the hope that life will be easier and better for her children. Since I had this conversation with Alma, the Trump administration has announced that it will discontinue DACA, though there has been some indication that if a deal can be reached over a border wall, perhaps those covered under DACA can remain lawfully in the U.S. The one hope Alma has is for the future of her children, but DACA’s uncertain future makes their status much more precarious.

Alma acknowledges that her life is in Alabama now, and that she must accept that she will likely never go back to Mexico, but staying connected to her patria remains an important part of her daily life. For her, this is mostly about family. “I try to not forget where I come from. In México family is the most important thing. I always do what my mother taught me so I try to have my family together, talk to them, try to eat at least one meal together. I also go out with them and listen to them. I try to give them advice.” Just like her children get frustrated with her for not learning English, she gets frustrated with them for not knowing or for mispronouncing words in Spanish.

I always tell them that when they have kids I want to teach them Spanish because I want them to speak two languages. So I always tell them to speak Spanish, not because I can’t understand but so they won’t forget where they’re coming from and who they are. It’s important for me that they don’t forget their culture or their language. I always tell them to be humble and always be nice and affectionate on birthdays and celebrate their Independence Day, and all the traditions México has. I always tell them to believe in their
religion, there’s a lot of diversity here, but I tell them to continue with the religion they have which is Catholic, that’s very important to me.

While she acknowledges that her children will have more opportunities living in the U.S. and that their lives will be better than her nephews who are still in Mexico, certain things make her sad.

My youngest daughter has changed the most of my kids, I don’t like her attitude. I always try to tell her to remember where she comes from, who she is, and to remember how she used to live in Mexico. I feel like her attitude is different because she didn’t live in México for long and didn’t learn the traditions from México. She thinks I have to give her everything - money, clean her room and give her everything she wants, or she can leave the house at whatever time she can and come back when she wants. She doesn’t know she needs to work for it.

Alma’s physical health has suffered considerably as well, which she attributes to the food she eats and the lack of exercise.

In Mexico I didn’t really eat vegetables, it was all meat, so that brings health problems. I’ve had a lot of health problems here and my husband too, we haven’t done anything to treat them. The way we eat here is the main problem. Even though I didn’t eat vegetables in México I didn’t have problems by just eating meat because I walked a lot. I walked to the store, to church, to pick up my kids from school, to the bus stop, I walked everywhere. Here in the U.S we have to drive everywhere because it’s not okay to walk, people talk about you or look at you weird, so I don’t walk as much.

Alma says that the most important things in life are to be humble, to always put family first, and to be grateful for what you have. Even though she tries to focus on what she is grateful for, mostly that her immediate family is together and her children have a bright future, feelings of loneliness and despair are not uncommon to her. For the most part, Alma is grateful for her new life here, but she acknowledges that the transition has been hard, even after twelve years. She has changed, her family has changed, in good ways and bad, and she is trying to make sense
of all this, to “try and forget what I can’t do and I can’t fix,” and just to be positive and appreciative.

Photograph 15.1: Alma at the Día de las Madres celebration at HICA. Several local businesses sponsored the event. Volunteers spent weeks making these beautiful paper floral arrangements.

Yesenia

Google maps can never quite get me to Yesenia’s house, and I drive past it at least once every time I go there. Somehow the white numbers spray painted vertically on the tree at the top of her driveway never catch my eye the first time, and I have to pull off to the side of the dirt road and turn around. Her driveway is long and rocky, used car parts and broken electronics litter the yard, and these are interspersed with colorful but faded plastic children’s toys. A flock of chickens disperses as I pull up behind an old gray truck. Before I knock, a little boy cracks open the door, but upon seeing me closes the door and calls for his mother. Yesenia answers the door laughing, lightheartedly scolding the boy for being rude and telling me that he has been eagerly anticipating my arrival all morning. The inside of the house is cluttered but neat and clean. Yesenia and I sit down at the dining table, which is sectioned off from the main living area, and she pushes a large bouquet of faux flowers over to the side so we can see one another.
The boy bangs around in the cabinet next to the table and sets up his toy horses on the floor beneath us. He stays close to his mother and often does things to get her attention. She responds to him as if everything is normal, but I cannot help but think he is trying to protect her from this strange woman who is asking her questions about her life. Maybe he is worried that I will prick her finger again. There is tension in the family because Yesenia’s brother has been detained and is in Louisiana awaiting deportation. His children are staying with her right now, but no one has told them why their father is not there. I understand why this little boy wants to stay near his mama.

The lights are off in the house, as is the window unit air conditioner. Yesenia offers to turn them on, but I say that it doesn’t matter to me, so we go on. I start the tape recorder, and before I even ask a real question she starts talking - about her brother and the pending deportation and what to tell the children and what generally to do about this situation. She tells me that the penalty for unlawful re-entry is ten years in jail, but his absence has put a major strain on his wife and three children. Yesenia is currently taking care of the children while their mother is at work, though when she has to go to work the next day, the oldest girl will have to look after all six of the younger ones. Going back to Mexico would mean forsaking the children’s education and the life they have here. Plus the children were born in the U.S. and have never been to Mexico before, and Yesenia’s sister-in-law worries about the difficulties of adjusting to life in Mexico, which she says would be like going backwards. I never know how to respond to stories like this — what to say, what kind of assistance to offer — so I just nod and foolishly say, “I’m so sorry, that must be very hard,” and we move on.
Yesenia was born in San Luis Potosí. Her father left her mother for another woman and started a new family somewhere else. Her mother earned money by cooking tortillas and other things to sell on the streets and to the restaurants. Despite all of that, she says she had the best childhood because:

You live your life much slower there, it’s not like here where you are running, running, worrying about how to pay for everything. It’s poor how you live there because from the moment you’re born you don’t have a bathroom or hot water, or anything like that, you have to heat up the watering can to bathe yourself, but you enjoy yourself more. You can entertain yourself because you’re calmer and you don’t have to worry about anything. You walk everywhere and eat all your meals with your family. It’s very calm and very slow. Here it is all about making money and paying bills, it’s so fast, but you have to get accustomed to that kind of life, that’s what it is all about here.

And yet her childhood was cut short because at fourteen years old, she journeyed by herself to the United States. Her brother and sister were living in the U.S., and they said it was better because they could work and make money to send home to their mother. So Yesenia, all alone, got on a bus to Monterrey, leaving behind her mother, her childhood, the only life she had ever known.

The point was to work and make money. We sent money for my mother to finish her house - now it has a bathroom and a floor and windows...but now we are all here and she is alone in her house, a big house. She says, ‘What am I going to do in this big house and no one is here?’ But we can’t go because of the children. They have a better future here.

Crossing the border was a treacherous and traumatic experience: “We had to cross the river. They tell you to bring some dry clothes in a plastic bag. And you have to change when you get across. But there is nowhere to hide, you have to change in front of the men, and they’re watching you, and I was embarrassed. But you don’t have time to be embarrassed because you have to change quickly and run to the truck that will take you to the next location.” Once she got
across the border, she waited for an American couple that had been paid by the cartel to transport people through customs. After going through customs with fake documents, they dropped her off in Houston, where she waited for her family to come get her. Her sister picked her up, having secured a fake ID and a birth certificate that said she was 19, which would allow her to work.

In Alabama, she started working at the Golden Corral washing dishes. She stayed there from 5 A.M. when her sister dropped her off until 10 P.M., when her sister got off work and would pick her up. Yesenia soon realized how irritated her sister was to have to do this: “That’s when I realized that family does help you here but after a while you have to be independent and provide for yourself.” She met a girl who lived nearby the Golden Corral, and she asked if she could move in with her so she would be closer to work. She was constantly exhausted and in a lot of pain because she was not used to working such long hours. Another waiter offered her something to reduce the pain: “I don’t know what it was, maybe marijuana. My mom never spoke to us about drugs or sex or any of those things. Mothers in Mexico don’t talk about things like that - they feel that it is embarrassing.” Nothing in Yesenia’s fourteen years of life had prepared her for this moment. Having essentially lost five years of her life, she was thrown into a situation where she felt alone and confused and unsure, without anyone to look to for guidance or support as she navigated her way through a completely unfamiliar and at times terrifying new life.

Her sister eventually moved to Tampa, Florida and encouraged Yesenia to move down there. So she got on a bus, with just an address and without knowing a word of English. But by the time she got there, her brother-in-law told her that he and Yesenia’s sister had split up and that she had already gone back to Alabama. He said that she could not stay with him because of
the way things had ended between him and Yesenia’s sister but that he knew a family that might take her in. She stayed there, with strangers, and started looking for a job. She eventually started working at the Marriott Hotel in housekeeping, where she met a man that she would soon marry. She had a daughter with him, and then when she was pregnant with her second child, he was detained and deported, and fearing she would lose him, Yesenia took her daughter and went back to Mexico. He then returned to the U.S., and she stayed in Mexico with two daughters: “I had a difficult life in Mexico with my daughters. I knew I had to leave Mexico for better opportunities for my daughters.” Once she had children, she knew she could not live in Mexico, primarily because of the health care system there. So she came back to start over…again.

Initially, the biggest shock to her was how difficult it was not being able to understand the language.

In the beginning the language is very frustrating. You cry and cry because you don’t understand, you can’t speak, and people say things about you and treat you poorly. People yell at you, ‘Go back to your country!’ or ‘Learn English!’ But it’s hard, you speak Spanish your whole life, and English is hard, much harder than Spanish because in Spanish the way you write it is the way you say it, it’s the same. English is much harder.

Yesenia continues to face racism and discrimination even though she speaks enough English to get by at her job at Subway. She acknowledges that “there are bad [Mexican] people, people that sell drugs or kill.” But she reminds me that there are “Americans that do this too. The problem is that they consider all of us the same, they think we must all do that.” All she is trying to do is work and make enough money to support her family and for herself when she gets older. “Sea que sea” (It is what it is), she tells me, “y tienes que acostumbrar” (you have to get used to it). I ask Yesenia how her life has changed since the 2016 election:
Since the election, all the people are scared here. Because the law says…if you’re driving and the police stop you, you have to have papers or they can arrest you. A lot of people left here after the election. A lot of Mexican stores have closed because no one is going out and buying things. Even in the schools, there are not as many Hispanics, not as many Mexicans. After the HB56 law, many left here because they were afraid and didn’t want to live like that. You must get accustomed to live with negative comments with time. For example, we work and pay our taxes. We pay for social security and we won’t be able to retire and use that money. Many people don’t look at that, but we can’t do much about it. We are only thankful to have a job and provide for our family.

Family dynamics are quite different in the U.S. than in Mexico, Yesenia tells me, and this has been difficult for her. She struggles with how different her relationship is with her daughter than the one she had with her mother in Mexico.

One example is that when I took my daughter to school on picture day, all the girls had make up on their faces, but not my daughter. In Mexico, you don’t start wearing make up until 15. She was dressed nice and clean and all of that, but she did not have make up on her face. She wanted to know why the other girls had it and why we don’t do that. It is very hard to explain to them the two different societies and which one to adapt to. Here, you become a woman much faster, your childhood is shorter. And shaving the hair on your legs also, they do it when the girls are so small here. I tell my daughter she doesn’t have to be a woman yet, but she wants to do those things because that is what the girls do here. I want her to wait a little longer to do these things, but it’s hard because she goes to school every day and I want her to fit in and have friends. It is hard for the two of us. And they learn about sex much sooner here. That is a big difference because in my country you don’t talk about that until much later. But here they learn earlier from their friends.

She laments that friendships are much harder as well because the friends that you are in school with one year will be different the next year so it is hard to make lasting friendships. In Mexico, “you were all together all through school, we saw each other every day and on the weekends.” It is difficult with family too, because “you have to take care of yourself, there is no one to help you. In Mexico, the family is very important, but not here.” At the end of the day, it is all worth it to her — the language barrier, enduring discrimination, shifts in family
relationships, the lack of friendships and community, and the daily struggles of being an unwelcome guest in a foreign land, just trying to secure a life for herself and her family — because she is convinced the children will have a better life.

**Xochitl**

Cultural consensus theory (Romney, Weller, and Batchelder 1986) was originally developed as a systematic way for ethnographers to identity members of the community with a robust knowledge of the culture, or high cultural competence. A woman that I interviewed early on in the research suggested that I get in touch with a woman named Xochitl because she thought she could help me recruit other women for the study. In this work you never know where any one lead might take you, but you follow up on as many as you can because sometimes you find a Xochitl, and she brings new life to the experience and helps you move forward. I do not know Xochitl’s cultural competence score, but I do know that I am indebted to her for the time and effort and the genuine interest she invested in me and in this project. I have hours and hours of recorded interviews with Xochitl, most of which took place in her small apartment, with her baby Matthew cooing at first and then toddler-talking in a funny mixture of Spanish and English as he got older and usually with several other women chiming in throughout the interview.

In San Luis Potosí, Xochitl’s family owned a small corner grocery store, and Xochitl remembers playing with the empty cardboard boxes with her friends, building houses with them, using them as slides and chasing each other with them. “We did not have toys,” she says pointing at a shelf full of her own son’s plastic toys, “but we had a lot of freedom, maybe too much,” she laughs, “and we played with what nature gave us.” Xochitl reminisces on her
childhood, calling it “a very special time, the best memories of my life.” All of the families in the neighborhood knew all the other families, and everyone felt safe and comfortable with the children playing together. Living in Birmingham, she barely knows her neighbors, and there is no one for her eight year old daughter to play with in their apartment complex.

Xochitl grew up in a middle class family; her father and uncles were professionals, and she studied education in secondary school. She never planned to move to the United States because her life was relatively comfortable in Mexico.

It was never my plan to move here, my family are not migrants. My family were professionals, my dad an agriculture engineer, my aunts teachers. I also went to school for teaching. They all settled in Mexico. Back in the day, you could be successful if you had an education, like my family. They didn’t feel obligated to come here because they were professionals.

Xochitl’s husband, Oscar, on the other hand, is from a small farming town called Nayarit. His father and his brothers migrated to California to do agricultural work or odd jobs like painting. Oscar’s father never wanted his family to settle in the United States because he saw that even when people managed to attain a decent life, the kids would start drinking or affiliate with gangs. He did not take advantage of an amnesty opportunity in 1985. But his seasonal migrant work did allow Oscar to get a high school education in Mexico, where he studied tourism. Oscar, who had been studying English by watching American movies, managed to convince his father to take him to the U.S. when he finished high school. He arrived with a tourist visa, which did not allow him to work, though he easily found jobs in housekeeping. Through a series of moving around and making connections with people, Oscar met a couple who were doctors at the University of Alabama at Birmingham. They advised him to go back to Mexico, finish college, and start a
career. Then he applied for scholarships to finish his college education in the U.S. He went back and forth on different scholarships and visas until he eventually met Xochitl at the university in Mexico where she was studying to be an educator. The next time he came to the U.S., she joined him, though she spoke only a few words of English and was reluctant to give up her career in Mexico. At one point, Xochitl returned to Mexico to try and finish her program, while Oscar stayed in the U.S. After years of back and forth, Xochitl and Oscar are in the process of becoming permanent residents in the United States. Xochitl wants to learn English and get certified as a teacher and teach Spanish to middle school students. While they are committed to staying in the U.S., mostly for the sake of their children, they still have their house in Mexico in case things do not work out here. Even for migrants whose lives are relatively stable in the U.S., intransigence is an ever-present aspect of their realities.

When I suggest to Xochitl that many Mexican immigrants describe themselves as “ni de aquí ni de allá” (neither from here nor there), she thinks about it a moment and says: “I am from here and there. Oscar and I talk about this a lot. People here don’t have an identity. Without an identity they can’t succeed.” Xochitl works very hard studying English, she devotes herself to helping other people, and she embraces the life she has been given, despite all of its difficulties. She braces herself for discriminatory experiences everyday — she had to go to four different DMVs to get a driver’s license, the final one being an hour away, because the state employees refused to assist her. She and her husband are good examples of people who have “followed the rules,” though the pervasive narrative perpetuated by anti-immigrant hostility is that if a person does not speak English well, then she must be in the country illegally, which justifies nativist scorn toward her. Even though they live up to the scrutiny of the law, the rules are not set up to
privilege them or to facilitate their permanent settlement. Instead, they live their lives as hindrances, and as a result, their future in the U.S. remains uncertain.

**Conclusion**

These three narratives illustrate three different migration experiences and the different pathways by which these three women have made their way to Birmingham, Alabama, and their experience of trying to find their place in a new cultural and environmental setting. Immigration models predict linearity, though Yesenia’s and Xochitl’s stories demonstrate that this is not always the case. People come and go, either willfully or forced, and there is always an impermanence about where home is, where they belong. Additionally, immigration theories often focus on the household, and specifically the male head, assuming that he is in charge of directing the life course of the family. These stories, however, lend credence to the alternative migration theory proposed by Hondagneu-Sotelo (1994), which acknowledges and emphasizes the place of gender in shaping the migration experience. While Alma’s husband made the initial decision to migrate without consulting her, she refused to let him do it alone, primarily to ensure that he would continue to fulfill his economic and social responsibilities vis-a-vis the family. Then, once she got a job, she was in a position to exert more control over the household decisions, and contradicting the patrilocal marriage patterns typical of Mexican culture, they moved to Alabama to be with her relatives and have remained there and established their lives there. Xochitl and her husband went back and forth making deals with one another about who would give up what and how they would make it work for both of them. Yesenia came on her own at 14, not knowing what to expect, and now, having lived more than half of her life in the
United States, she has come to accept that this is her home now, for as long as it can be. All of these women have elevated levels of glycated hemoglobin, putting them at increased risk for developing diabetes. Xochitl has basic health insurance through her husband’s job, though the continuance of this is uncertain because of current health care debates, but Yesenia and Alma have no nexus with the public health care system (except in the case of maternal care) and have to control their conditions on their own. And they all struggle with depressive symptoms — a result of social isolation, discrimination, and the difficulties of sustaining themselves and their families financially. All three women feel that moving to the United States was the best decision for the family, but it has taken a toll on their bodies, and they have few resources to combat their bodily and mental ills. Though their stories are different and none of them know one another, disorder, impermanence, and chaos are the defining features of these three women’s lives. They experience the comings and goings, the tragedies and triumphs, and the gains and losses that are so intrinsic to the life stories and daily realities of Mexican immigrant women in Alabama.
SECTION IV:

CONCLUSION, DISCUSSION, AND FINAL THOUGHTS
CHAPTER SIXTEEN:
CONCLUSIONS AND FINAL DISCUSSION

“Taking diversity seriously in the study of human behavior, including social problems and our attempts to transform them, demands that culture be taken seriously into account.”
- Kral et al. 2011

The aim of this research project has been to describe a particular cultural reality for Mexican immigrant women in Birmingham, Alabama, both in terms of their wants and desires for themselves and their families as well as the structural constraints that make life within this cultural context wrought with hardship. I have attempted to show that cultural consonance with a shared model of la buena vida is a better predictor of health status than simple acculturation constructs that use proxy variables to locate an individual on a continuum ranging from the socio-cultural context of their upbringing to that of their host community. The results show that not only does cultural consonance pass muster as a predictor of diabetes risk and depressive symptoms even when controlling for other known confounders, it interacts with typical measures of acculturation to explain even more of the variance in health status among respondents. And while higher diabetes risk and more depressive symptoms tend to occur together in this sample and in the larger Mexican immigrant population, it is the interaction between consonance and two different acculturation measures that have statistically significant relationships with these two conditions. Using cultural consonance theory and methodology, this research captures the interplay between cultural factors and typical measures of acculturation that improves our
understanding of what role culture plays in health outcomes as well as what social and institutional factors may limit the achievement of a culturally valued lifestyle, which may produce a loss of coherence and chronic assaults on the body that over a lifetime lead to poor health.

**Benefits of a Cognitive Approach to Acculturation**

We live and construct our understandings of the world around us within a system of shared knowledge, and this produces certain guidelines for how to structure our thinking and organize our lives. Because cultural knowledge is stored in human brains, it is a property of individuals; because it is shared, it is a property of the aggregate. In situations of cultural transition, and particularly in cases where it is forced, unwelcome, and wrought with uncertainty, empirically demonstrating how cultural knowledge and meaning are structured is important because it allows us to describe cultural realities that form in this context rather than making *apriori* assumptions about where people are coming from and where they are going in a cultural sense. Using the cultural consensus model to flesh out a cultural prototype for a salient domain of life resolves several problems with acculturation research, namely, it moves culture out of the realm of abstraction and allows for it to be described in terms of collective agreement. Cultural consonance is then useful in measuring individuals against their own cultural prototypes and exploring what impact this may have on health outcomes.

A cognitive approach to acculturation holds that learning a new culture happens in stages as people acquire knowledge about how to think and behave in certain domains of life more quickly than in other domains depending on their immediate needs and goals in the new setting.
This process takes place through social interaction and is culturally prescribed; however, in situations where different sets of cultural knowledge are converging and social interaction is limited due to logistical and structural constraints, there may be a significant amount of variation in how individuals articulate that knowledge, even among those who are identified as members of a particular cultural group. Demonstrating how people think and talk about certain domains of life is the first step in then exploring how they act on and within those constraints. Acculturation constructs assume that culture is a powerful shaper of behavior and that individuals generally act in ways that correspond to cultural influences and expectations (Berry 1994); however, research in this area has struggled to empirically describe what those influences and expectations are and how they translate into behavior. While acculturation was originally understood to be a linear process whereby individuals move along a continuum of culture in such a way that with every increase in the acceptance and practice of the host culture’s beliefs and behaviors there is a corresponding reduction in the practice of the beliefs and behaviors associated with the traditional culture, Berry (1994) notes that the behavioral repertoire of immigrants will likely reflect some complex pattern of continuity with the culture of origin as well as an adaptation to a new cultural context. Cultural consonance provides a theoretical and methodological basis for empirically demonstrating the relative ability of individuals to act on these cultural expectations and live in accordance with a shared model and how this in turn is related to health patterns.

**Interpretation of Results: A Multi-centric Model**

The consensus analysis indicates that women rationalize the importance of items in the domain of *la buena vida* in one of two main ways - emphasizing the prioritization of either
everyday, immediate needs and technological devices or the objectives related to being a morally upstanding person and fulfilling social and familial obligations. However, when it comes to consonance, both sets of ideas about what is important go hand in hand. Handwerker (2002) explains that the relationship between ideas and behaviors is very complicated — sometimes the configuration of ideas that informants articulate do not match up with their patterns of behavior. This may be because they have “forgotten something, misjudged the relative importance of something, ignored one or more multiple mental states that might go into the production of behavior, lied, or merely produced an ad hoc or post hoc fantasy” (120). Based on the strong consensus in the ways informants cognitively organized the domain of *la buena vida*, it makes sense that they tended to group the items together in similar ways even when there was the constraint of grouping them by importance. Thus, when forced to rank order them, they were choosing not between individual items so much but between groups of items. This explains why the PROFIT analysis from the consensus answer keys maps on so well to the MDS map of the pile sort data. In terms of behavior, consonance extends across both answer keys, meaning if a respondent exhibits high consonance with one set of responses, she is likely to exhibit high consonance with the other as well. In lived experience, no matter how one articulates the importance of the items, being consonant with both sets of ideals will affect her well-being. In this regard, the fact that the two weighted consonance scores had such a high correlation is not surprising. This is also true of distinct cultural domains — Dressler, Balieiro, and dos Santos (2017) found that cultural consonance tends to converge across domains so that individuals who are consonant in one salient domain of life tend to be consonant in others as well. Based on this, I argue that *la buena vida* is not so much a contested cultural model as it is a multi-centric model,
meaning it literally has two centers, and that actualizing both sets of ideals and expectations is ultimately important in lived experience.

The theoretical implications of these findings are rich. The notion that the lack of consensus does not necessarily preclude the presence of a cultural model pushes researchers to analyze the data in different ways, to look for clues that are not readily apparent. As this study has demonstrated, one way of doing this is to examine the patterns of residual agreement and consider how members of the sample diverge in the ways that they structure the cultural domain in question, particularly along the dimension of importance. Another is to look at cultural consonance, which is the logical extension of cultural consensus, but something that also provides insight beyond what individuals are saying by considering what they are actually working towards in their real lives. Again, regardless of what people say is important to them, considering how they actualize this may tell a different story. Finally, it is further validation that the aggregate quality of culture matters — no matter how people articulate their personal feelings regarding how life ought to be lived, actually living within a shared set of cultural expectations that are defined by the larger community will bear on their well-being.

Why It Matters in Terms of Health

While culture is often obscured in this area of research, cultural consonance theory and methodology provides an empirically satisfying way of fleshing out cultural prototypes for how to live in a specific context and measuring individuals against these agreed upon standards and consider how that affects their well-being. It is not so much about where someone exists on a cultural continuum or the degree to which she has managed to assimilate to mainstream
American beliefs and behaviors but how well she lives up to the expectations and ideals defined by her own community of reference. For any immigrant population, these will likely include elements retained from their upbringing as well as elements that characterize a modern middle class lifestyle, which is likely what brought them here in the first place. The results show that the longer people strive for these things, the greater the effects of being successful or unsuccessful in these efforts are on the body. One way to think about it is that consonance serves as a “provoking agent,” exerting the main effect on health outcomes, and that acculturation variables constitute “vulnerability factors” that exert moderating effects depending on the level of cultural consonance (see Cleary and Kessler 1982).

Research on the effects of acculturation are problematic for health care providers. On the one hand, higher levels of acculturation are associated with the use of preventative and curative care (Hidalgo, Garcés-Palacio, and Scarinci 2012). On the other hand, it is associated with declining health outcomes for several indicators (Lara et al. 2005). Attributing health outcomes to the therapeutic or dysfunctional nature of certain cultures is ethnocentric and has no basis in evidence. It is my contention that culture is not protective or harmful in its own right; rather, it is the ability to live successfully within a defined set of cultural expectations that matters in terms of health. Further, the sub-constructs typically used to measure acculturation are not inherent risk factors to poor health - it is the social and political context that makes them risk factors for certain bodies based on their positioning in the social structure. For vulnerable immigrant populations, the social production of disease is shaped by labor and immigration policies, native beliefs about and attitudes toward immigrants, lack of access to health care services, and myriad other structures that play out at the state, local and individual level. Researchers and health
workers must look beyond proxy measures of acculturation at the social determinants that shape lived realities and health care. Urbanization is rapidly changing lifestyles around the world, and as a result, chronic and non-communicable conditions are becoming the dominant forms of illness with which global health must contend. This demands an integrative and trans-disciplinary approach that interprets multiple levels of social, psychological and biological interactions within particular social and political-economic contexts and develops programs of care and treatment regimens that are sensitive to the cultural, economic, and logistical constraints of individual patients (Weaver and Mendenhall 2014). The relationship between acculturation and health outcomes is not only about nativity and ethnic identity but also a function of the contextual and socio-political factors that shape the acculturation experience (Thomson, Hoffman-Goetz 2009). The availability of resources and social support, the institutional factors that limit choice, movement and access to services can all be linked to physiological responses in the body. Using a cultural consonance approach allows researchers to see more clearly what success looks like for a particular social group, so that the social and institutional factors that limit the ability to achieve success are more noticeable. Reasons for lack of consonance may range from economic constraint, structural or interpersonal violence and abuse, lack of knowledge, personality differences, or active resistance to conforming to a new culture. Thus, more research is needed on what kinds of things Mexican immigrant women in newer immigrant destinations like Alabama are working towards, what socio-structural and political-economic forces inhibit them from effectively acting on these shared ideals and how to better facilitate consonance with a culturally valued way of life that is sensitive to integrating elements from both the culture of origin and the host culture in meaningful ways.
Limitations

All scientific studies must be replicated in order to uphold the scientific method. To my knowledge, this is the first study that investigates the relationship between typical measures of acculturation and cultural consonance in its effect on type 2 diabetes risk and depressive symptoms. As such, there are several limitations that should be noted. The samples used in this research project were small and not perfectly representative of the population. While it is probably impossible to obtain a totally random sample of Mexican immigrant women simply because this is a hidden population, a more thorough investigation would require larger and more representative samples, particularly in measuring cultural consonance and health outcomes. A more detailed history of individuals’ health history as well as a measure of body mass index (BMI) would also be useful in more thoroughly examining the interaction effects discovered here and understanding what other variables influence these effects. Another limitation to this study was my inability to always control the administration of the cognitive tasks and surveys. I often found myself administering several pile sorts at one time, and while I tried to limit the amount of sharing between respondents while they were engaged in the task, I cannot be sure that something about the group setting or being in the presence of others did not affect their responses.

Future Research

Due to the spareness and often contradictory nature of reported evidence on the health paradox, it is important to consider how, why, and for whom certain risk factors are related to certain outcomes and what are the underlying pathways responsible for this relationship.
(Bjornstrom and Kuhl 2014). For example, Angold, Costello and Worthman (1998) found that among children and adolescents in western North Carolina, numerous risk factors — poverty, social adversity, family risk — increased the chance of developing a psychiatric disorder by 33%, which is a highly significant finding. However, what this statistical model does not account for is why the other two-thirds of the sample have managed to remain free of psychiatric illness despite experiencing the same risk factors (Worthman and Kohrt 2004). Explanatory models accounting for less than 50 percent of the variance are generally considered successful, and interventions are often developed around these models. In an effort to reduce the variance even further, multifactorial research is required to identify other significant factors and dynamics for which these “successful” models do not account. Sudano and Baker (2006) call for a “conceptual disentangling” of certain variables from certain outcomes in order to better specify the proximal pathways that link context to differential health outcomes. It is important to consider vulnerability and risk as well as resilience and protection (Worthman and Kohrt 2004).

More research on immigrant health needs to be carried out in some of the newer immigrant destinations like Birmingham. Geographic location, reception by the native population, and the lack of firmly established social support networks into which one can readily integrate are among the factors that will alter the lived experience of immigrants in very real ways, and these may be altogether different than the experience of immigrants in more historic immigrant destinations. While there is a clear need for immigrant workers in Birmingham, state-mandated messages regarding their un-deservingness to be treated as citizens create tension and hostility that makes the formation of well-rooted social networks difficult. This limits access to supportive services and fosters isolation among these newcomers.
While cultural consonance is treated as an independent variable in its effect on health outcomes, the ability to successfully live up to a culturally valued model of “the good life” is obviously dependent on lots of factors. Research needs to explore what kinds of things - be they institutional, social or even genetic - facilitate or inhibit individuals from achieving consonance in certain contexts. While *la buena vida* turned out to be the only cultural domain of consequence in this study, other salient cultural domains - family life and life goals included - need to be explored further in relation to well-being.

Finally, while this study explored the moderation effects of cultural consonance, English language proficiency - which did have a significant and negative effect on both diabetes risk and depressive symptoms - needs to be explored as a mediator of cultural consonance and health outcomes. Of course as independent variables, age at arrival and length of time living in the U.S. have little to do with achieving cultural consonance. However, knowing to speak and understand English may have a profound effect on living “the good life.” After all, it did factor into the cultural model of *la buena vida* as a long-term objective. Retaining Spanish language facility, interestingly, did not, even though many women articulated that this was something very important to them with regard to their children. Again, what people say and what they do may tell very different stories. There is a lot of potential here to better understand how knowing English and potentially even the process of attempting to learn English factor into the achieving “the good life.”
Final Thoughts

Clearly, Mexican immigrants face seemingly insurmountable stressors. These include a language barrier, which may lead to discrimination and difficulty finding jobs, shifts in socio-economic status, loss of social networks, and disorienting cultural changes that make adjusting to life in a new place difficult. These difficulties are often compounded by poverty, substandard housing conditions and the stress of the migrant lifestyle. The goal of this research has been to describe a cultural reality within which Mexican immigrant women in Birmingham, Alabama, operate and the extent to which this affects their type 2 diabetes risk and depressive symptoms. Obviously a lot of factors contribute to both of these health conditions, but these results show that cultural consonance in a salient domain of life is a useful construct in describing what influence culture may have on these health outcomes. Culture develops and meanings are structured in the context of social, political, and environmental contexts that must also be considered in shaping certain individuals’ and communities’ exposure to social and physical pathologies.

It is said that stories are data with a soul. This is my story - it is the data I have collected in the most empirically precise way I know how, and it is also the experience I have had getting to know my informants and participating in their lives. Through it all I have tried to come to some kind of systematic understanding of what the data reflects as well as how to make sense of my own experience. This dissertation is not simply about the relationship between independent and dependent variables and statistical patterns - this is about real people living their real lives, and the numbers only matter because they offer mathematical legitimacy to our understanding of what life is like for Mexican immigrant women in Alabama.
On a cold, wet morning in January 2016, I set out on my first real fieldwork experience. I had finished my coursework, passed my qualifying exams, put together what I believed was a solid research plan, practiced my introduction in Spanish - I was actually doing this. As with every new and difficult endeavor, part of me wanted to turn around and call it quits. I assured myself that in an hour or so I would have one interview under my belt, which somehow felt like fifty. I pulled up to a gas station where my research assistant Veronica and I had agreed to meet. I parked my car and hopped in the car with her - nervous, excited, but mostly determined. I checked my bag for my notebook and my tape recorder and the neatly folded, crisp twenty dollar bill in the pocket of my raincoat. This I would give to my first “informant,” as a way to thank her for her time and her information. I had done my research on how much to pay volunteer participants, and I felt like twenty dollars was appropriate compensation. As it turned out, handing her that twenty dollar bill would be one of the most humbling experiences of my life.

Veronica pulled out of the gas station and instead of turning left to get on the main road, which is what I expected her to do, she turned right and drove into a wooded area behind the gas station. She drove slowly along a road in desperate need of repair, trying her best to avoid the large pot holes every few feet. Single-wide trailers lined each side of the road at a diagonal, many of them propped up on cinder blocks with makeshift stairs providing access to the inside.
Some had simple wooden porches attached to the front. The yards were littered with blown-out tires, children’s plastic riding toys, worn out furniture, and cars pulled so close to the trailers that they might have served as additional rooms to the homes. I took a deep breath, smiled nervously at Veronica who was craning her neck to find the right trailer. She stopped the car next to a chain-link fence surrounding a group of three trailers and got out. I realized that I was clutching my bag in my seat - not out of fear that someone might take it, but because I needed something to hold on to. Greeted by a very excited chihuahua, I opened the door, threw the strap over my shoulder and followed Veronica inside a gate, up some cinder block stairs and onto a small wooden platform. “I think this is right,” she said as she tapped the sliding glass door that had several blankets strung up blocking the view to the inside. Before I could really process that this might not be the right home, a woman peered through a crack in the blankets. Expressionless she slid the door open, nodded at both of us in what I perceived as a somewhat confused but unperturbed way. Veronica asked if her name was María, and she nodded. She explained that we were there to interview her for the study that “ella” (she pointed to me) was doing. It was clear that María remembered agreeing to the meeting but did not actually expect us to show up at her door. She stepped out of the way and gestured us inside. “Hola, ¿cómo está Señora?” was all I could muster. I stepped inside and stood holding my bag across my shoulder as she rearranged a few things on the counter then motioned for us to have a seat at the kitchen table. The trailer was cramped but neat, musty but clean. There was a space heater on the floor between the kitchen area and the living area that struck me as dangerous but was doing its job - I started to feel warm almost immediately. The round dining table was positioned in the small kitchen so that a chair had to be moved on one side in order to open the cabinets. The kitchen
opened up to the main living area, where two couches faced each other and a small TV sat on a low wooden table between them. María set two bottles of water on the table and sat down. An older woman, who I would learn was María’s mother sat on the sofa in the other room near a small child playing a game on an iPad, peaking at us over the screen. María asked him to turn the volume down. The mother was not introduced and did not seem interested in our presence, though it became clear later that she was listening to every word. I sat down at the table, pulled out my notebook and handed Veronica a consent form. In this moment, I realized that small talk in Spanish was not my forte, and I remained awkwardly quiet, shuffling my papers around and getting ready to start.

I stammered through my introduction, looking to Veronica every few seconds to make sure I was making sense. I asked Veronica to go over the consent form with María. María gave it a cursory glance, shrugged and nodded. Veronica handed her a pen, and she signed. She asked a question about the section on permission to tape record, considered it for a second, and marked that it was okay to record. I pulled out the tape recorder and set it lightly in the middle of the table. I felt like I was in a detective movie. I knew it was important to record this so I could listen to it later and make sure I got everything, but it was way more uncomfortable than I anticipated. I began with some basic questions about her - her age, whether or not she was married, how many kids she had, what their ages were. The easy stuff. Then I got into questions about why she immigrated to the United States, what her journey was like, how life is different here than in Mexico. At some point I realized that I was hunched over my notebook, furiously scribbling in a mix of Spanish and English, and I felt like I was making it obvious that I wanted to get through this as quickly as she did. María spoke of the *gente mala* (bad people) she
encountered along the way, and I asked her what she meant by that. She did not answer immediately, and when I lifted my head up to look at her, María’s eyes were glistening. We held each other’s gaze for a moment, and something clicked. I put my pen down, slid the tape recorder to the side of the table (it was still on, just not directly between us) and leaned forward in my chair. I asked her to go on, this time with every intention of really listening to her.

María spoke of being sexually assaulted and verbally tormented by the coyote (human smuggler), a friend of a friend who her husband (who was already in the U.S.) had organized to bring her to the U.S. María had heard of him and his reputation, but her husband assured her that the rumors were not true. María did not give me specific details of her encounters with this man, but she did tell me that he threatened to kill her if she told her husband. She did eventually tell her husband, but he dismissed her and essentially said, “He got you here, didn’t he? Stop complaining.” Her mother, sitting on the sofa in the next room, grunted at this story, seemingly in tacit agreement that this was a normal, everyday experience for women. I will never forget pulling that twenty dollar bill out of my pocket and handing it to María - never have I felt so inadequate in my entire life, a meager twenty dollars for a life story so wrought with loss and hardship and conviction and determination. I looked her shyly in the eyes as I extended my hand to her, as if to say, “I realize this is not enough, but I have to give you something.” She smiled and shook her head. “That’s not necessary,” she said politely as she got up from the table. “I’m sorry,” I said, “it is the least that I can do.” Without her noticing, I tucked the twenty dollar bill under a water bottle on the table and stood up to leave. I learned later in the research process to put the twenty dollars in an envelope - I don’t know why, but that made it easier for the women to accept it, and it didn’t feel quite so exploitative for me.
Photographs 17.1, 17.2 17.3: A few of my informants’ residences - cars pulled up so close they almost serve as additional rooms.

Nothing prepares you for field work. No amount of reading or vocabulary drills or practicing your introduction in the mirror makes you ready to step into another world and try to understand it from the inside out, to find a safe space to talk to people about their lives, to listen and to process, both as a scientist and as a human. The lives of my informants have been filled with hardship, suffering, and loss but also determination, endurance and hope. Spending time with them and hearing their stories made me utterly and shamefully aware of my privilege, my whiteness, the ease with which I approach life in this world, my world. The work of the ethnographer is not easy; no one ever said that it was. But I did not imagine the physical, mental and emotional toll this research would take on me, how it would affect my life and my relationships, even my desires and preferences. I conducted this research in my hometown, sometimes less than ten minutes from my home, but it might as well have been all the way across the world. My hope is that I have represented my informants well and that some kind of “greater good” comes out of this research, but at the end of the day, I am thankful for the experiences I
have had, the relationships I have formed, and a greater awareness of and appreciation for a shared humanity that extends beyond culture and the barriers that separate us.

When I first considered a degree in anthropology, I expected to study in some remote village in the Andes or even with a tribe of hunter-gatherers in Africa. I did not expect my research site to be right down the road from my home. When it ultimately worked out that way, I felt robbed of a “real” fieldwork experience, like true ethnography only takes place in situations of complete immersion. I had no idea how “real” my experience would end up being, how hard it would be to essentially operate in two worlds at once. I know that traveling to another land and living for an extended period of time in a different place is intense, and reintegrating into one’s homeland can be difficult. It is called reverse culture shock - that feeling of being disoriented, of taking a lot longer than usual to process what people around you are saying or doing or figuring out how you are supposed to respond, feeling anxious and confused even around people you have known your whole life. I did not experience this as intensely as someone who had been in the field for a year or longer, but I did experience it a little bit everyday, and it wore me out. At times when I felt connected to one world, I felt disconnected from the other. Most of the time, though, I felt disconnected from both, always coming from or going to or coming back, never truly at ease in any situation. But there were moments, not every day or even every week, but certain times when I felt good, even happy, to be with the women. We shared food and stories, we laughed and braided each other’s hair, we took care of each other’s children. In these times it didn’t seem to matter that we came from separate worlds, that our life histories were altogether different, or that language and culture created a distance between us. What mattered was that they had a story to tell and that I wanted to hear it.
Ethnography is the most personal of social scientific research methods, and for me, the most difficult. Logistically, emotionally, mentally, and physically, it is wrought with difficulty. Driving an hour to meet with someone who, as it turns out, has decided she does not want to talk to you anymore, crying with women about their husbands or sons recently being deported, having small children glare at me suspiciously and cling to their mamas as I pricked their fingers, concentrating so hard to understand a second language while not wanting to interrupt the flow of the conversation, and spending hours in homes where someone was inevitably sick was exhausting for me, often made me sick, and plagued me with mental and emotional anguish. To be sure, there were happy moments too, moments of laughter and ease, but these were few and far between. And then there was the aspect of switching back and forth between the qualitative aspects of the study and quantitative analysis — this was difficult for me as well. At the beginning of the interview, I assured each participant that her information would remain private, that she would be identified as a number and not a name. Towards the end of the investigation, this refrain started to bother me. Crossing over from thinking about these women as individual human beings - wives, mamas, friends - to thinking about them as numbers in a database made me feel ill at times. If I had the space, I would write a chapter on each of these women, I would tell all of their stories, I would describe the unique experiences and personalities that make these women who they are. It was also difficult because sometimes it felt like every milestone I achieved as a researcher coincided with something traumatic for my informants. I had originally intended to reach 100 respondents in my final sample, though starting this process right after the 2016 presidential election made this goal seem incredibly daunting, if not impossible. The increased vulnerability of the population made getting women to talk to me a lot trickier, and it
complicated my positionality as a researcher in a number of ways. My advisors suggested that if I could at least get sixty interviews for this sample that would be sufficient and I could start doing the analysis. I ended up getting a few more than sixty, but that sixtieth interview was the hardest conversation I have ever had with another human being. The woman’s son had recently been detained and deported, put in a van and driven across the border. No one in the family, including his wife, had heard from him, and in addition to being concerned about his safety, their lives had been thrown into utter chaos as they were trying to figure out what to do with the children because the mother would have to go back to work. The woman wept throughout the interview, and having no consolation to offer, I went ahead and asked her questions on the survey, about whether or not she had a refrigerator or a computer, if she considered herself to be a patient person or if she wished she had more clothes. All of the questions seemed completely irrelevant to her current situation, and I felt a great sense of guilt even asking them. When I finished the interview, I called my husband who enthusiastically asked if I had gotten to sixty interviews. Yes, I responded, but then I broke down weeping — this woman had done something substantial for me, and what had I given her? A hug and a sheet of paper that listed various clinics and services in the area. Twenty dollars, essentially nothing. Similarly, the day that I discovered the interaction effect between cultural consonance and time in the U.S., which seemed like a significant result, was the day President Trump tweeted that he was ending the Deferred Action for Childhood Arrivals program, DACA. Many of the children of women I interviewed, and some of the respondents themselves, were DACA recipients (“DACA-mented” as they called it), and this announcement threw their status, which was already somewhat precarious, into further ambiguity. While I had been in an analytical frame of mind as I was
thinking systematically about the data and had finally found an interesting result in the analysis, this pulled me back into the subjective experience of being in the field and in relationship with these women. I tried to get in touch with several women I knew had been affected by this decision, and I attended some rallies to show support for DACA recipients and their families. While I had something to celebrate from an analytical perspective, the lives of my respondents, my mamas, had been thrown into further disorder and uncertainty. I recalled that one woman had told me that while she worried about her own status, she felt comforted by the fact that her children could legally attend school and work under DACA. With one tweet, this comfort had been destroyed.

Despite the hardships and uncertainty that plague my informants’ lives and the distrust they often have for others, I found a safe place with these women to talk about their experiences in an authentic way. They welcomed me into their homes and their lives, and they trusted me
enough to know that I did not have any preconceived notions of what I wanted them to say but that they could speak freely and openly about their lives. In the words of Louise Lamphere, this was my opportunity to consider the mamas I have come to know and love “not as objects of study but as subjects of their own experience and inquiry.” The time they gave me, the insight they offered, and the bravery, courage, and vulnerability it took for them to tell me their stories truly humbles me. They gave the research a clarity and a specificity that made it all come together for me, and I am forever grateful for the opportunity to get to know these women and be a part of their lives.
REFERENCES

Abraído-Lanza, A.F., B.P. Dohrenwent, D.S. Ng-Mak, and J.B. Turner

Abraído-Lanza, A.F., Maria T. Chao, Karen R. Flórez


Acevedo-Garcia, Dolores and Lisa M. Bates

Acevedo-Garcia, D., M.J. Soobader, and L.F. Berkman


Afable-Munsuz, A., Gregorich, S. E., Markides, K. S., & Pérez-Stable, E. J.

Alba, Francisco

Alba, Richard and Victor Nee
de Alcántara, Cynthia Hewitt

Alderete, E. W. Vega, B. Kolody, and S. Aguilar-Gaxiola

Alegría, M. G. Canino, P.E. Shrout, M. Woo, N. Duan, D. Vila, and X. Meng

Alegría, M.

Allen, Jennifer Dacey, Caitlin Caspi, May Yang, Bryan Leyva, et al.

Almedia, Joanna, Ichiro Kawachi, Beth E. Molnar, S.V. Subramanian

Anderson, B.

Antecol, H. and K. Bedard

Anzaldúa, Gloria

Appadurai, A.

Bacallao, M. L. and P.R. Smokowski
Bailey, John  

Barcellos, Silvia Helena, Dana P. Goldman, James P. Smith  
2012 Undiagnosed Disease, Especially Diabetes, Casts Doubt on Some of Reported Health ‘Advantage’ of Recent Mexican Immigrants. Health Affairs 31: 2727-2737.


Bastian, Jean Paul  

Beatty, A.  

Behar, Ruth  
1993 Translated Woman: Crossing the Border with Esperanza’s Story. Boston: Beacon Press

Bender, D. E. and Castro, D.  

Bernard, H. Russell  
2011 Research Methods in Anthropology: Qualitative and Quantitative Approaches. Lanham: AltaMira Press.

Berry, John W.  

Bess, M. K.

Bjornstrom, Eileen E.S. and Danielle C. Kuhl

Blount, B.G.

Boehm, Deborah

Borgatti, Stephen P.
1993 ANTHROPAC 4.0 Columbia: Analytic Technologies

Borrell, L., N. Crawford, F.J. Dallo, and M.C. Baquero

Boster, James S.

Boster, James S., and Susan C. Weller
Bourdieu, Pierre


Brandes, S.

Brosschot, Jos F., William Gerin, and Julian F. Thayer

Broughton, C.

Brown, George W. and Tirril Harris

Browner, C.

Buchenau, Jurgen

Bunker, Steven B. and Víctor M. Macías-González

Bzostek, Sharon, Noreen Goldman, and Anne Pebley

Campos, Belinda, Julia A. Walsh, and Marc Schenker
Caplan, Susan  

Carter-Pokras, Olivia, Ruth E. Zambrana, Gillerminate Yankelvich, Maria Estrada et al.  

Carter-Pokras, Olivia and Lisa Bethune  

Cartwright, Elizabeth  

Cassell, John C.  

Castro, Felipe Gonzalez  

Chapman, Rachel R. and Jean R. Berggren  

Chavez, Leo R.  


Cho, Y., W. Frisbie, R. Hummer, and R. Rogers  
Cleary, Paul D. and Ronald C. Kessler

Cohen, S. and G.M. Williamson

Coronado, G.

Cowie, C.C., K.F. Rust, D.D. Byrd-Holt, E.W. Gregg, E.S. Ford, L.S. Geiss, K.E. Bainbridge, and J.E. Fradkin

Cruz, Theresa H., Stephen W. Marshall, J. Michael Bowling, and Andres Villaveces

Csordas, Thomas

CueLLar, Israel, Bill Arnold, and Roberto Maldonado

d’Andrade, R.G.

d'Andrade, Roy G. and Claudia Strauss

d’Anna-Hernandez, Kimberly, Brenda Aleman, Ana-Mercedes Flores

de Groot, M., B. Pinkerman, J. Wagner, and E. Hockman
de Leon, Jason

Dengah, Francois

DeWalt, Kathleen M.

Dohrenwend, Bruce P. and Robert J. Smith

Dow, J.

Dressler, William W., Alfonso Mata, Adolfo Chavez, Fernando E. Viteri, and Phillip Gallagher

Dressler, William


2015 Five Things You Need to Know About Statistics. Left Coast Press.
Dressler, William W. and Kathryn S. Oths

Dressler, William, Kathryn S. Oths, and Clarence C. Gravlee

Dressler, William, W., Mauro C. Balieiro and José Ernesto dos Santos

Durand, Jorge, and Douglas S. Massey

Duru, O. K., Harawa, N. T., Kermah, D., & Norris, K. C.

Escobar, Javier I. and William A. Vega
2000 Mental Health and Immigration’s AAAs: Where Are We and Where Do We Go From Here? The Journal of Nervous and Mental Disease 188(11): 736-740.

Espenshade, Thomas J. and Katherine Hempstead

Espinosa, Kristin E. and Douglas S. Massey

Farmer, P. E., Nizeye, B., Stulac, S., & Keshavjee, S.

Feinstein, Jonathan S.

Finkler, Kaja

Fleuriet, K. Jill and T.S. Sunil

Flores, Marie E.S., Sara E. Simonsen, Tracy A. Manuck, Jane M. Dyer, and David K. Turok

Foley, Neil

Foner, Nancy

Foster, G. M.


Franzini, L., J.C. Ribble, and A.M. Keddie

Friedlander, Judith

Garcia, Carlos

deGenova, Nicholas P.
Geronimus, A. T.

Geschwender, James A.

Gill, Lesley

Goldman, Noreen, Anne R. Pebley, Mathew J. Creighton, Graciela M. Teruel, Luis N. Rubalcava, Chang Chung
2014 The Consequences of Migration to the United States for Short-Term Changes in the Health of Mexican Immigrants. Demography 51: 1159-1173.


Goddard, C. and Wierzbicka, A.

Good, C.

Goodenough, Ward H.


Goodman, A. and T. Leatherman.
Gordon, Milton
New York: Oxford University Press

Gordon, Tom

Gorman, Bridget K., Jen’nan Ghazal Read, and Patrick M. Krueger

Gravlee, Clarence C.

Griffith, David

Gross, T.

Guarnaccia, Peter J.
2001 The Contributions of Medical Anthropology to Anthropology and Beyond. Medical Anthropology Quarterly 15(4): 423-427

Guarnaccia, Peter J., Teresa Vivar, Anne C. Bellows and Gabriela Alcaraz

Guendelman, S. and P.B. English
Gutmann, M. C.


Guzman, E. and Martin, C.

Hamnett, B.R.
2006   A Concise History of Mexico. Cambridge UP.

Handwerker, W. Penn


Harley, Kim and Brenda Eskenazi

Harvey, D.

Heckathorn, D. D.

Herskovits, Melville J.

Hidalgo, Bertha, Isabel C. Garcés-Palacio, and Isabel Scarinci

Hirschman, Charles and Douglas S. Massey
Holland, Dorothy and Naomi Quinn  

Hondagneu-Sotelo, Pierrette  

Horevitz, Elizabeth and Kurt C. Organista  

Horton, Sarah Bronwen  

Hovey, Joseph D. and Cristina Magaña  

Hunt, Linda M., Suzanne Schneider, and Brendon Comer  

Hunt, Linda  

Ingoldsby, Byron B.  

Janes, Craig  

Joralemon, Donald  

Kaestner, Robert, Jay A. Pearson, Danya Keene, Arline T. Geronimus  
Kanaiaupuni, Shawn Malia  

Kearney, M.  

Keesing, Roger M.  

Kleinman, Arthur  

Kochhar, Rakesh, Roberto Suro and Sonya Tafoya  

Kral, Michael J., Jorge I. Ramírez Garcia, Mark S. Aber, Nausheen Masood, Urmitapa Dutta, and Nathan R. Todd  

Krieger Nancy  

Kroelinger, C. D. and Oths, K. S.  

Lara, Marielena, Cristina Gamboa, M. Iya Kahramanian, Leo S. Morales, and David E. Hayes Bautista  

Lariscy, Joseph T., Robert A. Hummer, and Mark D. Hayward  
Lazarus, Richard S.

Leatham, M.

Lee, Everett S.

Lewis, O.

Little, Randie R. and David B. Sacks
2009 HbA1c: How Do We Measure It and What Does It Mean? Current Opinion in Endocrinology, Diabetes and Obesity 16(2): 113-118.

Lomnitz, L.

Markides, K.S. and J. Coreil

Markides, K. S. and Eschbach, K.

Marrow, Helen B.

Martin, David

Massey, D., L. Goldring, and J. Durand
Massey, Douglas and Chiara Capoferro

Matovina, T.

Matthews, Holly F.

McDade, Thomas

McGlade, Michael S., Somnath Saha and Marie Dahlstrom

Melo, Milena Andrea and K. Jill Flueriet

Mendenhall, Emily
2012   Syndemic Suffering: Social Distress, Depression, and Diabetes Among Mexican Immigrant Women. Left Coast Press.


Mendenhall, Emily, Rebecca Seligman, Alicia Fernandez, and Elizabeth A. Jacobs

Mendenhall, Emily and Elizabeth A. Jacobs
2012   Interpersonal Abuse and Depression Among Mexican Immigrant Women with Type 2 Diabetes. Culture, Medicine, and Psychiatry 36: 136-153.
Mintz, Sidney W. and Eric R. Wolf  

Mohl, Raymond A.  


Morales, Leo S., Marielena Lara, Raynard S. Kington, Robert O. Valdez, and Jose J. Escarce  

Napolitano, V.  

Nichter, Mark  

Ong, A.  

Palloni, A. and E. Arias  

Paredes, A.  

Pelto, G. H., J. Urgello, L.H. Allen, A. Chavez, H. Martinez, L. Meneses, and J. Backstrand  

Peña, M.  
Peréa, Flavia C.

Portes, A. and Zhou, M.

Portes Alejandro and Ruben G. Rumbaut

Poss, Jane and Mary Ann Jezewski
2002 The Role and Meaning of Susto in Mexican Americans’ Explanatory Model of Type 2 Diabetes. Medical Anthropology Quarterly 16(3): 36-377.

Quesada, J., Hart, L. K., & Bourgois, P.

Read-Wahidi, Mary Rebecca

Redfield, Robert

Redfield, Robert, Ralph Linton, and Melville J. Herskovits

Riedel, Jeannette, Ulrich Wiesmann, and Hans-Joachim Hannich

Rodríguez, Nestor
Romney, A. Kimball, Susan C. Weller, and William H. Batchelder

Romo, Harriett D.

Romo, Harriett D. and Olivia Mogollon-Lopez

Rubel, A. J.
1964 The Epidemiology of a Folk Illness: Susto in Hispanic America. Ethnology 268-283.

2016 Nativity Differences in Allostatic Load by Age, Sex, and Hispanic Background from the Hispanic Community Health Study/Study of Latinos. Population Health 2: 416-424.


Scheper-Hughes, Nancy and Philippe Bourgois

Scotch, Norman A.

Schiller, N. G., L. Basch, and C. Blanc–Szanton
Schrauf, Robert W.

Scotch, N.A. and H.J. Geiger

Searle, John R.

Selye Hans and G. Heuser

Singer, Merrill and S. Clair

Singh G and S. Yu

Smilde, David

Stern, Michael P., Clicerio Gonzalez-Villalpando, Braxton D. Mitchell, Maria Elena Gonzalez-Villalpando, Steve M. Haffner, and Helen P. Hazuda
1992 Genetic and Environmental Determinants of Type II Diabetes in Mexico City and San Antonio. Diabetes 41(4): 484-492.

Stimpson, Jim P., Ximena Urrutia-Rojas

Strauss, Claudia

Stuesse, Angela
Sturrock, K. and Rocha, J.

Suarez-Orozco, Marcelo M., Carola Suarez-Orozco, and Desiree Baolian Qin

Sudano, J.J. and D.W. Baker

Szurek, Sarah.
2011 Cultural Models of Food and Social Networks Among Mexican Immigrants in the Southeast United States: A Dissertation. ProQuest

Thompson, Gabriel

Thomson, Maria D. and Laurie Hoffman-Goetz

Torres, Lucas


Trotter, R. T.

Uchino, Bert N.

U.S. Census
Veblen, Thorstein

Vega, W. A. and H. Amaro

Vega, William A., Alfonso Ang, Michael A Rodriguez, and Brian K. Finch

Vega, William A. and William M. Scribney

Villegas, Jorge, Jennifer Lemanski, and Carlos Valdés

Viruell-Fuentes, Edna A.

Viruell-Fuentes, Edna A., Patricia Y. Miranda and Sawsan Abdulrahim

Viruell-Fuentes, Edna A. and Flavia C.D. Andrade

Vogt, Evon

Weaver, Lesley Jo and Emily Mendenhall

Weller, S. C. and R.D. Baer

Weller, Susan C.


Westerfelhaus, R. and A. Singhal

White, Kari, Valerie Yeager, Nir Menachemi, and Isabel Scarinci

Whyte, Susan Reynolds

Williams, D. R. and C. Collins

Wolf, Eric R.


Woo, Elaine

World Health Organization

Worthman, C. M. and B. Kohrt

Young, A.

Young, J. and Garro, L.
1982   Variation in the Choice of Treatment in Two Mexican Communities. Social Science and Medicine 16(16): 1453-1465.

Zambrana, Ruth E., Susan C.M. Scrimshaw, Nancy Collins and Christine Dunkel-Schetter

Zavella, Patricia
2011   I’m Neither Here nor There: Mexican’s Quotidian Struggles with Migration and Poverty. Duke UP.

Zsembik, Barbara and Dana Fennell

Zuñiga, Victor, and Ruben Hernández-León, Eds.
APPENDIX A:

PHASE II QUESTIONNAIRE

Numero de caso __________       Fecha __________

Cambios culturales y las consecuencias en la salud para inmigrantes en Alabama

Courtney Andrews, Investigador Principal
Universidad de Alabama

I. Información demográfica

1. ¿Cuál es su fecha de nacimiento? __________

2. ¿Dónde nació (pueblo/estado)? _________________________________________________

3. ¿En que año llegó a los Estados Unidos? __________

4. ¿Cuántos años tenía cuando llegó a los Estados Unidos? __________

5. ¿Cuánto tiempo ha vivido en Birmingham, Alabama? _______

6. Describe su situación de vida.
   1. Una casa que posee
   2. Una casa que alquila
   3. Un apartamento que alquila
   4. Un tráiler que posee
   5. Un tráiler que alquila
6. Con amigos
7. Con parientes
8. Diferentes lugares, no hogar permanente

7. ¿Tiene un coche? sí no
   7b. ¿Sabe conducir? sí no

8. ¿Cuál es su estado civil?
   1. Casada
   2. Viviendo con pareja
   3. Soltera
   4. Divorciada
   5. Viuda

9. ¿Cuál es su ocupación? (en que trabaja) _________________________

   6a. ¿Cuál es la ocupación de su pareja? (en que trabaja) _________________

10. ¿Cuál es su ingreso semanal? (cuánto ganas a la semana)
    1. Menos de $300
    2. Menos de $600
    3. Menos de $1000
    4. Más de $1000

11. ¿Cuál es su nivel de educación más alto? (hasta que grado estudio la escuela)
    1. Primaria
    2. Secundaria
    3. Preparatoria
    4. Universidad

12. ¿Habla usted inglés?
    1. Para nada
2. Un poco
3. Bien
4. Muy bien

13. ¿Tiene Ud…
   1. Luz?       sí  no
   2. Refrigerador?  sí  no
   3. Televisor?    sí  no
   4. Acceso al internet?  sí  no
   5. Celular?     sí  no
   6. Horno?       sí  no
   7. Estufa?      sí  no
   8. Lavadora?    sí  no
   9. Secadora?    sí  no
  10. Cable?       sí  no
  11. Agua caliente?  sí  no
  12. Computadora? sí  no
  13. Cama?        sí  no

II. Instrucciones: indique si está de acuerdo con las siguientes declaraciones
— (0) para nada
— (1) un poco
— (2) generalmente
— (3) definitivamente

   (0) _____ (1) _____ (2) _____ (3) _____

15. Tengo suficiente dinero para pagar mis gastos y para otras cosas que quiero.
   (0) _____ (1) _____ (2) _____ (3) _____

16. Me gustaría tener más ropa.
   (0) _____ (1) _____ (2) _____ (3) _____
17. Tengo suficiente comida para comer. (0) _____ (1) _____ (2) _____ (3) ____
18. Yo debería hacer más ejercicio. (0) _____ (1) _____ (2) _____ (3) ____
19. Ojalá tuviera más amigas aquí. (0) _____ (1) _____ (2) _____ (3) ____
20. Yo todos los días paso tiempo afuera. (0) _____ (1) _____ (2) _____ (3) ____
21. Debo ir a la iglesia con más frecuencia. (0) _____ (1) _____ (2) _____ (3) ____
22. Me gustaría ser una persona más espiritual. (0) _____ (1) _____ (2) _____ (3) ____
23. Yo debo cocinar para mí y mi familia con más frecuencia. (0) _____ (1) _____ (2) _____ (3) ____
24. Yo tengo contacto todos los días con mis familiares y amigos en México. (0) _____ (1) _____ (2) _____ (3) ____
25. Es importante que yo escuche música que me gusta todos los días. (0) _____ (1) _____ (2) _____ (3) ____
26. Me gustaría tener más tiempo libre para disfrutar de mí mismo. (0) _____ (1) _____ (2) _____ (3) ____
27. Tengo tiempo para leer y estudiar. (0) _____ (1) _____ (2) _____ (3) ____
28. Yo estoy aprendiendo a hablar y entender Inglés. (0) _____ (1) _____ (2) _____ (3) ____
29. Me encuentro en buen estado de salud mental.
30. Yo tengo un buen seguro de salud.

31. Me gustaría tener mejor acceso a la atención de la salud de calidad.

32. Es difícil pagar mis medicamentos y los de mi familia.

33. Yo tengo la libertad de viajar donde yo quiera.

34. Me gustaría ser una persona más paciente.

35. Yo me considero como una persona que ayuda a los demás.

36. Necesito más tiempo para descansar.

37. Mis hijos están recibiendo una buena educación.

38. Dentro de mi familia nos reímos mucho.

39. Dentro de mi familia, me gustaría que nos apoyáramos uno al otro mucho más.

40. Mi familia asiste a las iglesia juntos regularmente.
41. Dentro de mi familia nosotros nos perdonamos uno al otro.
(0) _____ (1) _____ (2) _____ (3) _____

42. Dentro de mi familia comemos comida mexicana en la mayoría de las comidas.
(0) _____ (1) _____ (2) _____ (3) _____

43. Dentro de mi familia me gustaría que nos ayudáramos uno al otro mucho más.
(0) _____ (1) _____ (2) _____ (3) _____

44. Dentro de mi familia, celebramos días festivos y tradiciones Mexicanas.
(0) _____ (1) _____ (2) _____ (3) _____

45. Miembros de mi familia hablan principalmente español uno al otro.
(0) _____ (1) _____ (2) _____ (3) _____

46. Dentro de mi familia nos ponemos primero uno al otro.
(0) _____ (1) _____ (2) _____ (3) _____

47. Mis hijos aveseces preguntan por consejos y yo se los doy.
(0) _____ (1) _____ (2) _____ (3) _____

48. Dentro de mi familia nosotros comemos juntos cada día.
(0) _____ (1) _____ (2) _____ (3) _____

49. Me gustaría que mi familia pasara más tiempo juntos.
(0) _____ (1) _____ (2) _____ (3) _____

50. Dentro de mi familia hay buena comunicación.
(0) _____ (1) _____ (2) _____ (3) _____

51. Me gustaría que mis hijos me escuchen un poco más.
(0) _____ (1) _____ (2) _____ (3) _____
52. Dentro de mi familia nos respetamos uno al otro.
   
   (0)   (1)   (2)   (3)   

53. Me gustaría que hubiera más amor dentro de mi familia.

   (0)   (1)   (2)   (3)   

54. Dentro de mi familia siempre nos apoyamos uno al otro.

   (0)   (1)   (2)   (3)   

55. Dentro de mi familia nos confiamos uno al otro.

   (0)   (1)   (2)   (3)   

56. Me gustaría que miembros de mi familia fueran más honestos el uno al otro.

   (0)   (1)   (2)   (3)   

57. Me gustaría que miembros de mi familia fueran más afectuosos un poco más.

   (0)   (1)   (2)   (3)   

58. Donde yo vivo, el barrio es mayormente hispánico.

   (0)   (1)   (2)   (3)   

59. Me siento segura en mi casa.

   (0)   (1)   (2)   (3)   

60. Me siento segura caminando por mi vecindario.

   (0)   (1)   (2)   (3)   

61. Conozco a mis vecinos y tengo una buena relación con ellos.

   (0)   (1)   (2)   (3)   

62. Si necesito un préstamo, tengo amigos o familiares que me pueden ayudar.

   (0)   (1)   (2)   (3)   

314
63. Si me siento nerviosa o molesta, tengo amigos o familiares que me pueden ayudar.

(0) _____ (1) _____ (2) _____ (3) _____

64. Si necesito un consejo, tengo amigos o familiares que me pueden ayudar.

(0) _____ (1) _____ (2) _____ (3) _____

65. Si necesito ayuda con mis hijos, tengo amigos o familiares que me pueden ayudar.

(0) _____ (1) _____ (2) _____ (3) _____
## Anexo

**Versión revisada de la CES-D-R**

A continuación hay una lista de emociones y situaciones que probablemente hayas sentido o tenido. Por favor escribe durante cuántos días en la semana pasada te sentiste así, o si te ocurrió casi diario en las últimas dos semanas.

<table>
<thead>
<tr>
<th>Durante cuántos días...</th>
<th>Escasamente (0 u 1 días)</th>
<th>Algo (1 u 2 días)</th>
<th>Occasionalmente (3 u 4 días)</th>
<th>La mayoría (5 u 7 días)</th>
<th>Casi diario (10 u 14 días)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Tenía poco apetito</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2. No podía quitarle la tristeza</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3. Tenía dificultad para mantener mi mente en lo que estaba haciendo</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4. Me sentía deprimido(a)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>5. Dormía sin descansar</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>6. Me sentía triste</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>7. No podía seguir adelante</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>8. Nada me hacía feliz</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>9. Sentía que era una mala persona</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>10. Había perdido interés en mis actividades diarias</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>11. Dormía más de lo habitual</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>12. Sentía que me movía muy lento</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>13. Me sentía agitado(a)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>14. Sentía deseos de estar muerto(a)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>15. Quería hacerme daño</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>16. Me sentía cansado(a) todo el tiempo</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>17. Estaba a disgusto conmigo mismo(a)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>18. Perdí peso sin intentarlo</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>19. Me costaba mucho trabajo dormir</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>20. Era difícil concentrarme en las cosas importantes</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>21. Me molesté por cosas que usualmente no me moleran</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>22. Sentía que era tan bueno(a) como otra gente</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>23. Sentí que todo lo que hacía era con esfuerzo</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>24. Me sentía esperanzado(a) hacia el futuro</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>25. Pensé que mi vida ha sido un fracaso</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>26. Me sentía temerario(a)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>27. Me sentía feliz</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>28. Hablé menos de lo usual</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>29. Me sentía solo(a)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>30. Las personas eran poco amigables</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>31. Disfruté de la vida</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>32. Tenía ataques de llanto</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>33. Me divertí mucho</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>34. Sentía que iba a darme por vencido(a)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>35. Sentía que le desagrada a la gente</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
APPENDIX B:

IRB APPROVAL LETTER

September 28, 2015

Courtney Andrews
Department of Anthropology
College of Arts and Sciences
The University of Alabama
Huntsville, Alabama

Re: IRB # Y15-063-252: “Funding the Culture in Accumulation: How Cultural Consequences Mediate the Effects of Acculturation Stress on Health”

Dear Ms. Andrews,

The University of Alabama Institutional Review Board has granted approval for your proposed research.

Your application has been given expedited approval according to 45 CFR part 46. You have also been granted a waiver of informed consent. Approval has been given under expedited review category 5 as outlined below:

5. Research on individual or group characteristics or behavior (including, but not limited to research on perception, cognition, motivation, identity, language, communication, cultural beliefs or practices, and societal attitudes or research employing survey, interview, and history, focus group programs evaluation, human factors evaluation, or quality assurance methodologies.

Your approval will expire on September 27, 2016. Please use reproductions of the IRB-stamped consent forms. If the study continues beyond that date, you must complete the IRB Renewal Form within e-Protocol. If you modify the application, please complete the IRB Revision Form. Changes in this study cannot be initiated without IRB approval, except when necessary to eliminate apparent immediate hazards to participants. When the study closes, please complete the Final Report Form.

Should you need to submit any further correspondence regarding this application, please include the assigned IRB approval number.

Good luck with your research.

Sincerely,

[Redacted]

Carriehan L. Myles, MScMACM, CIP
Director of Research Compliance
Office of Research Compliance

cc: Dr. Kathryn Oths