PEOPLE OF THE LAND WITHOUT LAND:
A SOCIO-DEMOGRAPHIC STUDY OF MAPUCHE POVERTY

A Dissertation in
Rural Sociology and Demography
by
David R. Ader

Submitted in Partial Fulfillment
of the Requirements
for the Degree of
Doctor of Philosophy

August 2013
The dissertation of David R. Ader was reviewed and approved* by the following:

Leif Jensen  
Distinguished Professor of Rural Sociology and Demography  
Dissertation Adviser  
Chair of Committee  

Leland Glenna  
Associate Professor of Rural Sociology and Science, Technology, and Society  

Anouk Patel  
Assistant Professor of Rural Sociology  

Stephen A. Matthews  
Associate Professor of Sociology, Anthropology, and Demography  

Cynthia Clare Hinrichs  
Professor of Rural Sociology  
Chair of Rural Sociology Graduate Program  

*Signatures on file in the Graduate School
Abstract

In recent decades the international community has become more interested in the plight of the world’s indigenous peoples. Defined simply in the Latin American context as people who are descendent from those who lived in the Americas prior to colonization, past research shows disproportionately high levels of poverty within indigenous communities. Latin America is home to scores of different indigenous groups, and prevailing research confirms high poverty levels, and their origin in limited access to education and employment, discrimination, and legacies of spatial segregation and marginalization. This research provides an in-depth exploration of poverty among the Mapuche people in Chile. The Mapuche are the largest indigenous group in Chile, numbering some 1.5 million, and yet the literature lacks a full appraisal of poverty among them. Historically, they have been relatively isolated in agricultural communities and reservations, and evince a high prevalence of economic deprivation. This becomes problematic for a nation state known for an impressive pace of economic development. Indeed, Chile has experienced significant economic growth in the past few decades since the introduction of neoliberal economic policies. The claim is that poverty has been decreasing over that period for everyone including indigenous people. The continuing existence of Mapuche poverty calls into question the prevailing economic policy. It also suggests some groups may require special support to benefit from economic growth. However, some politicians in Chile deny the existence of indigenous people, suggesting a homogenous Chilean population, and discount the need for special attention to indigenous poverty.

This dissertation seeks to shed light on the problem of Mapuche poverty within the larger context of indigenous inequality. It uses a mixed-method approach. First, descriptive and multivariate statistical techniques are used to analyze nationally representative household survey data from the 2006 National Survey of Socioeconomic Characteristics, in order to provide a comparative understanding of the prevalence and etiology of poverty. Second, over fifty qualitative in-depth interviews were conducted with Mapuche individuals as well as key informants who work for national agencies mandated to address indigenous problems, so as to probe more deeply into the nature of poverty and changes in indigenous identity. The quantitative results confirm higher poverty prevalence among the Mapuche when compared to Chileans who do not identify as indigenous, a disadvantage that holds regardless of whether poverty is measured in absolute or relative terms. Multivariate analysis suggests this disadvantage is accounted for in part by human capital deficits, greater levels of employment hardship, rural residence and other factors. When poverty is defined in relative terms, the detrimental impact of being Mapuche obtains even with all covariates controlled. The qualitative results offer a generalizable portrait of poverty among the Mapuche, but necessarily relies on pre-determined conceptualizations and operationalizations of concepts as basic as “poverty” and “indigeneity.” In-depth interviewing was used to interrogate these ideas more deeply, to assess their relevance for the Mapuche people, and to hold the quantitative results up against their lived realities in both rural and urban areas. The qualitative results show that people understand poverty both in absolute and relative terms. Poverty is conceptualized by respondents as a lack of income and ability to participate in the consumer-based culture. Although lifestyles vary between urban and rural areas, respondents also associate poverty with not being able to afford the lifestyle they feel they should have relative to those around them. Discussions of poverty led to broader discussions of values and well-being showing an increasing worry among Mapuche respondents about economic growth and the loss of community and Mapuche lifeways.
# Table of Contents

List of Tables..................................................................................................................... vii
Acknowledgements............................................................................................................. viii

**Chapter 1: Introduction to Mapuche Poverty**................................................................. 1
Redefining Ethnicity and Poverty......................................................................................... 2
National Discourse on Economic Development ................................................................. 3
Purpose of Dissertation...................................................................................................... 4
Story of Juan ....................................................................................................................... 6
Objectives .......................................................................................................................... 8

**Chapter 2: A Brief History of the Mapuche People**....................................................... 12
First Encounters with the Spanish...................................................................................... 16
Independence ................................................................................................................... 20
Pacification ....................................................................................................................... 21
Pre-Allende Years ............................................................................................................ 27
Allende Years ................................................................................................................... 30
Dictatorship ..................................................................................................................... 32
Contemporary Indigeneity ............................................................................................... 34
Conclusion ....................................................................................................................... 36

**Chapter 3: Theoretical Considerations of Indigenous Identity and Poverty** ............... 38
Introduction ...................................................................................................................... 41
Identity Construction ...................................................................................................... 41
Ethnicity ............................................................................................................................ 43
Indigeneity ........................................................................................................................ 48
Poverty ............................................................................................................................... 55
Measuring Poverty .......................................................................................................... 56
Absolute Poverty .............................................................................................................. 56
Relative Poverty ............................................................................................................... 58
Explaining the Variation in Poverty ................................................................................. 59
Individual Factors .......................................................................................................... 59
Structural Factors .......................................................................................................... 62
Mapuche Poverty ............................................................................................................ 64
Conclusion ........................................................................................................................................ 68

Chapter 4: Explanation of the Data and Methodology ................................................................. 72
  Introduction ................................................................................................................................... 74
  Mixed Methodology .................................................................................................................... 74
  Qualitative Data and Methodology ........................................................................................... 78
  Quantitative Data and Methodology ........................................................................................ 82
  The CASEN Survey ................................................................................................................... 82
  Poverty .......................................................................................................................................... 83
  Indigeneity .................................................................................................................................... 85
  Demographic Characteristics ....................................................................................................... 86
  Human Capital Characteristics .................................................................................................... 86
  Residential Characteristics .......................................................................................................... 87
  Descriptive and Multivariate Methods ....................................................................................... 87

Chapter 5: Quantitative Results .................................................................................................. 90
  Introduction ................................................................................................................................... 94
  Descriptive Statistics .................................................................................................................. 94
  Migration History ........................................................................................................................ 99
  Education ...................................................................................................................................... 100
  Employment .................................................................................................................................. 107
  Multivariate Analyses ................................................................................................................ 108
  Within Mapuche Poverty .......................................................................................................... 117

Chapter 6: Qualitative results ..................................................................................................... 124
  Introduction ................................................................................................................................... 125
  Poverty: what does it mean? ......................................................................................................... 129
  Position in society ........................................................................................................................ 130
  Are there differences between Urban and Rural views on poverty? ..................................... 138
  Are there differences between Mapuche and Non-indigenous poverty? ............................... 141
  What does it mean to be Mapuche in Chile today? ................................................................. 146

Chapter 7: Conclusions ................................................................................................................. 158
  Indigeneity .................................................................................................................................... 160
  Mapuche Poverty ....................................................................................................................... 161
List of Tables

Table 4.1 Household Population and Ethnicity ................................................. 85
Table 5.1 Cost of Basic Basket of Goods .......................................................... 95
Table 5.2 Income Quintiles .............................................................................. 96
Table 5.3 Poverty among Mapuche Households .............................................. 96
Table 5.4 Demographic Characteristics by Ethnicity ..................................... 98
Table 5.5 Migration History by Ethnicity ......................................................... 100
Table 5.6 Educational Attainment Levels by Ethnicity ................................ 101
Table 5.7 Educational Levels by Ethnicity and Residence ............................. 102
Table 5.8 Percent No Formal Education by Age and Ethnicity .................... 104
Table 5.9 Percent Illiterate by Age and Ethnicity ........................................... 104
Table 5.10 Mean Years of Education by Age and Ethnicity .......................... 104
Table 5.11 Mean Years of Education by Age, Ethnicity, and Residence .......... 106
Table 5.12 Employment Status by Ethnicity .................................................... 107
Table 5.13 Employment Industry by Ethnicity ................................................. 107
Table 5.14 Likelihood of Living in Poverty, Absolute Measure .................... 113
Table 5.15 Likelihood of Living in Poverty, Adjusted Measure ...................... 114
Table 5.16 Likelihood of Living in Poverty, Relative Measure ....................... 115
Table 5.16b Combined Models Comparing Mapuche to Non-Mapuche ........... 116
Table 5.17 Poverty among Mapuche Households ........................................... 118
Table 5.18 Income Quintiles by Language ..................................................... 118
Table 5.19 Demographic Characteristics by Language Group ...................... 119
Table 5.20 Migration History by Language Group .......................................... 120
Table 5.21 Employment Status by Language Group ...................................... 120
Table 5.22 Employment Industry by Language Group .................................... 121
Table 5.23 Educational Levels by Language Group ........................................ 121
Table 5.24 Likelihood of Living in Poverty by Language Group .................... 123
Table 6.1 Timeline of Research Process .......................................................... 127
Table 6.2 Breakdown of Respondents ............................................................ 128
Acknowledgments

My deepest appreciation goes to my committee members. First and foremost, I am indebted to Dr. Leif Jensen for his insightful comments on this dissertation, endless patience in discussion, and wide range of help throughout my experience at Penn State. He was always willing to stop and listen to my concerns and questions. It has been my privilege to work under his guidance for the past six years. I am honored to be one of his students. I hope I can one day become a mentor and writer as strong as he.

Substantial appreciation is devoted to Dr. Leland Glenna. He is always readily available to students and willing to share his experience and expertise with me. Dr. Glenna provided prompt and comprehensive feedback as I developed my research framework. Dr. Glenna contributed to this dissertation greatly by sharing ideas through his recent publications and ongoing work. He also offered his critical opinions on my analytic strategies.

Appreciation also goes to Dr. Anouk Patel and Dr. Stephen A. Matthews who were always available and willing to share when I was seeking advice. They also took the time to review my work and provide comments.

I am also indebted to the people of Chile, who took the time to listen to me and provide ideas and opinions in regard to my research ideas. Many thanks go to Mario Torres and the faculty at the Universidad Tecnológica Metropolitana for a space to work, their conversations and support in understanding contemporary Chilean society. Particular thanks go to Cesar Faúndez for his help in contacting rural Mapuche families and driving me around rural Chile. Also, I am particularly grateful for Isabel Pailahueque and her patience in helping me understand urban indigeneity.

Lastly, I am grateful to the respondents of the household surveys who took time to answer the long list of questions that provided me with data for my analysis, as well as the respondents whom I interviewed that provided a more detailed account of life in Chile. They did not receive anything for their efforts and yet were willing to share for the greater good. For that I am truly grateful.
Chapter 1: Introduction to Mapuche Poverty

The story of the Mapuche people, the largest group of indigenous people in Chile, is essentially a story of change; change in identity, lifestyle, livelihood, location and well-being. One process of change is migration, or movement of people from one place to another; a process that has been going on since the beginning of humankind. Scant evidence exists about the Mapuche in the Americas before the arrival of the Europeans in the sixteenth century. The arrival of the Spaniards marks a great change in Mapuche society. Everything about their way of life was affected. Some of the changes that occurred within Mapuche society include: changing population distribution because of mass movement of the Mapuche people, population decline because of disease and wars between the Mapuche and the Spaniards, and livelihood changes because of restricted access to land and resources. These changes had a profound effect on the Mapuche society and way of life.

During the 1800s, Spain lost control of the American colonies and Chile became an independent nation. This also marked another time of great change in Mapuche society. Under colonial rule, the approach was to marginalize and segregate the Mapuche people-spatially and economically. By contrast, the government of the newly independent nation was eager to assimilate the Mapuche into a Chilean society, and use their lands for economic development, creating another situation of conflict that continues until today.

In the past few decades Chile has gone through abrupt socio-political gyrations. Economic reforms, including land reforms and a reservation system, have affected the livelihoods of the Mapuche throughout the early to mid-1900s. A violent coup d'état occurred in 1973 when General Pinochet ousted President Allende, starting a 17 year long military dictatorship, with severe changes in economic and social policy. Pinochet adopted a strict neo-liberal economic agenda, including the privatization of major industries. Post dictatorship, the newly elected government adopted a social and economic development strategy that continued to follow a neoliberal agenda with the hopes of improving economic and social circumstances for all people in Chile, including the Mapuche. Current reports from the government of Chile suggest that since the end of the dictatorship the economic and social circumstances have improved for the country.
overall, measured by the decrease in national poverty levels (MIDEPLAN 2006). This
dissertation attempts to delve deeper into the social, economic and demographic situation of the
Mapuche people in Chile. In order to do so I start with a broader understanding of what it means
to be Mapuche in contemporary Chile as well as questioning the prevailing economic agenda and
progress that has been claimed in official development discourse.

**Redefining Ethnicity and Poverty**

Fundamentally important to how we understand social and economic situations, which I am
going to refer to as well-being, are definitions and measurements of concepts. In order to
understand the well-being of those living in Chile, including the Mapuche, we need to define
even simple ideas, like who is included as Mapuche, and what do we mean when we discuss
well-being. This however is problematic because it creates a power dynamic where those with
the power to create and redefine concepts can impose those definitions on others. Throughout
Mapuche history, at least since the arrival of the Spaniards, the defining of social and economic
concepts has been done by non-Mapuche, creating a situation where definitions are imposed
upon the Mapuche, and redefining those concepts can happen without the Mapuche peoples’
knowledge or consent.

Redefining what it means to be *Mapuche* in Chile today is problematic because it can affect their
well-being. This can happen, for example, when policy that addresses the social and economic
situation of the Mapuche is changed such that they are denied access to resources that they may
have had before, or when laws granting rights and protection against discrimination are changed
based on new definitions of who counts as Mapuche. One example of this is from the Chilean
Census. The 2002 Census reports that there are over 15 million people in Chile of which 604,349
are Mapuche, about four percent of the total population. However the 1992 census reports that
the Mapuche claim a higher percent of the total population than the 2002 census (about seven
percent). Preliminary results from the 2012 census suggest an even different percentage than the
1992 or 2002 census however the population is not changing that much overall. What then is
happening to the Mapuche population in Chile? One problem is the census questionnaire which
has changed its question on ethnic identity throughout the years. Simple changes in survey
instruments can have large impacts on how ethnic identity is perceived in a nation. This can have
long reaching effects on budgets and social programs, which makes an understanding of the
Mapuche population vital to improve their circumstances.

Redefining *poverty* according to a national economic agenda is also problematic because it establishes a discourse where poverty is defined as lack of money, which largely determines a household’s ability to attain a minimally acceptable level of consumption. Poverty becomes a social construct intricately related to income. Regardless of lifestyle, or preference of lifestyle, people who lack a certain level of income are defined as poor. However, cultural differences between groups may complicate this conceptualization of poverty. That is, some groups may not share the same view of what it means to be poor, or what needs to be consumed in order to lead a “non-poor” lifestyle.

Like most countries in the world today, Chile has a national-level discourse about poverty—about what poverty means, how it should be defined, and what its causes are—as well as a set of anti-poverty policies that align with prevailing discourse and ideology. Dominant discourses tend to foster a homogenous view of poverty. If a household’s consumption pattern, or lifestyle, does not conform with that ideology for cultural or other reasons, then they are living contrary to the national economic development paradigm and its goals of economic growth. A recent poignant example of this comes from a prominent Chilean newspaper.

**National Discourse on Economic Development**

A well-known Chilean historian, Sergio Villalobos Rivera, recently published an article in a national Chilean newspaper, *El Mercurio*, in which he describes what he calls the reality of the “Araucania” (a traditional name for southern Chile and the ancestral homeland of the Mapuche) (Villalobos Rivera 2011). His description of this reality is given in order to persuade the readers, which he hopes includes politicians and governors, of their ignorance; an ignorance that has allowed them to believe in "vulgar and folkloric concepts". The vulgar and folkloric concept of which he writes is none other than the existence of the Mapuche people in modern times. His argument, similarly held by some politicians, is that the Mapuche people were "the protagonists of their own domination". It was the Mapuche people who made treaties with, sold land to, and helped the Spanish and the Chileans throughout history. They chose to trade and deal with the Spanish and benefited from that trade. They were incorporated slowly into the Chilean society and it is for that reason that they own “cars, cell phones and computers” and hold professional
and political positions.

According to Villalobos, those fighting for Mapuche rights, those who claim to be Mapuche, are not "pure indigenous", but have been “artificially designated" as Mapuche. His article seeks to bring to light and describe the confusion surrounding indigenous issues in Chile today. It presents the reader with a question: do the Mapuche people exist today? Beyond the issue of identity the author's motivation is to problematize economic development. He suggests that the Mapuche people as a group exist artificially; they were socially constructed. Why then should they receive special help from the government? Why should they benefit more than the rest of the Chilean population; the population that is composed of mestizos (meaning people of mixed ancestry)? This confused and contested terrain of ethnicity, poverty, economic rights, social structure and other fundamental issues is the setting in which this dissertation takes place. Addressing this confusion of Mapuche identity is not just an academic exercise, but stands to improve the lives of individuals and families whose chances in life are otherwise limited in part because politicians, policymakers, and the general society are ill-informed about these issues.

The neoliberal development paradigm in Chile is pitting less consumptive lifestyles that maintain traditional agricultural livelihoods against modern, urban, technologically connected lifestyles of consumerism. The paradigm views the latter as unquestionably more desirable. It also tends to define indigenous peoples as something of the past, with remnants in the mestizo population of which the majority of Chileans can claim (Cademartori 2003). This has been met with some resistance evidenced by the conflicts over land and resources in the traditional ancestral Mapuche lands that continue today as shown by popular media such as The Economist (2002; 2009).

**Purpose of Dissertation**

The purpose of this dissertation is to document and explore the current situation of the Mapuche people in Chile. I attempt to describe how changing definitions of indigenous identity, or indigeneity, as well as changing definitions of poverty can affect our understanding of Mapuche well-being. This has implications for the wider field of indigenous poverty and economic development worldwide.
In this dissertation I question the idea that the Mapuche are remnants of the past, and I show that the Mapuche people do exist and that their lifestyles and livelihoods are different from those who are not Mapuche. I also show that the national discourse for development sets indigenous traditional, cultural, and linguistic norms against a westernized, consumer culture. In order to understand these concepts better I ask questions regarding the demographic and economic situation of the Mapuche including: who are the Mapuche people? How can we study indigenous demography in Chile, including how many Mapuche exist? What does poverty mean in Chile as the economy has grown in the last twenty years? How does the concept of poverty relate to consumer culture? How do the Mapuche define poverty? I answer these questions by analyzing national survey data in which respondents can self-identify as Mapuche. Specifically I analyze the social and demographic differences between Mapuche and non-indigenous Chileans according to social factors that have been shown elsewhere to affect poverty levels, such as education, employment, and residential location. I also analyze whether and why the Mapuche face differential poverty risks.

More specifically this research addresses the socio-demographic and economic factors that contribute to the incidence of household poverty among the Mapuche. Scholarly interest in indigenous poverty continues to be significant due to the many social changes occurring in places with large indigenous populations. Additionally, the United Nations has, for the second time, declared a decade of the world's indigenous peoples, with the expressed goals of developing strong mechanisms for the protection of indigenous peoples and the improvement of their lives.¹ In order for improvement to take place, it is imperative that we understand the factors influencing the socioeconomic differences between indigenous and nonindigenous populations, more specifically, between the Mapuche and the dominant Chilean society.

While most theories addressing indigenous poverty explain it as being an outcome of historical processes, such as colonization, (Loveman 2001) as well as continued discrimination from the dominant society (Merino et al. 2008), other factors may be more relevant when explaining

higher rates of poverty amongst indigenous populations. Most notable among these are
disadvantages in human capital attainment (Psacharopoulos and Patrinos 1994; Hall and Patrinos
2006).

Few studies have attempted to empirically analyze poverty among the indigenous people in Chile.
These studies are either government reports (MIDEPLAN 2006), or other studies that are limited
in their depth of analysis, use aggregate data for all indigenous peoples (Montecino 1992), or
focus on particular aspects of poverty such as health (Rojas 2007; Rojas 2010). This research
goes beyond these studies by quantitatively analyzing Mapuche poverty specifically. The
Mapuche people have a unique situation, compared to other indigenous groups, due to the timing
of the Spanish invasion as well as the political processes that took place between the Mapuche,
the Spanish and the Chileans. This study is the only study to date that utilizes a mixed-methods
approach, using quantitative, national level secondary data as well as in-depth qualitative data, to
understand poverty amongst the Mapuche.

In order to contextualize the findings and the richness of the reality they seek to capture, and to
provide rich detail to the reader, I use examples from the qualitative part of the research
throughout the dissertation. For if I have learned one thing as a graduate student, it is important
to tell a story.

**Story of Juan**

Juan peered through the gate to where I stood in the dimly lit street. "Who's there?" he asked.
"It's me" I said, "the gringo". I could hear Juan chuckling as the gate was unlocked. "A
gringo at my house", he laughed, "I never would've imagined it". Juan lives with his mother
and grandparents, behind a bakery that was built by his grandfather. I could feel the heat from
the bread ovens as we entered the small living room.

Juan's grandfather came to Santiago as a young man looking for work. He came from the south,
like many young Mapuche who came to Santiago looking for fortune and a better life. News of
employment and easy money to be had in Santiago, along with the thrills of music, dancing, food
and pretty girls, had reached the village where his grandfather lived. Swayed by these tales he
came to Santiago during the 1940s. After a series of odd jobs and a stint working in the
His grandfather eventually settled down in one of the many communities of Santiago that lies in the periphery. His grandfather was lucky; the bakery had always done well, which is no surprise as most Chileans eat bread at every meal.

We sat around the living room discussing our lives and the changes that have taken place in Chile. Juan’s grandfather, a stout man with a wide face and a warm smile, loves to chat. He talked openly about his youth in the rural village, and how things were hard there. The food was never enough for the many mouths to feed. Although he lived in a rural area his family did not have sufficient land to survive. I asked him if his time in Santiago was any easier. He said not at first. When he first arrived in Santiago he could not find work. He was not aware of the discrimination he would face upon arrival. He described how the Chileans in Santiago disregarded people from villages as being uneducated and backward. And on top of that, he was Mapuche and so was assumed to be dirty, lazy, and a thief, although he was none of these things. Over time his relationships with family back in the village, have weakened. He used to travel back to his village in the South, but has not for a long time. I asked him about his ethnic heritage, his language, and his cultural beliefs. He said that he still felt that part of him was Mapuche although it is not a very big part of his life anymore.

Juan’s mother was born in Santiago and grew up speaking only Spanish. She was aware that she had relatives that were Mapuche and lived in the South, but she only traveled there a few times in her life. She identifies herself as Chilean and as a Christian and is slightly perplexed by Juan’s interest in his ethnic roots. She wants Juan to finish his education and get a good job so that he can one day support a family.

Juan takes classes at the local university. He can only do this part-time, as he is also working to help support the family. The bakery has not been doing so well since the large supermarkets have started opening up in Santiago. "The bread from the supermarket doesn’t taste as nice", Juan explained, "but it’s cheaper". Juan grew up in the periphery community and had no real knowledge about the Mapuche culture. In fact, he only recently learned that he was a Mapuche descendent. He had overheard his grandfather talking about the death of a distant family member back in the village. After learning he was Mapuche, Juan started noticing advertisements about Mapuche organizations in Santiago. He had noticed them before but
thought nothing of it. Nowadays he thinks about Mapuche culture quite a bit. Juan was able to receive a government scholarship to pay for his university studies. He is studying to be a teacher and education administrator, with the hopes of using his education to improve the education situation in the rural South. Juan participates in Mapuche organizations, and is trying to learn the language, Mapudungun. He participates in the ceremonies that take place in Santiago in some of the communities where many Mapuche live, and hopes to travel south this year to participate in the ceremonies of the Mapuche New Year.

I use the example of Juan to introduce concepts relevant to the current situation of the Mapuche people. The Mapuche have had a history of internal migration from rural agrarian settlements to large urban centers, such as a Santiago, to find employment. As large groups of Mapuche arrived in Santiago they often found employment in bakeries, and in construction, as well as domestic service. Because of discrimination there was a tendency to disassociate themselves from their indigenous roots, resulting in a loss of indigenous language and tradition among subsequent generations born in Santiago. Juan is one of the many people I talked to who expressed how they feel about being Mapuche, as well as how they feel about the current situation of the Mapuche people today. Although not everyone I talked to had the same opinion, or the same experience, Juan’s story is typical of the many stories that were told to me. The stories talk of changing concepts of identity, economic hardships, discrimination, and the many efforts made by people to survive these changes. This research addresses these issues by focusing on specific objectives.

Objectives
The first objective is to understand the nature of Mapuche identity in Chile. The first step in doing that is to establish the validity of a Mapuche identity. While it may be unusual to interrogate the validity of the very concept that lies at the heart of this research, the fact that ethnicity is fluid and socially constructed make it all the more imperative to do so (Smedley and Smedley 2005). Culture is not static and the Mapuche society has continually adapted to changes throughout history (Faron 1962; Bengoa 2000; Mallon 2005) making the understanding of contemporary Mapuche society all the more relevant.

Indigenous identity, or indigeneity, is a complex issue with direct consequences on academic research as well as individuals’ lives (Coates 2004; Richards 2005). In this research I examine
differences between ethnic groups using empirical data from social surveys. The way the
corporate of indigeneity and poverty are defined during the gathering of the data can influence the
results. How we determine ethnic groups and the group boundaries can determine the size and
composition of the ethnic group (Brubaker and Cooper 2000). If in research, for example, ethnic
groups are being compared to each other, such as indigenous to nonindigenous, and the
boundaries for these groups are fluid, meaning the identity of an individual in a group can
change over time, then this introduces confusion, and even bias, into any statistical analysis.
When statistical results influence policy, and that policy helps shape individual’s access to
resources (from social programs for example) then those biases become real and thus
consequential for well-being (Andrew 2006; Richards 2007; Perz 2008; Niezen 2009; Warren
2009).

A renewal of indigenous identity and organization has been happening in Latin America for the
past few decades (Jackson and Warren 2005). It is now a greater part of the public debate, not
only in political circles, but in cultural arenas where more people are becoming aware of their
historic roots (Richards 2007). This renewed awareness of indigenous identity has been
influenced by external forces. According to the Chilean scholar José Bengoa, many communities
of indigenous people were small semi-isolated populations that, prior to the 1980s, did not feel
the need to tell the world about their ethnic identity. However, as the world becomes more
globalized and these traditional agrarian societies are confronted with the expansion of industries
such as forestry, mining, and agriculture, these populations required a larger and improved
identity in order to gain political power (Bengoa 2000).

The issue of indigenous identity is a tricky one. If ethnic identity is socially constructed and can
change over time how can anyone recognize someone as Mapuche or not? Other researchers
have adopted different strategies to the question of who is indigenous, by using language, family
names, phenotype, and self-selection to determine indigenous identity. Often the ability to speak
and understand an indigenous language determines one's belonging to an indigenous group
(Psacharopoulos and Patrinos 1994; Hall and Patrinos 2006). In this research, I explore multiple
meanings of Mapuche identity including self-identification and language speaking ability to help
grapple with the issue of indigenous identity.
The second objective of this research is to examine the concept of Mapuche poverty and the Chilean context in which it is defined. Poverty, as a concept related to well-being, can be defined differently depending on the socio-cultural context. Many definitions and measures are used in order to understand, and address the problem of poverty. However, as mentioned previously, definitions are often determined for groups, by those who do not belong to those groups. It is possible that the Mapuche society understands poverty differently than the way it is define at the national level.

The Mapuche people's historic and economic attachment to place and means of livelihood may influence their views on well-being and their definition of an acceptable lifestyle. In other words, the perspective of poverty or well-being from the local Mapuche point of view may differ from the outside perspective. I use quantitative, national level data to analyze Mapuche poverty. Poverty, in this data, was defined by the national government. This definition may not adequately represent the views and perspectives of the Mapuche themselves. Additionally, as Chile has gone through political and economic changes, including the adoption of neoliberal economic models to promote economic growth, the dominant view of what poverty means may change over time. This understanding of poverty has applications for poverty research but also for the social policies that have been put into place in order to “help” the Mapuche people. This dissertation furthers our understanding of Mapuche poverty by taking a more nuanced approach to poverty by using multiple measures of poverty. Quantitative survey data are used to conduct descriptive and multivariate statistical analyses. The statistical analyses examine the relationship between several demographic, educational, economic, and residential variables, as well as test the effect of these variables on the probability of being poor. These results are complemented by qualitative findings from in-depth interviews with government officials, community leaders, and heads of Mapuche households.

In summary, this dissertation seeks to understand and explain the nature of being Mapuche today, and how that relates to issues of poverty. Poverty is not taken as objective, but analyzed in relation to the Mapuche people, how they view it, and the meanings they attach to it.

Chapter Two gives a brief history of the Mapuche people which sets the stage for the rest of the research. I attempt to show how the changing social and economic structures have influenced
the Mapuche people, specifically how the national development discourse has influenced their ability to survive as a people.

Chapter Three gives a brief review of the literature regarding ethnic identity and poverty. Much has been published on identity, and I review relevant arguments to the major approaches to researching ethnic identity. Poverty as well is a widely discussed topic with disparate views on how it should be approached in any analysis. I cover the major points of both of these concepts and conclude with my hypotheses.

Chapter Four presents information about the data and methodology used in the analyses. I first present the idea of the mixed-method design which is used in this research. I then describe the quantitative data and methods followed by the qualitative data and methods used.

Chapter Five presents the results of the quantitative analysis. I open with the descriptive statistics on the multiple poverty measures used, as well as the descriptive statistics of the survey data. I then present the results of the multivariate regression analyses of poverty.

Chapter Six presents the qualitative results of my analyses. I have spent 6 months in Chile collecting in-depth responses to interview questions about poverty and the current Mapuche situation. The results of these interviews are presented and discussed on their own terms as well as compared to the results of the quantitative analysis.

Chapter Seven is the concluding chapter. In this chapter I discuss what was learned during this research process. I also present some ideas of about the limitations of the study, the data, and the methods used. I also propose how these findings may be implemented to improve upon future studies about indigenous poverty.
Chapter 2: A Brief History of the Mapuche People

I shall tell of deeds distinguished,
Of a monarch-scornig people,
Feats of daring to remember,
And deserving celebration,
Rare accomplishments of merit
Crowning Spanish might with grandeur;
For the victor most is honored,
By repute of vanquished hero.

Chile, fertile province, famous
In the vast Antarctic region,
Known to far-flung mighty nations
For its princely strength and courage,
Has produced a race so noble,
Proud and brave, illustrious, warlike,
That by king it ne'er was humbled,
Nor to foreign sway submitted.

North to South its long extension
Coast of Southern Seas is titled.
From the East to West its slimness
By a hundred miles encompassed,
Reaches 'neath Antarctic circle
To degrees full twenty seven,
Where the Ocean's sea and Chile's
Merge in bosomed straits their waters.

And these two broad seas aspiring
To unite beyond their limits
Lash the rocks with waves extended;
But their junction is impeded
Till at last the land is riven,
And they there commune together.
Here Magellan drove a pathway,
First to find it, Sire, and name it.

Land runs North to South, I've noted,
And the sea bathes Western shoreline.
To the East in one direction
Stretch a thousand leagues of mountains.
In their midst war's point is sharpened
By fierce exercise and custom.
Love and Venus have no part here;
Only wrathful Mars is master.
Each brave has one weapon only,
Which he skills himself to handle,
One to which since early childhood
He has shown fond predilection.
He attempts with this one solely
To win mastery; the archer
Is untrammelled by the pike-staff;
Pikeman spurns the bow and arrow.

Never has a king subjected
Such fierce people, proud of freedom,
Nor has foreign nation boasted
E'er of having trod their borders;
Ne'er has dared a neighboring country
Raise the sword and move against them;
Always were they feared, unshackled,
Free of laws, with necks unbending.

(Passages from ‘La Araucana’ by Alonso de Ercilla)
(Translated by Manchester and Lancaster 1941)

The Republic of Chile is a long (4300 km), narrow (an average of 175 km wide) country located on the western side of South America between the Andes Mountains and the Pacific Ocean. With the Atacama Desert in the North, and Patagonia in the South, Chile's unique geography provides an interesting backdrop to study social change because much of the change is dependent on the spatial context in which it takes place. Much of the social change has come through the demographic process of migration as people have migrated to Chile and within Chile, affecting the population and its cultural dimensions (Latcham 1924; Bengoa 1985).

There is no agreement on the exact origins of the original inhabitants of Chile. Some scholars suggest they migrated from the Argentine Pampas while others suggest that they migrated from the Amazon (Rector 2003). Regardless of their origin, archaeological evidence shows that by 500 BCE a sizable population inhabited central and southern Chile and there existed a culture that could be called Mapuche (Bengoa 1985; Boccara 1999; Rector 2003; Bengoa 2004). At the time of the arrival of the Spanish, to what is today known as Chile, there were approximately one million inhabitants that occupied 5.4 million hectares (Latcham 1924; Bengoa 1985).

Mapuche literally means ‘people of the earth’, ‘Mapu’ meaning earth and ‘che’ meaning people
(Barrera 1999; Bengoa 2004). Due to the lack of information about pre-colonial times, it is easy to romanticize the existence of the original inhabitants of Chile. Although little is known about how society changed over time prior to the arrival of the Spaniards, we do know that after colonization many changes occurred due to the introduction of new ways of governing and surviving, including the introduction of new goods and technology (Bengoa 1985; Barrera 1999; Loveman 2001; Rector 2003; Dillehay 2007).

The Mapuche groups were subsistence agriculturalists and pastoralists who relied on the natural resources available to them for survival. Prior to Spanish colonization evidence suggests the indigenous people were already living an agriculturally based, sedentary lifestyles (Faron 1968; Dillehay 2007; Ray 2007). They consisted of small kinship groups that were part of larger extended kinship networks. Each kinship or extended family had a leader or chief called a ‘cacique’. Each family or clan had control over a certain amount of land that they had inherited from their ancestors and this land they worked together in common for the family or group. Each laborer became owner of the goods they were able to produce; however, the land itself remained communal property. The land belonged to the community but the use of the land was determined by individuals. Conflicts over land tenure, territory and land rights came about after the conquest by the Spaniards (Loveman 2001).

It is difficult to know exactly what life was like for the Mapuche prior to the arrival of the Spanish because we have no written record. However some of the first Spaniards who arrived wrote about the indigenous population and tried to describe their way of life. There are discrepancies in the details about the pre-colonial setting however, because those writing about the indigenous way of life had limited understanding about the indigenous people and language (Dillehay 2007). However, we do have some idea about their social structure. For example, families were based on kinship ties, and people were identified based on extended kinship affiliation (Faron 1968). They also spoke a common language, called Mapudungun.

The term Mapuche is a macro-grouping that incorporates multiple groups of indigenous people (Vergara and Barton 2013). Indigenous groups prior to Spanish colonization referred to each other based on location and extended family ties. For example, people who lived on the coast were referred to by others, who did not live on the coast, as “people who live on the coast”
(lafkenche). The same applies for people who lived in the northern regions (picunche), people who lived in the mountains (pewenche), and people who lived in the southern regions (wiliche) as well as other names for other groups. So if social demographers existed in this time period, it is probable that they would have used these group identities to delineate ethnic identity (Ray 2007). In other words, before the Spanish arrived, the only ethnic distinction was between the sub-groups of the larger macro-grouping. Everyone would have been Mapuche, so there was no need to differentiate Mapuche from non-Mapuche (Bengoa 1985).

This chapter briefly chronicles the history of Chile, the Mapuche people, and the socio-demographic changes that occurred since colonization. This is presented here in order to place the research within this broader historical context, as well as to chronicle how Mapuche identity emerged over time. The purpose of this chapter is to help the reader understand who the Mapuche people are, and how the term Mapuche came into being.

The history of indigenous people in Chile is fraught with issues of land tenure and access to resources (Loveman 2001). These continue to be issues in contemporary Chile where, ironically, land tenure and access to social resources can be granted by proof of membership in an indigenous group. Throughout Chilean history, land was taken from the Mapuche, and in some cases, land was granted to Mapuche families based on their identifying as Mapuche. However, in order for a family to identify, or be identified, as Mapuche they needed to use some mechanisms of identification. Proof of identity or legitimization of indigenous identity can be influenced by individuals and their personal ancestry, but can also be given or denied by political institutions (Merino et al. 2009). This is why it becomes important to understand who the Mapuche people are, how that identity changes, and who legitimizes that identity (Nagel 1994).

If we look at the history of indigenous peoples in South America, after they came into contact with the Europeans, we see numerous examples where the Europeans discriminated against the indigenous people (Ray 2007). Many social, economic and political structures were forcibly changed because the Europeans were able to take control. They based their new colonial governments on systematically identifying people by their ethnic identity (indigenous or European), a concept that was not used prior to the arrival of the Spanish (Bengoa 1985; Loveman 2001).
When Europeans first made contact with Indigenous people in the Americas, social, cultural, and ethnic differences were stark. However, as time passed, and the two easily distinguishable groups intermixed socially (through increased interactions), culturally (through increased shared language and customs), and ethnically (by intermarrying or creating mixed offspring called mestizos), it became more difficult to distinguish the groups (Ray 2007). The ability to distinguish one person from another and categorize them into groups is a theoretical and empirical problem that lies at the center of this research.

**First Encounters with the Spanish**
Colonialism is the subjugation by physical and psychological forces of one group of people onto another (Bengoa 2000). This mechanism of control and dominance is as old as human civilization. However my focus starts after the European discovery of the ‘new world’. During the European colonization of the Americas, the dominant perception was that non-European people were inferior or backward (Hoffman and Centeno 2003). The Europeans engaged in domination of land and people through military and economic power (Bengoa 2000).

During the 1530s, the King of Spain authorized an expedition into what is today Chile. This expedition was led by Pedro de Valdivia. Valdivia arrived in the central valley of the Mapocho River and established the city of Santiago in 1541. Indigenous people in the area attacked the town of Santiago and destroyed it that same year. This was the start of a long drawn out battle over land between the Spanish and Mapuche in Chile (Loveman 2001).

At the beginning of the Spanish invasion the Mapuche people resided in an area from the north, what is today Santiago, toward the south extending to the island of Chiloe. Although the Spanish tried to expand their territory and control, fighting the indigenous people on their way south was costly. The existence of Chile as a Spanish colony was always dependent upon the Spanish crown for finances and soldiers (Rector 2003). Because of this cost, the colonizers were eager to find profits they could send back to Spain.

To the Spanish, the colonies were sources of raw materials and the native population was a
source of cheap labor. This mindset of natural resource extraction was entirely different from that of the indigenous population. The European mindset viewed nature as raw materials ripe for extraction and the native population as sources of cheap labor easy to exploit, for example working in mines or in fields. However the indigenous mindset viewed natural resources as a source of survival, that needed to be maintained. This shift in mindset from living on the land to extracting from the land, fundamentally changed the ecological and social systems that had been in place for centuries (Larson, Harris et al. 1995; Thorp 1998; Rector 2003; Marjorie 2007; Webber 2007).

At first the Spanish did not label the indigenous people they encountered in Central Chile as Mapuche. They referred to them as belonging to the group called Araucanians or in Spanish, ‘Araucanos’ (Bengoa 2009). According to a Jesuit missionary in 1606 the indigenous people referred to themselves as ‘reche’ or ‘pure people’ (Ray 2007). According to some researchers, the macro-grouping term Mapuche did not come about until the mid-17th century (Boccara 1999; Dillehay 2007). This is significant because it shows the slow shift in how social groups identify themselves. This shift in identification continued to occur as groups moved about and intermixed.

The Mapocho River Valley, where Santiago is located, was territory of the northern indigenous group or Picunches (Picun=north; che=people). Because they were part of the same language group as the other indigenous groups further south (part of the larger Mapuche macro-grouping), we assume the cultural similarities between them. These indigenous groups were greatly influenced by the presence of the Spanish invaders. They were enslaved, subjugated, forced to work in gold mines, and raise crops and cattle on the new Spanish estates (Loveman 2001; Ray 2007). During this time many of the Picunche migrated further south seeking refuge from the Spanish. Others did not leave and were either assimilated into the colonial society, or died during the process (Bengoa 2009). Valdivia continued expeditions further south looking to exploit and force the natives to work. Outposts were established and Valdivia gave his soldiers indigenous people as grants. These indigenous people were put to work mostly in gold mines (Loveman 2001). The indigenous people faced harsh conditions which eventually escalated into hostilities (Faron 1968; Bengoa 1985; Bengoa 2004; Ray 2007).

For decades the Mapuche fought against the Spanish and 91 years after the start of war between
the Spanish and the Mapuche, a truce was finally reached, culminating in the Treaty of Quilín in 1641 (Loveman 2001; Ray 2007). The Spanish crown was forced to recognize a border between the Spanish invaders and the Araucanians. This border was established at the Bio-Bio River. All territory south of the river became Mapuche territory. Those living beyond the river were called Araucanos and the land was referred to as Araucania. The Mapuche people had gained what no other indigenous group in the Americas had gained: recognized autonomy from the Spanish crown (Bengoa 1985; Rector 2003; Bengoa 2004; Ray 2007). Although the peace treaties had been signed the peace did not hold. Small skirmishes continued to break out over the following decades, but not to the same extent as before and the motivation was not to push the boundary of the Spanish territory. These skirmishes were contained at the border and were based on making incursions into the other's territory (to steal animals for example) (Ray 2007).

During this time regular meetings, peace talks or parleys (which they called parliaments or in Spanish, parlamentos), and treaties continued to take place between the Spanish and the Mapuche (Haughney 2008). The peace achieved during the regular treaties and parliaments between the Spanish and Mapuche lasted and created a long period of independence for the Mapuche people, especially for those beyond the border away from where the small skirmishes took place. Between 1598 until 1881 the Mapuche south of the Bio-Bio River were to live without being dominated by outside government, subject only to their own laws and political organization (Boccara 1999; Rector 2003; Alexander 2006; Dillehay 2007). However this does not imply that they were isolated or had no contact with the Spanish.

There were a great many developments between 1598-1881. Mapuche culture changed and adapted, gaining new technologies and new understandings. The Mapuche economy changed from one based on hunting and fishing to one based on raising horses, cattle and sheep (Ray 2007). The Mapuche became great horsemen having adopted horses from the Spanish (Bengoa 1985; Bengoa 2000; Bengoa 2004). They made improvements on technologies that the Spanish brought, such as improving the saddles and learning to raise animals in the distinct ecological environment. They improved on their political organization by increased communication between group leaders about their common enemy. This also improved their military organization (Loveman 2001). Mapuche leaders allowed merchants and missionaries to come into their territory and, despite skirmishes, the Mapuche maintained political control south of the
Bio-Bio River.

During this time of relative separation between the Mapuche and the Spaniards, changes also occurred in the Spanish colony. An agrarian based economy developed due to the lack of significant gold and silver mines, compared to other Spanish colonies such as Peru (Loveman 2001). The indigenous people who had remained in the central region were assimilated into Spanish society. Mapuche women adapted to Spanish promiscuity and bore many “Spanish” children. Thus, a mestizo population grew in the central Valley; a population that viewed themselves more as Chilean than Spanish. Loveman describes the social transformations this way:

Relative ease of communication and concentration of population in the central valley, along with the constant threat and challenge of the Indian frontier, forged a colonial elite with strong localistic orientations, a fortress mentality, and a significant military tradition. An impressive ability to coopt royal officials through business or marital ties and to absorb new wealth and successful immigrants, created an integrated political, economic, and social elite with interests in agriculture, commerce, and mining. Intermarriage, shared social values, and dependence for economic well-being upon the exploitation of the rural labor force unified the Chilean upper classes and helped forge a unique variant of Hispanic capitalism on the periphery of the Spanish Empire (2001, 74).

It was this unified mentality of the local elites, with their homogenous view of the population that permeated the political discourse during the time before independence. This newly formed Chilean society of metizo and Spanish elites wanted to control the colony, free from Spanish influence and indigenous threat. Thus relative uneasiness increased between the Mapuche and the recently formed Chilean society in the central valley. The Mapuche still maintained a relatively separate existence from the Chilean society in the central valley and still considered the Spanish crown to be in charge. The Mapuche continued to negotiate their independence with the Spanish crown through peace talks and parliaments. The last Parliament occurred between the Mapuche leaders and representatives of the Spanish crown in 1803 (Bengoa 1985; Bengoa 2004). Afterward, the Chilean society moved towards independence from Spain and negotiations with the Mapuche over their autonomy ceased (Loveman 2001).
Independence
From the early days of colonization, when the fighting was most fierce between the Spanish and the indigenous people, tales about Mapuche heroes who fought bravely against the Spanish were passed down through the generations (Bengoa 1985; Loveman 2001). The Mapuche were regarded as brave and courageous warriors (Merino et al. 2009). However as generations passed, because of years of mixing and intermarrying, the majority of the population north of the Bio-Bio River no longer considered themselves European nor did they consider themselves indigenous; they considered themselves Chilean. When the Chileans began to fight for independence from Spain they used these tales of fierce Mapuche warriors to inspire the Chileans to fight. So the irony is that these historic heroes are Mapuche heroes that originally fought the Spanish, but were used by Spanish descendants to inspire courage and bravery to fight for independence from Spain. Contemporary Chilean society still refers to these Mapuche heroes as part of modern day social consciousness about Chilean identity (Loveman 2001; Richards 2007; Richards 2010).

Napoleon invaded the Iberian Peninsula in 1807 and word arrived to the governors in Chile in 1808 (Loveman 2001). Independence movements quickly sprung up throughout the Spanish colonies, marking the beginning of the end of Spain's overseas colonies. September 18, 1810, marks the beginning of Chile’s independence movement. After the previous governor died in 1808, and because of stipulation in a reform that allowed the highest ranking military official to take the place of the governor if he should die, a military official, Carrasco, replaced the governor. Due to Carrasco’s lack of administrative experience, and some of the decisions he made on administrative issues, the other leaders and the general public became skeptical of his legitimate authority. A town hall meeting was held on September 18th, 1810 and the governing body accepted the resignation of Carrasco and “proclaimed the creation of a national junta” (Loveman 2001, 100).

War ensued between Spanish Loyalists and Chileans who wanted independence. Mapuche fought on both sides (Skidmore and Smith 1992; Ray 2007). At this point the majority of the Mapuche people lived south of the Bio-Bio River and all indigenous that lived in the Central Valley had been assimilated into the Chilean culture. Some Mapuche hoped the new Chilean government would be better than the old Spanish government, however many of the Mapuche
took a pragmatic view and sided with the Spaniards because the Spanish were ‘the enemy they knew’, and with whom they had established relative peace and an autonomous existence south of the Bio-Bio River. The Mapuche knew the Spanish way of doing things, and although relations between the Mapuche and the Spanish crown were not close, they understood the Spanish ways. However the Mapuche feared the dominant population of mestizo Chileans because of their status. The mestizo Chilean population was more poor and had less political power than the native born Spanish population. The Mapuche knew the mestizos wanted land and power but their peace agreements were with representatives of the Spanish crown, not with representatives of the Chilean population who supported independence (Loveman 2001). The Mapuche feared that if the Chileans took control from the Spanish, all previous agreements that had been made with Spain would be nullified and the Chileans would trespass Mapuche territory looking for land (Ray 2007).

The Spanish Loyalists were defeated in 1817. The new Chilean government, led by Bernardo O'Higgins, granted Chilean citizenship to all those living in the new territory of Chile, including the Mapuche. The new Chilean government no longer considered the Mapuche to be autonomous. All lands south of the Bio-Bio were now considered to be part of the newly formed nation of Chile (Loveman 2001; Ray 2007).

**Pacification**

As for most Latin American countries, the nineteenth century was a period of great economic and social change in Chile (Loveman 2001). Land in the fertile central valley was concentrated under the control of a few families. These vast estates produced goods for regional cities or larger cities further abroad (Skidmore and Smith 1992). The war for independence greatly affected trade to other countries. Mining of nitrates, silver, and copper increased during the nineteenth century, spurred on by investment from abroad as well as from the land-owning elite. As the economy grew, investors began looking for more opportunities within Chile (Loveman 2001).

Multiple factors changed the policy of the Chileans towards the Mapuche south of the Bio-Bio River. The land was becoming crowded in the central valley and more European immigrants were arriving all the time (Bengoa 1985; Ray 2007). The newly independent government had no intention of allowing the Mapuche to keep the fertile land that they occupied. The Chilean
government hoped the Mapuche would abandon their traditional ways and assimilate into a more modern Chilean identity (Haughney 2008). Most of those living in the central valley at this time had ancestral ties to the Mapuche and viewed assimilation as a natural result, something to which the population in the South should aspire (Ray 2007).

As time passed in the new nation, and the central valley became increasingly crowded, forces of internal migration saw more and more non-Mapuche Chileans drift further south, encroaching upon the Mapuche lands and taking the land for themselves (Loveman 2001). Another factor was the burgeoning of capitalism in Europe. Many Europeans migrated to the ‘new world’ and those that arrived in Chile wanted land, making the Southern regions irresistible (Ray 2007). The Chilean government viewed immigration as a way to create economic development and industry and promoted Chile as a fine destination for Europeans looking to invest in the new world (Loveman 2001; Ray 2007). Settlers were encouraged to venture south and to expand the frontier; however this created tensions with the Mapuche. The Mapuche fears had come true; the Chileans wanted their land and had no intention of leaving them alone (Ray 2007).

In the decades after independence, the government referred to the tensions with the Mapuche as the “Araucanian Problem” (Ray 2007, 71). From the newly formed government’s perspective, the fertile land, which the Mapuche occupied, was to be settled in order to boost Chile’s economic development. In 1813, the Comisión Radicadora de Indígenas (Indigenous Settlement Commission) was established with the mandate of confining the Mapuche onto reservations, but in reality this was a slow process that was hampered by lack of government support. Other plans were devised, such as negotiating with the Mapuche to build a line of forts in the southern territory. These plans however were put on hold as the new Chilean government spent their efforts pursuing the last of the remaining royalist factions and fighting a war with Peru and Bolivia in the north (Ray 2007).

By 1840, despite government inactivity, settlement of southern lands continued. In 1845 Chilean politicians and intellectuals talked openly about a military conquest of the Araucania. Settlers continued to encroach on the South with fights breaking out regularly in this frontier territory (Loveman 2001, Ray 2007). Tensions increased between settlers and the Mapuche. The government knew that they would have to act.
In order to control this process of development and avoid further conflict, the new government established the Indigenous Reservation Laws in 1866, which granted some lands as Mapuche lands (Ray 2007). However in 1870 the Mapuche launched a widespread rebellion against incoming settlers. During this time of conflict on the frontier, the national discourse against the Mapuche increased as one example from a Chilean periodical, El Correo del Sur, shows by calling for the destruction of the Mapuche:

> The necessity, not only to punish the Araucanian race, but also to make it impotent to harm us, is so well recognized that almost everyone desires that such measure be taken as the only way to rid the country of a million evils. It is well understood that they are odious and prejudicial guests in Chile. The thousands of families that today find themselves in misery; the innumerable robberies committed by these savages….are clamoring for prompt and extreme measures, since conciliatory measures have accomplished nothing with this stupid race - the infamy and disgrace of the Chilean nation (1859; quoted in Loveman 2001, 135).

Conflict and disruption of their lives continued for the Mapuche as settlers continued to come, lured by quick profits and “free” land (Loveman 2001). The Mapuche people revolted again, on a much larger scale in 1880 (Olson 1991). Finally, in an attempt to put an end to the conflict, the Chilean government attempted victory by what they called the "pacification of the Araucania" (Loveman 2001; Ray 2007). It was bloody warfare, however, improvements to military weapons, the invention of the telegraph and expansion of the railroad from Santiago to the frontier allowed the Chileans to finally take the upper hand. In 1881 a defensive settlement was established in the heart of Araucania, at Temuco (Bengoa 1985; Bengoa 2009), and by 1883 the Mapuche had been defeated militarily by the Chilean military. A new reservation system went into effect in 1884, and from that time until the 1920s the Mapuche were relocated to these reducciones (reductions or reservations) (Olson 1991; Loveman 2001).

After the pacification, the Mapuche lands were considered state lands and were granted to different parties. The Mapuche were given land on reservations. All land that was previously Mapuche communal land became designated as empty land, available for use in ways determined by the new government (Loveman 2001). These lands were auctioned to Chileans, property companies and foreigners. The down payments for land were so high that the peasants, workers, or Mapuche people could not compete with the private investment companies, many of which
were based in Northern Europe and investing in land in the new world. These investors came looking for opportunities in the new land and were lured to Chile by the fertile soils available (Ray 2007; Haughney 2008). Because the down payments were high, only accessible to those with capital, this system of auctioning allowed the frontier lands to become another domain of the hacienda. Following the central valley model, the political and economic elites created a system where squatters, landless peasants and Mapuche people became peons, working on these haciendas (Loveman 2001).

This new land arrangement was problematic for the Mapuche. The land that was ‘given’ to the Mapuche was land that they were currently occupying. The problem was that before independence the Mapuche inhabited particular areas but used the surrounding lands as communal land for common purposes such as grazing animals or as places that provided natural resources. Because the new government would not accommodate the Mapuche land tenure system, they viewed communal land as empty and unused. So the land available to the Mapuche after the war was significantly reduced, affecting their livelihoods, and cultural practices (Loveman 2001).

The Mapuche people’s access to land was significantly decreased, which inevitably and adversely affected their livelihoods (Loveman 2001; Ray 2007). When the transition into small plots of intensive agriculture occurred, the Mapuche were ill-prepared. They were forced to become small-holder farmers without having the knowledge of how to survive. Because the Mapuche were removed from their lands and were restricted to plots too small to support their population, this led to intensive use of the small plots and degraded soils (Ray 2007).

As sociologist Philip McMichael observes (2008, 4), “While industrialism produced new class inequalities within each society, colonialism racialized international inequality”. Or as he puts it in another way, development “introduced new class and racial hierarchies within and across societies” (2008, 4). This could not be more clear than this period in Chilean economic history as the Mapuche went from a people, independent and autonomous, to a people forced into small plots of land, or marginalized land, not used for commercial production (Clapp 1998). In order to confront the problem of growing hunger the Mapuche had to become temporary laborers on nearby estates or immigrate to cities (Loveman 2001). They became the excess labor for Chilean
investors and companies both in urban and rural areas (Bengoa 1985; Mallon 2005). In this context of development, rural populations were subject to modern social engineering and exposed to new systems of governance and power, as well as forced labor schemes, schooling, and segregation from the upper class elites (McMichael 2008).

The Mapuche were given land titles to only the land where they currently lived. These legal land grant titles called *titulos de merced*, were the result of war and systematic oppression (Loveman 2001; Rector 2003). After the war ended these legal land grant titles were given only after the land was surveyed and maps were drawn. Often the maps were drawn slowly, resulting in more favorable conditions for non-Mapuche who claimed lands that supposedly belonged to the state. These titles were generally given out between 1903 in 1915. As Mallon explains in her book, *Courage Tastes of Blood*,

> The obvious conclusion is that the state favored private and entrepreneurial interests over its legal obligation first to settle indigenous groups on the land. The state saw native territory as a region entirely suitable for colonization and usurpation, and that the very process of land titling was heavily slanted in favor of colonists and entrepreneurs (2005, 58).

There are numerous stories about greedy landowners tricking indigenous people out of their lands, using dubious tactics in order to prosper unfairly at the expense of the indigenous community (Loveman 2001; Mallon 2005).

Southern agriculture, however, continued to flourish as more land was put under cultivation. With large amounts of cheap labor, and high yielding virgin soils, significant agricultural production could be achieved with little capital investment (Loveman 2001). Because the “Mapuche Problem” was solved by putting them onto reservations, and because of increasing immigration, encouraged by the Chilean government, an influx of Germans, Swiss, French, and Italians arrived into Southern Chile. The Chilean government provided families with land, seeds, wood, oxen, and a cow (Ray 2007).

During the early to mid-1900s, the majority of the Chileans, the politicians as well as the citizens, agreed that the assimilation of the Mapuche people and eradication of their culture would be the best thing for national unity (Mallon 2005; Bengoa 2009). Reducing the Mapuche
hold on the land was seen as the best way to achieve this end. By reducing Mapuche access to land, their livelihoods of raising cattle and growing crops could not continue, and the Mapuche communities were left struggling to survive (Loveman 2001; Haughney 2006). This time period of settlement of the Mapuche onto reservations lasted from 1883 to 1930 with conflicts occurring frequently between the Mapuche in Chilean settlers. "Large landowners sometimes used violence as well as fraud to force Mapuche families to leave their lands and then had the titles recorded as their own in state registries. In other cases, overlapping or imprecise property boundaries led to title disputes" (Haughney 2006, 37). By 1929 Mapuche communities, looking to right this wrong, had filed 1,219 lawsuits over usurped lands (Haughney 2006). Land titles were not the only problem associated with settlement.

Demographic pressure from population growth also meant that more people had to survive on the same amount of land. The size of land available continued to decrease, usurped by private individuals. Almost one-third of the land originally granted to the Mapuche as reducciones was acquired, through dubious methods, by non-Mapuche people (Bengoa 1985; Ray 2007). This led many Mapuche people to leave the reservations to look for work, on estates, and in towns and cities, especially Santiago (Loveman 2001; Ray 2007).

The integration policies and land grabbing did not yield the results that the Chilean society wanted. Although some connections were made between the Mapuche and the Chilean government, with some Mapuche serving on political committees and in political positions, the integration policies led to increases in the differences between Mapuche and Chilean society. As José Bengoa describes it,

urban migration increased during the post-World War II, as did the levels of poverty among the communities and families who remained in the Indian territories. Not only was there no integration or progress, but social distancing, discrimination, and marginalization continued and grew (2009, 136).

In other words, at the beginning of the 20th century the new nation state of Chile attempted to create a homogenous culture based around the dominant culture of those living in Santiago and in the central valley. This nation building exercise coincided with what was occurring globally as former colonies became independent nations and sought to participate in what McMichael calls the development project (McMichael 2012).
Pre-Allende Years

During the early to mid-20th century the development project was embraced by nations as an "antidote to colonialism" (McMichael 2012, 22). Countries joined the United Nations, and participated in a new world order based on the idea of economic growth (McMichael 2012). There were coordinated efforts throughout the international community to provide social improvements through education, improved infrastructure and economic growth (McMichael 2012). The ways in which this happened were influenced by the Cold War. Although both Cold War blocs (the USA and the Soviet Union) understood development in terms of national industrialization and viewed development as destiny, their respective paths towards this destiny differed (McMichael 2012). This is critical to our understanding of national politics in Chile during the mid-20th century because much of the national level policies towards development, policies that affected the Mapuche, were dictated by the international community and the development project. We will return to this idea later.

It was during this development project period that the use of economic growth became the standard by which to judge development. The term poverty was used to define whole peoples according to what they lacked or were expected to be (Sachs 1999). Economic growth as an indicator of development is problematic. Indices such as per capita income mask inequalities within and between social groups. "Economic criteria for development have normative assumptions that often marginalize other criteria for evaluating living standards relating to the quality of human interactions, physical and spiritual health, and so on" (McMichael 2012, 49). The Mapuche people in particular, suffered due to social and economic changes such as the decrease in land and available livelihoods (Ray 2007). As mentioned above, these changes forced them off the land and reservations toward cities looking for work and ways to improve their lives. These changes were not an arbitrary outcome but planned by the national political strategy to eradicate the Mapuche by assimilating them into Chilean society. Intellectuals and politicians were open about their desire to remove the Mapuche from their land and integrate them into an urban society. This was not unique to Chilean development.

The problems of land distribution were often referred to as an urban bias in the development project. "The assumptions of the development project heavily discriminated against the survival
of peasant culture, as materially impoverished as it may have seemed. The result has been a
swelling migration of displaced peasants to overcrowded urban centers” (McMichael 2012, 78).
During this time some Mapuche looked towards politics to improve their situation (Haughney
2006).

During the 1940s and 1950s the number of Mapuche organizations involved in politics increased
(Ray 2007). Many Mapuche felt the need to work within the political system and demand their
rights as a people (Loveman 2001). Many Mapuche organizations united under the Corporación
Araucana (Araucana Corporation) to increase political power (Haughney 2006). And although
this organization became one of the most influential Mapuche organizations it never directly
challenge the structural, political, and economic terms of subordination to the Chilean state
(Haughney 2006).

One major demand, however, was land rights and the restoration of Mapuche lands (Ray 2007).
During the administration of Jorge Alessandri (1958-1964), and due in part to the pressure from
Mapuche organizations, the government established courts to deal with land issues in rural Chile.
Alessandri was a firm believer in the benefits of private enterprise and limited government
interference in the economy and opposed to reforms that benefitted the Mapuche (Loveman
2001). “The influence of the Corporación Araucana and its leaders rapidly dwindled as the new,
right-wing administration of Jorge Alessandri reduced funds for social and economic programs”
(Haughney 2006, 41). In reality very little was done to help with the land issue amongst the
Mapuche.

In 1962 the courts established the Law of Agrarian Reform, stating that all land that was taken
from the Mapuche before 1946, would be allocated for public use. This resulted in increased
frustration in the Mapuche communities, leading to the first tomas, (literally ‘takings’) or land
seizures (Ray 2007).

The international community also influenced these development policies in Chile. The United
States, particularly, had an influence on the Chilean development policies, often putting pressure
on the Chilean government to enact policies that would “benefit Chilean private investors as well
as United States interests” (Loveman 2001, 221). American and international lending agencies
agreed to provide loans and assistance to the Chilean government to help enact these policies. “Externally financed economic modernization was oriented toward importing capital goods for industry and labor-saving farm machinery and thereby strengthened the position of the employers, especially in agriculture, vis-à-vis the labor force” (Loveman 2001, 221).

These agrarian changes and investment from external sources, during the 1960s, led to the acquisition of agricultural machinery that helped raise productivity; however this mechanization of farming replaced the rural labor force, exacerbating the internal rural to urban migration of Mapuche peasant farmers. Also, as some estates transitioned from grains and vegetable crops into pine and eucalyptus plantations, less labor was needed (Clapp 1998; Haughney 2008). This only exacerbated problems in Mapuche communities.

During this time the international community was concerned with the Cold War and the spread of Communism. The US wielded influence in the region and tried to steer governments away from communism by providing financial and military support to nations trying to develop (McMichael 2012). During the administration of Eduardo Frei (1964-1970) USAID provided “large loans and other assistance to the Chilean administration; in 1964-65 USAID accounted for almost 15 percent of Chile’s national budget” (Loveman 2001, 240). Access to help did increase for peasant farmers, through the existence of new unions, cooperatives, and community organizations. Also, “distribution of consumer goods, credit, agricultural inputs, and jobs… created a vast network of patronage and spoils tying bureaucrats, party hacks, slum dwellers, and campesinos to government purse strings” (Loveman 2001, 240). In 1967 a new Law of Agrarian Reform was passed. This led to some expropriation of land from large estates, however, these occurred mostly in the central region, and not in the Mapuche territory of the South (Ray 2007). The number of tomas subsequently increased, “not only by Mapuche communities, but also by poor campesinos” (Ray 2007, 104). The government tried to convince the underclasses of their concern for their plight through small tokens, such as seed and fertilizer for rural cooperatives, however they accompanied these acts with increased promises of material benefits “creating high expectations of rapid, often unobtainable, changes in lifestyle and of economic opportunities” (Loveman 2001, 240).

During the decades prior to the military coup of 1973 many Mapuche were involved in Chilean
politics at the grass roots level. The Corporación Araucana lost some legitimacy and splintered into many smaller groups (Haughney 2006). These groups tended to align with political groups formed around a Leftist Popular Unity. This was a time of leftist political ideology when the revolutionary idea of land redistribution was in the minds and interests of all peasants, including the urban Mapuche; they too were landless peasants. Surprisingly, ethnic identity was not the main issue. "The self-image was class oriented and defined by peasant farmers" (Bengoa 2009, 138). The Movimiento de Izquierda Revolucionaria (Left Revolutionary Movement) spread its ideology among the Mapuche and the peasants of the south. Often university students joined the Mapuche communities in land recuperation movements. On the political side, multiple parties came together and chose Salvador Allende as their presidential candidate and created a new popular front called the Unidad Popular (Popular Unity), and called for revolutionary change. They expressed their views about the economic situation in Chile:

“Chile is a capitalist country, dependent on the imperialist nations and dominated by bourgeois groups who are structurally related to foreign capital and cannot resolve the country’s fundamental problems—problems which are clearly the result of class privilege which will never be given up voluntarily” (Loveman 2001, 246).

They proposed a restructuring of the economy to increase the public sector, and to expropriate all agricultural estates of more than 80 hectares. They also proposed the nationalization of the financial system and other activities which had strong influence on the nation’s economy, such as the mining sector (Loveman 2001). These proposals created a climate of uncertainty about the party, and would produce serious political problems when Allende took office in 1970.

**Allende Years**

When Salvador Allende took office in 1970, Chile officially recognize the existence of 2060 Mapuche reservations for a population of 700,000. This covered an area of over 850,000 acres. During the first year of the Allende administration (1970-1973) over 1700 tomas took place in rural Chile. Rural peasants, including the Mapuche, were clearly unhappy about the lack of access to land, and took it by force when necessary (Ray 2007). Some progress was made however in the early 1970s through land reforms which returned some of the lands, taken from the Mapuche, back to the Mapuche communities.
However, debate over the types of agricultural production units to establish on the expropriated land created uncertainty among peasant farmers. There were experiments with different types of farms, including state farms and collective farms, however, this resulted in a disorganization of the agricultural economy. There was a good harvest in 1970-71, but agricultural production decreased the following year forcing the government to “use scarce foreign exchange to import foodstuffs needed to meet the increased demand …and to make up for the reduction in domestic production” (Loveman 2001, 250).

The Cold War continued to influence Chilean development. As McMichael states, “The Cold War marked the rise of a U.S.-centered world economy in which the U.S. government deployed military and economic largesse to secure and informal empire as colonialism receded” (2012, 80). American foreign policy exacerbated problems through both covert and diplomatic activities, that sought to “disrupt the Chilean economy, to cut off or stifle credit from international lending agencies, to provide financial and moral support for [the Allende administration’s] opponents-and to maintain friendly relations with the Chilean military” (Loveman 2001, 249). Investigations in the United States provided evidence, in declassified documents, that the Nixon administration and the CIA supported the overthrow of the Allende administration. These policies “contributed significantly to the government’s economic woes and to the political polarization that eventually culminated in a military coup on September 11, 1973” (Loveman 2001, 255).

However, despite problems with the international community, some progress was made between the Mapuche population and the Chilean government. Prior to 1972, all legislation regarding Mapuche lands aimed to subdivide the reservations into individual plots so they could be sold. The legislation “intended that individual private property would stimulate productive use of the land and promote the cultural assimilation of the Mapuche and their disappearance as a distinct culture” (Haughney 2006, 5). In 1972 the Chilean parliament passed a version of a law that had been proposed by indigenous organizations in 1970. This 1972 law (Law 17,729) decreed that the Mapuche collective property was indivisible and that division of collective property can only be achieved when 100 percent of the community members agreed to it (Calbucura 2009). This was the first time that indigenous people were legally recognized as an existing people, independent of their lands. This change in how the government viewed the existence of the
Mapuche is significant with wide reaching implications. Prior to this time, the only way the Mapuche could be legally recognized as a people was through the land issues and reservations. However, now they could claim existence regardless of whether they lost their land.

This law also created the Institute of Indigenous Development and with it, promises to restore more land to the Mapuche (Ray 2007). What was perceived to be the government having the Mapuche interests in mind, the creation of national centralized programs, to benefit the Mapuche, were criticized as paternalistic, where the Mapuche are recipients of development policies, rather than protagonists in their own development (Ray 2007). Any progress that was made during the Allende administration, however paternalistic, was reversed after the coup in 1973, when General Augusto Pinochet took power.

**Dictatorship**

The dictatorship of Pinochet did not improve the Mapuche situation (Haughney 2006). Many Mapuche opposed the dictatorship and were tortured, driven into exile, or simply ‘disappeared’. The official rhetoric of the dictatorship is expressed in the simple statement by Pinochet, “Indigenous people do not exist. We are all Chileans” (Ray 2007, 118).

Land reform came to a sudden end with the military coup of 1973. In McMichael’s terms the 1970s were a time when the development project, with its internationally orchestrated program of economic growth, transitioned into what McMichael calls the Globalization project. The globalization project “superimposed open markets across national boundaries, liberalizing trade and investment rules, and privatizing public goods and services. Corporate rights gained priority over the social contract and redefined development as a private undertaking” (2012, 22). Free markets became the rule under a neoliberal agenda; an agenda that could be described as a political-economic theory to advance private property rights, free markets, and free trade (Renfrew 2011).

Consistent with the neoliberal agenda of his ‘Chicago Boys’ economic advisors, the Pinochet government issued Decree 2.568 in 1979, opening Mapuche lands to privatization. According to Carruthers and Rodriguez, “The law prohibited traditional communal land use, permitting
indigenous families no more than six hectares of land each. Eager to promote market-oriented development, the regime gave generous land concessions, subsidies, tax breaks and favorable terms of investment to timber companies” (2009, 745). This is consistent with the globalization project happening across the international community.

The dictatorship created structural changes to the economy, reducing the state’s role and enlarging the role of the market. Under the rule of Pinochet, Chile became the first nation to adopt neoliberalism policies. “This neoliberal restructuring broke with a forty-year pattern of import-substitution industrialization and a strong welfare state” (Haughney 2006, 3). According to McMichael, “Chile is perhaps the founding model of economic liberalization” (2012, 130). This neoliberal reform was implemented in rural areas with an agrarian counter reform. The state returned to their former owners, land that had been expropriated during the Allende administration and land taken over by Mapuche communities. Neoliberal economic policies promoted the expansion of capitalist enterprises on land historically claimed by the Mapuche and the “dictatorship instituted legal changes regarding natural resources that facilitated the transfer of use rights of water and subsoil minerals on those lands to large national and transnational corporations” (Haughney 2006, 6). The administration did this by decreeing Law no. 701 of 1974, “which authorized the National Forestry Corporation (CONAF) to provide subsidies for forestry expansion and to transfer land occupied by Mapuche communities to the forestry companies” (Ray 2007, 124).

Pinochet's administration highly favored the free-market ideology. They shifted the economy to one focused on export industries and free trade policies (Loveman 2001; Ray 2007). The traditional agricultural sectors of grain and cattle were under stiff competition in this free market. Drastic neoliberal socioeconomic reforms were made to specifically impact the Mapuche (Loveman 2001). Prior to the dictatorship, Mapuche lands, even though they were reservations, were still owned at a communal level. Pinochet wanted to privatize these lands in order to promote efficient productivity on the lands. During 1978, decrees 2568 and 2750 changed land tenure policies so that all communal land, meaning the reservations, became private property. As long as one member of the community requested it, the land would become individually owned and protection of the reservation, as Mapuche land, would be lost (Ray 2007). As a result, 1,600 communities were divided into 63,600 individual properties. The dictatorship took it one step
further declaring that once the land had been privatized the owners would no longer be considered indigenous, rather they would be peasants like any other (Park and Richards 2007). The Pinochet regime justified their actions by declaring “there were no indigenous peoples in Chile and thus no legal exceptions could be made to liberal property laws on the basis of ethnic status” (Haughney 2006, 6). The administration equated national security with a nationally homogenous society and a capitalist, free-market economy (Loveman 2001). Pinochet’s policies facilitated the division of Mapuche lands and the erasure of Mapuche identity. According to Richards, “The re-dispossession of Mapuche communities under Pinochet is the immediate antecedent of the current conflicts among Mapuche communities, local farmers, forestry companies and the state” (2010, 45).

During the dictatorship Mapuche demands grew as their organizations became more prominent in the democratization process. By the end of the dictatorship the major demands of these organizations focused on formal recognition of indigenous peoples, the creation of indigenous law and participation in decision-making about rights and development (Bengoa 1985; Bengoa 2004; Veiga and Magrini 2009). The dictatorship ended in 1990 when the new center-left party (the Concertación) was voted into power (Bengoa 2004; Park and Richards 2007).

During his time in power, Pinochet was able to pass a law facilitating the division of indigenous lands and, what he hoped would be the end of Mapuche identity. The steps backwards taken during the dictatorship sets the stage for contemporary problems and conflicts between the Mapuche people and the Chilean society (Richards 2010).

**Contemporary Indigeneity**
In the early 1990s the newly elected government of Chile continued the model of neoliberal economics. However the Mapuche succeeded in placing the issue of indigenous rights, including the right to land, on the agenda of the new administration. The discourse of multiculturalism replaced that of a homogenous mestizo society, with recognition of the damaging effects of assimilationist policies of the past (Loveman 2001; Haughney 2006; Ray 2007). However as Hale has pointed out, multiculturalism, which intends to be inclusive and to incorporate indigenous participation, nevertheless does not require people to deal directly with the power inequalities and racial hierarchies that continue to exist in society (Hale 2006).
After coming to power, Patricio Aylwin halted the division of Mapuche lands and created the Comisión Especial de Pueblos Indígenas (Special Commission of Indigenous Peoples) with the purpose of “realizing programs and projects for the development of the indigenous peoples of Chile” (Ray 2007, 137). This commission proposed changes that were eventually transformed into Law 19.253, the indigenous law of 1993, effectively establishing the National Commission for Indigenous Development (CONADI). This organization carries out programs that relate to indigenous rights attached to an extension of land, agricultural training, and intercultural education and healthcare (see www.conadi.gob.cl).

Because of the neoliberal model and policies that were put into place during the dictatorship, and left unchanged by the new government, Mapuche people continue to suffer social and environmental degradation. One major example is the government support for private and foreign owned forestry companies which possess three times more land than the Mapuche people themselves, within the Mapuche ancestral territory (Ray 2007). The pine and eucalyptus plantations have caused severe environmental degradation including the loss of water and soil fertility (Winn 2004; Park and Richards 2007; Ray 2007).

Political struggles in the 1990s took place in courts and in protests on the streets. This differs from the land seizures, and fights that were the tactics used to fight prior to the dictatorship. Some conflicts over land still continue as Mapuche, frustrated with the slow political process, take justice into their own hands by fighting with the multinational forestry corporations, destroying equipment and blocking roads (Mallon 2005). Also, large development projects, such as hydroelectric dams, have been built without consent from the Mapuche communities (Ray 2007). These mega-development projects are justified by the national discourse on economic growth but fail to take into account the land use and desires of the local Mapuche (Mallon 2005, Ray 2007). This economic growth discourse is represented in the official data about indigenous poverty. Figure 1 shows how poverty is represented as declining since 1996 at a national level. However this does not take into consideration more nuanced understandings of where poverty is declining and for whom.
Figure 1: Poverty Trends Through Time

Conclusion
In summary we see that at different times in Chilean history indigenous people were labeled in different ways. Prior to the Spanish colonization indigenous people used geographic labels to describe different populations. However other terms came to be used such as Araucanians, Indians, Mapuche, as well as other more pejorative terms. This suggests that what it means to be “Mapuche” varies across time and space and by who is doing the identifying. Ethnic terms to describe the Mapuche changed over time. The boundary of what it means to be Mapuche may not be strict, and by suggesting it is strict and unchanging takes away from people's ability to use or not use that identity for their own beliefs or purposes. In one sense the origins of one’s ancestors makes little difference in everyday life of Chileans, however if access to social goods is contingent on the origin of one’s ancestors, then the characteristics that shape ethnic identity may in fact be extremely important in today’s world.

Larger forces have influenced the lives of the Mapuche since colonization. As the international community has adopted the development and globalization projects (McMichael 2012), so too has the Chilean government sought to make changes in accordance with these projects. The varying governments throughout Chile’s history have taken differing stances on the Mapuche. The reality is however, that since the arrival of the Spanish, the land that the Mapuche occupied
has been coveted by the political and economic elite. This has placed land tenure and private property at the center of the conflict. Politicians have continued to use political discourse to deny the existence of the Mapuche or convince others of the need to assimilate the Mapuche into Chilean society, by force if necessary. As Bengoa suggests, "the subject of the Mapuche is one of the most complex political and social issues in the contemporary Chilean political situation" (Bengoa 2009, 27). The Chilean government has denied the existence of the Mapuche however by household surveys we find that thousands of people today in Chile claim Mapuche identity.

This dissertation analyses how, since the decades of the dictatorship and during neoliberal economic reforms and robust economic growth, do the Mapuche people survive and what that survival entails. This is done by analyzing household surveys of those who self-identify as Mapuche as well as interviewing Mapuche people to ask about their views on the current situation of the Mapuche in Chile.
Chapter 3: Theoretical Considerations of Indigenous Identity and Poverty

Selena is a social worker in Santiago, who works with cases of domestic violence and child abuse. She was born and raised in Santiago by nonreligious parents who both worked. With only one sibling, her parents were able to afford private schooling which ranks in quality slightly above public education. She then went on to study at the University. After university she started working as a social worker and it was during this time she began to question her own roots. Selena did not have a very strong religious education and as an adult was looking for more spiritual connections. She wondered about ideas of connectedness to humans and nature and tried to find answers in different religious organizations. Colleagues that she met at work were involved with the indigenous movement and worked with Mapuche clients who lived in poor neighborhoods of Santiago. She began to attend meetings that take place on a university campus in Santiago. It was there that she learned about traditions and cultural practices of the Mapuche people. It was only after talking to some Mapuche who attend these meetings that she gained perspective on her life. She recounted the story this way:

"I was there one evening at a meeting, and afterwards we are all mingling about, talking to one another. An older gentleman, a Mapuche man, approached me and we started a conversation. He said something that stuck with me, it was about my name. He said he was happy to hear that they were still members of the Mapuche community that carried my last name. I was shocked. I had never thought that my family name was Mapuche. I immediately went home after the meeting to talk to my mother about what she knew about our family history. I wouldn’t have even have thought about it if it wasn’t for that man, but it turns out that I have a closer relationship to the Mapuche community than I realized."

So she took this new knowledge and tried to apply it to her life. She became active in the Mapuche community and began looking for opportunities where she could help by using her profession. She met other people with similar stories and they continue to work with NGOs in Mapuche communities in Santiago. This was a few years ago and so I asked her how she was doing today.
"I feel like a hole has been filled, you know? I always felt like something was missing in my spiritual life... some sort of connection. I realize now that had a lot to do with my ancestry in connection to my people. Now I try to live a life following the Mapuche philosophy."

I’d heard about this Mapuche philosophy or cosmological vision so I probed for more information, "Do you feel that the Mapuche have a different cosmological vision of the world?"

"Oh yes!" she exclaimed, “it’s a different way of looking at your place in the world.”

She went on to discuss with me how, in her view, the Mapuche philosophy is about connections to the natural world, to the animals, to the plants, as well as the spiritual aspect of connection. I asked her about the Mapuche who live in the city and she confessed that they may not have the same opportunity to have a connection to the natural world and this is a problem in her mind.

"It creates a very strong spiritual disequilibrium in life and this causes a lot of problems. We Mapuche suffer a lot of things here in the city from bad jobs to stress to discrimination and poverty, and this affects our health, our family relationships... a lot of things. It’s a real shame that it's gotten to this point."

"But you don’t have to be Mapuche to suffer those things”, I contested.

"Of course not! This could happen to any person" she responded. "But the difference is that the Mapuche have to denounce their identity to live in the city, at least that’s what happened with my grandparents and many people's grandparents. And so we try to live our culture by focusing on the connections with the natural world even though we live in the city."

"Do you think that current programs and policies are helping? Are things getting better?" I asked.

"Maybe. It’s hard to say.” Her eyes conveyed a sense of doubt.

"Well what about poverty? What do you think about indigenous poverty? Is the situation
changing?” I delved deeper.

“I think that's complicated. Especially from an outside perspective, not necessarily a foreigner's perspective, but just someone who’s not Mapuche. The government imposes a lot of programs and has a lot of views about life that may not be in agreement with how the Mapuche view things,” she explained.

“How do the views differ?” I asked, wanting to know what she meant.

“Well for one, a lot of the programs don't take into consideration the Mapuche views. They come up with solutions to problems but these solutions are often very black-and-white” she responded, attempting to help me understand. It only brought about more questions in my mind.

“What exactly do you mean by black-and-white?” I probed, hoping she wasn’t getting tired of my questions.

“Well a lot of it goes back to that different cosmological vision that we were talking about. You guys have a very... how do I say it...Western mindset. You always try to come up with some idea of how something is or isn't, one or zero, black or white, and that's just not always the way we view things”.

“How do you see it differently?” I questioned, my curiosity rising.

“Well, for example, Western thought might say something is yes or no but the Mapuche might say that something could be yes, something could be no, or something could be maybe yes maybe no. There is a very mystical holistic sense of life that is missing from some of the ways in which Western thought addresses social problems and comes up with solutions”, she elaborated.

The conversation continued about her personal experience of participating in the Mapuche community. Her excitement about her sense of self and belonging was obvious.
Introduction
The purpose of this chapter is to explain what is known and understood as indigenous identity or indigeneity as well as indigenous poverty. In order to convey this information in an organized way I divide the chapter into two parts. In the first part of the chapter I discuss the concept of indigeneity. This includes the conceptual and theoretical background of identity and the process of ethnic identity creation. Much has been said about the construction of racial and ethnic identity in society and the use of race and ethnicity as stratifying tools, however, I will focus the discussion on indigenous peoples and the unique situation they hold when discussing ethnic identity. I present a summary of the argument in the ethnicity literature that ethnicity is a socially constructed concept and I follow Wimmer’s (2009) ethnic boundary-making paradigm to show that indigenous identity is a result of a social process of boundary-making rather than self-evident categories of analysis. This view is contrasted with the primordial view of ethnicity as self-evident based on social ‘givens’ (Geertz 1963).

The second part of the chapter discusses the conceptual and theoretical components of poverty. Much has also been said about poverty and how it is understood within society. I attempt to focus the chapter towards indigenous poverty. I explain the various definitions and measurements of poverty used by poverty researchers and then focus the discussion more specifically on poverty in Chile and again more specifically on Mapuche poverty. After reviewing the literature, including the theoretical considerations of indigenous identity and indigenous poverty, I present some hypotheses about Mapuche poverty in Chile.

Identity Construction
A central focus of sociological research is systematic attention to the causes and consequences of social inequalities. When people use group identity to sort and rank each other, research on how that identity affects inequality falls squarely within sociological inquiry. Much has been written about the concept of identity (Giddens 1991; Castells 2000; Brubaker 2004; Brubaker 2009; Higginbotham and Andersen 2009). Identity shapes how people view the world, its meaning and experience. As Calhoun puts it:

We know of no people without names, no languages or cultures in which some manner of distinctions between self and other, we and they, are not made... Self-knowledge -- always a construction no matter how much it feels like a discovery -- is never altogether separable from claims to be known in specific ways by others (1994: 9-10).
Social science researchers, following a symbolic-interactionist perspective, advanced the idea of identity theory (Mead 1934, Stryker and Burke 2000). Identity theory, based in part on the work by Mead, suggests there is a reciprocal relationship between self and society (Mead 1934; Stryker and Burke 2000). Stryker and Burke discuss the idea of identity theory and its roots in social psychology, suggesting that identities are embedded in and affected by social structural contexts, and are linked to roles and to behavior through meanings (Stryker and Burke 2000). Identity is different than the role people take within society. Roles tend to be defined by norms that have been established by institutions and organizations in society (Castells 2000). However, identities are sources of meaning for individual social actors. Identities can come from the dominant institutions but they only become identities when the individual actors internalize them and construct meaning around this internalization (Castells 2000). Thus identities are sources of meaning for individuals and are constructed through a process of interaction with others (Giddens 1991).

Social scientists try to understand and explain how social structures affect self and how self affects social behaviors. In other words, the context in which someone lives can affect how they identify themselves as well as how others identify them. The term identity is well used in social science research, increasing in use throughout the 1960s. As Brubaker suggests,

The term identity proved highly resonant in the 1960s, diffusing quickly across disciplinary and national boundaries, establishing itself in the journalistic as well as the academic lexicon, and permeating the language of social and political practice as well as that of social and political analysis (Brubaker and Cooper 2000: 3).

By the 1970s the term ‘identity’ was considered by some to be overused (Gleason 1983). The real issue, as Castells points out, is not the construction of identity, but the issue of "how, from what, by whom, and for what" the identity is constructed (2000: 7). When a concept is central to societal organization, examining how, when, and why people in that society use the concept is vital to understanding the organization and consequences of social relationships (Higginbotham and Andersen 2009). When we discuss how and by whom different types of identities are constructed, it is difficult to address this in general abstract terms because it is a matter of social context. Discussion of identity and identity construction must be situated historically (Zaretsky 1994). This is clearly the case with the Mapuche (described in the previous chapter) as they interacted through time with each other, and with the Spanish and Chilean populations. One
particular type of social identity relevant to the Mapuche case is ethnic identity.

**Ethnicity**

In contemporary society much discussion has taken place regarding ethnic identity (Wilson 1978; West 1993; Nagel 1994; Cornell and Hartmann 1998; Nagel 2001; Nagel 2006; Higginbotham and Andersen 2009). Ethnic identities are central to valid scientific investigation at the social level because social and economic life is organized, in part, around ethnicity (Castells 2000). Understanding what ethnic categories mean becomes essential to understanding the contemporary situation of the Mapuche, not only for statistical analyses but, as Skrentny suggests, in order to understand the deeper meaning of ethnicity. He suggests sociologists should “analyze possible ethnic and racial variations on ‘existential’ questions—the meaning of life itself—as this may play a role in observable variations and patterns” (2008: 60).

People frequently confuse the difference between race and ethnicity, so some definitions are in order. Discussions of race refer to a category of people who share biological traits. The biological traits included in racial categories are traits that members of a particular society consider important (such as skin, hair and eye color) (Macionis 2008).

Ethnicity, however, refers to a category of people who share a cultural heritage that includes common ancestry, language, or religion. Both concepts vary across societies with certain characteristics being more important to certain groups. The importance of racial and ethnic differences can change over time as people migrate, intermarry, and produce offspring, and as culture, language and religion change over time (Macionis 2008). However, as Weber and others have suggested, race and ethnicity are imprecise concepts that overlap (Brubaker 2009, Weber 1978). They are “vague vernacular terms whose meaning varies considerably over place and time. Rather than seek to demarcate precisely their respective spheres, it may be more productive to focus on identifying and explaining patterns of variation on these and other dimensions, without worrying too much about where exactly race stops and ethnicity begins” (Brubaker 2009: 28). I follow this advice and use the term indigeneity to mean the racial and ethnic characteristics of indigenous people that are based on common origin, skin color, appearance, religion, language or some combination.

There is a vast literature regarding ethnicity. Historically, social philosophers (such as Herder)
viewed separate cultural groups as objective, observable entities that they would rank according to social hierarchies (Herder 1968, Skrentny 2008). That idea was challenged by Barth who saw groups as socially constructed (Barth 1969). Andreas Wimmer gives a thorough review of the literature regarding ethnic group formation (Wimmer 2009). Wimmer’s argument is intended to help scholars of immigration understand that ethnic groups are not always self-evident categories of analysis and that ethnic boundaries emerge and transform.

Wimmer explains that during the 18th century it was common for French and British scholars to rank groups of people based on their physical difference and cultural achievements. She bases her argument on the writings of the philosopher Johann Gottfried Herder. Wimmer’s argument is that Herder has influenced the social thinking of anthropologists and sociologists in regards to ethnic identity. Herder’s view is that,

the world is made up of peoples each distinguished by a unique culture (1), held together by communitarian solidarity (2), and bound by shared identity (3). They thus form the self-evident units of observation and analysis (4) for any historical or social inquiry – the most meaningful way of subdividing the population of humans” (Wimmer 2009: 246).

The view that ethnic groups are self-evident categories of analysis is rejected by some researchers, Barth among them. He emphasizes the ways in which ethnic boundaries are negotiated, defined, and produced through social interaction (Barth 1969). Barth was one of the first to describe the notion of ethnicity as changeable when he argued that ethnicity is the product of social ascriptions. He suggested that ethnicity is a kind of labeling process engaged in by others and oneself (Barth 1969). In other words, one's ethnic identity is a combination of the view one has of oneself as well as the views held by others about one's ethnic identity. As one moves through life, ethnicity can change according to variations in context and people encountered (Barth 1969). That both the boundary of a particular ethnic group and the membership of a given person in that group can be fuzzy and ambiguous is an issue I return to below.

This boundary approach towards ethnicity (that ethnic distinctions are a result of marking and maintaining a boundary irrespective of cultural differences), implies a cultural shift in our understanding of ethnic identity (Barth 1969; Wimmer 2009). After Barth, social scientists no longer studied the culture of group A or B but “rather how the ethnic boundary between A and B
was inscribed onto a landscape of continuous cultural transitions” (Wimmer 2009: 250). Ethnicity becomes the process of boundary-making instead of a fixed category.

The ethnic boundary-making approach can be characterized by four assumptions: 1) ethnic groups are a result of a process of boundary making and not self-evident units of observation; 2) that the people in these groups have to mark ethnic boundaries with cultural markers they decide are most relevant; 3) for people who have a common origin and culture, ethnic groups do not form independently among them, but only through acts of social distancing in relation to other categories; 4) the boundary-making approach focuses our attention on the process of group making and less focus on group relations.

The conterviling views of scholars like Herder and Barth is manifest in two diverse perspectives in the literature on ethnicity: the primordialist view and the constructivist view. The difference is essentially between those who understand ethnicity as rooted in deep-seated attachments and sentiments (ancient, unchanging, inherent in a group’s blood, soul, or misty past) against those who understand ethnicity as an instrumental adaptation to shifting social and political circumstances (Brubaker 2004) I will elaborate on both perspectives.

The primordialist perspective views ethnicity in terms of objective commonalities. The primordialist perspective claims that ethnicity emerges from given features that are natural and unchangeable facts (Geertz 1963; Bayar 2009). These natural and unchangeable facts, or ‘givens’, stem from being born into a particular community with its particular religious views, language, and social practices (Geertz 1963). This perspective suggests that these givens make up the set of primordial boundaries; boundaries that cannot be moved socially (Geertz 1963). The earliest usage of primordialism focuses on kinship and a sense of natural affinity to others regardless of interaction (Bayar 2009).

Scholars of identity have criticized the primordialist perspective by claiming that there cannot be a set of givens because these givens are socially constructed (Eller and Coughlan 1993). Proponents of the primordialist perspective, however, claim it is misunderstood and that these givens are a set of a priori bounded patterns. These patterns are the legacy of history and tradition and represent the belief and action towards primordial objects such as biological traits.
and territorial location (Grosby 1994). However, since Barth, the constructivist view has increased among scholars.

The constructivist or circumstantialist perspective views ethnicity in terms of participants’ beliefs, perceptions, understanding, and self-identification (Harris 2002; Nagel 1994). They view ethnicity as situational, malleable and context dependent (Eller and Coughlan 1993; Brubaker, Loveman et al. 2004). The constructivist view suggests that ethnicity is socially constructed within an historical context as well as within a context marked by power relationships (Castells 2000; Macionis 2008). As Harris (2002) points out, racial and ethnic identity is socially constructed in at least two ways: the categories themselves are socially constructed which means they can change and be redefined, and also, individual identity (how people think and talk about their racial and ethnic identity) is constructed with feedback from their social world (Harris 2002). Therefore a better understanding of how people self-identify ethnically can help us understand the dominant messages sent from society to the individual and how the individual reacts in a larger social context (Liebler 2004). Nagel puts it this way, “[e]thnic identity, then, is the result of a dialectical process involving internal and external opinions and processes, as well as the individual’s self-identification and outsiders’ ethnic designations…” (1994: 154).

This constructionist view of ethnicity emphasizes the choices of individuals and groups as they defined themselves as well as others. Nagel discusses the idea of ethnic construction and elaborates the idea of boundaries; boundaries that determine who is a member, who is not a member, as well as determine the available ethnic categories in a given time and place. "Ethnicity is created and re-created as various groups and interests put forth competing visions of the ethnic composition of society and argue over which rewards or sanctions should be attached to which ethnicities." (1994: 154). Ethnicity in this sense is constructed from language, religion, appearance, ancestry, region and other aspects of shared culture. As Nagel suggests, “the location and meaning of the particular ethnic boundaries are continuously negotiated, revised, and revitalized, both by ethnic group members themselves as well as by outside observers” (1994: 153). This is similar to other scholars who view ethnicity as a mobile process that is under constant renegotiation (Bhattacharyya 2009). Rumbaut describes it in this way:

Social identities, forged in terms of those contrasts with others, represent the way [people] self-consciously define the situation in which they find themselves and construct an ongoing account of who ‘we’-and ‘they’- are. Ethnic identification
begins with the application of a label to oneself in a cognitive process of self-
categorization, involving not only a claim to membership in a group or category
but also a contrast of one’s group or category with other groups or categories
(Rumbaut 2008: 110).

In constructivist language then, ethnicity is “no longer synonymous with objectively defined
cultures, but rather referred to the subjective ways that actors established group boundaries by
pointing to specific markers that distinguish them from ethnic others” (Wimmer 2009: 251).
Ethnicity becomes, not a thing in the world, but more a perspective on the world. It is a cultural
process, having to do with the everyday practices that construct people’s lived experience
(Conway 2004). According to Brubaker, “today, few if any scholars would argue that ethnic
groups or races or nations are fixed or given; virtually everyone agrees that they are historically
emergent and in some respects mutable” (2009: 28).

Some researchers following a constructivist perspective have gone on to differentiate between
types of ethnicity and the degree to which ethnicity influences individuals lives. Cornell and
Hartman (1998) develop the concepts of thick and thin ties when discussing ethnicity. They
explain that a thick ethnic identity is one that organizes a great deal of social life and action
whereas a thin ethnic identity is one that organizes very little social life (1998: 73). This concept
of thick and thin ties is specifically related to action, meaning the things in which an individual
does in their social life. Someone with thick ethnic ties may have friends of the same ethnic
group, attend religious services with members of that group, marry someone within that group,
and speak the language of the group. Those with thin ethnic ties would participate less in those
types of activities. The strength of ethnic ties can change over time which opens up the
possibility of personal decisions about ethnic identity and the potential for changing ethnic
identity (Liebler 2004). The changing nature of ethnic ties also puts into question the validity of
the measurement of ethnicity when using surveys with set categories (Aspinall 2009). Population
science has paid greater attention to the complexities of ethnicity which has been accompanied
by some improvements in the collection, consistency and availability of population statistics for
ethnic groups. However, if ethnic categories are fluid and malleable, but standard measures and
surveys aim for stability and use fixed categories, obvious problems with regard to validity and
reliability of measurement remain (Aspinall 2009; Brubaker 2009; Mateos 2009; Burton 2010).
More about the validity of ethnic categories will be discussed in the methods chapter.
Indigeneity
Indigenous identity, or indigeneity, is a complex and somewhat controversial topic that shares many of the same problems as ethnic identity generally (Weaver 2001). Few agree on what exactly constitutes indigeneity and how to measure it (Weaver 2001; Coates 2004). As with ethnicity, because the boundary making approach is a process, it takes place through time. By conceptualizing indigeneity as a process through time we stand to gain insight into how indigenous groups are created and maintained.

The boundary-making approach suggests that indigeneity does not emerge because indigenous people maintain a separate identity, culture and community from non-indigenous, but that both are made by the boundaries between them (Wimmer 2009). Indigenous groups are often identified, by others, based on the physical characteristics and traits that they share. However, being part of an indigenous group is also about a shared cultural heritage or ethnicity. This can include language, religion and territory as well as other characteristics. Finally, indigenous groups have historically been subordinated by dominant social groups because of unequal power relationships or because they were a numerical minority. Subordination has happened predominately through the process of colonization (Coates 2004). In fact the indigenous situation is a colonial situation (McCormack 2012).

The concept of indigeneity only exists in relation to colonization and national states (Oliveira 2009). Indeed, some scholars view indigeneity as always being based on power and exclusion, for someone must be excluded from a particular identity in order for it to be meaningful (Weaver 2001). Indigeneity is defined as an ongoing process of indigenous adaptation and adjustment to the dominant society (Oliveira 2009). It is an oppositional process in which indigenous people maintain boundaries between themselves and the controllers of the surrounding state apparatus (Peroff 1997). The boundary-making approach makes sense in this context, then, because indigenous populations create and maintain boundaries that are malleable (Zenker 2011).

However the problem with using definitions that are rooted in contemporary political circumstances is that these definitions ignore the flow of human history (Coates 2004). In other words, if we take a longer historical perspective, and view indigeneity as a process, we can see that indigenous peoples have not all been marginalized or colonized. Coates describes it this way:
Indigenous peoples have exploited, defeated, ruled over, and dislocated other indigenous societies. Indigenous cultures flourished in most parts of the world, before and after the age of European expansionism, and the struggle for survival in the contemporary world continues. Definitions of indigenous in most common usage arise out of the European colonial experience, originated in Western industrial nations, and reflect the historical and contemporary realities of the social relationships (2004: 9).

In other words, in order to understand indigenous identity we need to understand the process: how ethnic identity changed over time through the historical process of colonization, independence and nation building, but also contemporary political situations. Definitions of who counts as indigenous may change over time because “nation-building is an ongoing process full of revision and reversals” (Wimmer 2009: 255).

Whereas historically, prior to independence, national elites saw indigenous people as part of the uncivilized and barbaric past, they were reluctant to include indigenous populations in the processes of modern nation building (Peroff 1997). They were more likely to view indigenous people as a group that needed to be conquered (Coates 2004). However, the political circumstances and the subsequent effects on indigeneity changed during the time of independence. For example, in Latin America after the Spanish had arrived their initial intent was to conquer and use indigenous peoples as slave labor (Rector 2003). However over time there was a lot of mixing because the Spanish did not bring many women with them and during battles and confrontations with indigenous peoples, indigenous women were taken and made to live with the Spanish men. Over the years this miscegenation, or interracial marriage, produced a generation of people that were of mixed ancestry. This group of people of mixed ancestry is referred to as mestizo. As Chile, as well as other colonies in Latin America, became more interested in independence from Spain they used this mestizo identity in the process of independence (Warren 2009).

The Spanish colonies wanted to create their own nations and partly justified this by claiming they were different than the Spanish; the majority of the population was no longer Spanish but mestizo (Loveman 2001; Bertrand 2003; Rector 2003). Mestizo, or mixed-racial, identity was often viewed by the state in Latin American countries as a positive national identity, in part because it gave a homogenous, single, national identity that the entire population could rally around against Spain. This had the effect of rendering indigenous identity invisible, relegating
them to the past. In other words, post-independence during the time of nation building, governments wanted to assimilate minority groups into a national mestizo identity. In the case of Chile these new national identities were constructed, based on Spanish ancestry as well as indigenous ancestry, into a mestizo identity (Warren 2009). This created a situation where national discourse and ideology of modernity constrained indigenous peoples development because they were viewed as part of the country's past, no longer relevant post-independence (Warren 2009, Rector 2003).

As described in Chapter 2, independence was not a peaceful process however and indigenous peoples were marginalized and often forced to assimilate into the dominant mestizo culture (Loveman 2001). This forced assimilation happened because of many factors such as forced educational programs, but also because of changes in land tenure, political policy, and economic circumstances (Engerman and Sokoloff 2012). In many cases the animosity between the mestizo population and the indigenous population was fierce because the mestizo population wanted to create a powerful nation state but the presence of indigenous peoples reminded them of their ‘barbaric’ past. In order to forget this past they needed the indigenous populations to disappear through assimilation or be isolated on reservations (Oliveira 2009). This was the case for many decades as Chile, and these newly independent states, grew economically and perpetuated a national identity. This is consistent with the development project described by McMichael (2012). However this changed during the 20th century as national governments began to recognize multicultural societies and the existence of indigenous people (Engerman and Sokoloff 2012).

During the 20th century the majority of the population in Latin America identified as mestizo. Being indigenous, or indigeneity, came with many negative stereotypes attached to it (Postero and Zamosc 2004). Many indigenous languages and customs were lost because the indigenous population was denied rights, forced into boarding schools to learn Spanish, and pushed out of a more traditional lifestyle to urban centers for employment, all of which exacerbated the forced assimilation process. Eventually the remaining indigenous population began to fight for their right to exist as a separate group with distinct customs and language (Postero and Zamosc 2004; Oliveira 2009).

Of course the rise of indigenous movements fighting for indigenous rights has occurred in
different contexts and at different times. Throughout the mid-20th century indigenous people across the American continent have organized, mobilized, and participated in national and international political processes to demand cultural recognition and political rights (Postero and Zamosc 2004). These movements have brought about important political and cultural changes with states having to respond to indigenous peoples’ demands which often include territorial autonomy and cultural recognition. In many countries indigenous people are fighting for constitutional reforms that recognize the multicultural nature of the population. In short, indigenous people want the right to identify as indigenous while at the same time they want to avoid discrimination that is based on their identity (Bengoa 2000; Oliverira 2009).

As states began to recognize their indigenous populations and grant them rights, growing numbers of people began identifying as indigenous. This creates a problem that Postero and Zamosc describe as the “Indian Question” (2004: 5). This problem refers to the issue of what kinds of rights indigenous people should be granted as citizens of democratic nation-states. The promise of democracy is that the social and economic marginalization of indigenous peoples would be replaced by full citizenship. Citizenship however is a condition of belonging, ultimately defined and enforced by the nation state. In this sense, the state becomes a major factor in the construction of indigeneity (Urban and Sherzer 1991). Indigenous citizenship and the rights that they enjoy depend upon the way the state views ethnicity. In order for indigenous people to be recognized as indigenous they often have to prove their indigeneity. However the markers to determine authentic indigeneity are created and determined by those who are not indigenous (Warren 2009; Richards 2010). What is at stake, as Postero and Zamosc put it, is "the right of indigenous people to have a say in the political, economic, and cultural processes that determine their lives as citizens. It is, ultimately, about how power is controlled and shared in a democracy. As such, these are extremely complex political and cultural struggles that can only be examined on a case by case basis” (2004:7).

As mentioned in Chapter 1, the current discourse in politics and the media about indigenous peoples in Chile relegates them to history (Richards 2007). In order to prove their existence they are required to use identity markers that are determined by the dominant mestizo society, with the media as one example. Richards (2007) argues that the media's archetypes of indigeneity use assumptions about indigenous people and create expectations for being indigenous. Indigenous
people must then meet this ideal-typical expectation in order to be considered indigenous by the dominant society. These ideal-typical expectations exist to emphasize that there are ways of being indigenous that are authorized and ways that are not (Richards 2007).

For example, during celebrations of Chilean history people remember the indigenous groups and the part they played in the nation’s history, however they continue to view indigenous people as rural dwellers who are subsisting off the land, as having indigenous spiritual beliefs, who practice indigenous medicine, and who speak indigenous languages. The dominant society uses phenotype, dress, and other visual markers to determine authentic indigeneity. However the reality is that many indigenous people in Chile live in cities, are not employed in agriculture, practice Western medicine, dress like other Chileans, speak like other Chileans, and generally do not live up to the ideal-typical expectations of the dominant society (Richards 2003; Richards 2005; Richards 2006; Richards 2007; Richards 2007; Warren 2009; Richards 2010). One example is language.

Language is one cultural criteria often associated with indigenous groups. Language is an important aspect of culture.

Indeed, it has been argued that language and ethnicity are inextricably linked because language plays important symbolic and instrumental functions in the evolution of human species in general and ethnic collectivities in particular. Thus, contact between two ethnic groups can be construed as contact between two symbolic systems, each encompassing a language, values and privileged cultural referents (Clement and Noels 1992: 204).

The Mapuche who lived in Chile prior to colonization did not speak Spanish. They spoke an Amerindian language called *Mapudungun*. This language is still spoken today; however few people only speak Mapudungun, most speak Spanish as well. Language is a concept that one might see as fitting into a primordialist perspective because its primordial role in understanding culture. However, languages are socially constructed and change over time and that process of language change is part of the process of boundary-making (Wimmer 2009).

Another ethnic characteristic associated with indigeneity is family name. People are defined by their family names and in Chile some names are recognizable as Mapuche last names. Although names can be changed legally, people can trace their ancestry by family names. Because the first
Spanish colonists were soldiers and religious people, they kept track of the names of people that came to the Americas, as well as the names of indigenous families (Latcham 1924). They then could use someone’s name as a social characteristic to determine ethnic identity. Using names as part of identity makes it seem like indigeneity is fixed and easily measured, however we need to ask what makes a name indigenous. Using names may seem a reasonable way to distinguish indigenous people, however names change over time. Also in today’s world people may not know the history of their family names. Names can also be lost within a few generations making names unreliable as indicators of indigeneity (Mellor 2009; Merino 2011).

Regardless of what a name means or whether its a good determinant of indigeneity, people may be discriminated against because of their names (Mellor 2009). In today’s world we use names for access to many social goods. One example is applying for jobs where people have to include their names. Another is matriculation or application to schools or training centers or universities. All of these require people to give their last names which can determine their chances of being included fairly, which affect their ability to attain human capital (Hall and Patrinos 2006).

Language and family name are two good examples of what Cornell and Hartman called thick ties to ethnic groups. Thick ties are those that strongly attach someone to the process of indigeneity, like speaking Mapudungun. If someone speaks the language they are following the boundary-making approach and using cultural diacritica to maintain that boundary. It is a strong or thick tie or cultural marker because languages are hard to learn and they take time to learn. So by learning to speak, it is part of the process of creating thick ties (Cornell and Hartman 1998).

Mapuche identity is not solely about the research and understanding how to define groups. Identifying or being identified as Mapuche has consequences not only for gathering data but in people's lives. The consequences for identifying as Mapuche change and can depend the circumstances. The potential, positive consequences of identifying as Mapuche (possible scholarships for example) are often only granted after a process of determining authentic Mapuche status. In other words, one has to prove they are Mapuche to get any benefits. However the problem arises from the power structure around who decides what is valid proof of belonging to an ethnic group. That proof or legitimization of indigenous identity can be given by individuals, but can also be given or denied by political institutions. So if there is a social benefit
made available by the government to a certain ethnic group, the people have to prove to the
government that they are part of that ethnic group in order to receive that benefit. Understanding
the dominant ideas of indigeneity and how they change becomes important for governments and
people as they negotiate the changing cultural terrain.

The example of Juan from the first chapter shows how indigenous identity can change over a
lifetime for an individual and indicates questions of how identity can change based on power
structures as well as location. Recall that Juan did not realize he was Mapuche until he overheard
his grandfather talking about distant relatives in the south. Because Juan was born in Santiago he
was not exposed to Mapuche culture as he would have been in the south. Also, while attending
the university he began to interact with others in similar situations and has since taken on a
Mapuche identity, received an indigenous scholarship, and has started to learn *Mapudungun*. His
situation brings up questions about the many others who share this situation. What does it mean
to be Mapuche for the thousands of Mapuche who live in urban areas? Does Mapuche identity
in urban areas differ than that of those living in Mapuche communities in the South? Are there
certain traits or characteristics that become identifiers? Do family names matter? Does language
matter? If languages are important indicators of indigenous identity as well as the tool to pass on
cultural knowledge, does it benefit people to maintain the language in the cities where the
indigenous language is rarely spoken? Why would Juan spend his time learning *Mapudungun*?
Is it possible that the value of knowing the language may vary with the cultural or social context
where that language is spoken? What determines whether or not Juan, living his life in the city,
is going to invest his time and money into learning the Mapuche language? These are just some
unanswered questions that arise when dealing with identity and what defines someone as
Mapuche. I will address these questions in the data analysis.

To be clear, there are isolated indigenous communities in Chile. There are people in Chile who
are 100 percent descendent from ancestors that lived in that specific region. However, when we
start getting into these questions of detail we end up arguing about who is more authentically
Mapuche and we end up asking questions like: how do the Mapuche who live in isolated rural
communities as subsistence farmers compare to my friend Juan who attends University, has
never lived on a farm and also claims to be Mapuche? Does the reality of a young Mapuche
growing up in the city, compared to an older Mapuche living as a subsistence farmer, affect any
aspects concerning ethnic heritage or indigenous identity of the other?

In summary, indigeneity is a complex topic that involves ethnic identity creation. I suggest that indigeneity relates to identity construction through the boundary-making approach (Wimmer 2009). The boundary-making approach suggests that ethnic groups exist as a result of a social process of boundary making through interactions with others, rather than as self-evident groups. This is consistent with the Mapuche experience because, as I show above, the Mapuche identity has changed through interactions with the Spanish colonizers, Chilean society, European immigrants and as they migrate from their ancestral homes to urban centers. During these interactions ethnic boundaries were formed and changed. According to Wimmer, actors have to mark these boundaries with “cultural diacritica they perceive as relevant, such as language or skin color” (Wimmer 2009: 254). Indigenous groups do not emerge alone through the cohesion of the group who share similar traits, but by interacting with ‘others’ like the Spanish. Finally, by using a boundary-making approach to understand Mapuche identity, we can focus on the group making and focus less on the culture of the group, in other words we can see how certain ethnic groups, like the Mapuche, are formed and interact with the ever changing society (Wimmer 2009). In this dissertation I focus on the boundaries between Mapuche and non-Mapuche identities in contemporary Chile.

**Poverty**

This section provides a basic understanding of poverty and how it is defined and measured. This is to present the reader the types of poverty measures used in the analyses and the motivation behind using those measures. Specifically I discuss absolute and relative poverty measures, as well as the individual and structural factors that help to explain poverty. I then tie this discussion to the contemporary experience of the Mapuche.

Poverty research has a long history (Hernandez 1997; Iceland 2006). Social scientists have developed and used multiple definitions of poverty, each trying to capture some dimension of deprivation. The concept of deprivation itself is taken to mean lacking the basic necessities of life. Many people recognize the subjectivity of defining the basic necessities of life (Townsend 1962). The basic necessities could refer to a number of things such as social or psychological needs, however the majority of poverty research defines these needs as material things, often
built on the most fundamental need, food (Pradhan and Ravallion 2000; Iceland 2006; Kay 2006; Spicker et al. 2006).

During the early 1900s in Britain, social scientists discussed poverty in terms of subsistence. Subsistence was defined as only meeting the basic necessities of life in terms of food, clothing and shelter (Townsend 1962). This tendency to define poverty as not meeting basic necessities of life in terms of food clothing and shelter became a common way in which governments defined what it means to be poor (Townsend 1962). In order to analyze differences in poverty between groups or within groups over time, a standard measurement of poverty was needed. Based on this common definition of deprivation poverty began to be operationalized as insufficient income to obtain the basic necessities (Pradhan and Ravallion 2000; Iceland 2006; Iceland and Bauman 2007).

**Measuring Poverty**

Early poverty research used income, or rather the lack of income, as the means to measure poverty (Townsend 1962; Orshansky 1965). The argument was that basic necessities for survival can be purchased in the market economy with money\(^2\). Families were deemed poor if their total earnings were insufficient to obtain a minimal amount of necessities for physical subsistence (Pradhan and Ravallion 2000). Lists of necessities including food, clothing, and shelter were established and used as a method of measuring poverty by calculating the cost of these necessities to create a ‘poverty line’ (Townsend 1962). A poverty line represents the amount of income needed in order to obtain the necessities of life (Orshansky 1965; Ruggles 1990; Miller and Weber 2003; McGillivray 2006). However there are inherent problems in defining basic necessities because families could survive in different ways with different sized houses, different lifestyles and potentially different necessities (Townsend 1962). This is particularly relevant when studying Mapuche poverty because the Mapuche, with a distinct cultural background, may define necessities differently than non-Mapuche. One way to address this uncertainty is by creating absolute poverty lines.

**Absolute Poverty**

Establishing absolute poverty lines is a common way to measure poverty (Iceland 2006). These

---

\(^2\) In less monetized or market-based economies consumption-based measures of poverty have been proposed and used because consumption can provide a better picture of actual standards of living when income fluctuates (Odekon 2006).
lines reflect the amount of income needed for a minimally acceptable standard of living, calculated from the costs of food. According to the Encyclopedia of World Poverty (2006), absolute “measures of poverty are rooted in the perspective that an individual, family, or household that lacks sufficient income to cover basic needs such as food and shelter is among the poor” (2006, 1). For example, the absolute poverty measure in the United States uses information from a consumption index to calculate the cost of food needed to survive on a “nutritious but monotonous” diet (Orshansky 1965; Iceland 2006). The Chilean government’s official poverty measure follows a similar format where a consumption index calculates the amount needed for a basic bread basket of foodstuffs, adjusted for household size. Households with incomes below these absolute poverty lines are defined as poor (MIDEPLAN 2006). Critics of absolute measures of poverty argue that it results in undercounting the number of people who live in poverty conditions because the line that designates descent into poverty is somewhat arbitrary. For example, two families of similar structure, one that lives at $10 above the line and one that lives at $10 under the line, are really not different, even though one is officially counted among the poor (Odekon 2006). Also, what is needed to meet basic needs varies across time and societies. Therefore, different countries establish poverty lines that are appropriate to “their levels of development, society norms, and values” (Odekon 2006, 1). However, the poverty lines are constructed by national governments, who often act based on and by following a discourse of a homogenous society.

It is important to understand how poverty lines can be influenced by government policies because it is the government that defines and measures poverty. It is essential that we retain focus on the fact that the “definition of poverty and the policies addressing it are all shaped by political biases and values” (Bradshaw 2006, 5). Poverty lines are used not just to determine who is poor, but thereby, who qualifies for state support. If a government changes their measurement of poverty by changing the amount of income needed to qualify as not poor, then the number of people who can be counted as poor changes. In other words, changing the poverty line changes the amount of people who qualify as poor and thus the amount of support needed by poor people. Because social programs, policies and support are based on the poverty rates (the amount of people in poverty), and that number can change simply by changing the way poverty is measured, then understanding how those poverty measures are created and change becomes important to poverty research. Poverty researchers have realized this issue and have come up with various
ways to define and measure poverty. Alternative ways to measure poverty, beyond absolute poverty lines, have been developed with one such alternative being the relative poverty line.

**Relative Poverty**

Researchers use a relative poverty line to take into account the relative economic position of people to others in their communities, such that households are poor if their income is much lower than average (Spicker 2006). Understanding poverty means going beyond a focus on the deprivation of basic needs and looking at one’s exclusion from the standards of living broadly available within one’s community. As Townsend explains,

> Poverty is a dynamic, not a static concept. Man is not a Robinson Crusoe living on a desert island. He is a social animal entangled in a web of relationships—at work and in family and community—which exert complex and changing pressures to which he must respond, as much in his consumption of goods and services as in any other aspect of his behavior (Townsend 1962: 219).

The relative poverty measure is used as a comparative economic deprivation measure (Runciman 1966; Iceland 2006). Unlike absolute measures of poverty, which measure one’s inability to meet certain basic needs, relative income measures of poverty measure one’s distance from the norm, in terms of income, within a specific community (Odekon 2006). For example, if the median income is $300 per week and the poverty measure is set at 50 percent of median income, then a weekly income of $150 per week would be considered poor.

Relative poverty measures consider poverty to be relative within a society’s existing level of economic and social well-being. In this way people can be compared within their groups to see whether they are relatively more or less poor than those in their group (Townsend 1962). However this relative measure still uses income to compare people. So someone would be considered poor if their resources, measured by income, are significantly below the resources of what is considered average for their society. This is often measured by some percentage, generally one-half, of the median household income (Hernandez 1997, Odekon 2006).

Another reason, according to the Encyclopedia of World Poverty (2006), for using relative income poverty measures is “in addition to providing a picture of the prevalence of poverty within a specific political community, such as a nation or province, [relative poverty measures] also offer a measure of the degree of inequality. Relative income measures of poverty can
provide insights into the depth of poverty within a society by showing the distance and
distribution of people from the income norm. Interpretations of this distance and distribution
reflect views about how wide a gap between members of the same society is acceptable” (2006,
909). In a situation where poverty research is comparing various culturally distinct groups, using
relative poverty measures provide a better understanding of the overall sense of inequality
between the groups.

Despite the usefulness of using poverty lines, there have been criticisms (Iceland 2006;
O’Connor 2001; Odekon 2006). One major criticism of the poverty line is the lack of adjustment
across space to account for varying costs of living. Another criticism of poverty lines is the lack
of adjustment across time for changes in lifestyles, consumption patterns, and the costs of
necessities relative to that of food. Taking into consideration changes in costs across time and
space is important because using a poverty line that does not adequately address various in costs
leads to policies that do not adequately address the problems of those living near the poverty line
(Iceland 2006; Odekon 2006).

In addition to significant scholarship that has been devoted to developing and deploying
measures of poverty, even more attention has been paid to understanding its etiology and
consequences. Just as measures of poverty can be grouped – absolute, relative, consumption-
based -- so too can explanations for poverty be categorized. In the next section I focus on
dominant explanation of poverty in the poverty literature; specifically the individual and
structural factors that help to explain the presence of poverty.

**Explaining the Variation in Poverty**

Multiple theoretical approaches have been used to address the variation in poverty levels
amongst groups of people (Iceland 2006). These approaches attempt to explain the cause of
poverty by focusing on factors that relate to poverty. These factors can be grouped into two
categories: individual factors and structural factors. I will discuss these more in detail in the
following paragraphs.

**Individual Factors**
The study of individual factors that affect poverty is common in the social sciences. Individual
explanations of poverty claim that individuals are responsible for their poverty. This view of poverty typically blames individual deficiencies for their poverty situation (Bradshaw 2006; Iceland 2006). Some variations of individual explanations of poverty blame a lack of genetic qualities like intelligence (Bradshaw 2006). Neoliberalism is a dominant economic paradigm that reinforces individualistic sources of poverty. According to Bradshaw (2006) the core premise of this paradigm is that “individuals seek to maximize their own well-being by making choices and investments, and that (assuming they have perfect information) they seek to maximize their well-being” (2006, 6). When their well-being is inadequate, it implies that they did not seek hard enough. In other words, individual explanations of poverty imply that the poor should be blamed for their own situation. According to O’Connor (2001), traditionally poverty researchers had a tendency to “reduce the most volatile of social problems into quantifiable, individualized, variables— while leaving questions of politics and power unasked. Class, race, and gender were absent as real categories in poverty analysis, their “effects” instead measured as individual characteristics related to demography, education level, and personal behavior” (2001, 215). While it is routine to dismiss individual deficiency theories of poverty, this does not mean that individual factors are not important to poverty research (Bradshaw 2006). Many poverty researchers try to take into account all factors that affect poverty, including individual characteristics.

One major factor shown to correlate to poverty is human capital (Goldman and Tickamyer 1984; Cotter 2002). In the poverty literature, emphasis is placed on human capital as one way to think about how market forces affect poverty on an individual level (Becker 1962; Becker 1964; Becker and Tomes 1986). Human capital theory holds that through education and experience, people can gain sets of skills, or ‘capital’, that they exchange for wages in the labor market. Since the globalization project in Chile supports a free market approach to economic development, where people are free to pursue education, human capital is a useful factor to help explain poverty in a quantitative analysis. Because indigenous people have been historically excluded from activities that would otherwise increase their human capital it is important to determine whether this is indeed the case and, if so, how these deficits affect poverty risks. The literature on indigenous poverty shows that increases in human capital, measured most often by years of education, were significantly related to improving labor circumstances and decreasing poverty (Psacharopoulos and Patrinos 1994; Hall and Patrinos 2006). People who have more
skills and education tend to have better access to higher paying jobs. Other individual demographic factors also correlate with increased risks of poverty including age (older indigenous people suffer higher rates of poverty), gender (indigenous women often suffering greater poverty rates), and marital status (single parents households struggle more than married households) (Psacharopoulos and Patrinos 1994; Patrinos 1994; Hall and Patrinos 2006).

Previous research has shown that indigeneity, or belonging to an indigenous group, increases the risk of being poor (Hall and Patrinos 2006). In this dissertation I focus on poverty differences between an indigenous group and a non-indigenous group. Evidence from other countries in Latin America shows that social political and economic opportunities vary based on ethnic group affiliation (Hall and Patrinos 2006; Guido 2007; de Alcantara 2008). Ethnicity is often included as an individual demographic characteristic. However, as shown above, identity is often created by the dominant institutions in a society. Therefore it is often difficult to separate ethnicity from social structure in which it was created.

Since the days of colonization indigenous groups in Latin America have been excluded from participation in the dominant political and economic structures (Beals 1953; Patrinos 1994; Psacharopoulos and Patrinos 1994). This exclusion was based on indigenous identity. Latin American societies were shaped by feudal institutions that came from Europe (Loveman 2001). The basic class structure was usually defined as a dual class, with a small upper class of elites who ruled politically and economically. These class lines also corresponded with ethnic lines because indigenous populations belonged to the lower class (Beals 1953). Thus an ambiguity exists, where indigenous people dominate the lower class making ethnicity and class appear as “two faces of the same coin” (Postero and Zamosc 2004). As neoliberalism spread, class inequities have continued and been exacerbated, making it a necessity to consider indigenous struggles within a greater system of class struggle in a globalizing world (Webber 2007).

Indigenous struggles can be partially explained by individual characteristics, however to focus solely on individual characteristics disregards the structure and context of Mapuche society. Individual circumstances are not the only factors in determining poverty. Structural factors are also analyzed in the literatures on indigenous poverty and development (Psacharopoulos and Patrinos 1994; Patrinos 2006). These studies recognize that people are neither independent nor
isolated from larger contextual factors (Iceland 2006).

**Structural Factors**

Researchers analyzing structural factors accept that context plays a part in the poverty of individuals. Where one lives changes access to labor markets, natural resources and social and political participation. This perspective of poverty -- that focuses on the structural or contextual factors -- is known as a structural view of poverty (Iceland 2006). Structural views of poverty attribute poverty to the social and economic structure of society. This view of poverty places an emphasis on inequality in access because of relevant structural factors such as residence and dominant social and political discourse that can affect discriminatory policies as well as resource allocation for regional development (Haynie and Gorman 1999; Spicker et al. 2006).

Residence is another factor associated with poverty (Iceland 2006). Where someone lives can determine their access to social goods, social networks as well as other factors that help mitigate the risk of poverty. For example, a family living in a rural isolated community with limited access to technology, information, labor markets, and education opportunities will have very different life circumstances and risks of living in poverty than someone living in an urban area or an area better connected to social goods.

For example, research on rural-urban differences of poverty show that rural poverty is more than an issue of family income (Lichter and Johnson 2007). Rural poverty may be created, maintained, or intensified by the geographic isolation. Availability of transportation, infrastructure, and access to labor markets and product markets can hinder economic development and stifle capital investment (Iceland 2006).

Natural resource dependency can also play a part in determining the economic outcomes of communities (Blank 2005). If someone lives in a place where the only industry is based on the extraction of a natural resource this can create problems for everyone in the community regardless of whether they work in that industry (Clapp 1998; Jensen and Slack 2004).

One example of a structural dimension that affects poverty in Chile is the construction of hydroelectric dams on the Bio-Bio River (Bengoa 2000). The Bio-Bio River flows through the heart of
what was once the Mapuche homeland (Ray 2007). Since the early 20th century the Mapuche have been forcibly relocated onto reservations. The small group that still remains in the region is facing the consequences of development projects. The neo-liberal market reforms of the 1990s led to an increase use of natural resources for export, and the need for energy. As a result the government, with support of the World Bank, has decided to build large hydroelectric dams on the Bio-Bio. The dams are private ventures with decisions being made outside of the local community. These dams have been displacing the Mapuche and the company doing the building and displacing is spending large amounts of money to gain public and government support despite the environmental and social damage caused by these development projects (Mariqueo 2004). Many Mapuche have lost their homes and are being forced to accept resettlement in distance lands. They had no say in the decision making process to dam the river and flood their valley. The end result is that a small impoverished group of Mapuche people have been forced to subsidize the Chilean hydro-electric development at the cost of their resources, livelihoods and culture (Mariqueo 2004). This is contrary to the United Nations Declaration on Rights of Indigenous Peoples stipulation of development projects needing to obtain free, prior and informed consent from indigenous groups in order to implement them (UN 2007).

There have been outcries against such treatment, but the Chilean government has argued that the country’s economic development must take precedence over other concerns, such as the displacement of a small number of indigenous families. Bengoa (2000) suggests that this is a significant example of the continuing relevance of the ‘indigenous question’. In other words, “is respect for the traditional residence of a few indigenous families sufficient motivation to stop one of the largest public investments in infrastructure in Chile?” (2000, 118). For the Mapuche the government's quest for economic growth is in essence a death sentence for the Mapuche land and Mapuche culture (Mariqueo 2004). So although some benefit from the development projects, others are not so fortunate. This is only one example in the ongoing social and environmental changes taking place in Chile that affect the Mapuche. Another example to consider is the forestry industry.

Communal land, once used by the Mapuche, were usurped and sold or leased to timber companies, originally to make timbers for mine shafts, but also for other wood products (Haughney 2006). Since the 1920s and 1930s the Monterrey pine (pino radiata) has been
introduced to Chile as a monoculture crop used to make various products for export. The Chilean state supported this industry with programs promoting the establishment of pine plantations “as a long-term investment” (Haughney 2006, 170). The logging companies have profound effect on local land prices, reduce local job offerings, and deteriorate the local environment with synthetic chemicals. The logging trucks carry loads too heavy for local roads thus deteriorating the local infrastructure. However as Haughney (2006) points out, “the logging companies do not contribute to the local or regional tax base due to the system of tax exemptions and subsidies for plantation forestry” (2006, 175). Regional and local governments are often too poor to maintain the infrastructure themselves.

State policies can affect the amount of rural development or funding allocated to certain communities. It can also affect access to viable livelihood options. For example, access to land has decreased for the Mapuche (Barrera 1999; Boccara and Seguel-Boccara 1999). Previously communal land had been deemed by the government as public land and was sold to private industries (Bengoa 2004). Capital is usually available through private markets which tend to favor large agricultural industries. Access to credit is problematic in excluded regions because the lack of financial institutions. State interventions to help rural development have often shown preference for small farmers, however, increase debt and rising costs of agricultural inputs can eventually lead to problems in rural society (Clapp 1998).

Vergara and Barton (2013) discuss how in the past few decades the role of land continues to play a large part in the Mapuche struggles. They suggest that it is important to focus on “the way in which rural transformations have been driven by a market logic – neoliberalism – within the agribusiness and forestry sectors” (2013, 242). Agribusiness, including forestry, has succeeded in changing the local livelihoods, and land use, in a relatively short period of time (Vergara and Barton 2013). These structural changes affect the risk of poverty for the Mapuche living in these areas and therefore including structural factors to help explain Mapuche poverty become essential to my analysis.

**Mapuche Poverty**
The recognition of indigenous groups as separate cultures bestows the right to define their lives
in ways meaningful to them (UN 2007). They do not exist in isolation however and policy, institutions and interactions with the larger society do not always benefit indigenous populations in the ways preferable to them (Eversole et al. 2005). We know little about the social structure of the Mapuche prior to colonization however after contact the Spanish pushed the indigenous populations into either an hacienda agricultural market system, or a socially excluded subsistence survival (Boccara 1999; Rector 2003; Alexander 2006; Dillehay 2007). Originally the colonial government of Chile wanted to incorporate and integrate the Mapuche population into the capitalist society. Large groups of peasant, unskilled workers provided a source of cheap labor; in some cases free labor. However for those Mapuche who have remained relatively isolated for generations, they have been forced to participate in a market economy which has created many changes (Boccara and Seguel-Boccara 1999; Loveman 2001; MIDEPLAN 2006; Haughney 2008).

Clapp (1998) describes the context of southern Chile as being part of “a region of refuge” in which there is usually poor soil or mountains that inhibit large-scale capitalistic agricultural endeavors (Clapp 1998). These are areas that remain poor and the people’s survival is based on peasant subsistence agriculture. These refuges are places where rural inhabitants have been pushed by a market economy. Clapp suggests that the survival of regions of refuge and peasant agriculture can be explained as a "product of distinctive historical and structural forces"(Clapp 1998). These are areas where the peasant agriculture takes place on areas of poor soil or areas not fit for commercial agriculture. In Latin America this isolation of indigenous peoples was often the consequence of discriminatory social and political policies that pushed them onto marginal lands, so that the more fertile lands could be used for more productive agricultural systems, like forestry plantations (van der Ploeg 2008).

If the larger society discriminates against the indigenous population it may be more difficult for indigenous people to gain human capital or find employment even if they have high human capital (Bebbington 1997; Atria 2004; Sapag, Aracena et al. 2008). Previous research has shown that the Mapuche are forced to compete socially and economically in a larger Chilean society, but negative stereotypes and discrimination constrain their ability to participate and compete in mainstream society which affects the livelihood options available (Merino et al. 2009; Montero and Garces 2009). Mapuche in urban areas depend on their ability to compete in the urban world
and the lack of human capital may render that survival difficult. Mapuche in rural areas, who are more likely to rely on the land for survival, are faced with decreased access to land, and receive less of the infrastructural benefits of urban areas (Clapp 1998; Vergara and Barton 2013). It is easy to imagine these disadvantages becoming barriers to attaining standards of living comparable to the non-indigenous population.

For the Mapuche particularly there have been a number of studies that provide in depth knowledge of the economic and social circumstances that they face. Mallon (2005) explores the history of one particular Mapuche community and traces the changes to the Mapuche way of life. The author places particular emphasis on the Mapuche relations with the state. The state, after they defeated the Mapuche militarily, created “economic parameters within which the newly resettled indigenous population would have to build a different life as an integral, if marginalized, part of Chilean society” (2005, 238). In this particular community the state forced them to change their way of life by living on a reservation with restricted access to land. This resulted in generating “dramatic impoverishment by the second and third generations. The final result of this economic vicious circle was that Mapuche small producers were forced to work for others because they did not possess the necessary capital, seed, animals, or tools to cultivate the little land they had left. In this way, the state created a part of the cheap labor supply needed by the capitalist economy” (2005, 238).

Haughney (2006) finds similar results in her study on Mapuche rights under neoliberalism. She reiterates that the two main goals of the Chilean state towards the Mapuche have always been to “assimilate the Mapuche and other indigenous peoples into the Chilean nation” as well as to make available the “material resources and indigenous lands” for capitalist exploitation (2006, 203).

Vergara and Barton (2013) explore transformations to Mapuche society by analyzing qualitative data from three rural communities in the Andes. The authors point to the complexities of poverty in Mapuche communities, including the relationship with the state and the land. They describe the Mapuche as being stuck in their current situation. “With an insufficient human, physical, financial, natural and social resource base for the creation of viable alternatives, rural Mapuche communities remain wedded to programs established beyond their locality, and become clients
of the state as a consequence, reducing their autonomy in the process and threatening their culture via changing practices” (2013, 260). This helps to explain the continuing high levels of poverty in the local communities. In terms of poverty reduction, the authors suggest that as the situation in rural Mapuche communities becomes more intolerable, education is often looked at as a means to human capital attainment, and a new form of livelihood. However, education favors particular types of knowledge and the authors point out that education prepares students for life in Chilean society, not on reservations or in Mapuche communities (Vergara and Barton 2013). As the young become educated they leave the rural communities, often leaving their Mapuche identity behind. The authors conclude that that the “links between rurality, indigenous identity and poverty remain significant” (2013, 240). Other studies try to use representative data to explore poverty.

Agostini, Brown and Roman (2010) use household survey data to estimate poverty and inequality through poverty mapping techniques. They find that indigenous households in Chile are poorer than non-indigenous households. However because they are concerned with methodology, their results do not show factors that correlate or help to explain the higher rates of poverty for the indigenous population, nor do they consider applying various poverty measurements to the data. They conclude that in “Chile and other countries in which ethnicity plays a role in shaping public policy, policy-makers should consider including ethnicity in targeting for antipoverty programs” (2010, 1043).

There are many people that are not happy with the market reform of the globalization project (McMichael 2012). Max-Neef, a Chilean economist, suggests that as the economy grows, peoples’ well-being increases as the material gains improve their lives. However, as income increases there is a point or threshold where the increases to the quality of life stagnate (Max-Neef 1995). This threshold hypothesis could help to explain economic development in Chile (Max-Neef 1995). It is possible that as the economy of Chile has grown and people have been able to procure basic necessities, their lives have gotten better. However, the development discourse in Chile does not focus on well-being, but instead on national economic growth (Cademartori 2003; Olavarria-Gambi 2003). Well-being then is defined and measured by the state and people are forced into situations where local development is constrained by a national level development paradigm that pushes for economic growth and privatization (Berardi 2001).
Or, in the words of Mallon (2005), “the Chilean state seems to set the rules of the game, in the sense that it establishes the structures, institutions, and political discourses within which people must struggle and exist. But on the other side, the poor and oppressed push at the boundaries of these discourses, structures and institutions, trying to modify and adapt them to their own requirements for struggle and identity” (2005, 237). It is in this context that this dissertation seeks to understand the individual and structural characteristics of Mapuche poverty.

**Conclusion**
In summary, indigenous identity and indigenous poverty are both complex concepts intricately linked through time. Evidence from previous literature suggests that we should be concerned with how identity changes over time, how identity is linked to poverty and how measures of poverty can change, thus affecting our understanding of poverty.

From the poverty literature we can see that there are multiple ways to define and measure poverty. Poverty measures attempt to represent deprivation, and they do this by comparing people's income, because income in a market economy can be exchanged for the basic necessities. Therefore distinct measures of poverty can be useful for different reasons. An absolute poverty line can help show a lack of basic necessities that human beings need for survival. Whereas a relative measure of poverty may help indicate economic inequalities within a society. Individual and structural factors such as ethnic identity and living in rural areas can affect access to basic necessities as well as exacerbate inequalities. However, social and political discourse influence the ways in which poverty is defined.

In the case of Chile, official poverty levels are declared by the government, obtained by their definitions and measures. This is problematic when diverse cultural groups, like the Mapuche, have a history of problems with the state (Mosse 2010). Throughout recent Chilean history the national level discourses on economic development suggests that all citizens should be assimilated into the market economy and participate, according to their human capital, in that economy. This perspective emphasizes economic growth, measured by income but does not take into account the possibility of various perspectives on poverty.

The national government of Chile has a political agenda of economic growth because they follow
a neoliberal economic model (McMichael 2012). Poverty is considered a problem; however, it is defined and measured by the government. Policy makers then use these definitions and measurements to analyze poverty trends and create solutions. These solutions are often market based, aimed to increase income instead of looking at overall well-being. However, as mentioned before, the concept of deprivation can vary between culturally distinct groups of people (Townsend 1962). Since this research deals with poverty differences between two historically and culturally distinct groups of people, it is possible that perspectives on deprivation may differ between the two groups (Mosse 2010). Vergara and Barton (2013) put it the following way:

Despite decades of a close relationship with the Chilean state, passing through periods, often interwoven, of repression, relocation, redistribution, reconciliation and cooperation, the rural Mapuche of the Araucanía Region retain socio-economic conditions that mark them out as the most unfavored, or excluded, within Chilean society. The reaction to this persistent condition has been for younger generations in particular to migrate and merge increasingly into Chilean culture and society, through the educational system, and from here into Chilean labor markets. The consequences for rural Mapuche communities, where cultural traditions and the relationship to the land and its resources (the mapu) are strongest, have been considerable (2013, 258).

Again to highlight the indigenous poverty literature, we find qualitative evidence showing the difficulties the Mapuche families face in the current political and economic climate (Mallon 2005; Vergara and Barton 2013). Also, quantitative studies on indigenous poverty, based on research from other indigenous communities in the region, show that indigenous people suffer higher rates of poverty, often because they are excluded from participating in the market economy (Hall and Patrinos 2006). This exclusion happens because of a number of factors: differences in human capital, differences in employment opportunities, structural factors like rural/urban situations, and social pressures and discrimination. Some evidence from Chile suggests that these same forces are at work (Agostini et al 2010; Mellor et al 2009; Merino and Tileaga 2011). This dissertation, using national level data of Chilean households, and in-depth interviews, approaches questions of Mapuche identity and poverty by asking questions and testing hypotheses. These include:

Given that there are multiple ways to measure poverty, I explore various measures to answer the question: Are the Mapuche more poor than the non-Mapuche in Chile? I hypothesize that when measuring poverty with an absolute poverty measure that the data will show that the Mapuche are more poor.
After exploring absolute poverty lines, I explore other measures of poverty, specifically a relative poverty line in order to answer the question: Is there a difference between types of poverty measures? I suggest that by using multiple poverty measures we can gain a better understanding of poverty from the data. I hypothesize that regardless of the poverty measure, that the Mapuche will be poorer than their non-indigenous counterparts.

After reviewing poverty measures, I turn to exploring explanations for poverty differences. I ask: Can individual characteristics explain the differences in poverty? Other research, reviewed above, suggests that human capital and occupation explain differences in poverty. I hypothesize that human capital and occupational status will correlate with poverty and that differences in human capital and occupation will explain some of the poverty differences between the Mapuche and non-Mapuche.

I also explore some structural factors that are shown in the literature to explain poverty differences, by asking: Does residence play a role in poverty risks? Past studies indicate that where one lives can influence opportunities and thus affect risks of poverty. I hypothesize that living in rural areas will help explain differential risks of living in poverty, with rural residence being more likely to be poor.

After exploring the factors that help to explain poverty, I turn my attention to indigenous identity. I use the survey data to explore difference within the Mapuche, specifically the characteristic of language, which is considered a ‘thick’ identity trait. I explore differences between those Mapuche who speak Mapudungun and those who do not, by asking: Does having a thick tie to indigenous identity increase the risks of poverty?

After exploring the survey data, I then focus on the qualitative interviews. I start by asking: What does it mean to be Mapuche today in Chile? Indigenous identity can affect people’s life chances. However, this is not the same for all indigenous people. I hypothesize that there will be differences in the way that the Mapuche identify themselves based on where they live and their lived experiences. So for example: does Mapuche identity in urban areas differ from those in rural areas, specifically those living in traditional Mapuche lands? I think that I will find some
differences in how the concept of Mapuche identity is adopted and expressed depending on where one lives.

Finally, I return to questions about how poverty should be defined. I explore the interview responses to ask: How have the last few decades, specifically the time period of a neoliberal economic agenda, affected the Mapuche way of life? Do they feel they are participants in this development/globalization project?

Also neoliberalism promotes people as consumers (McMichael 2012). I explore the links between consumption, poverty and Mapuche identity. I hypothesize that the Mapuche have adopted many of the recent developments regardless of whether they wanted to participate. In other words, I hypothesize that Mapuche culture is being influenced by, and changing because of a neoliberal culture (Ventura 2012), and I suspect that not all are happy with these changes.
Chapter 4: Explanation of the Data and Methodology
We rode the bus towards the university campus. The university had some land they were not using, and so they had allowed some Mapuche organizations to use a piece of land to build a community center. Christian grew up in the area, a poor part of Santiago, and had been attending the ruka for some time. The ruka, which is a Mapuche word for house, is a traditional building of the Mapuche people, made of a wooden frame and covered in thick grass. When rukas were still used by the Mapuche people, they varied in size depending on the family, but this one was built as a center for the Mapuche; it was a place to meet and hold ceremonies. I had heard there was going to be a meeting over the weekend and I wanted to attend. I knew Christian would know about it, and he offered to take me. He was planning to attend anyways, and said I could join him.

We arrived in the morning, before the scheduled event, and there were already people gathered, busy with preparations. They had come by bus, piled in trucks, or on foot. There were teenagers excitedly carrying on, children running about playing, wrinkled old men talking, and traditionally dressed women busily cooking food. There was to be a traditional ceremony, a meeting of various Mapuche organizations, and then a communal meal.

The ceremony started with a large crowd of people outside the ruka. We marched as a crowd, slowly circling the grassy structure. Leaders in the front were carrying flags hung on wooden poles. Many participants were dressed in traditional garb. The men had thick, woolen ponchos, the women wearing head scarves with jingling silver ornaments. The chanting began as we marched. On the third circle around the ruka, the crowd moved on to an adjacent field, where at one end stood the rewe, or ceremonial post. The spiritual leaders gathered around the post and the crowd grew silent. A traditional prayer was offered in Mapudungun. Muffled voices of support could be heard in the crowd as the prayer continued. The leader of the ceremony finished and a cry rose up from the crowd. After one more march around the ruka, we entered the dark building on one end. I was at the back of the crowd, and so entered towards the end.

As my eyes adjusted to the dimly lit room, I could see the crowd sitting on long benches along the walls, three rows deep. At one end of the room sat the Mapuche leaders and Mapuche
organization representatives, including some government representatives. Christian motioned me to a spot he saved for me. I was happy to have him around as he could answer any questions I had about the proceedings. I asked him about the presence of the government officials. He told me that not everyone here liked the presence of the government, even though they were only local, municipal authorities. However, the community leaders thought it was important to be transparent; something the Chilean government rarely was when dealing with indigenous matters.

The meeting was conducted in Spanish and Mapudungun. Not everyone there understands the traditional language, although many would like to. Representatives from various Mapuche organizations gave short presentations about their work and how they were addressing local community problems. Some groups even expressed their views on the local government’s role in solving community problems. Despite different approaches, they all expressed the same problems: the Mapuche people lack opportunities, they want better jobs, better schools, greater representation in the political process, and improved relationships with the state…..the list goes on and on. Some groups represented rural concerns of their compatriots in the South, whose land tenure is tenuous due to large development projects. I had heard these concerns before, as had many in attendance. Cheers would rise up, cow bells would ring, and people holding small branches of Canela tree would wave their arms, the leaves fluttering in the air; it was their way of applauding.

The meeting closed when the Mapuche man leading the group declared it was time. The middle of the floor was cleared of seats, as people mingled about, networking, and reaffirming social bonds. Tables were brought in and various traditional foods were placed upon them, the smell of roasted nuts of the Pewen tree permeated the ruka. Christian introduced me to friends and leaders of Mapuche organizations as we ate. They were all curious to know why I had attended. I told them of my interests and they responded with mixed emotions. They had all experienced foreign researchers, coming to interrogate them of the Mapuche problems. Most seemed generally accepting of the research process, although some were wary, having seen too many anthropologists come and go without seeing any benefit to the Mapuche community. I told them I was just trying to make sense of the data and reports coming from the government. They were skeptical of anything the government said, but wished me luck.
Introduction
This chapter fully describes the methods used to address my research questions, and does so by focusing on three issues. First, I discuss the mixed methodological approach to social science research generally and as applied in this study. Obtaining a comprehensive understanding of such a complex social phenomenon and process as indigenous poverty requires the use of multiple perspectives and types of data, to enhance the robustness of the research findings. I use a mixed method approach which features a blend of quantitative and qualitative data analysis, to address the factors related to poverty. Second, I detail the qualitative research methods employed and the method used to analyze these data. Third, I describe the quantitative data analysis with emphasis on the data source-including its purpose, scope, domain of content and the sampling procedures employed- as well as the univariate and multivariate techniques employed to analyze the data.

Mixed Methodology
The types of questions I seek to answer suggest the need for a mixed method design (Tashakkori and Teddlie 1998; Tashakkori and Creswell 2008). Mapuche poverty is a population level, aggregate phenomenon, but it is also about personal experience. To rely solely on quantitative data and analysis would limit the research to national level data, produced by the government, without allowing the Mapuche people a chance to voice their views. Since I am interested in how poverty is defined, and experienced, as well as how people define the contemporary Mapuche experience and create a Mapuche identity, using multiple methods helps to address the multifaceted research questions. In this section I will briefly introduce mixed methodology, discuss its strengths and weaknesses, and discuss how mixed methodology is applied to my research questions.

At the risk of over-stylizing, social science research has historically taken two major methodological paths: quantitative or qualitative research (Johnson and Onwuegbuzie 2004). As the term implies, quantitative research rests on gathering data on units of observation-usually individual people or aggregates of people- that are expressed numerically. Numerical data are then subject to one or more of a vast array of statistical techniques available to analyze them in order to describe these units and the relationship between their characteristics. Data gathering through structured questionnaires administered to a random sample of a population is
quintessential example of the quantitative research approach. By contrast, qualitative research involves gathering data that are expressed as words or perhaps images rather than as numbers. These data are then analyzed using a number of techniques available. There are strengths and weaknesses of both methodological paths, which often depend on the research questions.

Over time researchers sought ways to combine quantitative and qualitative methods into one research paradigm. This was not always an easy task. The theoretical differences between quantitative and qualitative methods did not allow for easy synthesis (Tashakkori and Teddlie 1998). Social scientists as well as philosophers engaged in serious debate about the legitimacy of each method. The quantitative-qualitative debate occurred on two main levels: the philosophical and the methodological (Tashakkori and Teddlie 1998). Positivists and post-positivists argued for empirical testing of data, while constructivists argued for a contextualized understanding of the meaningfulness of human’s lived experience (Tashakkori and Teddlie 1998; Greene 2007). Social scientists came to realize that nothing about objective quantitative research precluded a descriptive analysis with interpretive qualitative methods (Greene 2007).

By taking a more pragmatic approach, social scientists have been able to design a mixed methods research methodology (Collins, Onwuegbuzie et al. 2007). Mixed methodology (or mixed methods) has recently become more popular because of the range of strategies it offers to social researchers. In a situation where questions are not answered by quantitative data alone, mixed methods become an attractive alternative methodology. Although not without its critics (Giddings and Grant 2007) mixed methodology, when designed properly, provides a broader range of insights, allows a greater confirmation of findings, and enhances the validity of results. When dealing with complex social issues (such as distribution of poverty, inequality, and ethnicity) mixed methods facilitates a deeper level of inquiry and analysis. For example, Johnson et al. (2007: 128) describes mixed methods as follows:

Mixed methods research is the type of research in which a researcher or a team of researchers combines elements of qualitative and quantitative research approaches (e.g., use of qualitative and quantitative viewpoints, data collection, analysis, inference techniques) for the broad purposes of breadth and depth of understanding and corroboration.

The process of mixed methods research is not one of merely using qualitative methods for survey
instrument or questionnaire development and then quantitative methods for the analysis of the resulting survey data. It is an integrated process where both quantitative and qualitative methods are used concurrently throughout the research project (Creswell 2003; Creswell, Clark et al. 2003). It also can help to create links between the participants and researcher in a way that influences definitions and provides cultural context (Morgan 2007). Mixed methodology is the ideal way to illuminate complex issues that require breadth and depth and through an interactive process gain understanding of community situations and notable here, the situation of the Mapuche people (Mertens 2007).

As a research methodology, a mixed methods approach has many strengths. Mixed methodologists such as Greene and Creswell (Creswell 2003; Greene 2007) have identified three main strengths of combining quantitative and qualitative research: triangulation, development of analysis for richer data, and initiation of new modes of thinking about the research questions. I elaborate on these in the following paragraphs.

The first major strength using a mixed-methods approach is that combinations of methods are used to enable confirmation or corroboration of each other through triangulation (Tashakkori and Teddlie 1998; Creswell 2003). Triangulation generally refers to the combination of methodologies in the study of the same phenomenon (Campbell and Fiske 1959). The purpose of triangulation is to provide greater evidence and support for the results of each method. Once results have been confirmed by two or more independent measurement processes, the uncertainty of the interpretation is reduced (Campbell and Fiske 1959). Researchers that use mixed methods have come up with at least four types of triangulation: data triangulation that uses a variety of sources in a study, investigator triangulation that uses several different researchers, theory triangulation that uses multiple perspectives and theories to interpret the results of a study, and methodological triangulation or the use of multiple methods to study a research problem (Creswell 2003). For this research, I use a combination of triangulation. I rely on multiple types of data, rely on several perspectives and use multiple methods to study the problem of Mapuche poverty.

The second major strength of mixing methods is that when combinations of methods are used it enables the researcher to develop analysis that provides richer data (Creswell, Clark et al. 2003).
For example, if census data show that the Mapuche have lower education on average than other groups, this has important implications for poverty. However this information does not explain why the education levels are different. By combining a statistical analysis with a qualitative analysis, where interviews are conducted with Mapuche people and they are asked why they have lower education, then the analysis would result in a richer understanding of the issue.

The third strength of a mixed methods approach is that by combining methods researchers may initiate new modes of thinking about the research. Paradoxes or further questions may arise from the results of using two or more separate methods (Creswell, Clark et al. 2003). This may spark new ideas and allow the researcher to take the research in new directions that may not have been obvious with only one method (Tashakkori and Creswell 2008). In this way, a mixed method approach can yield new insights that would not have obtained otherwise.

One weakness of mixed methods is the greater complexity in the research design. Researchers using mixed methods often have to contend with the complexities of blending and harmonizing quantitative and qualitative designs. And, of course, each method used must be sufficiently well designed, articulated and justified as to stand on its own merits. The researcher could use them both simultaneously, or they could use one to inform the process of the other, referred to as a sequential design (Creswell, Clark et al. 2003). If they choose the latter, then communicating their hypotheses or research questions explicitly (for research proposals or grants) can become difficult because they must wait until they have completed the first part of the research if they intend the first part of the research to inform the design of the second (Ivankova, Creswell et al. 2006; Bryman 2007).

To summarize, during the 20th century much of the social sciences were primarily quantitative (influenced by logical positivism)(Tashakkori and Teddlie 1998; Creswell, Clark et al. 2003). This is not to say that there was no qualitative research. Some great works in American sociology from its earliest days were largely qualitative, a tradition that has continued since the beginning of the discipline. However, there has been a dominance of a quantitative approach. In reaction to this, qualitative methods continued to develop throughout the century, ultimately creating a more established qualitative research paradigm in the 1980s and 1990s (Creswell 2003). In reaction to the polarization between quantitative and qualitative research, another
intellectual movement (focusing on synthesis) occurred and it has come to be called mixed methods research (Tashakkori and Teddlie 1998; Creswell 2003; Creswell, Clark et al. 2003). Currently there are three methodological or research paradigms in the social sciences: quantitative, qualitative, and mixed methods research. Each approach has its strengths and weaknesses and is useful in different times and places (Creswell 2003).

Mixed methods research is becoming more popular with social scientists who want to address both qualitative and quantitative issues in their research. Despite the complexity of using multiple sources and types of data, mixed methodology can add greater richness and provide better understanding of the research topic. In this dissertation I use a mixed methods approach to understanding poverty amongst the Mapuche people. I follow a sequential design (Creswell, Clark et al. 2003; Johnson and Onwuegbuzie 2004; Ivankova, Creswell et al. 2006; Sosulski and Lawrence 2008) that suggests that each step of the research process informs the research process of what steps should be taken next as well as influencing the overall results. The first experience I had with the research on Mapuche poverty came from qualitative experiences. Therefore I will explain my qualitative methodology and data first.

**Qualitative Data and Methodology**

In this section I explain my qualitative methodology and how I went about using it to gather data. I used a purposive and a snowball sampling strategy to select participants, followed by semi-structured in-depth interviews to gather respondent's views on questions related to indigeneity, poverty, and social changes in Chile. In the following paragraphs I explain this further.

Prior to studying Mapuche poverty, I had spent a number of years living (between 1999 and 2001) and traveling within Chile. I had met, interacted with and become friends with numerous Mapuche people who openly shared their thoughts and experiences with me. My familiarity with specific issues that the Mapuche people faced (i.e. discrimination and poverty) certainly impacted my decision to study these issues more formally here. In order to understand the complexity of life in Chile, and to gain insight into adequate research questions, I traveled again to Chile to interview people during 2008 and 2009. My goal was to gain a preliminary understanding of the socioeconomic and demographic factors influencing people's lives and how those factors relate to poverty. It was my hope that by interviewing people in different social
positions, I would be able to gain insight into the social problems facing the Mapuche people. These insights would then lead to specific research questions that I could address through quantitative research methods.

On this first trip my method consisted of talking to people I had already met, asking them about their perspectives, and asking them to introduce me to others who were involved in or had an extensive knowledge about the Mapuche situation. This type of sampling strategy would be classified as a purposive sampling strategy (Marshall and Rossman 1989; King, Keohane et al. 1994; Weiss 1994). This means that I selected interviewees with a particular purpose in mind. I specifically chose people who belong to the Mapuche community as interviewees so I could get their perspective.

I talked informally with friends about the current social situation in Chile, and how they viewed the Mapuche issues. I also interviewed people (Mapuche and non-Mapuche alike) who work for government agencies, universities, and nonprofit organizations that focus specifically on indigenous people’s issues in Chile.

Each of these contacts was able to recommend friends and colleagues, with whom I could talk, to gain a better understanding of the situation. Identifying new respondents from current interviewees is referred to as Snowball sampling (Marshall and Rossman 1989; Creswell 2003). After an interview I asked the interviewee if they knew of anyone else with whom I could talk, to provide an interesting perspective or more sources of information (Yin 2003). By doing this I was able to meet, talk with, and develop rapport with many more people knowledgeable about the Mapuche situation. I was able to maintain contact with these people throughout the research project and they became a source of in-depth understanding. From these interviews I was able to gain insight into the types of quantitative questions that needed to be addressed.

After this first trip to Chile I returned back to the US and used the information gathered from the interviews to help guide the quantitative part of my research. I used survey data to analyze Mapuche poverty and factors influencing it. In the next section I will discuss the quantitative aspects of the research. However I mention the quantitative part here in order to show the sequential nature of the research project (Ivankova, Creswell et al. 2006).
The quantitative results also left me with questions, questions regarding details about social factors that I was unable to analyze in the quantitative data. For example, education is significantly related to poverty. However the quantitative data on education is limited. This did not give me much information about the education system or why it is significantly related to poverty. This was the same for other factors; the data provided information about the social factors but did not provide rich detail of why it was this way. I needed a better understanding of why these results were the way they were so following a sequential design (Ivankova, Creswell et al. 2006), I returned once again, in 2010 and 2011, to Chile to interview more people regarding my quantitative results.

On this visit to Chile I was able to interview more people who are involved with social issues concerning the Mapuche people. However during this trip I relied more upon the snowball sampling to meet more people (Stake 2005). I also specifically sought out interviews with government officials from government programs that work with indigenous issues, such as CONADI and ORIGENES, as well as community leaders in Mapuche communities that I thought would be able to provide information.

To reiterate, the central focus of the dissertation is to understand Mapuche identity and poverty. Since the Mapuche have traditionally lived in the Southern parts of Chile I knew I needed to interview people there. However, since the Mapuche also have a history of migrating to urban centers I also wanted to interview people in those areas to understand their perspective. Accordingly, I chose to focus the interviews in three distinct locations: Metropolitan areas (including Santiago and Temuco), small urban areas (including small towns outside of Santiago and Temuco), and rural areas in the southern traditional Mapuche lands (including rural communities that are still recognized as reservations and rural communities that are no longer part of reservations). By the end of the interviewing process I had spent weeks living with rural Mapuche families gaining insight into how they make a living as well as weeks spent in urban areas discussing changes in Mapuche identity, discrimination, and poverty in urban areas in Chile.

Each conversation was different, and although I asked the same basic research questions to
everyone, the length of the interview and the order of questions changed according to the person I was interviewing. The semi-structured style allowed me the freedom to change the wording of questions and the order of questions, in order to suit the interview setting. This was helpful as some people were more involved with specific aspects of indigeneity than others. For example, I interviewed people who are employed in academia. Their perspectives on education provided greater detail compared to respondents who were not employed in, nor have any understanding of, the education system in Chile.

In this research I am specifically interested in perceptions of poverty and how the Mapuche define being poor. If public policy and programs exist to improve the circumstances of impoverished people, and the way people view poverty can affect the effectiveness of these programs, it becomes important to understand the ways in which indigenous people view poverty. If the policies are put into place to help bring people out of poverty, but they do not take into consideration the views of the Mapuche, or if the policies promote solutions contrary to the cultural beliefs of the Mapuche, then the policies, at best will not improve the situation, and at worse they may create further problems. To avoid worsening social problems it becomes imperative that we gain further understanding into perceptions of poverty and livelihood choices (Hargreaves, Morison et al. 2007).

During the first round of interviews in Chile I asked people questions about their perceptions of poverty. An example of the type of question asked would be: How do you define poverty? What exactly is poverty? These questions address differing views on poverty, and these differences often reflect what people value in life (Iceland 2006; Barrios 2008). People vary in what they view as most valuable in life. How they see their circumstances greatly influences what strategies they will choose to make a living; a living that is more desirable to them and in accordance with what they value. Therefore the question of defining poverty attempts to address what the Mapuche see as important and how that influences their ideas of what it means to be poor.

After the quantitative analysis, during the next round of interviews, I was able to ask more specific questions about the quantitative results including questions about rural-urban differences and poverty differences between the Mapuche and the non-Mapuche. I was also able to ask
questions about specific factors that influence or are correlated with poverty such as questions on education, labor market status, and migration history. It was through these interviews that I was able to gain more in depth understanding of poverty differences between the Mapuche in the non-Mapuche as well as within the Mapuche population.

**Quantitative Data and Methodology**

The quantitative analysis for this research took place in the United States using secondary survey data from Chile. The secondary data were free to the public and downloaded from the website of Chile’s Ministry of Planning. With the data I analyze poverty and factors that influence it by using descriptive and multivariate analyses. Here I detail these data –where they come from and how they were gathered- as well as my methods of data analysis.

**The CASEN Survey**

The broad goal of this research is to advance the understanding of indigenous poverty. Data from a nationally representative household survey conducted by the Ministry of Planning and Cooperation (MIDEPLAN) in Chile in conjunction with the Economics Department of the University of Chile are used to analyze the prevalence of indigenous poverty. The survey is called the *Encuesta Caracterizacion Socioeconomica Nacional* or National Survey of Socio-economic Characteristics (CASEN).

The CASEN is the only regularly conducted survey of the socio-economic and demographic characteristics of Chilean households (Pizzolitto 2005). It is a government funded household survey of about 72,200 households (in 2006) collected biannually throughout Chile. The CASEN is analogous to the U.S. Current Population Survey in content and sample size, though given Chile's much smaller total population the CASEN sample is proportionally much larger. The CASEN survey gathers basic demographic data about households and household members as well as information on the material situation of the household and economic and social variables including: employment status, employment type, income, education, literacy, health, and social program participation.

The CASEN is a repeated cross-sectional survey that has been conducted every two years

---

3http://www.mideplan.gob.cl/casen/index.html
beginning in 1990. The sampling framework is based on the Population Census that was most recently conducted in 2002. It is a multi-stage random sample with geographic stratification by region and rural/urban residence. It represents the whole population in urban as well as rural areas (Pizzolitto 2005; MIDEPLAN 2006). For this analysis I use the most recent CASEN available, the 2006 dataset that was released in 2007.

The survey asks respondents about ethnicity and allows people to self-select into the indigenous category by asking directly if the respondent identifies with an indigenous group. The main variable of interest is poverty. The CASEN data use an absolute poverty line to define poverty. In the analysis this is included as a bivariate variable with 1 being poor and 0 being not poor. Other socio-economic variables are also used in the analysis including: age, gender, education, and employment status. It is also important to acknowledge spatial variation in poverty risks. For example, industries cluster spatially and because indigenous groups historically inhabited certain regions, dummy variables were used to assess spatial differences. A sizable portion of the population (slightly less than half) lives in metropolitan Santiago. Using dummy coding, rural and other urban areas are compared to Santiago (reference category) in the analysis.

Because of its large sample size, representativeness, depth of information, and the fact that the data are geo-coded, the CASEN lends itself to quantitative research. This survey provides the data necessary to assess the relative impact of many of the mechanisms that may perpetuate poverty. Using the CASEN data allows the analysis of household level demographic variables that correlate with indigenous poverty such as human capital attainment, family composition, employment, and residence. In the following paragraphs I describe the dependent variable as well as the main independent variables of interest that were used in the analysis.

**Poverty**

The dependent variable for the analysis is poverty. In Chile poverty is defined by the government using an absolute poverty line that takes into consideration the basic costs of nutritional necessities but suggests that those costs vary between rural and urban areas. To provide a somewhat more comprehensive statistical appraisal of poverty in Chile, I went beyond the particular absolute measure that comes with the CASEN data, and used household income in comparison to alternative poverty thresholds. I elaborate on this below.
The poverty measure included with the CASEN data is a trichotomy: extremely poor (indigent), poor, and nonpoor. The CASEN survey defines poverty as being unable to satisfy basic necessities; households whose income is less than a minimally established line are poor. This poverty line is established by calculating the monthly cost of a basic basket of food stuff (canasta básica), considering the calories and protein that would be needed to satisfy the minimal amount of nutritional requirements, based on prevalent consumer habits. This amount of income is then multiplied depending on the number of people per household\(^4\). This is similar to the way the absolute poverty line is calculated in the United States. One important difference, however, is that Chilean sets different thresholds depending on rural versus urban residence. For urban areas the poverty line corresponds to twice the cost of the basic basket of food stuff, whereas in rural areas the poverty line corresponds to 1.75 times the basic basket of food stuff. The reason for this is the belief that households situated in rural areas are better able to self-provision, meaning they do not need as much income because they have access to cheaper food. In this analysis I recode this official absolute poverty line into two categories: poor (indigent and poor combined) and nonpoor.

In order to understand the poverty differences between rural and urban areas I also created an absolute poverty line that is the same for households across the nation. I used the cost of the basic basket of food stuff that was used for urban areas and applied it to all households. Those households whose income is below this line are considered poor. This adjusted absolute poverty line allows me to analyze poverty in a more standardized way.

Definitions of poverty can vary as discussed previously. In order to gain an even more nuanced understanding of poverty I created a third poverty line: the relative poverty line. I did this by using household income and calculating one half of the median household income (Iceland 2006), adjusted for household size. The reason for doing this is to provide a poverty line that takes into consideration the relationship people have to others, or how poverty is relative to other in society. Cultural preferences may influence food expenditures and lifestyle choices. I wanted to be able

\(^4\)For more information on the things contained within the basic basket of goods and the associated costs see the Mideplan website: http://www.mideplan.gob.cl/casen/definiciones/pobreza.html#
to analyze how household poverty varies relative to other households, in addition to how it varies relative to a basket of goods. For example, if everyone in a society had sufficient income for basic necessities they can still be relatively poor, compared to others in that society. This can have negative consequences because of psychological damage based on their perceptions of being poor compared to their peers, but also because they may not be able to afford access to resources that others have to improve their lives, effectively keeping them from participating in the overall society (Iceland 2006). Using these three separate poverty lines I compare and contrast the prevalence of poverty in the Mapuche and non-Mapuche populations.

**Indigeneity**

The CASEN survey allows respondents to self-identify into 8 ethnic categories, with Mapuche being one of the indigenous groups. Table 4 shows the population distribution of the CASEN data.

<table>
<thead>
<tr>
<th>Table: 4.1 Population and Ethnic Groups in Chile</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total Households</td>
</tr>
<tr>
<td>Non-Indigenous</td>
</tr>
<tr>
<td>Mapuche</td>
</tr>
<tr>
<td>Other Indigenous</td>
</tr>
<tr>
<td>Missing</td>
</tr>
</tbody>
</table>

Household Data from CASEN 2006

For the analysis I compare Mapuche with Non-Indigenous Chileans. This means that other indigenous are not included in the empirical analysis. There are some missing data in the ethnic variable, as well as in other variables. These missing data were dropped using a listwise deletion, leaving 71,353 households in the analysis.

In the initial analysis the Mapuche variable is a dichotomous dummy variable: the Mapuche and non-Mapuche with the Mapuche coded as one and the Mapuche as zero. A subsequent question was asked of the respondents about the ability to speak and understand an indigenous language. Because of the fluidity of ethnic boundaries that was mentioned previously, I further analyzed the Mapuche group by dividing them into two groups: those who can speak and understand the language, and those who cannot. I use a term to differentiate between the Mapuche groups, a term that is used by the Mapuche: *hablante* which means a speaker, or the ability to speak. I use these three categories (non-Mapuche, Mapuche no-hablante, and Mapuche hablante) to analyze
poverty differences.

**Demographic Characteristics**

Other independent variables of interest include demographic characteristics that I will describe below. Age is divided into categories in order to analyze the differences between younger and older household heads. Migration history information is collected in the CASEN survey. Respondents are asked in which community their mother lived when they were born. They were also asked where they lived five years previous to the survey. Both questions have the same response options of the same community or a different community. Household composition information is also included in the CASEN data. I analyze the average number of people per household, the average number of children per household, and the average age of the household head. Gender and marital status of the household head are also included in the analysis. Gender is a dummy variable (coded 0=male, 1=female). Marital status in the data is a seven category variable: married, cohabiting, single, annulled, separated, divorced, and widowed. For my analysis I collapse these categories into four categories: married, cohabiting, single, and other. Each of these categories is coded as a separate dummy variable and included in the analysis with married being the reference category.

**Human Capital Characteristics**

Human capital theory suggests that the more human capital someone acquires the less likely they are to live in poverty. This has been shown previously to be the case for indigenous peoples in other contexts (Psacharopoulos and Patrinos 1994; Hall and Patrinos 2006). Human capital is most often measured by education. The CASEN includes two measures of education: years of education, and level of education. The levels of education include: no formal education, incomplete basic education, completed basic education, incomplete secondary education, completed secondary education, incomplete University education, and completed a University education. These categories were coded as individual dummy variables. Both education variables are used in separate models to understand educational differences. There is also a question on literacy in the survey. Respondents were asked whether they know how to read and write. I use this dichotomous variable to look at broad literary differences between the Mapuche and non-Mapuche.
Residential Characteristics

Societies produce the space that they occupy. They visualize, name, and use the lands and resources around them. In today’s world political boundaries exist to help differentiate between places. For example political boundaries outline nations, states and communities. The political boundaries that exist are not static (Morris and Fondahl 2002). They have come into being through systems of power and in socially constructed ways (Harley 1989). Most often, boundaries are drawn by the dominant group in the society (Harley 1989; Blank 2005). These boundaries can be arbitrary because they may not correspond to cultural or physical boundaries. They are also subject to change. When studying the spatial distribution of minority populations it is important to keep in mind how these boundaries were made and how these boundaries can affect the research (Morris and Fondahl 2002). The agency of marginalized people needs to be recognized to understand the spaces in which they live (Herlihy and Knapp 2003). That being said the survey contains two measures of residential characteristics: rural and urban, and political boundaries of region, province and community (Región, Provincia, and Comuna). The rural urban variable is coded as a dummy variable (rural=1). I use the region variable in the multivariate analysis to see how Mapuche poverty varies across Chile.

Descriptive and Multivariate Methods

I use the CASEN data to analyze poverty and the socio-demographic factors that relate to it. I do this using descriptive statistics, comparing the Mapuche and the non-Mapuche, for each of the dependent and independent variables. I use chi-squared tests to establish the statistical significance of observed differences between the two groups. Then, using poverty as a dichotomous dependent variable, I construct multivariate statistical models to analyze the differences in the likelihood of being poor. I use logistic regression models for these analyses. I will discuss both types of analyses below.

Logistic regression (sometimes called logit analysis) is a multivariate modeling tool used when the dependent variable is dichotomous rather than continuous. There are many examples of social phenomena that are discrete or qualitative instead of continuous. For example, an event occurs or it does not. Someone may be poor, or they may not. A person can be alive or dead. Because such phenomena exist, logistic models have been developed to help address the need for
statistical techniques that can deal with these dichotomized dependent variables. Although there is nothing to prevent one from using Ordinary Least Squares (OLS) regression with a dichotomous dependent variable, there are problems in doing so that are overcome with logistic regression. One conceptual problem is that probabilities have a maximum of 1 and a minimum of 0. However the linear regression line can extend beyond 1 or 0 resulting in nonsensical results. The statistical problem with trying to fit a dichotomized variable in a linear regression is that the dependent variable violates the assumptions of normality and homoscedasticity (Pampel 2000).

In order to address this problem we can transform the dependent variable through a logit transformation. The logit transformation involves two steps: first we take the ratio of the probability to 1-the probability, or the odds of experiencing the event. Second we take the natural logarithm of the odds. The logit then equals the logged odds, represented as:

\[ L_i = \ln\left(\frac{P_i}{1-P_i}\right) \]

Logistic regressions can be used to estimate the probability of an occurrence of an event happening or that a given unit of analysis will have a particular attribute by fitting the data to a logistic curve. It is a generalized linear model used for binomial regression. The independent variables can be either categorical or continuous variables. Unlike ordinary linear regression, logistic regression does not assume that the relationship between the independent variables and the dependent variable is a linear one. Nor does it assume that the dependent variable or the error terms are distributed normally. The form of the model is:

\[ \log(p/(1-p)) = \beta_0 + \beta_1X_1 + \beta_2X_2 + \ldots + \beta_kX_k \]

where \( p \) is the probability that \( Y=1 \) and \( X_1, X_2, \ldots, X_k \) are the independent variables. The terms \( \beta_0, \beta_1, \beta_2, \ldots, \beta_k \) are the regression coefficients, which have to be estimated from the data. Logistic regression thus forms a predicted variable (log (p/(1-p))) which is a linear combination of the explanatory variables. The values of this predictor variable are then transformed into probabilities by the logit function. Such a function has the shape of an S (Pampel 2000).

One of the differences between logistic and linear regression techniques is the use of the \( R^2 \) statistic. \( R^2 \) is appealing because it reflects the proportion of variance in the dependent variable accounted for by the independent variables included in a given model. There is no precisely equivalent statistic with logistic regression. However, pseudo \( R^2 \) statistics have been developed as an analog to \( R^2 \) that are useful for comparing models. Instead researchers use the log
likelihood value to estimate model fit. The log likelihood value represents the likelihood that the data will be observed given the parameters. For example, a perfect or saturated model would have a log likelihood of 0 and the larger the log likelihood of the estimated model the closer the model is to a perfect model. This is calculated in relation to the baseline log likelihood (Pampel 2000).

One of the major strengths of logistic regression is the ability to use dichotomous variables as dependent variables. Also the interpretation, when the results are presented as log odds is intuitive to the researcher. I estimate logistic regression models using each of the three poverty variables as my dependent variables and include the main independent variable of indigeneity as well as other independent variables of interest, to test the likelihood of living in poverty. I present the results of the quantitative analysis in the next chapter.
Chapter 5: Quantitative Results
After having talked with Mapuche families in Santiago I made my way south towards the rural agricultural valleys, the homeland of the Mapuche. The main route leading south goes through a number of small agricultural towns as well as larger regional capitals. The capital town of the 10th region is Osorno, a small town with an equally small bus station. The hustle and bustle of Santiago had been left behind along with the air pollutants and noise. Because this was a small agricultural town I assumed that things would be less punctual but was surprised when I easily found a short bus that was running on time. Even the regional capital was too big for my purposes; I wanted to talk to people in tiny farm towns about being Mapuche in Chile. As the bus rolled on through the hills and fields I couldn't help but marvel at the natural beauty and tranquility of life here. I knew from experience that it was more complex than it seemed, however it was certainly cleaner and more peaceful than in Santiago.

As we approached the small town on the only paved road, I told the bus driver to drop me at the first stop just at the outskirts of the town where the new government subsidized housing project had created a new "Villa Nueva". I was supposed to meet Mario and Sandra, who had offered me their home during my visit there, however I had never met them and only knew of them through their extended kin in Santiago. I was worried about not being able to find them. When the driver signaled my stop I exited the bus to find that there were only two people waiting at the bus stop and I was the only one gringo getting off the 10 person bus so my fears were unwarranted; it was easy to finally meet them. I had talked with Sandra multiple times, although these were briefly on the cell phone (cell phone conversations cost a lot), and she assured me that they were very willing to talk about life in Chile and even take me further into the countryside to stay with their extended kin.

Mario and Sandra were both young, in their 30s, and had been together for over 10 years and had four children. Mario had been a fisherman for 15 years, spending months at sea each year, before deciding to give it up and stay closer to home. Mario loves to share experiences about his time at sea and he is quick to point out the dangers of working in the fishing industry; he survived multiple accidents and sunken ships although his coworkers were not as fortunate. He told me his story, a story typical of many young men in rural Chile that seek employment. This
search often leads them to port cities where jobs in the fishing industry might be more readily available to someone without an education or skills. Mario started young, in his late teens, riding out for weeks at a time on a boat in the Pacific Ocean looking for different types of fish. He said the work was dangerous. I asked if that was because of the weather, thinking that storms may claim the lives of fisherman in small boats. "It's because it's so competitive", explained Mario, "there's so many guys out there trying to make a fast buck, pushing the limits, hauling too much weight, staying out in bad weather... it's risky". He was now working on a blueberry plantation as an unskilled laborer. Recently there's been an increase in blueberry production in southern Chile (although Chileans were not known to eat blueberries), and they are exported to the US and Europe as well as other places. More people are being employed as agricultural workers on blueberry plantations and, like Mario, were happy to have employment. Mario works as a manual laborer picking, pruning blueberry bushes, applying agricultural needs to the crop, as well as harvesting. He says he doesn't mind the work because he's active and likes to do things with his hands. "Besides", he smiles "anything is better than dying at sea... plus I get to be close to my kids". Without the work on the blueberry plantation Mario knows he would have to migrate to a larger city to find work. He's not particularly interested in that idea.

Sandra, on the other hand, is not as opposed to migrating for work. Normally she works as a janitor down at the local school; the school that used to sit on the edge of town but has been surrounded by recent development. It is a boarding school for students that come from the rural countryside and who cannot afford to travel every day (whether because of time constraints, money, or lack of transportation). The students come on Mondays and stay throughout the week most of them returning Friday to their home village. The majority of these children are Mapuche who come from more rural isolated communities. In the school they live and interact with students from the town who are not boarders; this integration causes some problems that were mentioned before like being forced to speak Spanish. The students come into the towns to stay during the week for the free education and for the meals that are provided by the school system. Although there are inherent problems in this type of system, many rural families take advantage of the free education and meals for their children. Sandra sees a lot of these problems not only because she works at the school, but she also hears about them from her children who attend the same school. Although Sandra doesn't mind the work, it pays very little and she looks for any opportunity that she can for other work. Often she hears of these opportunities from relatives.
who live in Santiago.

Sandra works in Santiago on an occasional basis. Through contacts with friends and relatives in the city she’s often able to find short-term jobs which allows for the opportunity to earn some quick, well-needed cash. She likes the money but she does not like being so far away from her children. She continues to travel the 12 hour bus ride every few months in order to work for a month or two in Santiago. She stays with relatives and is able to save her money to take back to her family. Sandra takes advantage of the opportunity of travel and carries with her products made in the rural South including produce such as potatoes, so that she can sell them in Santiago. She can ship them as luggage on the bus and when she arrives in Santiago she can sell them to her extended kinship and friends who are quite willing to pay a cheaper price for fresh potatoes from the South. On her return trip back from Santiago to the South, Sandra takes goods, such as clothing and electronics not easily accessible in the small towns of the rural South. She is only now able to take frequent trips to Santiago for work because her husband Mario is working in the local plantation and can take care of the children when she is gone. When he worked in the fishing industry he would be gone traveling up and down the coast for weeks at a time while Sandra would stay home. Now Mario is able to take a greater part in caring for the children. Because of the nature and seasonality of agricultural work there are certain times of the year when the work is more intense and Mario spends more time working. During these times he coordinates with Sandra so that she can be in town to help with household.

Mario and Sandra live on a short, narrow street with semi-detached houses crowding both sides of the street. The houses were built by the government to address problems of housing and avoid squatter settlements that occur when rural inhabitants move to the cities looking for work. The outside of the houses are made of corrugated metal sheets, either blue or brown, which creek and bang loudly during the frequent tremors. Luis reports that during the earthquake of 2010, all the houses in the neighborhood, "because of all that metal made a tremendously loud and eerie noise". The houses come standard built by the government and after they are built people can apply to live there at a discount. These new housing developments are built in sections with each section containing a couple of streets. When each section is complete people are able to move in and after moving in families often change the structure of the house to accommodate their families. Many families eliminate the small back patio and add additional bedrooms. Mario
followed suit and with superb carpenter skills constructed additional bedrooms using the patio that was once in the back. This allowed them to expand the kitchen to accommodate their family size as well as provide space to host guests that frequently come from the countryside and need a place to stay while in town. Mario and Sandra, like many Chilean families that I've met, love to receive visitors and enjoy conversing around the table sipping hot tea and eating fresh baked bread. It was here in this kitchen around this table where we held many conversations about life in southern Chile, perceptions on poverty and economic development, and about how people make a living in small-town Chile. We also talked about Mapuche identity and whether growing up in the countryside or in the city influenced people's perceptions of being Mapuche.

Mario was born in another provincial town but had a less typical childhood. He was shuffled between extended kin spending some of his years in Santiago and some in smaller towns. He never graduated from high school and doesn't feel bad because of it, although he recognizes the differences in opportunities based on education. Because of this he insists that his children attend school and he even walks them to the school each morning. Mario does not think much about his ethnic heritage or Mapuche ancestors. He believes that he is Mapuche and he thinks that one of his grandparents might have had a Mapuche surname but he is not certain. He is not particularly bothered about it. He considers himself Chilean and he doesn't really understand the need for separate ethnic groups. "Why does it even matter?", he asks, "in today's world we are all part of the same country just trying to survive. He remembers derogatory comments that were made towards him as a teenager in Santiago about being an Indian but he brushes it off and says it didn't affect him.

Sandra, on the other hand, was raised in a family of subsistence farmers in the countryside. She knew from a young age that she was from a Mapuche family and she does have Mapuche surnames. She does not however speak any mapudungun. She considers Mapuche identity to be relevant in her life, but not any more so than being Chilean, or Catholic, or any other identifying characteristic. She doesn't think it bears any particular importance to who she is nor does she think she has a different worldview because she’s Mapuche. "I think it’s nice to know about my ancestors and stuff like that but it's not something I think about every day. I'm just trying to make a living and raise my kids in the right way. When I hear people talk about the conflicts in Mapuche communities I don't really think it applies to my life". I asked her if she had ever been
confronted by a member of her family or a member of the Mapuche community about her lack of enthusiasm for being Mapuche. She explained, "I guess a lot of my friends and family are Mapuche or at least they have Mapuche ancestors, but we don't really talk about that much."

I asked both of them whether or not their identity changed or they thought they were treated differently because of their ethnic background when they went to other places. Mario didn't think so. He believes that although there some people who are prejudiced against Mapuche, in his experience it's not something that came up. His colleagues come from similar economic situations and are more concerned with which football team he supports than whether or not he has Mapuche ancestors. Sandra, however, does notice a difference, especially when she goes to Santiago. She works informally in Santiago, often as a domestic labor in homes of wealthy families. She has heard conversations in these wealthy homes where people explicitly claim that they are Spanish or have Spanish ancestors and their attitudes towards indigenous groups is derogatory. "I just think it's silly. We are all Chilean... what difference does it make where your ancestors lived? Besides I bet they all have Mapuche ancestors somewhere in their family", she explained to me.

Introduction
This chapter presents the results of the quantitative analysis of national level household survey data. The purpose of the analysis was to gain a better understanding of the relationship between poverty and other independent factors, like ethnicity. In order to do this I first analyze the data at a more descriptive level. This analysis consists of comparing the Mapuche to the Non-Mapuche across relevant factors. After presenting the descriptive results, I present the multivariate results of the logistic regression models. These are nested models that show the relative impact of different independent variables on poverty, the dependent variable. Also, models are estimated using the different operationalizations of poverty to discern how varying measures of poverty obtain different understandings of the relationship between indigeneity and poverty.

Descriptive Statistics
The dependent variable for the analysis is poverty. To reiterate, in Chile poverty is defined by the government using an absolute poverty line that takes into consideration the basic costs of nutritional necessities as well as cost of living differences between rural and urban areas. To provide a somewhat more comprehensive statistical appraisal of poverty in Chile, I went beyond
the particular absolute measure that comes with the CASEN data, and used household income in comparison to alternative poverty thresholds. Table 5.1 presents the cost, in Chilean Pesos, for the amount needed to satisfy basic nutritional requirements of one person. The basic cost of the basket of food stuff is the same as the extreme poverty (indigent) line. This amount is then multiplied by a factor to calculate the absolute poverty line. In the case of urban areas the indigent line is doubled to create the poverty line, whereas for rural areas the indigent line is only multiplied by 1.75. This results in lower rural poverty thresholds, a reflection of the assumption that the cost of living is lower in rural areas.

<table>
<thead>
<tr>
<th>Table 5.1 Cost of Basic Basket of Goods and Poverty Line</th>
</tr>
</thead>
<tbody>
<tr>
<td>Chilean Pesos</td>
</tr>
<tr>
<td>---------------</td>
</tr>
<tr>
<td>Cost of Basket per Person</td>
</tr>
<tr>
<td>Indigent Line</td>
</tr>
<tr>
<td>Poverty Line</td>
</tr>
</tbody>
</table>

Source: CASEN definitions

Because the poverty line is created using household income, another way to look at poverty is to analyze group differences based on income quintiles. Table 5.2 presents the income quintile distribution for the Mapuche as well as the non-Mapuche groups. From table 2 we see that around 32 percent of the Mapuche fall within the first income quintile whereas less than 20 percent of the non-Mapuche fall within the same quintile. At the other end of the economic spectrum over 20 percent of the non-Mapuche are found in the highest quintile whereas slightly more than 10 percent of the Mapuche fall within this quintile. This gives us a simple baseline understanding of household income for which to judge other analyses of poverty. Based on income distribution alone we can see that the Mapuche have lower incomes compared to the non-Mapuche. From here I move on to analyses of the poverty line.
Table 5.2 Income Quintiles, Chile 2006 (per cent)

<table>
<thead>
<tr>
<th></th>
<th>Total</th>
<th>Mapuche</th>
<th>Non-Mapuche</th>
</tr>
</thead>
<tbody>
<tr>
<td>First (lowest)</td>
<td>20.0</td>
<td>31.7</td>
<td>19.4</td>
</tr>
<tr>
<td>Second</td>
<td>20.0</td>
<td>23.5</td>
<td>19.8</td>
</tr>
<tr>
<td>Third</td>
<td>20.0</td>
<td>18.5</td>
<td>20.1</td>
</tr>
<tr>
<td>Fourth</td>
<td>20.0</td>
<td>16.0</td>
<td>20.2</td>
</tr>
<tr>
<td>Fifth</td>
<td>20.0</td>
<td>10.3</td>
<td>20.5</td>
</tr>
</tbody>
</table>

Source: CASEN 2006

As explained previously, three poverty lines were calculated, the absolute measure provided in the data, the adjusted absolute measure, and a relative measure. The statistical significance of the difference between Mapuche and non-Mapuche groups was assessed using a Chi Square test. Table 5.3 presents these results. Based on the official poverty line given in the data, the national poverty level was 11.3 percent. After comparing Mapuche to non-Mapuche the results show that within the Mapuche group the poverty level is 15.2 percent and the non-Mapuche group is more similar to the national level at 11 percent. According to the Chi Square statistic this difference is statistically significant (P <.000).

Table 5.3 Poverty among Mapuche Households, Chile 2006 (per cent)

<table>
<thead>
<tr>
<th></th>
<th>Total</th>
<th>Mapuche</th>
<th>Non-Mapuche</th>
</tr>
</thead>
</table>
| Official Poverty Line
  Poor             | 11.3  | 15.2    | 11.0        | ***          |
| Adjusted Poverty Line
  Poor             | 13.0  | 20.6    | 12.6        | ***          |
| Relative Poverty Line
  Poor             | 15.5  | 24.2    | 15.0        | ***          |

N= 71353
Significance values: ***p<.000; **p<.001; *p<.05

Using the adjusted poverty line we see that the national level of poverty increases to 13.0 percent. The Mapuche level of poverty also increases to 20.6 percent with the non-Mapuche maintaining a lower proportion of poverty at 12.6 percent. Although, by using this adjusted measure, the proportion of people in poverty increases nationally and within both groups, the proportion of Mapuche in poverty increased more than the proportion of non-Mapuche in poverty. This difference between Mapuche and non-Mapuche groups remains statistically significant, and can likely be attributed in part to differences in rural residency; the Mapuche are more likely than the
Chilean population as a whole to live in rural areas. Accordingly, when I adjusted the national poverty line, to maintain the same poverty line across the rural and urban areas, the proportion of the Mapuche considered poor increased more so than the other group. The third measure of poverty, the relative poverty line, provides an alternative perspective which focuses on income inequality and distribution. Relative poverty, at the national level, is 15.5 percent, with about a quarter of the Mapuche group being relatively poor while the non-Mapuche group maintains a lower level (15%) of relative poverty. This difference, like the other differences, is statistically significant.

These descriptive results align with other publications on poverty in Chile (Mideplan 2006). The results show that poverty is more of a problem for the Mapuche population. Regardless of the poverty line used the Mapuche are significantly more likely to be poor than the non-Mapuche. In order to explain the differences between the Mapuche and non-Mapuche poverty rates, I start by looking at the differences between these groups along salient social and demographic factors.

Table 5.4 shows the demographic characteristics of the head of household as well as key household characteristics. Because head of household is selected to represent the household, there is a gender bias because traditionally the male is seen as the head of household. Only 30 percent of household heads are female. In this analysis the head of household represents the household as the unit of analysis. All households are included, including female headed households and one person households. The difference between the Mapuche and non-Mapuche on percent female-headed households is less than one percent is not significantly different.

There are some significant marital status differences between ethnic groups. Compared to others the Mapuche have a lower proportion married compared to the non-Mapuche (52.1% compared to 54.8%), and a higher proportion in both cohabiting and single categories. One reason for this difference could be the relationship between the Mapuche and the state. Marriages in Chile take place at the Registro Civil (Civil Registrar) or with an official employee of the state present at the ceremony. If this does not happen, then the couple may not be considered legally married. Because of difficult relations with the Chilean state authority, the Mapuche may choose to marry without state sanction.
Table 5.4: Demographic Characteristics by Ethnicity

<table>
<thead>
<tr>
<th></th>
<th>Total</th>
<th>Mapuche</th>
<th>Non-Mapuche</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Gender</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Female</td>
<td>29.7</td>
<td>28.9</td>
<td>29.8</td>
</tr>
<tr>
<td>Male</td>
<td>70.3</td>
<td>71.1</td>
<td>70.2</td>
</tr>
<tr>
<td><strong>Marital status</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Married</td>
<td>54.6</td>
<td>52.1</td>
<td>54.8 **</td>
</tr>
<tr>
<td>Cohabiting</td>
<td>14.5</td>
<td>16.5</td>
<td>14.3 ***</td>
</tr>
<tr>
<td>Single</td>
<td>10.3</td>
<td>12.6</td>
<td>10.2 ***</td>
</tr>
<tr>
<td>Anulled</td>
<td>0.4</td>
<td>0.3</td>
<td>0.4</td>
</tr>
<tr>
<td>Separated</td>
<td>9.0</td>
<td>7.4</td>
<td>9.1 ***</td>
</tr>
<tr>
<td>Divorced</td>
<td>0.3</td>
<td>0.3</td>
<td>0.3</td>
</tr>
<tr>
<td>Widowed</td>
<td>11.0</td>
<td>10.7</td>
<td>11.0</td>
</tr>
<tr>
<td><strong>Age groups</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Under 30</td>
<td>6.8</td>
<td>8.4</td>
<td>6.7 ***</td>
</tr>
<tr>
<td>30 to 39</td>
<td>17.7</td>
<td>22.0</td>
<td>17.5 ***</td>
</tr>
<tr>
<td>40 to 49</td>
<td>25.1</td>
<td>25.5</td>
<td>25.1</td>
</tr>
<tr>
<td>50 to 59</td>
<td>21.1</td>
<td>18.2</td>
<td>21.3 ***</td>
</tr>
<tr>
<td>60 to 69</td>
<td>15.0</td>
<td>13.8</td>
<td>15.1 *</td>
</tr>
<tr>
<td>70 and above</td>
<td>14.2</td>
<td>12.1</td>
<td>14.3 ***</td>
</tr>
<tr>
<td><strong>Household composition</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Mean No. People per HH</td>
<td>3.7</td>
<td>3.8</td>
<td>3.7 **</td>
</tr>
<tr>
<td>Mean No. Children per HH</td>
<td>1.1</td>
<td>1.3</td>
<td>1.1 ***</td>
</tr>
<tr>
<td><strong>Residential characteristics</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Rural</td>
<td>13.1</td>
<td>33.6</td>
<td>12.0 ***</td>
</tr>
<tr>
<td>Urban</td>
<td>86.9</td>
<td>66.4</td>
<td>88.0 ***</td>
</tr>
<tr>
<td>Santiago</td>
<td>40.4</td>
<td>29.1</td>
<td>41.0 ***</td>
</tr>
</tbody>
</table>

N= 71353

Age is another key demographic variable since it often relates to poverty and socioeconomic status with younger and older individuals more vulnerable than prime-aged adults. It is used here as an ordinal categorical variable. In the sample 6.8 percent of household heads are under the age of 30. The Mapuche have a slightly higher yet significantly different proportion of household heads under the age of 30 (8.4% compared to 6.7%). Household heads between the age of 30 and 39 make up about 18% of the sample. However the non-Mapuche households
have a slightly lower proportion in their 30s compared to the Mapuche (17.5% compared to 22%). A quarter of the sample for both Mapuche and non Mapuche groups are in their 40s. For all the age groups over 50 the Mapuche have a lower proportion in that age group compared to the non-Mapuche. In short, the Mapuche have a comparatively youthful age structure.

Regarding household size, at a national level the mean number of people per household is 3.7 people and the mean number of children per household is 1.1. The Mapuche group has a slightly higher average compared to the non-Mapuche group on both of these characteristics. While statistically significant, the differences are substantively trivial (3.8 compared to 3.7 and 1.3 compared to 1.1).

The residential location of the household- whether it is in a rural versus urban area- is also important for this analysis. In the sample 13.1 percent of households are located in rural areas. The Mapuche and non-Mapuche groups drastically differ in this regard. In the Mapuche group 33.6 percent live in rural areas compared to the only 12.0 percent of non-Mapuche who live in rural areas; a difference that is statistically significant (P<.000). Another important aspect of residence is not only urban but particularly the metropolis of Santiago. Overall about 40 percent live in the region of Santiago, but only 30.0 percent of the Mapuche people reside there. This is significantly less than the 41.0 percent of the non-Mapuche group who live in Santiago.

**Migration History**

Another demographic characteristic of importance is migration status because many Mapuche have migrated to urban centers looking for employment. Recent migrants may have a harder time finding well paid employment than Mapuche who have live or were born in urban areas. Here, migration is considered in two different ways: migration from place of birth and migration since 2002. For the total sample, 62.4 percent of household heads currently live in a different *comuna* (community) than the community where they were born. For the Mapuche group however this number is lower, only 53.1 percent of the Mapuche currently live somewhere different than where their mother lived when they were born. This is a statistically significant difference compared to the 62.9 percent of the non-Mapuche group (P <.000). At a national level only 8.9 percent currently live in a different community than they did in 2002. For the Mapuche group the proportion is 7.8 percent and for the non-Mapuche 8.9 percent This difference of about one
percent is only slightly significant (P<.05). From this analysis it appears that the Mapuche have been significantly less mobile – more rooted in place – than the non-Mapuche. This seems to go against the literature on indigenous migration in Chile that suggests the Mapuche may have migrated more. One thing to note however is the migration questions did not ask about temporary residence or short-term migration (sometimes referred to as residential mobility). They only asked whether they currently live somewhere other than when they were born or where they lived in 2002 (during the last census). The Mapuche may in fact migrate more, but on a more temporary basis. This will be address more in the chapter on the qualitative analysis.

**Table 5.5: Migration History by Ethnicity (percent)**

<table>
<thead>
<tr>
<th></th>
<th>Total</th>
<th>Mapuche</th>
<th>Non-Mapuche</th>
</tr>
</thead>
<tbody>
<tr>
<td>Migrated since birth</td>
<td>62.4</td>
<td>53.1</td>
<td>62.9 ***</td>
</tr>
<tr>
<td>Migrated since 2002</td>
<td>8.9</td>
<td>7.8</td>
<td>8.9 *</td>
</tr>
</tbody>
</table>

Source: CASEN 2006
N= 71353

**Education**

Human capital, often gained through formal education, is related to poverty with an increase in education correlating with a decrease in the likelihood of being poor. There are multiple ways to measure education. I use multiple available measures from the data to look at educational levels between ethnic groups. One measure is educational attainment. The responses for this question on the survey range from ‘no formal education’ to having ‘completed a university degree’. Table 5.6 shows educational levels by ethnicity. In the total sample only 3.7 percent of the household heads had no formal education. The non-Mapuche group has a similar proportion, 3.6 percent. The Mapuche however have a significantly higher proportion (6.8%), with no formal schooling. Comparisons across the other educational attainment categories likewise suggest the Mapuche are disadvantaged. Notably, a higher proportion of the Mapuche group has only completed basic education compared to non-Mapuche. Alternatively, a higher proportion of the non-Mapuche group (14.3%) has completed a University education compared to the Mapuche group (5.2%), a significant difference of 9.1 percent.
### Table 5.6: Educational Attainment Levels by Ethnicity (percent)

<table>
<thead>
<tr>
<th>Educational Attainment</th>
<th>Total</th>
<th>Mapuche</th>
<th>Non-Mapuche</th>
</tr>
</thead>
<tbody>
<tr>
<td>No formal education</td>
<td>3.7</td>
<td>6.8</td>
<td>3.6 ***</td>
</tr>
<tr>
<td>Basic education incomplete</td>
<td>21.4</td>
<td>34.2</td>
<td>20.8 ***</td>
</tr>
<tr>
<td>Completed basic education</td>
<td>14.8</td>
<td>18.1</td>
<td>14.6 ***</td>
</tr>
<tr>
<td>Secondary education incomplete</td>
<td>17.8</td>
<td>14.8</td>
<td>18 ***</td>
</tr>
<tr>
<td>Completed secondary education</td>
<td>23.5</td>
<td>19</td>
<td>23.7 ***</td>
</tr>
<tr>
<td>University education incomplete</td>
<td>4.9</td>
<td>1.9</td>
<td>5.1 ***</td>
</tr>
<tr>
<td>Completed a University education</td>
<td>13.9</td>
<td>5.2</td>
<td>14.3 ***</td>
</tr>
</tbody>
</table>

N=71353

Source: CASEN 2006

Some of the differences in education can be attributed to residential location. We would not expect higher levels of education in rural areas where education is not as easily accessible. In order to test this I look at educational attainment differences between rural and urban. Within rural and urban categories are also compared between ethnic groups. Table 5.7 shows these results. From the previous table we learned that 3.7 percent of the total sample had no formal education, but in rural areas this jumps to 9.8 percent of the total rural population in the sample. In urban areas however the percentage is much smaller; 2.8 percent of urban dwellers had no formal education. If we break this up even further we can see that within both rural and urban areas the Mapuche had a greater proportion with no formal education; 11.9 percent of rural Mapuche had no formal education compared to only 9.5 percent of the non-Mapuche rural people. In urban areas 4.2 percent of the Mapuche had no education, a significantly larger proportion than the 2.7 percent of the non-Mapuche who live in urban areas. The group with the highest proportion of the population that has a University education is the urban non-Mapuche. The group with the lowest amount of education is the rural Mapuche group. In short, the Mapuche educational disadvantage is not explained by their greater prevalence in rural areas.
### Table 5.7: Educational Levels by Ethnicity and Rural/Urban Residence (percent)

<table>
<thead>
<tr>
<th>Education Level</th>
<th>Rural Total</th>
<th>Rural Mapuche</th>
<th>Rural Non-Mapuche</th>
<th>Urban Total</th>
<th>Urban Mapuche</th>
<th>Urban Non-Mapuche</th>
</tr>
</thead>
<tbody>
<tr>
<td>No formal education</td>
<td>9.8</td>
<td>11.9</td>
<td>9.5 **</td>
<td>2.8</td>
<td>4.2</td>
<td>2.7 ***</td>
</tr>
<tr>
<td>Basic education incomplete</td>
<td>43.7</td>
<td>52.1</td>
<td>42.4 ***</td>
<td>18.1</td>
<td>25.1</td>
<td>17.8 ***</td>
</tr>
<tr>
<td>Completed basic education</td>
<td>20.8</td>
<td>20.2</td>
<td>20.9 ***</td>
<td>13.9</td>
<td>17.1</td>
<td>13.7 ***</td>
</tr>
<tr>
<td>Secondary education incomplete</td>
<td>11.3</td>
<td>8.5</td>
<td>11.8 **</td>
<td>18.8</td>
<td>17.9</td>
<td>18.8</td>
</tr>
<tr>
<td>Completed secondary education</td>
<td>10.0</td>
<td>6.1</td>
<td>10.6 ***</td>
<td>25.5</td>
<td>25.5</td>
<td>25.5</td>
</tr>
<tr>
<td>University education incomplete</td>
<td>1.0</td>
<td>0.3</td>
<td>1.2 **</td>
<td>5.5</td>
<td>2.7</td>
<td>5.6 ***</td>
</tr>
<tr>
<td>Completed a University education</td>
<td>3.2</td>
<td>0.8</td>
<td>3.6 ***</td>
<td>15.5</td>
<td>7.5</td>
<td>15.8 ***</td>
</tr>
</tbody>
</table>

N=71353

Source: CASEN 2006
Because education play such a significant role in the likelihood of obtaining employment and thus influencing poverty levels, it is important to understand the relationship between education and indigeneity. Access to free public education in Chile is relatively recent. The Mapuche disadvantage could be a factor of age. We know that access to education is dependent not only on availability of schools, but also on the availability of schools during someone’s lifetime, meaning that regardless of rural urban differences, age may also play a significant role in educational differences. Because education and access to education has improved over time age differences may contribute to the overall group differences in educational attainment. The next few tables show the differences in education levels by age group.

The first of these, Table 5.8, shows the percent of each group Mapuche and non-Mapuche, as well as the total, which have had no formal education. Clearly age is strongly correlated with educational attainment. The older groups have higher percentages of those with no formal education. For the youngest group, those under 30, there is only a fraction of a percent of the population that have had no formal education. As older groups are considered, the attainment differences become more apparent. Only a small proportion of those below the age of 50 have had no formal education for either the Mapuche or non-Mapuche groups, but over age 50 larger percentages are observed. This pattern is consistent with the massification of education that took place in Chile. For those in their 50s about 3 percent of household heads have had no formal education. This differs significantly between Mapuche and non-Mapuche groups with the Mapuche having a larger percentage with no formal education (6.2% compared to 2.4%). The older age groups maintain this trend. The differences between the Mapuche and non-Mapuche however increase in severity with age. For example the difference between the percentage of each group that has no formal education for those 50 to 59 only differs by 3.8 percentage points, however for those 70 and above the difference between the Mapuche and non-Mapuche is 13.9 percentage points. This seems to indicate that access to education improved over time but did more so for the non-Mapuche.
### Table 5.8: Percent no formal education by age group and Ethnicity

<table>
<thead>
<tr>
<th>Age Group</th>
<th>Total</th>
<th>Mapuche</th>
<th>Non-Mapuche</th>
</tr>
</thead>
<tbody>
<tr>
<td>Under 30</td>
<td>0.1</td>
<td>0.0</td>
<td>0.1</td>
</tr>
<tr>
<td>30 to 39</td>
<td>0.5</td>
<td>1.1</td>
<td>0.5 *</td>
</tr>
<tr>
<td>40 to 49</td>
<td>0.8</td>
<td>1.3</td>
<td>0.8</td>
</tr>
<tr>
<td>50 to 59</td>
<td>2.6</td>
<td>6.2</td>
<td>2.4 ***</td>
</tr>
<tr>
<td>60 to 69</td>
<td>7.0</td>
<td>14.1</td>
<td>6.7 ***</td>
</tr>
<tr>
<td>70 and above</td>
<td>12.7</td>
<td>26.0</td>
<td>12.1 ***</td>
</tr>
</tbody>
</table>

N=71353 Source: CASEN 2006

### Table 5.9: Mean Years of Education by age group and Ethnicity

<table>
<thead>
<tr>
<th>Age Group</th>
<th>Total</th>
<th>Mapuche</th>
<th>Non-Mapuche</th>
</tr>
</thead>
<tbody>
<tr>
<td>Under 30</td>
<td>12.2</td>
<td>10.71</td>
<td>12.27 ***</td>
</tr>
<tr>
<td>30 to 39</td>
<td>11.6</td>
<td>9.81</td>
<td>11.76 ***</td>
</tr>
<tr>
<td>40 to 49</td>
<td>10.7</td>
<td>8.66</td>
<td>10.76 ***</td>
</tr>
<tr>
<td>50 to 59</td>
<td>9.31</td>
<td>6.72</td>
<td>9.43 ***</td>
</tr>
<tr>
<td>60 to 69</td>
<td>7.27</td>
<td>4.76</td>
<td>7.39 ***</td>
</tr>
<tr>
<td>70 and above</td>
<td>5.93</td>
<td>3.37</td>
<td>6.05 ***</td>
</tr>
</tbody>
</table>

N=71353 Source: CASEN 2006

### Table 5.10: Percent Illiterate by age group and Ethnicity

<table>
<thead>
<tr>
<th>Age Group</th>
<th>Total</th>
<th>Mapuche</th>
<th>Non-Mapuche</th>
</tr>
</thead>
<tbody>
<tr>
<td>Under 30</td>
<td>0.4</td>
<td>2.0</td>
<td>0.3 **</td>
</tr>
<tr>
<td>30 to 39</td>
<td>1.2</td>
<td>2.7</td>
<td>1.1 ***</td>
</tr>
<tr>
<td>40 to 49</td>
<td>2.1</td>
<td>4.3</td>
<td>2.0 ***</td>
</tr>
<tr>
<td>50 to 59</td>
<td>4.1</td>
<td>10.5</td>
<td>3.8 ***</td>
</tr>
<tr>
<td>60 to 69</td>
<td>9.9</td>
<td>21.7</td>
<td>9.3 ***</td>
</tr>
<tr>
<td>70 and above</td>
<td>14.9</td>
<td>30.7</td>
<td>14.2 ***</td>
</tr>
</tbody>
</table>

N=71353 Source: CASEN 2006

Another way of measuring education is through years of education. Table 5.9 shows the average years of education by age group and also by ethnicity. This table confirms what the other table has shown about the trend of education. The younger groups have higher average years of education and the older groups a lower average. In every age group however the Mapuche have
a lower average amount of education than the non-Mapuche. The gap between the average years of education, between the Mapuche and non-Mapuche, seems to be closing evidenced by the smaller differences for the younger groups.

A final measure of education is literacy. Literacy is often used in studies across countries as one indicator in human development indices. We can assume a correlation between formal education and literacy, although it is possible for someone to learn to read and write without going to school. Therefore I include it in this analysis on education as a way to corroborate the other measures. Table 5.10 shows the total percent of population who are illiterate, as well as the percent within the Mapuche and non-Mapuche groups, all by age. Not surprisingly, the pattern mimics that for educational attainment, suggesting a younger population that is better educated. We can see however that illiteracy exists in all age groups and increases with age. As such, the age group with the highest illiteracy rates are the oldest, with the Mapuche having a significantly higher percentage illiterate than the non-Mapuche (30.7% compared to 14.2%, p<.000).

From the last three tables we can see that age, ethnicity and residence all play a part in educational attainment. Table 5.11 brings these factors together and analyzes the differences in years of education based on age group, ethnicity, and residence. This table shows that, indeed, the group with the least amount of education is the oldest age group, of the Mapuche who live in rural areas. Alternatively, the group with the most amount of education is that group whose members are non-Mapuche, live in urban areas, and who are under the age of 30.
<table>
<thead>
<tr>
<th>Age Group</th>
<th>Rural Total</th>
<th>Rural Mapuche</th>
<th>Rural Non-Mapuche</th>
<th>Urban Total</th>
<th>Urban Mapuche</th>
<th>Urban Non-Mapuche</th>
</tr>
</thead>
<tbody>
<tr>
<td>Under 30</td>
<td>9.4</td>
<td>8.5</td>
<td>9.5 *</td>
<td>12.4</td>
<td>11.2</td>
<td>12.5 ***</td>
</tr>
<tr>
<td>30 to 39</td>
<td>8.8</td>
<td>7.8</td>
<td>8.9 ***</td>
<td>12.0</td>
<td>10.5</td>
<td>12.1 ***</td>
</tr>
<tr>
<td>40 to 49</td>
<td>7.8</td>
<td>6.8</td>
<td>7.9 ***</td>
<td>11.1</td>
<td>9.5</td>
<td>11.1 ***</td>
</tr>
<tr>
<td>50 to 59</td>
<td>6.2</td>
<td>4.9</td>
<td>6.4 ***</td>
<td>9.8</td>
<td>7.7</td>
<td>9.8 ***</td>
</tr>
<tr>
<td>60 to 69</td>
<td>4.4</td>
<td>3.3</td>
<td>4.5 ***</td>
<td>7.8</td>
<td>5.9</td>
<td>7.9 ***</td>
</tr>
<tr>
<td>70 and above</td>
<td>3.4</td>
<td>2.6</td>
<td>3.5 ***</td>
<td>6.5</td>
<td>4.1</td>
<td>6.5 ***</td>
</tr>
</tbody>
</table>

N=71353 Source: CASEN 2006
**Employment**

Table 5.12 compares the Mapuche to the non-Mapuche in terms of employment status. Over 70 percent of both groups are employed, with the Mapuche actually slightly but insignificantly more likely to be employed than the non-Mapuche group (71.6% vs. 71.1). About a quarter of the total sample is inactive in the labor market. The differences between the Mapuche and non-Mapuche are slight and fail to achieve statistical significance. The last category of employment status is unemployed. These are people who are not employed but are looking for work. The overall unemployment rate is 2.6 percent. At 3.4 percent the Mapuche are slightly and significantly more likely than the non-Mapuche (2.6%) to be unemployed.

**Table 5.12: Employment Status by Ethnicity, (percent)**

<table>
<thead>
<tr>
<th>Status</th>
<th>Total</th>
<th>Mapuche</th>
<th>Non-Mapuche</th>
</tr>
</thead>
<tbody>
<tr>
<td>Employed</td>
<td>71.1</td>
<td>71.6</td>
<td>71.1</td>
</tr>
<tr>
<td>Unemployed</td>
<td>2.6</td>
<td>3.4</td>
<td>2.6 **</td>
</tr>
<tr>
<td>Inactive</td>
<td>26.3</td>
<td>25.0</td>
<td>26.4</td>
</tr>
</tbody>
</table>

N=71353 Source: CASEN 2006

It is not only employment that matters when relating to poverty, but also the industry in which one works. Therefore the next table, Table 5.13, shows the analysis of employment differences based on employment industry.

**Table 5.13: Employment Industry by Ethnicity, (percent)**

<table>
<thead>
<tr>
<th>Industry</th>
<th>Total</th>
<th>Mapuche</th>
<th>Non-Mapuche</th>
</tr>
</thead>
<tbody>
<tr>
<td>Agriculture</td>
<td>14.4</td>
<td>29.3</td>
<td>13.6 ***</td>
</tr>
<tr>
<td>Mining</td>
<td>2.3</td>
<td>0.6</td>
<td>2.4 ***</td>
</tr>
<tr>
<td>Manufacturing</td>
<td>14.1</td>
<td>12.4</td>
<td>14.2 **</td>
</tr>
<tr>
<td>Construction</td>
<td>11.8</td>
<td>14.1</td>
<td>11.6 ***</td>
</tr>
<tr>
<td>Utilities</td>
<td>0.6</td>
<td>0.4</td>
<td>0.6</td>
</tr>
<tr>
<td>Commerce</td>
<td>16.1</td>
<td>14.6</td>
<td>16.2 *</td>
</tr>
<tr>
<td>Transportation</td>
<td>9.3</td>
<td>6.7</td>
<td>9.5 ***</td>
</tr>
<tr>
<td>Finances</td>
<td>7.3</td>
<td>2.9</td>
<td>7.5 ***</td>
</tr>
<tr>
<td>Services</td>
<td>23.1</td>
<td>18.6</td>
<td>23.3 ***</td>
</tr>
<tr>
<td>Other</td>
<td>1.0</td>
<td>0.5</td>
<td>1.0 **</td>
</tr>
</tbody>
</table>

N=71353 Source: CASEN 2006

The biggest difference in employment industry, between the Mapuche and non-Mapuche, is in percentage that works in agriculture. For the Mapuche group about 30 percent work in the agricultural industries. This makes sense due to the traditional nature of the Mapuche society...
and economy, and because of the larger percentage of the Mapuche people who live in rural areas. The Mapuche also have a significantly higher percentage of people who work in construction compared to the non-Mapuche. Thus, even though the Mapuche do not differ significantly on their prevalence of employment, they do have a greater proportion that work in industries typified by more manual labor such as agriculture or forestry and fishing and construction work. This work can be seasonal and lower wage.

Overall, the descriptive analyses suggest that the Mapuche are more likely to be poor, whether basing poverty on income quintiles or multiple different poverty lines. They are also at a disadvantage when it comes to education, employment, and residence. They have a higher percentage in low educational attainment categories, greater illiteracy, a higher percent living in rural areas where access to education and jobs can be more sparse, and when they do find employment is more likely to be in the agricultural sector or in construction. I now move on to multivariate analyses to try to understand the relationship between these social and demographic factors on the prevalence of poverty.

**Multivariate Analyses**
The multivariate analyses, presented below, are an attempt to explain the relationship between poverty and indigeneity while taking into consideration other independent factors. The dependent variable for these analyses is poverty. As discussed above, I created three separate variables, corresponding to the three separate poverty lines: the official poverty line given in the CASEN data, an adjusted poverty line that uses the same income level for all households, and a relative poverty line which is calculated as one half of the median household income. I use each of these poverty variables as the dependent variable in separate models in order to get a better understanding of poverty. I use the same nested strategy for each analysis, starting with only the dependent variable and indigeneity, followed by other models with groups of dependent variables and control variables. In this way, I can see which independent variables account for the variation in poverty between the Mapuche and the non-Mapuche groups. This allows me to explain which factors affect the Mapuche households’ likelihood of living in poverty.

The multivariate analyses are presented on several tables, each with multiple regression models.
The first table, table 5.14, reports the results of regression models using the official poverty line as the dependent variable with other social and demographic variables included as independent variables. The results are presented as the odds ratios, or the likelihood of being poor. The first model only includes the independent variable of indigeneity. We can see that the Mapuche are 1.46 times more likely than the non-Mapuche group to be poor. Model two is the same analysis except that it takes into account the demographic characteristics of the household. After taking into consideration the demographic characteristics (model two) the Mapuche are only 1.29 times more likely to be poor than the non-Mapuche. Model two also shows us the likelihood of being poor for females headed households; female-headed households are 1.47 times more likely to be poor than male headed households.

Other demographic characteristics are also shown to be important in model two. Age is significantly related to poverty. The older the head of household the less likely they are to live in poverty compared to households with the head being under 30. Married households are significantly less likely to be poor than other non-married households. Household size is related to poverty with the larger the household the less likely to be poor. However, the number of children under the age of 18 in a household negatively relates to poverty, with households with more children being significantly more likely to be poor.

Model three includes migration status with the other independent variables. After including migration history, the likelihood of being poor for the Mapuche decreases from the previous model. The Mapuche in model three are 1.25 times more likely to be poor than the non-mapuche. Both migration from birth and migration since 2002 significantly and negatively relate to poverty. For those household heads that have move to a different community than where they were born, the chance of being poor decreases by 30 percent. For those who have moved since 2002, the chances of being poor are reduced by 15 percent. This indicates that those who move have a lower likelihood of being poor. This stands to reason since, as mentioned previously, those who move tend to do so to improve their economic opportunities. One of the reasons then that the Mapuche have higher poverty rates could be because they are more rooted in place, or only migrate on a temporary basis to work seasonal, low wage jobs.
Model four takes into account educational attainment and confirms the well-known negative relationship between education and poverty risks. Simply put, the better educated are less likely to be poor. For example, those with no formal education, are five times more likely to be poor than those with more than secondary education. After controlling for educational differences, the Mapuche are only 1.23 times more likely to be poor than the non-Mapuche group. This attenuation means that the lower education of the Mapuche helps account for their greater poverty risks.

Model five introduces employment circumstances. The employment results are what we would expect; those who are unemployed are significantly more likely than those who are employed in anything besides agriculture to be poor. This makes sense since poverty is measured by income, and employment is the usual way to acquire income. Without employment, we expect someone to be poor. Those employed in agriculture are more likely to be poor than those employed in other industries. After controlling for employment, the Mapuche are 1.37 times more likely than the non-Mapuche to be poor.

Model six takes into consideration the spatial aspects of residence by including a variable for rural or urban. According to this model rural residents are significantly less likely to be poor than their urban counterparts. The interesting thing about model six is that after controlling for rural differences the Mapuche are significantly more likely to be poor, even more so than in model one, indicating a suppression effect from the rural differences. The results at first may seem strange that rural households are less likely to be poor, however when we take into consideration that the dependent variable is the absolute poverty line measured using different measures for rural and urban places, it becomes more clear. More specifically, because the absolute poverty line is calculated differently for rural and urban places, when using this poverty measure, it ensconces differences in the relationship to poverty. For example, if a Mapuche household in an urban area has income just below the poverty line, they will be considered poor. If a Mapuche household with the same income level, but in a rural area, they will not be considered poor because the separate poverty line for rural areas. This situation then, makes it seem that urban areas are more poor than rural areas. Additional models below, take this effect into consideration for a more nuanced understanding of the rural urban difference in poverty.
Model seven is the full model that includes all independent variables of previous models. For the Mapuche the direction remains the same with the Mapuche more likely to be poor however this difference does not reach statistical significance. The full model shows that after controlling for household composition differences, education and employment differences, as well as rural and urban differences, the Mapuche people are not significantly more or less likely to be poor than the non-Mapuche.

Next, the same seven models are estimated again using two different operationalizations of poverty. The first alternate set of models uses an adjusted absolute poverty line that is uniform across households, that is, unlike the official measure it does not assume cost of living differences between rural and urban areas. The official poverty, used in the first set of models, attempts to adjust for cost of living differences between rural and urban areas. However, this measure only takes into consideration food prices. Although it is possible that food may be cheaper in rural areas because households can self-provision, this is no guarantee. Additionally, other household expenses are not taken into consideration with this measure. It is possible that other costs, such as transportation, are more expensive in rural areas, thus making the use of separate poverty lines misleading. This adjusted poverty line allows greater uniformity across space and allows a more thorough analysis of rural and urban differences. Table 5.15 reports the results of these models using the adjusted poverty line as the dependent variable. Model one includes only indigeneity and shows that the Mapuche are 1.8 times more likely to be poor than the non-Mapuche, a difference that is statistically significant. The other models follow the same pattern as Table 5.14, with each group of independent variables accounting for some of the variation in poverty.

When we compare the full models on each table one glaring difference is in the effect of rural residence. By using the official poverty line that adjusts for presumed cost of living differences rural households appear less likely than urban households to be poor. By using a more uniform dependent variable (the adjusted absolute poverty line) the results of the full model indicate that rural households are in fact 1.5 times more likely to be poor than urban households. Regarding
the Mapuche households, the full model of table 5.15 shows similar results to the previous table where the Mapuche are not significantly more or less likely to be poor than the non-Mapuche households.

Table 5.16 repeats the model estimation with the relative poverty measure as the dependent variable. This relative poverty measure helps shed light on income inequality more so than absolute poverty. The results however are very similar to the previous models (Tables 5.14 and 5.15). In the null model the Mapuche households are significantly more likely to be poor, however after controlling for demographic, education, employment, and rural residence, the results show that the Mapuche are not significantly more or less likely to be relatively poor compared to the non-Mapuche counterparts.

These three sets of models provide insight into the poverty situation in Chile. First, after controlling for other human capital and demographic characteristics and in two of the three sets of models, rural households are significantly more likely to be poor. The Mapuche situation remains the same across the three sets of models; the bivariate relationship indicates they are significantly more likely to be poor, but after controlling for other independent variables this effect disappears. These results seem to run contrary to some other findings on indigenous poverty that suggest that, regardless of the human capital or spatial differences, because of discrimination, indigenous groups are more likely to be poor (Patrinos 1994). This may not be the case in Chile. It could be that when given access to adequate education and employment, that the Mapuche can decrease their risks of being poor, comparable to the non-Mapuche. However, these results do not address issues of access to education and employment.
Table 5.14: Regression Models Predicting the Risks of Poverty; Absolute Poverty Line

<table>
<thead>
<tr>
<th>Demographics</th>
<th>Model 1</th>
<th>Model 2</th>
<th>Model 3</th>
<th>Model 4</th>
<th>Model 5</th>
<th>Model 6</th>
<th>Model 7</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mapuche</td>
<td>1.46***</td>
<td>1.29***</td>
<td>1.25***</td>
<td>1.23***</td>
<td>1.37***</td>
<td>1.52***</td>
<td>1.06</td>
</tr>
<tr>
<td>Non-Mapuche</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Female</td>
<td>1.47***</td>
<td>1.50***</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>1.01</td>
</tr>
<tr>
<td>Under 30</td>
<td>0.82***</td>
<td>0.81***</td>
<td>0.81***</td>
<td>0.82***</td>
<td>0.82***</td>
<td>0.82***</td>
<td>0.82***</td>
</tr>
<tr>
<td>30 to 39</td>
<td>0.78***</td>
<td>0.78***</td>
<td>0.78***</td>
<td>0.67***</td>
<td>0.48***</td>
<td>0.32***</td>
<td>0.32***</td>
</tr>
<tr>
<td>40 to 49</td>
<td>0.79***</td>
<td>0.79***</td>
<td>0.67***</td>
<td>0.67***</td>
<td>0.67***</td>
<td>0.67***</td>
<td>0.67***</td>
</tr>
<tr>
<td>50 to 59</td>
<td>0.86**</td>
<td>0.86*</td>
<td>0.86*</td>
<td>0.86*</td>
<td>0.86*</td>
<td>0.86*</td>
<td>0.86*</td>
</tr>
<tr>
<td>60 to 69</td>
<td>0.66***</td>
<td>0.66***</td>
<td>0.66***</td>
<td>0.66***</td>
<td>0.66***</td>
<td>0.66***</td>
<td>0.66***</td>
</tr>
<tr>
<td>70 and above</td>
<td>0.72***</td>
<td>0.72***</td>
<td>0.72***</td>
<td>0.72***</td>
<td>0.72***</td>
<td>0.72***</td>
<td>0.72***</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Education</th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>No Formal Education</td>
<td>5.11***</td>
<td>9.68***</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Incomplete Primary</td>
<td>5.20***</td>
<td>6.94***</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Complete Primary</td>
<td>4.57***</td>
<td>5.38***</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Incomplete Secondary</td>
<td>4.33***</td>
<td>4.42***</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Complete Secondary</td>
<td>2.59***</td>
<td>2.17***</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>More than Secondary (ref.)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Employment</th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Employed (ref.)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Employed in Agriculture</td>
<td>1.69***</td>
<td>1.54***</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Unemployed</td>
<td>8.87***</td>
<td>12.04***</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Inactive in Labor Market</td>
<td>1.70***</td>
<td>3.55***</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Residence</th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Urban (ref.)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Rural</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Intercept</td>
<td>0.12***</td>
<td>0.08***</td>
<td>0.11***</td>
<td>0.04***</td>
<td>0.09***</td>
<td>0.13***</td>
<td>0.03***</td>
</tr>
<tr>
<td>N</td>
<td>71353</td>
<td>71353</td>
<td>71353</td>
<td>71353</td>
<td>71353</td>
<td>71353</td>
<td>71353</td>
</tr>
<tr>
<td>-2loglikelihood</td>
<td>50076</td>
<td>44554</td>
<td>44319</td>
<td>48399</td>
<td>48227</td>
<td>50048</td>
<td>39660</td>
</tr>
<tr>
<td>Nagelkerke R2</td>
<td>0.002</td>
<td>0.149</td>
<td>0.155</td>
<td>0.048</td>
<td>0.052</td>
<td>0.002</td>
<td>0.27</td>
</tr>
<tr>
<td>Model Chi Square</td>
<td>57.3***</td>
<td>5579.6***</td>
<td>5814.1***</td>
<td>1733.7***</td>
<td>1906.1***</td>
<td>85.5***</td>
<td>10473.6***</td>
</tr>
</tbody>
</table>

Significant P values: * p<.05; ** p<.01; *** p<.001
### Table 5.15: Regression Models Predicting Poverty Risks; Adjusted Poverty Line

<table>
<thead>
<tr>
<th></th>
<th>Model 1</th>
<th>Model 2</th>
<th>Model 3</th>
<th>Model 4</th>
<th>Model 5</th>
<th>Model 6</th>
<th>Model 7</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Demographics</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Mapuche</td>
<td>1.81***</td>
<td>1.66***</td>
<td>1.59***</td>
<td>1.49***</td>
<td>1.61***</td>
<td>1.49***</td>
<td>1.05</td>
</tr>
<tr>
<td>Non-Mapuche (ref.)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Female</td>
<td>1.29***</td>
<td>1.32***</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>1.01</td>
</tr>
<tr>
<td>Under 30 (ref.)</td>
<td>0.86**</td>
<td>0.86**</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>0.82***</td>
</tr>
<tr>
<td>30 to 39</td>
<td>0.81***</td>
<td>0.81***</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>0.65***</td>
</tr>
<tr>
<td>40 to 49</td>
<td>0.82***</td>
<td>0.82***</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>0.46***</td>
</tr>
<tr>
<td>50 to 59</td>
<td>0.94</td>
<td>0.94</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>0.32***</td>
</tr>
<tr>
<td>60 to 69</td>
<td>0.76***</td>
<td>0.77***</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>0.18***</td>
</tr>
<tr>
<td>70 and above</td>
<td>0.75***</td>
<td>0.75***</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>0.84***</td>
</tr>
<tr>
<td>Married</td>
<td>0.89***</td>
<td>0.89***</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>0.86***</td>
</tr>
<tr>
<td>Non-married (ref.)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Household Size</td>
<td>2.19***</td>
<td>2.20***</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>2.31***</td>
</tr>
<tr>
<td>Number children</td>
<td>0.58***</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>0.74***</td>
</tr>
<tr>
<td>Migrated Since Birth</td>
<td>0.82***</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>0.98</td>
</tr>
<tr>
<td>Migrated Since 2002</td>
<td>0.82***</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Education</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>No Formal Education</td>
<td>6.89***</td>
<td>9.84***</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Incomplete Primary</td>
<td>6.64***</td>
<td>7.14***</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Complete Primary</td>
<td>5.57***</td>
<td>5.57***</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Incomplete Secondary</td>
<td>4.64***</td>
<td>4.51***</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Complete Secondary</td>
<td>2.76***</td>
<td>2.27***</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>More than Secondary (ref.)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Employment</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Employed (ref.)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Employed in Agriculture</td>
<td>2.83***</td>
<td>1.58***</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Unemployed</td>
<td>8.77***</td>
<td>11.77***</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Inactive in Labor Market</td>
<td>1.85***</td>
<td>3.45***</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Residence</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Urban (ref.)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Rural</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Intercept</td>
<td>0.14***</td>
<td>0.10***</td>
<td>0.14***</td>
<td>0.04***</td>
<td>0.10***</td>
<td>0.13***</td>
<td>0.03***</td>
</tr>
<tr>
<td>N</td>
<td>71353</td>
<td>71353</td>
<td>71353</td>
<td>71353</td>
<td>71353</td>
<td>71353</td>
<td>71353</td>
</tr>
<tr>
<td>-2loglikelihood</td>
<td>55012</td>
<td>49376</td>
<td>48804</td>
<td>52574</td>
<td>52566</td>
<td>54169</td>
<td>43167</td>
</tr>
<tr>
<td>Nagelkerke R2</td>
<td>0.005</td>
<td>0.145</td>
<td>0.159</td>
<td>0.067</td>
<td>0.067</td>
<td>0.026</td>
<td>0.288</td>
</tr>
<tr>
<td>Model Chi Square</td>
<td>175.2***</td>
<td>5811.2***</td>
<td>6383.1***</td>
<td>2613.6***</td>
<td>2621.9***</td>
<td>1018.8***</td>
<td>12020.7***</td>
</tr>
</tbody>
</table>

Significant P values: * p<.05; ** p<.01; *** p<.001
<table>
<thead>
<tr>
<th>Demographics</th>
<th>Model 1</th>
<th>Model 2</th>
<th>Model 3</th>
<th>Model 4</th>
<th>Model 5</th>
<th>Model 6</th>
<th>Model 7</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mapuche</td>
<td>1.81***</td>
<td>1.67***</td>
<td>1.59***</td>
<td>1.47***</td>
<td>1.61***</td>
<td>1.49***</td>
<td>1.05</td>
</tr>
<tr>
<td>Non-Mapuche (ref.)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Female</td>
<td>1.28***</td>
<td>1.31***</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>1.01</td>
</tr>
<tr>
<td>Under 30 (ref.)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>30 to 39</td>
<td>0.81***</td>
<td>0.79***</td>
<td>0.74***</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>40 to 49</td>
<td>0.77***</td>
<td>0.77***</td>
<td>0.60***</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>50 to 59</td>
<td>0.79***</td>
<td>0.78***</td>
<td>0.42***</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>60 to 69</td>
<td>0.88**</td>
<td>0.87***</td>
<td>0.28***</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>70 and above</td>
<td>0.80***</td>
<td>0.80***</td>
<td>0.18***</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Married</td>
<td>0.77***</td>
<td>0.78***</td>
<td>0.87***</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Non-married (ref.)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Household Size</td>
<td>0.91***</td>
<td>0.90***</td>
<td>0.88***</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Number children</td>
<td>2.16***</td>
<td>2.17***</td>
<td>2.29***</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Migrated Since Birth</td>
<td>0.57***</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Migrated Since 2002</td>
<td>0.77***</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Education</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>No Formal Education</td>
<td>7.61***</td>
<td></td>
<td>11.19***</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Incomplete Primary</td>
<td>7.27***</td>
<td></td>
<td>8.14***</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Complete Primary</td>
<td>6.03***</td>
<td></td>
<td>6.23***</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Incomplete Secondary</td>
<td>4.78***</td>
<td></td>
<td>4.74***</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Complete Secondary</td>
<td>3.10***</td>
<td></td>
<td>2.59***</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>More than Secondary</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Employment</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Employed (ref.)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Employed in Agriculture</td>
<td>2.83***</td>
<td>1.58***</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Unemployed</td>
<td>8.02***</td>
<td></td>
<td>10.94***</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Inactive in Labor Market</td>
<td>1.83***</td>
<td></td>
<td>3.41***</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Residence</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Urban (ref.)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Rural</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Intercept</td>
<td>0.18***</td>
<td>0.12***</td>
<td>0.17***</td>
<td>0.04***</td>
<td>0.12***</td>
<td>0.16***</td>
<td>0.04***</td>
</tr>
<tr>
<td>N</td>
<td>71353</td>
<td>71353</td>
<td>71353</td>
<td>71353</td>
<td>71353</td>
<td>71353</td>
<td>71353</td>
</tr>
<tr>
<td>-2logllikelihood</td>
<td>61294</td>
<td>55109</td>
<td>54377</td>
<td>58324</td>
<td>58733</td>
<td>60333</td>
<td>48053</td>
</tr>
<tr>
<td>Nagelkerke R2</td>
<td>0.005</td>
<td>0.148</td>
<td>0.164</td>
<td>0.075</td>
<td>0.066</td>
<td>0.028</td>
<td>0.297</td>
</tr>
<tr>
<td>Model Chi Square</td>
<td>197.0***</td>
<td>6381.4***</td>
<td>7114.3***</td>
<td>3166.5***</td>
<td>2757.5***</td>
<td>1158.1***</td>
<td>13437.6***</td>
</tr>
</tbody>
</table>

Significant P values: * p<.05; ** p<.01; *** p<.001
Table 5.16b Comparing Regression Models Using Relative Poverty Line, 2006, Chile

<table>
<thead>
<tr>
<th>Demographics</th>
<th>Mapuche</th>
<th>Non-Mapuche</th>
</tr>
</thead>
<tbody>
<tr>
<td>Female</td>
<td>1.08</td>
<td>1.01</td>
</tr>
<tr>
<td>Under 30 (ref.)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>30 to 39</td>
<td>0.66</td>
<td>0.75***</td>
</tr>
<tr>
<td>40 to 49</td>
<td>0.56**</td>
<td>0.60***</td>
</tr>
<tr>
<td>50 to 59</td>
<td>0.40***</td>
<td>0.42***</td>
</tr>
<tr>
<td>60 to 69</td>
<td>0.24***</td>
<td>0.28***</td>
</tr>
<tr>
<td>70 and above</td>
<td>0.25***</td>
<td>0.17***</td>
</tr>
<tr>
<td>Married</td>
<td>0.96</td>
<td>0.87***</td>
</tr>
<tr>
<td>Non-married (ref.)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Household Size</td>
<td>0.96</td>
<td>0.87***</td>
</tr>
<tr>
<td>Number children</td>
<td>2.15***</td>
<td>2.30***</td>
</tr>
<tr>
<td>Migrated Since Birth</td>
<td>0.77**</td>
<td>0.73***</td>
</tr>
<tr>
<td>Migrated Since 2002</td>
<td>0.82</td>
<td>0.93</td>
</tr>
</tbody>
</table>

| Education                     |         |             |
| No Formal Education           | 16.87***| 11.10***    |
| Incomplete Primary            | 11.92***| 8.11***     |
| Complete Primary              | 8.29*** | 6.26***     |
| Incomplete Secondary          | 8.58*** | 4.66***     |
| Complete Secondary            | 4.39*** | 2.57***     |
| More than Secondary (ref.)    |         |             |

| Employment                    |         |             |
| Employed (ref.)               |         |             |
| Employed in Agriculture       | 1.22    | 1.61***     |
| Unemployed                    | 3.35*** | 11.81***    |
| Inactive in Labor Market      | 2.44*** | 3.49***     |

| Residence                     |         |             |
| Urban (ref.)                  |         |             |
| Rural                         | 2.12*** | 1.44***     |
| Intercept                     | 0.02*** | 0.04***     |

| N                             | 5686    | 65667       |
| -2loglikelihood               | 3137    | 44852       |
| Nagelkerke R2                 | 0.32    | 0.29        |
| Model Chi Square              | 857.3***| 12447***    |

Significant P values: * p<.05; ** p<.01; *** p<.001

Table 5.16b shows the results of the same regression models for each group alone.
Within Mapuche Poverty

In this next section I show the results of a within-Mapuche group analysis and, in particular, one that pivots on how the Mapuche are defined. Reasonable critics might legitimately call into question results that are based on self-identification. While self-identification is by far the most common way to define race and ethnic identity among social scientists, it does open the door to respondents either hiding identity that they hold, or claiming an identity that may be tenuous at best. Fortunately the CASEN survey includes an item asking about indigenous language ability. Unfortunately the item is only asked of those who claim indigenous identity using the self-identification measure. The difference is that claiming to be indigenous is not equivalent to claiming to speak an indigenous language. The difference is that claiming to be indigenous is not equivalent to claiming to speak an indigenous language. The latter is both an indicator of a deeper and stronger claim to ethnicity, but also more readily verifiable. In the case of the Mapuche, that language is Mapudungun. Here I am curious about poverty differences between those Mapuche who state they speak Mapudungun, and those who do not. Spanish is the official language of Chile, and all politics, business, and education use Spanish. As the Mapuche have migrated to cities, and integrated into the larger Chilean society, the ability to speak Mapudungun is retained by older generations and by those who are more fully integrated into Mapuche society. Therefore, we would expect speakers to be older, live in rural areas, and maintain a more traditional lifestyle.

Table 5.17 presents the poverty differences in the same way as Table 5.3 with one variation, the Mapuche group is divided into those who speak the Mapuche language (hablante - the Spanish word conveying this ability) and those that do not speak the language (non-hablante). The difference in poverty between the hablante and the non-hablante is compared using the Chi-Square test of significance. The results show that for each poverty line those that speak their indigenous language are significantly more likely to be poor than those Mapuche who do not claim this ability (and who presumably only speak Spanish). A similar picture is seen in Table 5.18 which shows the income quintile distribution for the hablante and non-hablante groups. Those who speak the indigenous language are more clustered in the lowest two quintiles.
### Table 5.17: Poverty among Mapuche Households, Chile 2006 (per cent)

<table>
<thead>
<tr>
<th></th>
<th>Total</th>
<th>Non-Mapuche</th>
<th>Mapuche Non</th>
<th>Mapuche Hablante</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Official Poverty Line</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Poor</td>
<td>11.3</td>
<td>11.0</td>
<td>14.6</td>
<td>17.5</td>
</tr>
<tr>
<td><strong>Adjusted Poverty Line</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Poor</td>
<td>13.0</td>
<td>12.6</td>
<td>18.7</td>
<td>27.2</td>
</tr>
<tr>
<td><strong>Relative Poverty Line</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Poor</td>
<td>15.5</td>
<td>15.0</td>
<td>21.9</td>
<td>31.9</td>
</tr>
</tbody>
</table>

N=71353 Source: CASEN 2006

### Table 5.18: Income Quintiles, Chile 2006 (per cent)

<table>
<thead>
<tr>
<th></th>
<th>Total</th>
<th>Non-Hablante</th>
<th>Hablante</th>
</tr>
</thead>
<tbody>
<tr>
<td>First (lowest)</td>
<td>31.7</td>
<td>28.0</td>
<td>44.3</td>
</tr>
<tr>
<td>Second</td>
<td>23.5</td>
<td>22.5</td>
<td>26.6</td>
</tr>
<tr>
<td>Third</td>
<td>18.5</td>
<td>19.7</td>
<td>14.6</td>
</tr>
<tr>
<td>Fourth</td>
<td>16.0</td>
<td>17.6</td>
<td>10.4</td>
</tr>
<tr>
<td>Fifth</td>
<td>10.3</td>
<td>12.2</td>
<td>4.1</td>
</tr>
</tbody>
</table>

Source: CASEN 2006
Table 5.19: Demographic Characteristics by Ethnicity (Percent except where indicated)

<table>
<thead>
<tr>
<th>Gender</th>
<th>Total</th>
<th>Mapuche</th>
<th>Non-hablante</th>
<th>Mapuche Hablante</th>
</tr>
</thead>
<tbody>
<tr>
<td>Female</td>
<td>28.9</td>
<td>29.7</td>
<td>26.2</td>
<td></td>
</tr>
<tr>
<td>Male</td>
<td>71.1</td>
<td>70.3</td>
<td>73.8</td>
<td></td>
</tr>
<tr>
<td>Marital status</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Married</td>
<td>52.1</td>
<td>52.5</td>
<td>50.8</td>
<td></td>
</tr>
<tr>
<td>Cohabiting</td>
<td>16.5</td>
<td>17.0</td>
<td>14.6</td>
<td></td>
</tr>
<tr>
<td>Single</td>
<td>12.6</td>
<td>13.0</td>
<td>11.4</td>
<td></td>
</tr>
<tr>
<td>Anulled</td>
<td>0.3</td>
<td>0.3</td>
<td>0.4</td>
<td></td>
</tr>
<tr>
<td>Separated</td>
<td>7.4</td>
<td>8.0</td>
<td>5.1</td>
<td>**</td>
</tr>
<tr>
<td>Divorced</td>
<td>0.3</td>
<td>0.4</td>
<td>0.1</td>
<td></td>
</tr>
<tr>
<td>Widowed</td>
<td>10.7</td>
<td>8.7</td>
<td>17.6</td>
<td>***</td>
</tr>
<tr>
<td>Age groups</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Under 30</td>
<td>8.4</td>
<td>9.3</td>
<td>5.1</td>
<td>***</td>
</tr>
<tr>
<td>30 to 39</td>
<td>22.0</td>
<td>24.2</td>
<td>14.3</td>
<td>***</td>
</tr>
<tr>
<td>40 to 49</td>
<td>25.5</td>
<td>26.9</td>
<td>20.9</td>
<td>***</td>
</tr>
<tr>
<td>50 to 59</td>
<td>18.2</td>
<td>17.4</td>
<td>20.9</td>
<td>*</td>
</tr>
<tr>
<td>60 to 69</td>
<td>13.8</td>
<td>12.4</td>
<td>18.5</td>
<td>***</td>
</tr>
<tr>
<td>70 and above</td>
<td>12.1</td>
<td>9.7</td>
<td>20.2</td>
<td>***</td>
</tr>
<tr>
<td>Household composition</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Mean No. People per HH</td>
<td>3.8</td>
<td>3.8</td>
<td>4.0</td>
<td>**</td>
</tr>
<tr>
<td>Mean No. Children per HH</td>
<td>1.3</td>
<td>1.3</td>
<td>1.2</td>
<td></td>
</tr>
<tr>
<td>Mean Age of HH</td>
<td>34.3</td>
<td>33.4</td>
<td>37.4</td>
<td>***</td>
</tr>
<tr>
<td>Residential characteristics</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Rural</td>
<td>33.6</td>
<td>26.6</td>
<td>57.2</td>
<td>***</td>
</tr>
<tr>
<td>Urban</td>
<td>66.4</td>
<td>73.4</td>
<td>42.8</td>
<td>***</td>
</tr>
<tr>
<td>Santiago</td>
<td>29.1</td>
<td>29.9</td>
<td>26.3</td>
<td>*</td>
</tr>
</tbody>
</table>

N=71353 Source: CASEN 2006

Table 5.19 compares the hablante and non-hablante groups of Mapuche according to their distribution across the demographic and spatial variables to see how they differ and to provide an indication of what variables will be important to analyze in the multivariate analysis. The group that speaks the language is a significantly older and live in households with a slightly greater number of members. Also noteworthy is that well over half of respondents who speak the language live in rural areas, which compares to only about one quarter among those who do not speak the language.
Table 5.20 shows the migration history for the separate Mapuche categories. Those who speak the language may be more rooted in place and less likely to have moved to places where their native tongue would not be used and would be a cue for discrimination by others. Those that speak the language have a significantly smaller portion that has migrated, whether that is migration since birth or migration since 2002.

Table 5.20: Migration History by Ethnicity and Language Ability

<table>
<thead>
<tr>
<th></th>
<th>Total</th>
<th>Mapuche Hablante</th>
<th>Mapuche Non-hablante</th>
<th>Mapuche Hablante</th>
</tr>
</thead>
<tbody>
<tr>
<td>Migrated since birth</td>
<td>53.1</td>
<td>56.3</td>
<td>42.4 ***</td>
<td></td>
</tr>
<tr>
<td>Migrated since 2002</td>
<td>7.8</td>
<td>8.6</td>
<td>5.1 **</td>
<td></td>
</tr>
<tr>
<td>N=5686 Source: CASEN 2006</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

The following table, Table 5.21, presents the results of employment differences between those that speak the language and those that do not. Again, employment is an important factor relating to poverty and if the Mapuche in the hablante group are discriminated against in the labor market, this may show up in an analysis on employment. Those who speak the language have a significantly lower percentage of the group who is employed in significantly larger percentage who are inactive in the labor market. This makes sense since those who are hablante are apt to be older and retired.

Table 5.21: Employment Status by Ethnicity, (percent)

<table>
<thead>
<tr>
<th></th>
<th>Total</th>
<th>Mapuche Hablante</th>
<th>Mapuche Non-hablante</th>
<th>Mapuche Hablante</th>
</tr>
</thead>
<tbody>
<tr>
<td>Employed</td>
<td>71.6</td>
<td>73.7</td>
<td>64.7 ***</td>
<td></td>
</tr>
<tr>
<td>Unemployed</td>
<td>3.4</td>
<td>3.6</td>
<td>2.7</td>
<td></td>
</tr>
<tr>
<td>Inactive</td>
<td>25.0</td>
<td>22.8</td>
<td>32.5 ***</td>
<td></td>
</tr>
<tr>
<td>N=5686 Source: CASEN 2006</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Table 5.22 shows differences between the hablante and non-hablante in their distribution across industry of employment. Whereas about 30 percent of all Mapuche are employed in agriculture, among those who speak the native language fully, 45 percent are so employed. Those Mapuche who have lost or never had their native language are more likely to be employed in commerce, transportation and the financial sector.
Table 5.22: Employment Industry by Ethnicity, (Percent)

<table>
<thead>
<tr>
<th>Industry</th>
<th>Total</th>
<th>Mapuche</th>
<th>Mapuche</th>
<th>Mapuche</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>N=5686</td>
<td>Source: CASEN 2006</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Agriculture</td>
<td>29.3</td>
<td>25.4</td>
<td>44.5 ***</td>
<td></td>
</tr>
<tr>
<td>Mining</td>
<td>0.6</td>
<td>0.6</td>
<td>0.2</td>
<td></td>
</tr>
<tr>
<td>Manufacturing</td>
<td>12.4</td>
<td>12.5</td>
<td>12.0</td>
<td></td>
</tr>
<tr>
<td>Construction</td>
<td>14.1</td>
<td>14.6</td>
<td>12.0</td>
<td></td>
</tr>
<tr>
<td>Utilities</td>
<td>0.4</td>
<td>0.4</td>
<td>0.4</td>
<td></td>
</tr>
<tr>
<td>Commerce</td>
<td>14.6</td>
<td>15.5</td>
<td>11.1 **</td>
<td></td>
</tr>
<tr>
<td>Transportation</td>
<td>6.7</td>
<td>7.7</td>
<td>2.8 ***</td>
<td></td>
</tr>
<tr>
<td>Finances</td>
<td>2.9</td>
<td>3.3</td>
<td>1.1 **</td>
<td></td>
</tr>
<tr>
<td>Services</td>
<td>18.6</td>
<td>19.4</td>
<td>15.9</td>
<td></td>
</tr>
<tr>
<td>Other</td>
<td>0.5</td>
<td>0.6</td>
<td>0.0</td>
<td></td>
</tr>
</tbody>
</table>

Table 5.23 presents results of educational differences. Consistent with the portrait of disadvantage that is emerging here, those Mapuche who speak the language have lower levels of educational attainment. For all Mapuche heads of households just under 7 percent have had no formal education. However, for the group that speaks the language, twice that rate, or 14.5 percent have had no formal education, a significantly difference. Conversely, those who speak the language are less likely to be found among those with high educational achievement; 1.3 percent of those that speak the language have completed a university education.

Table 5.23: Educational Levels by Ethnicity

<table>
<thead>
<tr>
<th>Educational Level</th>
<th>Total</th>
<th>Mapuche</th>
<th>Mapuche</th>
<th>Mapuche</th>
</tr>
</thead>
<tbody>
<tr>
<td>No formal education</td>
<td>6.8</td>
<td>4.5</td>
<td>14.5 ***</td>
<td></td>
</tr>
<tr>
<td>Basic education incomplete</td>
<td>34.2</td>
<td>30.2</td>
<td>47.6 ***</td>
<td></td>
</tr>
<tr>
<td>Completed basic education</td>
<td>18.1</td>
<td>18.9</td>
<td>15.6 *</td>
<td></td>
</tr>
<tr>
<td>Secondary education incomplete</td>
<td>14.8</td>
<td>16.7</td>
<td>8.1 ***</td>
<td></td>
</tr>
<tr>
<td>Completed secondary education</td>
<td>19.0</td>
<td>21.0</td>
<td>12.2 ***</td>
<td></td>
</tr>
<tr>
<td>University education incomplete</td>
<td>1.9</td>
<td>2.3</td>
<td>0.8 **</td>
<td></td>
</tr>
<tr>
<td>Completed a University education</td>
<td>5.2</td>
<td>6.4</td>
<td>1.3 ***</td>
<td></td>
</tr>
</tbody>
</table>

N=5686 Source: CASEN 2006

Clearly there are differences within the Mapuche group. Some of these differences can be
attributed to differences between those who speak the Mapuche language and those who do not. For those that do speak the language they are significantly older, less educated, have migrated less, are involved less in the labor market, and for those in the labor market they are significantly more prevalent in agriculture and a greater proportion live in rural areas.

Table 5.24 presents the results of logistic regression models predicting the likelihood of living in poverty. These models are similar to the ones shown previously except that the Mapuche dummy variable is now a three category variable consisting of the non-Mapuche, the Mapuche who do not speak the language and the Mapuche who do not speak the language. These regression models are very similar to those previously reported, except that they do underscore the disadvantages of the hablante group described above.

Model one indicates that the Mapuche people who can speak the native language are 2.6 times more likely to be poor than the non-Mapuche. The group that does not speak the language are only 1.6 times more likely to be poor than the non-Mapuche. After controlling for the other independent variables the non-speakers are not significantly more are less likely to be poor than the non-Mapuche. However, the results of the full model show that even after controlling for other correlates of poverty, the hablante group remains 1.35 times more likely to be poor than the non-Mapuche, a significant difference.

So we see that the Mapuche who speak the language even after controlling for other factors, are still significantly more likely to be poor compared to the non-Mapuche. So one can imagine the picture of Mapuche poverty in Chile as households with older household heads, living in rural areas and working in the agricultural sector or inactive in the labor market. Suggesting that those who are less integrated into the larger Chilean society are more poor, at least by Chilean society standards. One could then ask the question, why did some Mapuche people integrate into the Chilean society? What is about those who remained in rural areas, working in agriculture, that kept them there? How do they view their situation of having greater risks of living in poverty? To understand this better, I used qualitative techniques to ask more in-depth questions about the relationship between poverty and Mapuche identity.
Table 5.24: Regression Models Predicting Poverty; Adjusted Poverty Line

<table>
<thead>
<tr>
<th>Demographics</th>
<th>Model 1</th>
<th>Model 2</th>
<th>Model 3</th>
<th>Model 4</th>
<th>Model 5</th>
<th>Model 6</th>
<th>Model 7</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mapuche Hablante</td>
<td>2.60***</td>
<td>2.63***</td>
<td>2.40***</td>
<td>1.84***</td>
<td>2.12***</td>
<td>1.76***</td>
<td>1.35**</td>
</tr>
<tr>
<td>Mapuche Non-Hablante</td>
<td>1.60***</td>
<td>1.42***</td>
<td>1.38***</td>
<td>1.37***</td>
<td>1.46***</td>
<td>1.40***</td>
<td>0.96</td>
</tr>
<tr>
<td>Non-Mapuche (ref.)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Female</td>
<td>1.30***</td>
<td>1.33***</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>1.01</td>
</tr>
<tr>
<td>Under 30 (ref.)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>30 to 39</td>
<td>0.86**</td>
<td>0.85**</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>0.82***</td>
</tr>
<tr>
<td>40 to 49</td>
<td>0.81***</td>
<td>0.81***</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>0.65***</td>
</tr>
<tr>
<td>50 to 59</td>
<td>0.81***</td>
<td>0.82***</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>0.45***</td>
</tr>
<tr>
<td>60 to 69</td>
<td>0.93</td>
<td>0.94</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>0.31***</td>
</tr>
<tr>
<td>70 and above</td>
<td>0.75***</td>
<td>0.77***</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>0.18***</td>
</tr>
<tr>
<td>Married</td>
<td>0.75***</td>
<td>0.75***</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>0.84***</td>
</tr>
<tr>
<td>Non-married (ref.)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Household Size</td>
<td>0.89***</td>
<td>0.89***</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>0.86***</td>
</tr>
<tr>
<td>Number children</td>
<td>2.19***</td>
<td>2.20***</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>2.31***</td>
</tr>
<tr>
<td>Migrated Since Birth</td>
<td>0.58***</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>0.74***</td>
</tr>
<tr>
<td>Migrated Since 2002</td>
<td>0.82***</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>0.97</td>
</tr>
</tbody>
</table>

Education

| No Formal Education | 6.82*** |         |         |         |         |         | 9.78*** |
| Incomplete Primary | 6.62*** |         |         |         |         |         | 7.13*** |
| Complete Primary | 5.57*** |         |         |         |         |         | 5.58*** |
| Incomplete Secondary | 4.64*** |         |         |         |         |         | 4.52*** |
| Complete Secondary | 2.76*** |         |         |         |         |         | 2.27*** |
| More than Secondary (ref.) |        |         |         |         |         |         |         |

Employment

| Employed (ref.) |        |         |         |         |         |         |         |
| Employed in Agriculture | 2.82*** |         |         |         |         |         | 1.58*** |
| Unemployed | 8.77*** |         |         |         |         |         | 11.79*** |
| Inactive in Labor Market | 1.84*** |         |         |         |         |         | 3.46*** |

Residence

| Urban (ref.) |        |         |         |         |         |         |         |
| Rural | 0.14*** | 0.10*** | 0.14*** | 0.04*** | 0.10*** | 0.13*** | 0.03*** |
| Intercept | 2.31*** | 1.52*** |         |         |         |         |         |

| N | 71353 | 71353 | 71353 | 71353 | 71353 | 71353 | 71353 |
| -2log likelihood | 54986 | 49339 | 48774 | 52564 | 52551 | 54163 | 43157 |
| Nagelkerke R2 | 0.005 | 0.146 | 0.16 | 0.067 | 0.067 | 0.026 | 0.288 |
| Model Chi Square | 202.0*** | 5848.4 | 6413.3*** | 2623.4*** | 2636.9*** | 1024.7*** | 12030.7*** |

Significant P values: * p<.05; ** p<.01; *** p<.001
Chapter 6: Qualitative results

It was a long gravel road that we had been traveling. We were visiting a rural Mapuche community and we had one last stop to make before we headed back to town. It was early in the morning, the air was crisp, and I could still see the dew glistening on the grass. I was traveling with a friend who worked for a nonprofit organization that helps Mapuche communities deal with legal issues relating to land rights. He knows many families in the community and he said I could ride with him as he went to visit a particular family. The family had been having some legal troubles with land ownership. The head of the family was an older gentleman who was trying to pass the land onto his son and was having troubles because of all the paperwork and bureaucracy involved. I was along for the ride and my friend said that they were a friendly family and would be more than willing to answer any questions I had. We parked our car on some bare earth that had only a few scraggly weeds growing. The only sign of life was a few chickens scratching at the weeds under a tree. The house was a one-story ranch with some tin roofing. The walls were made of roughhewn lumber and instead of glass in the windows there hung cloth. As we approached, the door opened and a wrinkled old lady stepped out across the threshold. She greeted us warmly and asked us to come in. We stepped into a dark room, light coming in through cracks in the walls and from a small metal grate where red coals glowed. After asking us to sit down the old woman shuffled about making us a cup of tea. The room smelled of smoke, and as my eyes adjusted to the darkness I could make out other figures in the room. There was a small cot size bed in the corner where an old man was sleeping, and there was a mangy dog lying on the dirt floor near the cot. As I sat down on a piece of log I noticed that the house was only made of two rooms. From the other room came the sound of a baby crying. "I hope you like eggs", the old woman stated, as she knelt down near the hot coals holding a frying pan with fresh eggs in it. It was more a statement than a question. From the back room came a young couple, maybe in their 20s, holding a small child that was still whimpering. It was cold inside the house and they were all bundled up. It was the son, his wife, and their young child. Because they knew my friend they smiled, happy to greet him again.

As the conversation began, and they finished the simple pleasantries of small talk, they started to express their concerns about the legal process and the frustrations that they had been feeling lately. The head of household is sick. I could see the large tumor protruding from the side of his
head. They couldn't afford the transportation costs to take him to the doctor in Santiago for treatment. They knew he would probably pass soon which is why they were trying to figure out the legal situation of land ownership. The old woman is his wife and she takes care of him as well as taking care of an adult daughter who is mentally disabled and also lives there. The son and his wife have not been able to find employment and so they were also living with the family with their new baby. There were not enough eggs to go around and the son watched as I ate his breakfast, swallowing my guilt with every bite.

As my friend had told me, they were very willing to answer any questions. I started with simple questions addressing them to the matriarch. I asked her where she grew up and about her life as a child. She told me she grew up not far from there. She seemed happy reminiscing about her youth. I started to feel slightly uncomfortable knowing the types of questions I really wanted to ask. I wanted to ask her what poverty meant, to ask what it was like to be a Mapuche person living in a rural area of southern Chile and how she felt about her socioeconomic situation, but those are hard questions to ask while huddled around some coals in a shack. "Times were tough back then", the old woman continued about her childhood, "we used to have to walk every day and fetch water from the river and carry it back to the ruka where we lived". She continued on describing the circumstances of her community. The son looked bored, and the daughter-in-law tried to keep the baby from crying. As I listened, my mind started to wander about what it must be like to live in such a situation. This was clearly a situation of material deprivation, and most people I know would describe it as poverty. "We were poor back then", I snapped back to awareness of what the old woman was saying. "What do you mean?" I asked politely. "We were poor because we didn't have bread", came the response, as if quite obvious. In her youth they could not afford to grind their grain and so bread was a treasured commodity. They use to eat whole-grain cakes but now because of pensions and handouts from the government bread was provided. "And I was told", she continued excitedly, "that we would be getting electricity in this community real soon". I couldn't help but smile at her excitement.

**Introduction**

This chapter presents the results of the qualitative analysis, which was conducted in Chile over a few years' time. In accordance with a mixed method, sequential design, interviews took place after the quantitative analysis. Interview questions were chosen in order to help supplement the
quantitative research. Poverty, indigenous identity, and how people survive can be studied using the quantitative data available, however because I wanted a more nuanced understanding of these issues I chose to interview people so they could provide details that were absent from the statistical data. Although the quantitative data come from a nationally representative household sample, the survey instrument was limited to specific questions about indigenous identity, poverty, and factors that are associated with the likelihood of living in poverty. From the quantitative analysis I found that indigeneity is correlated with poverty when using a quantified poverty line. Other factors also matter including rural residence, education levels and employment. However, the quantitative data are limited in the details of how the Mapuche understand the contemporary situation of identity and poverty in Chile. The qualitative analysis, which I present below, helps to corroborate the quantitative findings and provide personal experience and a greater understanding of what it means to be Mapuche in Chile today.

In this research I am specifically interested in perceptions of poverty and how the Mapuche people define poverty for themselves. This concern has practical implications. If public policy and government programs exist to improve the impoverished situations of people, and if the way people view poverty has implications for the effectiveness of these programs, then it becomes important to understand the ways in which indigenous people view poverty. If ameliorative policies do not take into consideration the views of the Mapuche, or if the policies promote solutions contrary to the cultural beliefs of the Mapuche, then at best they will be less effective and, at worst may even create further problems. One example would be when the government, attempting to stimulate the local economy, builds infrastructure to improve transportation to markets without taking into consideration where the road is built. Without consultation from local community rebuild the road on sacred ancestral grounds causing further conflict and disruption of cultural events. Simply for practical reasons then it becomes imperative that we gain further understanding into perceptions of poverty and livelihood choices (Hargreaves, Morison et al. 2007).

The qualitative analysis comes from conversations, in-depth interviews with individuals, and a small number of focus group discussions that took place during multiple trips to Chile between 2009 and 2011. I conducted all interviews with respondents in Spanish. Because of the
sequential design of the mixed-methods research project, I was able to interview people prior to the quantitative analysis as well as after. This created a unique opportunity for the respondents to influence the survey data analysis as well as reflect on its results. Figure 6.1 shows a timeline of the research process.

**Table 6.1: Timeline of Research Process**

<table>
<thead>
<tr>
<th>Activity</th>
<th>Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>Preliminary Research Visits</td>
<td>Summer 2007</td>
</tr>
<tr>
<td></td>
<td>Summer 2008</td>
</tr>
<tr>
<td>Survey Data Analysis</td>
<td>Fall 2008</td>
</tr>
<tr>
<td></td>
<td>Spring 2009</td>
</tr>
<tr>
<td>In-depth Interviews</td>
<td>Summer 2010</td>
</tr>
<tr>
<td></td>
<td>Summer 2011</td>
</tr>
</tbody>
</table>

During these interviews, I was able to sit down with people, either in their homes, or offices, and ask them their views and experience with poverty and how it relates to being Mapuche. I wanted to hear people's life experiences and how they connected with indigeneity. So I asked him about where they grew up and how communities have changed over time. I asked them about their views on poverty and economic development and what their thoughts were about the indigenous situation in Chile today. I also asked people about their experiences with discrimination and whether they had experienced discrimination and, if so, how it happened and how it made them feel. And because poverty is correlated with education I asked people about the education system, their education experience and how they think education in Chile has changed over time (see appendix for interview guide). Most of the interviews started with basic questions but I allowed the conversation to meander because I wanted people to feel free to discuss issues they felt were important in regards to Mapuche poverty.

The average interview time was about an hour. I conducted all interviews in Spanish and in addition I transcribed and analyzed the interviews. In all, I gathered over 60 hours of interview data and notes, which comprised over 100 pages of transcribed interviews. Not all interviews were recorded because of respondents comfort levels, and not all interviews were transcribed due to their lack of relevancy. Some respondents were interviewed multiple times during the process.
In the end, I interviewed over 50 people, 9 of whom were interviewed multiple times. Some respondents were interviewed multiple times because they participated during the preliminary research trips as well as during in-depth interviews.

Respondents were selected, as explained in the chapter on methodology, through purposive and snow ball sampling strategies. The key informant interviews consist of interviews with people either working in a government agency dealing with indigenous issues, academics researching some aspect of indigenous issues, or those working for an NGO dealing with indigenous problems. Figure 6.2 shows the breakdown of respondents across geographic type. The majority of the key informant interviewees lived in urban areas, indicated on figure 6.2. However, the academics as well as government workers all currently work, or have worked in both urban and rural areas. Only two of the key informant respondents lived in rural areas during the time of the interview. For a more detailed breakdown of the respondents, their age and gender, see appendix 3.

Table 6.2: Breakdown of Respondents

<table>
<thead>
<tr>
<th>Residence</th>
<th>Gender</th>
<th>Age</th>
<th>Total</th>
<th>Urban</th>
<th>Rural</th>
<th>Male</th>
<th>Female</th>
<th>Young</th>
<th>Middle</th>
<th>Aged</th>
<th>Senior Citizen</th>
</tr>
</thead>
<tbody>
<tr>
<td>Key Informant</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Academics</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Government workers</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>NGOs</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Respondents</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Household members</td>
<td>42</td>
<td>44</td>
<td></td>
<td>24</td>
<td>18</td>
<td>21</td>
<td>21</td>
<td>14</td>
<td>20</td>
<td>28</td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Source: Interviews in Chile

During the interviews I asked people questions about their perceptions of poverty. An example of the type of question asked would be: How do you define poverty? What exactly is poverty? These questions address differing views on poverty, and these differences often reflect variation in what people value in life (Iceland 2006; Barrios 2008). How people see their circumstances, as well as those around them, ultimately influences what strategies they will choose to make a
living; a living that is more desirable to them and in accordance with what they value. Therefore the question of defining poverty attempts to address what the Mapuche see as important and how that influences their ideas of what it means to be poor. Their views on poverty also have implications for social and economic development initiatives. A government's development agenda at the national level may or may not coincide with what local communities and peoples want, especially if their views are based on a different cultural perspective.

After the quantitative analysis during the next round of interviews I was able to ask more specific questions about the quantitative results including questions about rural urban differences and poverty differences between the Mapuche and the non-Mapuche. I was also able to ask questions about specific factors that influence or are correlated with poverty such as questions on education, labor market participation status, and migration history. It was through these interviews that I was able to gain more in depth understanding of poverty differences between the Mapuche and the non-Mapuche, as well as within the Mapuche population.

For continuity I present the results of the qualitative analysis in the same format as the quantitative results, meaning I discuss the dependent variable first, followed by the other independent variables of interest.

**Poverty: what does it mean?**
During the beginning of this research project, on one of the first trips to Chile, I had the opportunity to interview a retired history teacher, who was also an active member in the Mapuche community. The initial purpose of the interview was to gather information about the history of the Mapuche people from the perspective of a member of that community. During the course of the interview he asked me what my intentions were, why I was studying the Mapuche. I replied that I was interested in how Chile is changing and how poverty in particular was changing. This retired man patiently listened and then asked me, “What do you think poverty means?” I responded that there was a formal definition of poverty in Chile. “No!” he exclaimed, “that’s not what I asked. I want to know what you think it is.” So we talked about poverty and what it means and he related the following thoughts.
When I was a boy, I lived in the forested hills in Southern Chile. I was free to roam the hills, learn about nature, and appreciate the fresh air and rivers. I didn’t have electricity or television or even a cell phone. According to the official definition, I was probably poor, but I didn’t feel poor. Now I’m old and my grandson is grown. He lives in the city, in his nice apartment, makes good money, and is not poor, by the [official] definition. But he is stressed all the time. He is bitter and unhappy. He does not breathe fresh air, or swim in the rivers. He works all the time and never sees his family. He is living a poor life.

He continued on for a while, elaborating on how he feels about poverty and today’s young people. This was a sincere and passionate man who was concerned for the well-being of his people and the next generation. This interview has stuck with me throughout the research process because he brought up some interesting points about how the definition of poverty and the actuality of what we are trying to define can differ. What someone values in life helps determine how they will define or understand poverty.

Although an official definition of poverty exists in Chile, much of the discussion during the interviews revolved around definitions and implications of poverty. I wanted to understand how people define and view poverty, how they experience it, and how that may influence their understanding of Mapuche poverty. Throughout the interview process the respondents shared stories of how they know poverty and what it means to them. Many respondents were not aware of the official definition of poverty or how it was measured, however everyone I talked to was sure they had seen poverty, knew someone who was poor, and could talk about what they thought it meant. This means that they had somewhat of a definition in their minds, enough to recognize poverty when they see it. However the ways in which people defined and described poverty varied based on a few characteristics, particularly their position in society and their location.

Position in society
The first characteristic on which the definitions varied was the position of the respondent in society. Those respondents who worked for an academic institution or the government responded that poverty was, as the official definition says, a matter of low income. These respondents, or key informants, were contacted for their expertise and experience dealing with Indigenous issues. For example, one respondent, a government employee working on Indigenous rights, said,
Poverty in Chile is based on income. If a Mapuche family does not make enough money…or their income is below the poverty line, then they are poor. Simple as that.

This is a typical response I received when asking key informants to define poverty. They related it to not having money. Often this perception of poverty as merely a lack of income became the basis for further questions. I would question them further to see what they thought about the varying poverty levels and the differences between group poverty rates. I specifically asked government employees and academics about the causes of poverty and if they believed the official reports on the amount of poverty. The key informants tended to follow the official dialogue describing Mapuche poverty.

The official rhetoric describing poverty in Chile follows the saying that “the rising tide lifts all boats”. As Chile has progressed economically in the last few decades, they have been able to decrease the amount of people living in poverty. This is based on national statistics. The key informants tended to agree with this assessment and recognized that the Mapuche have become less poor as well. However, when they say less poor, they mean they are earning more money.

One key informant put it this way:

The Mapuche have been doing better as well. They are becoming more urban and less backwards. They are going to school more, getting better jobs than before and making more money. They’re less poor than before. It’s nice to see that we have made some progress in this country.

The respondent equates urbanization and greater integration into the mainstream society as progress. Not all the key informants were so positive about the progress. One respondent explained:

Just because some [Mapuche] aren’t as poor, doesn’t mean that everyone is doing better. I know some communities that are suffering the same, or in a few cases worse, as they were ten years ago. And some communities have almost entirely disappeared because people have left, looking for jobs in the cities… there are a lot rural communities that are still suffering.

I tried to investigate these views more deeply, by asking about the factors that cause poverty. When I asked the key informants about the causes of poverty and why they believe the situation of poverty is changing, they cited both individual and structural factors. The individual factors they discussed included personality, work ethic, and laziness. One respondent, who works for a prominent university, blames Mapuche poverty on the Mapuche themselves:
It’s part of [the Mapuche] culture. They are poor because they are lazy. They just sit around and want handouts. It’s been that way for a long time and I don’t see it changing. They even teach their children that’s how it’s supposed to be.

She expressed frustration about the problems in the Mapuche community and thinks the solution lies in individual change, although she doubts things are going to change. Others also blamed government handouts and dependency for their view of the Mapuche being lazy. Other key informants were not so quick to blame the Mapuche, but recognized the structural factors that are involved. One respondent put it this way:

The Mapuche are more poor, and part of that is because of the long history of government interaction. Sure, many of the Mapuche would rather take handouts than work, but many don’t have the option of working because there are not any jobs available where they live. They either have to depend on outside help or they end up moving to cities looking for jobs there.

There was recognition of both individual and structural factors with the blame generally divided between both sets of factors. Although key informants were helpful, it is important to recognize that they are professionals, meaning they have good paying jobs and have had the education and background support to get to where they are. They may not have personal experience with poverty. Members of the communities, the non-key informants, had more personal experience with the struggles of poverty. Table 6.2 indicates the differing definitions of poverty and causes of poverty between the key informants and the community members.

I interviewed over 40 members of the Mapuche community in both rural and urban areas. Their ages ranged from 22 to 70 and about 40 percent were male. They ranged in their occupational positions however none were employed in professional positions dealing with indigenous issues. A few respondents were university students, a few were retired, some were unemployed, some worked in manual labor jobs (construction or in factories) and the service sector (clerks, servers at restaurants, social work) and others lived as subsistence farmers. Despite their diverse backgrounds all the respondents responded to the question about the definition of poverty. These community members were less likely to be aware of or understand the official definition than the key informants. This is understandable because the key informants work within an official sector (such as the government) that deals with the official definitions and policy. However, the Mapuche people I interviewed were readily able to describe what poverty means to them. The definitions and descriptions of poverty from community members fell into two categories.
The first category aligns with the official definition which uses income to measure poverty. I describe this view of poverty as a consumption-based definition. The majority of the respondents in their description of poverty related it to not having something. For example, one respondent, an older woman, put it like this, “poverty means not having enough. It means not having enough food or whatever it is that you need to live”. So poverty in her mind was linked to inadequate consumption; however she makes it clear that it also relates to survival or the “need to live”. This is similar to the official view of poverty in that the official view recognizes some basic needs, like food, in order to survive and bases the poverty line on the income necessary to acquire those basic needs. The respondents tended to follow this line of thought evident by their examples. Generally they did this by comparing what they did not have and now they do, or what they did not have growing up and how they are able to provide it for their children. For example, one Mapuche woman who grew up in the South but migrated to Santiago after she got married said this:

I believe that when I was young, in those years, poverty was worse for everyone. I tell it to my daughters. I tell them they were raised with butter and jam. I didn't have any of those things when I was growing up. My husband didn't either. His family was worse off than mine was, because they had a larger family. He was in a family where they didn't have shoes. I tell my daughters to remember they didn't grow up without shoes. We've been able to buy them shoes since they were born.

We can see that she relates poverty to consumption of food and shoes, items perceived as necessary. Many respondents referenced food as related to poverty: “When I was young we went through hungry times, now I tell my daughters that at least we have bread everyday”; “Poverty is not having enough to eat”; “When you’re poor it means you can’t always buy the things you want like meat for the grill, you have to settle for what you can afford”. These responses indicate that people readily identify poverty with consumption and the inability to satisfy basic needs. However, some thoughts on poverty went beyond basic consumption and the respondents talked about comfort or luxury, like meat for the grill. However not everyone was quick to point out the connection between poverty and consumption. These respondents fall within a second category.

The second category of how community respondents defined poverty can be described as
relating to well-being. This category includes those respondents who defined poverty as not being happy, not being healthy, or lacking the social connections that make life worth living. The example given previously, of the retired Mapuche history teacher, falls into this category. His definition of poverty relates more to the ideas of freedom, health, love, community and the connection to the natural world. These are factors that one cannot buy with money, yet provide a sense of well-being. This type of definition for poverty is connected to spirituality, and community identity. These types of definitions focus on a broader concept of deprivation. In other words, the respondents with this type of view tended to think of poverty in terms of what non material things they were missing in life; non material things that they knew were not purchased in stores. People readily identified with the problems of modern life, including stress, loss of community, loss of beliefs and language in the younger generations, sedentary lifestyles, and impersonal nature of the market economy.

When asked about the causes of poverty the responses from the community members were more varied. They still provided responses that included individual and structural factors, but as the key-informants responses focused more on the institutional problems like policy, the non-key informants focused more on specific factors in their lives. So for example, I interviewed a Mapuche man from a major city, middle aged and employed. He complained that one reason the Mapuche were poor was because they didn’t work hard enough. This was a typical response from someone who was employed, and worked hard, but found the idea of welfare and handouts frustrating. They blamed poverty on the individual’s lack of character and work ethos. Another individual factor people blamed as a cause of poverty and often linked to laziness was the consumption of alcohol. Multiple respondents mentioned the idea that the Mapuche are often poor because when they do have money, they waste it on alcohol and drink their futures away. One respondent had a more moderate view on alcohol and conveyed to me his view on poverty and alcohol, and told me he had learned lots in life that kept him from being poor:

You learn that lots of people work eight hours. You learn that you have to work hard in order to make ends meet…in order to save up a little. You learn that you can't be lazy…you can't drink a lot of booze. Maybe once in a while on a special occasion…You can't be getting drunk every day though.

People who focused on specific individual factors of poverty tended to be the ones that were relatively better off, at least in a material sense. They felt proud of what they had accomplished
and felt others could too if they would just try harder or not squander their money.

Some respondents however blamed poverty on structural factors specific to their social setting. Those who mentioned structural problems focused on challenges faced by localities. One factor mentioned over and over again was education and educational opportunities. In the cities people described their frustration with an educational system that was failing them. They blamed public schools for not providing a good education, which they connected to not being trained for good jobs. Most respondents sensed that private institutions provided better education and thereby a leg up on access to lucrative employment. When asked about the education system, people overwhelmingly blamed the government for lack of funds and action to improve public education. One respondent captured the general sentiment:

Education in Chile is in shambles! There are so many students, not enough schools, and the government is not willing to pay. Every year more private schools are built but the people have to pay to attend. It’s worse in the countryside where there aren’t even any schools available. At least in the cities there are schools, but you still have to travel half way across town just to find a decent school….ones with desks and books. Every year we protest, and the government promises to fix it, but I have my doubts things will change. We are such a rich country….it’s such a shame!

Beyond education, people mentioned lack of infrastructure as a cause of poverty. One rural resident stated:

How am I supposed to get a job and work hard if there are no jobs in this little town? Even if there were jobs near here, every time it rains the roads become impassable and the buses won’t come down here. I wouldn’t be able to get to work anyways. Why can’t someone fix the road? Then maybe we could go to [the next town over] to work.

Infrastructure was recognized as a major factor in the access to education and employment. People realize that the ability to access schools and jobs is dependent on their ability to travel to those places. Because of failing infrastructure, people often feel pushed towards relocating to other areas. This was especially prevalent among rural residents where there was less investment in infrastructure. Without access to these education and employment opportunities, people felt they would never be able to make it out of poverty. They saw a direct link between opportunities and outcomes.
Infrastructure was not the only structural factor mentioned in conversations about causes of poverty. The healthcare system was frequently mentioned as something relating to poverty. The general comments were along the lines of “if you are too sick to work, you can’t work”. Even though free health care is available it is seen as a last resort. “If you are poor you have to use the free health care, and it takes forever. The lines take all day and the treatment is crap. You have to miss work and then they just replace you”. Clearly poor health is understood as a factor related to poverty.

Safety was also frequently mentioned as a link to poverty, especially in urban areas. This is a pretty poor neighborhood. There are a lot of delinquents, and drugs. I don’t feel safe walking around, and the police never do anything about it. I won’t let my kids play out in the streets anymore, and we try not to mix with any….we don’t want problems.

Many respondents conveyed the stress they felt concerning their safety and that of their children, especially walking to school, or taking public transport. For those families with younger children child care was a factor mentioned. They were concerned about being able to go to school or work if they could not find a place to take their child during the day. They were also concerned about being able to afford it. Many were lucky enough to have relatives who would take care of the children why parents worked or studied.

Respondents clearly voiced a critical reliance on the government for access to basic needs as well as opportunities, and often blamed the government for not providing support to improve infrastructure like roads and public transport. On balance they viewed development as the government’s responsibility. Complaints about the government were commonplace. Indeed almost all respondents had some sort of negative comment or complaint about the functioning of the government, whether at a national level or a local municipal level, or both. While some indicated the government was not doing enough, another complaint concerned where the effort was placed.

Historically development effort was focused on mega development projects decided at the national level. Problems arise when government projects are decided without taking into
consideration the views of the local community. Although the discourse from the national government is one of poverty reduction, local community members point out that these mega development projects have negative consequences and are meant to benefit international corporations instead of the local communities. This holds true whether the respondent defines poverty as income based or related to well-being. An example of this type of project is the damming of the Bio-Bio River for hydroelectric power generation. This project displaced families, changed livelihoods, and, in the community members’ view, created more harm than good (Mariqueo 2004). Some respondents linked this type of project with the destruction of livelihoods:

What right does the [national] government have to kick people off their land? They did it in the colonial times, but I thought they were supposed to stop that. They forced those poor people out of their valley and for what…so that those in Santiago can have more electricity? How do we benefit from this project? Not all of us [Mapuche in the community] even have electricity in our homes and here they go kicking us out…..and it’s not even a Chilean company!

Another example of a mega development project is the planned construction of a coastal highway. The national discourse describes the project as improved infrastructure that will bring commerce, increase trade and tourism, however, those respondents I talked to are not happy about the idea. This unhappiness does not come from a loss of livelihoods but from cultural control. One respondent, a leader in the community, who also works in tourism and would stand to benefit from increased tourism, explains:

Sure the highway might increase tourism, but at what cost? We Lafquenche [Mapuche of the Coast] see the sea as sacred. We cherish our connection to the ocean and derive, not only depend on it for our livelihoods, but also rely on it for a spiritual connection. What good would a giant highway on the coast be if it separates communities from the sea? We already have roads here. Some of them are in pretty bad shape, and we have asked for years for the government to help fix them but they refuse. They tell us there are not enough funds to do that, yet they want to build a highway. What comes after that? Why can’t they fixed the roads we have, instead of trying to separate us from the sea? We tried to tell them we didn’t want the highway, but we don’t think they will listen to us.

Some community members speculated that the highway was being built to accommodate lumber companies who control huge tracts of land in Southern Chile, but no one was exactly sure what the motivation was behind the highway plans.
This community was a rural community, and as such, expressed the idea of cultural connectivity to the land and sea. However, I was also curious about how Mapuche views on poverty varied, not only between positions in society (key informants versus community members), but by where they lived. I wanted to know if it views of poverty varied by residence.

**Are there differences between Urban and Rural views on poverty?**
The second characteristic in which respondents varied about their definitions of poverty was their place of residence. I was able to interview people in both rural and urban areas. I wanted to see if there was a difference in how people from rural and urban areas defined poverty.

For the interviews in urban areas, respondents included residents of the largest city in Chile, Santiago, as well as Temuco and other small cities in the South. Around 40% of the interviews took place in rural areas. Of course, there were commonalities in personal definitions and perspectives on poverty across the rural urban spectrum. For example, respondents in both areas described poverty as relating to deprivation and blamed individual and structural factors as the cause. But telling differences emerged as well. In the urban areas, respondents (key informants or not) viewed poverty based on access to consumption. Not only would they mention access to food, but also access to cell phones, and more modern consumer goods like laptops. I would often hear people mention their position in society compared to others based on consumer goods.

One respondent, in their 20s, related it this way:

> I am pretty poor compared to some of my friends. I can't afford to go to college. I don't have credit so I can't even get a contract for a cell phone... I have to use pay-as-you-go. I'm hoping to save up some money so I can buy a scooter, but it's going to take a while. First though, I have to get Internet at my house. It's such a pain having to go down to the Internet café. I mean, I could always go my one friend's house and use his Internet, but he lives a little ways away. That's why I want it at my house.

The urban respondents were well aware of new technologies and the recent availability of consumer goods in Chile. Frequently they would comment on the differences in consumption between the rich and poor and would talk about those "up there", referring to the wealthy of Santiago. The lack of high-end consumer items was a clear source of frustration for some and defining poverty in this way goes well beyond the satisfaction of basic needs and underscores the importance of relative poverty in the Chilean context.
Often the idea of poverty was bound up conceptually with access to opportunities as well. Urban respondents recognized the centrality of employment for economic survival in the city. They also know that labor markets are very competitive and that success is highly dependent on educational attainment.

If my kids are ever going to get a good job then I have to make sure they can afford to go to a good high school, pass the entrance exam and get into college. That's really the only way I think that they're going to get a job. There's so many people in Santiago... so many unemployed... it's really competitive out there, and it's hard when you come from a poor household. It's also about who you know! Those rich kids never have to worry about passing the [entrance exam] or being smart.

Less "top of mind" were correlates of poverty such as access to clean water, proper disposal of sewage, adequacy of transportation infrastructures and so forth. These are well developed in urban areas and cease to be a concern for most poor residents. There are some areas in Santiago that lack access to electricity and sewage systems however these are a very small minority.

In rural areas, however, much more of the conversations about poverty revolved around factors that affect the broader community instead of individual households. Instead of saying things like, "I can't afford to send my kids to a good high school" the comments would be "we don't even have a school in this town". Or for employment, urban residents would talk about employment in terms of individual opportunities and having to compete for jobs, whereas rural residents would comment about the availability of employment in their town and having to travel to other cities to look for jobs. Urban residents lamented about the high prices for public transportation whereas rural residents complained about the lack of public transportation. Rural residents also commented on the lack of or quality of basic things like electricity, sewage disposal systems and the availability of clean water. With both urban and rural respondents, food was mentioned in discussions of poverty. Urban respondents discussed the rising cost of food and linked poverty to not being able to eat at restaurants. However, rural respondents, by and large, discussed food in terms of how it coincided with land issues.

Access to land was a major issue in regards to poverty for those in rural areas. As is true anywhere, in Chile rural livelihoods depend on access to land for subsistence and market crop
production, and for sustaining sheep, cattle, poultry and horses -- an animal introduced by the Spaniards but adopted by the Mapuche into their lifestyle.

Land tenure struggles in Chile are related to historical changes and the politics of development (Skidmore and Smith 1992; Loveman 2001). When the Mapuche were pushed into reservations after independence they lost access to their ancestral lands on which their communal lifestyle depended for survival. Respondents were acutely aware that access to land remains vital for survival and is inherent to any discussion of poverty. For example, one rural respondent put it like this:

> Look, a long time ago, when we had more land, people were able to work the land. People knew how to work the land. And they wanted to work. They had that alternative. You were able to work hard and make something of yourself. People went on through life gaining knowledge. They learned how to work better and they knew if they worked hard they could make it, they could survive.

The respondents spoke as if land was their tie to life. They expressed reliance on the land, for physical as well as emotional support. This was a dominant narrative about land and could be heard from both rural and urban respondents.

This narrative, about the Mapuche people's tie to the land, was often mentioned by both rural and urban respondents and was often related to ideas of Mapuche identity. Even urban respondents, Mapuche who had grown up in Santiago or other cities, described their identity as being tied to the land. When asked about this connection between their identity and the land, they would respond with positive narratives about the Mapuche as the first inhabitants of this land how they depended on it for survival. They would describe the land, forests, and rivers with a sense of nostalgia regardless of how much time they personally had spent outside of the city. One middle-aged, Mapuche woman, who lived in Santiago described her view of the countryside in terms of beauty and felt pride at being connected with it:

> The Mapuche have a strong connection to the land because it's so beautiful and pure. All the fresh air and clean water... it's such a wonderful way to live. My ancestors were the original inhabitants of Chile and they knew how to live in harmony with nature.

Urban respondents seemed to rely on emotional connections to the land suggesting the presence of a culturally instilled emotional attachment to the land that, perhaps, transcends place of
residence. Despite the emotional attachment to land, urban respondents recognized the availability of land as a link to poverty and survival. One male respondent, in his mid-30s, related it in this way:

My parents moved to Santiago when I was still young but I remember having more space to play, more fields and more forests to play in. We used to visit my grandparents on their farm, and even though they didn't have a lot, they always had enough food. My grandmother would bake homemade bread and we would put cheese on it that came from the neighbor’s cow. If you have a little bit of land in Chile you can at least grow some vegetables, maybe have a chicken or two. It's hard to do in Santiago. We don't even have a patio. Land in the city doesn't exist... if you want land you have to move out to the countryside. They might not have much in the country, but at least they have some space and some land.

In summary, respondents differed in their views on definitions of poverty. Their responses ranged from viewing poverty as a lack of income, which denied them access to consumption of material goods, to viewing poverty as lack of overall well-being. Key informants, who were familiar with the official definition of poverty, equated poverty with insufficient income to obtain basic necessities and blamed individual and structural factors as causes of poverty. Some community members viewed poverty as insufficient income to obtain basic necessities, while others equated poverty with lack of spiritual and cultural well-being. They also blamed individual and structural factors for the existence of poverty. These views of poverty also varied by residential location with urban residents tending to define poverty, less in absolute terms, and more in relative terms comparing themselves to more wealthy members of urban society. However rural respondents described poverty in terms of access to basic necessities and when they did compare their situation to others, they compared their rural lifestyle to that of their urban counterparts. They recognize the negative aspects of living in urban areas, but also recognized the availability of goods and services that were slow in coming to their rural towns.

Are there differences between Mapuche and Non-indigenous poverty?
Studies abound that show a greater prevalence of poverty among indigenous people when compared to their nonindigenous counterparts (Gonzalez 1994; Patrinos 1994; Psacharopoulos and Patrinos 1994; Hall and Patrinos 2006). Any analysis of the CASEN data presented above only confirms that the case of the Mapuche people in Chile is no different. Like other studies, this analysis relied on various income-based measures of poverty. However, during my interviews I wanted to dig deeper and understand more about the possible differences between
Mapuche poverty and nonindigenous poverty. Indeed, I was curious about whether the greater prevalence suggested by official statistics was even perceived as a true and meaningful difference. Therefore, during the interviews I would present the official statistics showing a higher prevalence of poverty amongst the Mapuche people, and I would ask respondents their views about them. Often, during the discussion, respondents would mention both wealthy and poor Mapuche people indicating that, clearly, not all Mapuche are poor. However, I was curious about the higher prevalence of poverty amongst the Mapuche population. I would ask respondents for clarification about if and why the Mapuche population was more poor, citing the statistics, and asking whether they agreed with the data. I would specifically ask about the difference between Mapuche poverty and nonindigenous poverty, if it existed and if so why. I found a variety of responses.

Interestingly, all respondents were willing to accept ethnic differences with the prevalence of poverty. As discussed above, not all respondents define poverty in the same, however all respondents recognized that there was a difference between Mapuche and nonindigenous poverty levels, with the Mapuche being more poor. Again, the respondents' general definitions of poverty varied depending on where they lived and whether they were part of an educated professional group. During discussions of poverty in general, the respondents mentioned both individual and structural factors that influence poverty. However, since indigeneity was my main independent variable in the quantitative analysis, I wanted to see what specific factors would be mentioned by respondents to explain Mapuche poverty. In other words, I knew from the data that educational attainment, employment status, residential location as well as other factors influenced the likelihood of living in poverty. What I was trying to find out was the reasons why. For example, why did the Mapuche have lower levels of educational attainment in a country with free public education? Why were the Mapuche employed disproportionately in lower wage jobs? How does poverty differ between the Mapuche and the nonindigenous populations?

There were two main categories of responses given by respondents to help explain the differences in poverty between the Mapuche and the nonindigenous populations. The first category of responses I described as conflict with the state. Respondents described factors that indicate the relationship between the government of Chile and the Mapuche people as
problematic. The second category of responses I describe as discrimination, where the Mapuche people are discriminated against by other Chileans thus leading to differences in opportunities and subsequently differences in the prevalence of poverty. I would ascribe these both in more detail starting with the relationship with the state.

Many Mapuche respondents explained the variation in poverty levels as a consequence of the relationship with the state. They would cite issues of land grabbing, the export-oriented development strategies imposed by the national government, lack of government investment in the Mapuche population, lack of representation in the political process, and a general lack of trust between Mapuche population and the national government.

The Mapuche have been fighting with the government since the days of colonialism. We can't trust them. They're [the politicians] a bunch of liars. They've taken our lands and given them to the forestry companies, and the forestry companies just ruin the land.

Historically, communal land was taken by the state and given to those who would make a profit from it. This continues today in the form of forestry plantations. The justification for using land, previously owned by the community, for private ventures is the neoliberal export-oriented economic approach that has been adopted and advocated by the Chilean government. Currently there are ongoing conflicts between Mapuche communities, the state and international timber companies over land rights or more specifically the exploitation and profiting by international privately owned corporations of historically Mapuche land. The Mapuche people do not necessarily disagree with the goal of economic development or even the use of the land for economically profitable activities however the methods to achieve that goal is where there is often disagreement.

Of course we want to see our community develop. We want to improve economically just as much as the next guy, but we can't compete with international corporations. These companies are making a lot of money but where is it going? It sure isn't coming to me. I don't know anybody in this community that is benefiting from the timber companies. If we could still use the land, we would do things differently.

The varying approaches to economic development have varying consequences for those involved. Many of the respondents expressed a feeling of marginalization; they felt their concerns and objectives were not taken into consideration by those making the decisions.
Beyond the issue of land and conflict with the state, the Mapuche respondents voiced concern about discrimination and its influence on opportunities, specifically regarding education and employment. People were quick to tell me that the higher prevalence of poverty among the Mapuche could be traced to discrimination that keeps them from participating equally in the education and employment sectors. One key informant gave an example of discrimination:

Let's say we have two young men, one is Mapuche and one is not. They both have the same education levels and are comparable on most factors. When we look at how these two men will participate in the labor market, we see that the Mapuche man has a harder time gaining access to employment as well as earning the same wages as the other man. It's the same sort of situation that we see with women in the labor market where they earn less than men for comparable work. This happens in many countries, not just Chile, but we're finding that here in our country it is happening for the Mapuche. They have a harder time participating in the labor market, and they don't earn as much as their nonindigenous counterparts. The government programs, put in place in the last few years, are trying to change that situation.

One mechanism through which discrimination happens is the use of surnames in application processes. When applying for a job or particular educational opportunity people must state their first name as well as both of their last names (Chileans use a last name from the father and a last name from the mother on official documents). Mapuche surnames are easily recognizable in contrast to Spanish surnames. Many respondents felt that when they applied for employment or to matriculate in school, they were not given a chance based on people's perceptions of the Mapuche population. One Mapuche man, in his 50s, described his experience with discrimination:

When I first came to Santiago as a young man I tried to apply for any work that was available. Of course I knew that people in Santiago thought the Mapuche were dirty and lazy but I kept on trying anyways… that's all I could do. But the first thing they asked for on an application was your surname. If you have a Mapuche surname, they might just throw the application away without even reading it, without giving you a chance. Eventually, I did find a job in a company where the boss was German. He didn't have the same prejudice as the Chileans did. I worked really hard and he was very kind to me. He knew that I worked hard and eventually I was promoted. Many colleagues would make comments, and complain about how a dirty Indian could get promoted over them, but I didn't let it bother me.

In the educational system as well, people are required to put their surname. It is widely
recognized that Chile has a public education system in which everyone is allowed to attend regardless of ethnic background or economic situation. However the consensus from respondents was that certain schools, particularly the private schools, offer better education and guarantee better access to higher paying employment. One woman explained her view on education:

Sure my kids can go to public schools, but that's not necessarily going to give them a good education or get them a good job. If they want to make money after school, they are going to have to go to a private school. Even if I could afford it, they are going to know that we are Mapuche, and they’re not going to let them in. I don't think that's fair because my kids are smart and I know they would do fine at a private school.

The educational disadvantages faced by the Mapuche people have been recognized by the Chilean government in recent years which has responded with a program that provides educational subsidies for indigenous families. In other words, Mapuche families can apply for scholarships to help pay for the cost of attending private schools as well as universities and institutes of higher education. This solution of subsidizing Mapuche education has its own set of problems, specifically, relating to the idea of indigeneity or how the government determines who is or is not Mapuche. Mapuche descent is officially designated if the student, their parents, or their grandparents have an indigenous surname. This somewhat crude method of determining indigeneity is inherently error-prone. One interviewee recounted her situation:

One of my relatives came from Columbia. His last name is a Colombian last name that is very similar to an indigenous name here in Chile. I didn't realize that made any difference until my daughters were old enough to go to school. Someone mentioned to me that that name sounded like an indigenous name. I looked into it and was able to receive scholarships for my daughters to go to a good private school and help pay for their college. I was lucky because I'm not indigenous at all!

Government programs, set up to help the Mapuche people, rely on a mechanism for identification above and beyond self-identification as Mapuche. This presupposes that the government has the right or authority to determine indigeneity. The government solution is to put the onus of proving indigeneity on the individual. In this and other cases, people who do not view themselves as indigenous, in their personal daily lives, benefit from a system that simply uses surnames as an eligibility criterion. More disturbing perhaps, I interviewed another person who did self-identify as Mapuche, but because he lacked a Mapuche surname was unable to
obtain certified proof from the government in this regard and was therefore denied access to scholarships. Determining just who is Mapuche can be difficult.

So in summary, the difference between Mapuche and non-indigenous poverty was described by respondents as relating to conflict with the state; conflict relating to land since colonial times and in regards to economic development programs. They also related the difference in poverty is the result of discrimination specifically discrimination in regards to opportunities for educational attainment and participation in the labor market. Both issues are intimately related to ideas of Mapuche identity, and determining indigeneity can be difficult. I spent a significant portion of time during the interview process questioning respondents about what it means to be Mapuche in Chile today.

**What does it mean to be Mapuche in Chile today?**

A perennial challenge for studies of indigenous people is identification, in this case, how to identify the Mapuche people. During interviews, I asked people what they thought it meant to be Mapuche in Chile today and how it related to ideas of poverty. Because the Mapuche traditionally came from rural areas and have only recently migrated to urban areas, and because how respondents described poverty depended on their rural or urban residence, I was particularly concerned with the varying views of indigeneity between rural and urban respondents. Because many people who identify as Mapuche live in urban areas and have grown up in urban areas we would expect them to have a different view of what it means to be Mapuche compared to those who live as subsistence farmers in rural areas. The respondents provided a variety of responses to the questions about Mapuche identity, however one theme dominated discussions of Mapuche identity, their different worldview.

On the whole, the most common response about Mapuche identity was the phrase, "the Mapuche have a different cosmological vision"*(una vision cosmologica diferente)*. This means that the Mapuche have a different worldview. This idea of varying worldviews was expressed by community members as well as key informants. For example, one key informant explained it this way:

> A lot of people say that you can recognize the Mapuche by the way in which they think. They say they have a different view of the world. They say the Mapuche
don't think in a normal Western way. There is a different form in the way in which they see things and how they live. They have a distinct culture.

When presented with this type of response, I would press for more details and explanation. Respondents would elaborate and cite examples of the way in which the Mapuche cosmology differed from the nonindigenous. Most often, the respondents would present examples that I grouped into two categories: their relationship to health and their relationship with the natural world.

According to respondents, the common perception of Mapuche cosmology is that the Mapuche take a more holistic approach to health that blends spirituality and culture with medicine. This means the Mapuche people link physical health to spiritual health. This is evident when people are talking about Mapuche communities because they always refer to a significant figure in Mapuche culture, the Machi, or traditional healer. When a Mapuche person gets sick, whether in rural areas or in Santiago, they often seek out the traditional healer as well as visit the local clinic. One respondent put it this way,

Health for the Mapuche is a sign that there's something that's causing you to be unbalanced. The shaman treats you in a more holistic way, not just your physical body but also your feelings and your thinking and your spirit. It's much more integrated and holistic. But the national health care system is more specifically based on Western medicine. Mapuche health is much more transversal.

Perhaps more evidence of varying perspectives on health comes from a recent trend in Chile; there has been the opening of a chain of natural Mapuche medicine stores or pharmacies where they sell traditional medicines. This suggests that there is a demand for natural remedies and that there is some truth to what the respondent said. However, it is unclear who was shopping at the stores or, indeed, the extent to which the mere existence of the stores signals a different way of viewing the world in regards to health. In my experience I have heard of non-Mapuche people buying natural remedies from a Mapuche medicine store, as well as non-Mapuche visiting with traditional healers. By the same token, there is also ample evidence of Mapuche people not visiting the traditional healer nor buying natural Mapuche remedies but relying instead on the national healthcare system and Western medicine. There is reason to be circumspect and not overgeneralize that the Mapuche people view health differently than non-Mapuche. This
skepticism is also present when discussing the other factor the respondents mentioned, their relationship to and treatment of the natural world.

A majority of the respondents, when asked about Mapuche identity, mentioned a relationship difference with the natural world. The claim is that the Mapuche are more in touch with the natural world and therefore have more respect for and understanding of it. This idea intrigued me because many of the Mapuche, especially the younger generations— the ones who have only recently adopted the identity of Mapuche— were born and raised in the city. One might find it difficult to believe that someone who has grown up in the concrete jungle of Santiago, who has never visited the countryside in the South would, because their ancestors were born in the South, have a better connection to or understanding of the natural world. The noted historian of indigenous peoples in Chile, José Bengoa, describes how during the 1970s and 80s the indigenous movement started adopting the discourse, and making alliances with the environmental movement (Bengoa 1985; Bengoa 2000). According to Bengoa, previous to this time indigenous peoples were not associated as heavily with the environmental movement. A key informant explained:

During the 1930s a lot of peasant farmers started migrating towards the cities. This included the Mapuche. People in the cities did not necessarily think of them as indigenous but viewed them as peasants. People were talking about creating a nation not saving the environment. So the discourse about connections to the natural world didn’t start to come out until much later after the environmental movement started and indigenous people all over Latin America found that they could benefit by joining forces with the environment movement.

So for those Mapuche who have grown up in urban areas, especially the younger generations, the idea of a relationship to the natural world as part of a Mapuche cosmology, has been present throughout their lives. I did interview one woman who lives in a Mapuche community in the South, in a rural area, who had a unique experience to share regarding views of the natural world:

I grew up here in this community but spent 30 years of my life living in England. I have only recently come back to retire here. I have a bit of land and I spend my time gardening and growing food and raising animals. The other day when my nephews came to visit me I offered them some fresh apple juice that I had made from my own apple trees. I was excited about the fresh apple juice and I thought they would've enjoyed it. But they scoff at it and asked if I had anything better to drink like Coca-Cola. I was angry. Here they were asking me for Coca-Cola.
when I was giving them something much better. I said to them, I said,’ what the hell is wrong with you? Do you know how much organic apple juice costs in Europe? You're crazy if you don't appreciate what it is that we have here’. But they did not want to listen to me.

This woman had a different perspective after having spent time living abroad and she was surprised at the limited appreciation that her nephews showed towards the apple juice but also towards that kind of natural lifestyle.

Another example of how it may be erroneous to support an overgeneralization of the relationship between indigenous people and the natural world is the timber industry. International forestry companies have used previously communal land for the production of trees for timber and pulp for paper production, with devastating environmental consequences (Clapp 1998). The timber industry's ability to acquire more land has been severely restricted. These companies have found that they can lease land from individual Mapuche landowners to plant tree plantations. The individual landowner, therefore, is responsible for the environmental degradation caused by the mono-crop of pine or eucalyptus trees. So on one hand the popular discourse suggests that the Mapuche have a better relationship with the natural world, but on the other hand it is the Mapuche themselves that are often at fault for the degradation of the land. However, poverty and the destruction of livelihoods can push people degrade the land out of economic necessity. Structural economic changes including market fundamentalism and export-oriented agriculture can lead households to participate in any economic opportunities available including those that have negative long-term effects on their land. Perhaps then, immediate basic needs trump cosmology.

I was curious to whether there was a cosmological difference between rural and urban residents. When respondents suggested that the Mapuche have a different cosmological vision, I probed on what that phrase meant. It was only after respondents started talking about factors related to Mapuche identity that a more nuanced description of this cosmological vision emerged. And once again the idea of land became very important to the conversation. This, however, varied by the respondent’s place of residence. For example, almost all respondents from rural areas mentioned the idea of land tenure or something similar. However respondents in urban areas did
not readily discuss land tenure. Respondents in urban areas did however mention the idea of ancestral land, but focused less on issues of land tenure today. For example, after I asked what it meant to be Mapuche, one rural respondent said,

We are the legitimate inheritors of this land. It was passed down from my ancestors down to my current family.

_interviewer:_ so land is important to Mapuche identity?

When people talk of Indians, I say Indians come from India. We are Mapuche and we are from here. This is our land. We have lived here longer than anyone else. We would not survive without the land. We are connected to it.

This view makes sense in light of the fact that the word Mapuche means people of the land. This idea, that the Mapuche people were the original inhabitants of what is Chile, lends itself to the idea of identifying with history, cultural background, attachments to land, and the right to exist in that land. Many respondents expressed this cosmological view of being linked to the land, especially those who lived on the land in rural areas.

Another varying aspect of how respondents discussed Mapuche cosmology was their daily discourse of Mapuche identity. This varied by residential location, specifically, by population concentration, which is more likely in rural areas. A young female Mapuche respondent named Rosie put it this way when I asked about the discourse of Mapuche identity:

It’s just that... you know... everybody here in this community is Mapuche, so it's not something that we really talk about. I mean it's obvious that everyone who lives here is Mapuche. We all know how the Mapuche differ, and how Mapuche culture is different than Chileans, so we don't really need to talk about it.

The implication is that if most everyone in the community is Mapuche, then the sense of discrimination or the need to assert one's Mapuche identity does not exist. However in today's world people do not spend all their time within their community. Rosie recognized this in her own situation. She lives in a rural community on the weekends but during the week she works in a nearby regional city. This is a common phenomenon in rural towns in the south, where people sojourn to town to work during the week, and on weekends return to their community.

During the week, the fact that I am Mapuche seems to be a lot more important in town. When I come back to the community no one mentions anything about my
identity. In the city people talk about the Mapuche, it's more of an issue but out here people talk about other things like how to pay for school and where they're going to go to find jobs.

Rosie described how she as well as friends that she knows in similar situations, felt they were not given any slack. They felt they had to be well-behaved and work hard to prove they were just as valuable as a non-Mapuche. This suggests that indigeneity is linked to economic opportunities but that varies based on location, with a stronger connection between indigeneity and economic opportunities, and thus poverty, is stronger in urban areas.

In cities, where there is less concentration of Mapuche, indigeneity matters. One key informant, who works for a government agency dealing with indigenous issues, explained to me that the idea of Mapuche identity in cities, such as Santiago, is complicated.

This is a very complicated topic. You could interview lots of people and lots of them will say different things. There are a lot of Mapuche people in Santiago, and the majority of them were born in the city, or came to Santiago when they were young like me. My parents moved here when I was very young. They never told me that I was Mapuche until I was older. I didn't grow up with a sense of Mapuche identity. So being Mapuche in Santiago depends on the reality and experience of each person. When the Mapuche in Santiago gather together, they do so in order to reaffirm their cultural bonds. They use those opportunities to feel connected to a larger community. They talk about what it means to be Mapuche, and what a Mapuche cosmology means, and I think it helps them.

This respondent takes a more pragmatic view of varying perceptions of indigeneity across space. She views it as more of a personal situation, less connected to residence. This suggests that indigeneity is more fluid, more personal, and calls into question survey data routinely gathered by government institutions. It seems possible, based on the respondents varying personal experience, that a person could migrate to Santiago and choose not to participate in the Mapuche community. They need not overtly pass on their Mapuche identity to their children, however the opposite can be true where they may choose to do so.

With the advent of technology and social media, information about the Mapuche cosmology is more prevalent. Young people are waking up to their heritage and questioning their ethnic identity. One respondent, who works for a University, talked particularly about the youth and their desire to learn about Mapuche culture and language. On the day of our interview, the
Today I went to a funeral of a shaman who died. There were a lot of youth there, and you figure you would have seen them normally as normal youth. But today they were there participating in the ceremony dressed in traditional garb. The Mapuche show their culture much more in the spiritual and those spiritual ideas are being passed on to young people.

One way to address indigenous identity (and the mechanism I relied on in a quantitative analysis of the CASEN data) is to use language as an indicator of indigeneity. This idea often came up in conversations about what it meant to be or what it means to be Mapuche today. Respondents would often raise the topic of Mapuche language without me soliciting it. When they did it was usually in terms of education and how previous generations were forced to learn Spanish in schools. Language remains a contentious issue today except the complaint has shifted from being forced to learn Spanish (a majority now speaks Spanish as their first language) and seeing to it that there are educational programs that can provide that type of linguistic education. One key informant who works with a government agency at the national level discussed goals, specifically educational goals, with the idea of providing and improving access to educational opportunities to learn the Mapuche language.

Many of the Mapuche, especially in Santiago have expressed interest in learning Mapudungun. There's a lot of demand for language programs and this would work especially well as schools, however there's just not enough resources... we don't have the money to support these types of programs. Our budget is pretty small and language programs are not the government's first priority. In fact, a lot of people think we shouldn't have them at all, that they're a waste of time. I think they're a great way to pass on cultural understanding.

The negative view of language education seems to be rooted in a strong counter ideology that is attempting to erase any collective memory of the Mapuche people, relegating them to the past and disregarding those who still are scratching out a life in the 21st century.

When respondents would mention the issue of indigenous language I would ask them if there was a difference between being Mapuche and being Mapuche who speaks Mapudungun. I assumed that their response would be in the affirmative, and that they would view indigenous identity in relation to the ability to speak an indigenous language. However this was not the case. Respondents would lament the loss of language, the lack of indigenous language used for
emphasis in the education system, and a certain disrespect for indigenous language, but none of
the respondents associated language capability with indigenous identity. During a follow-up
interview with a key informant I mentioned this observation they were quick to point out that
things were not what they seemed. They explained that there are multiple reasons why people do
not rely on language ability to determine indigenous identity, notable among these is the prospect
of discrimination and the resulting inability to function within the Chilean society. Children
from rural areas, where Mapudungun would be more predominately used, often have to leave the
rural area to attend school in a local town we are forced to interact in Spanish. Additionally
when people from rural areas seek employment in regional towns or in Santiago their ability to
speak Spanish helps them function within society. Speaking Spanish is viewed as a prerequisite
for higher-paid employment. Respondents often told stories of discrimination based on how they
looked but also based on their accents and how they sounded. In order for someone to avoid
discrimination it is imperative that they sound Chilean, or the very least that they do not sound
indigenous.

When I first went looking for work in [a regional town] people I met would laugh
at me because of the way that I sounded. They used to tease me because of my
accent. That might not be a big deal if you're just going to work in construction,
but if you want a real job you need to sound Chilean, and not like a Mapuche
from the countryside.

These issues surrounding indigeneity and well-being are linked to where people are and their
movement across space, in other words migration. Poverty and indigeneity are linked to
migration because many of the problems discussed, such as discrimination, may not exist if the
Mapuche and non-indigenous Chileans did not mix. In fact, as mentioned earlier, many Chileans
thought the Mapuche had completely disappeared or were isolated in small communities in the
South. It was not until the 1992 census that people became aware that there was a significant
number of Mapuche people that remained and that were also living in urban areas. In the early
decades of the 20th century many Mapuche flocked to regional cities or Santiago looking for
employment and opportunities to improve their lives. Many, upon arrival, found that negative
stereotypes about Mapuche hindered their ability to assimilate or gain access to employment. As
they made their lives in Santiago, many parents refused to teach their children Mapudungun or
any of the religious or culturally significant practices for fear of their child's suffering because of
discrimination. Interview after interview people would tell me about their experience moving to
a new place and being fearful that they would be looked down upon for being Mapuche. "When I first came to Santiago people would criticize me for my accent and the clothes I wore", explained one respondent. Another respondent told of his feelings of inadequacy, "I remember feeling discrimination as soon as I arrived in Santiago. I worked in a company and there were people with more experience and were more educated and I was." Respondents had different stories depending on whether they move to Santiago or to a regional city, whether they were from rural areas, their level of Spanish, and whether their move was permanent or temporary.

As noted, many Mapuche people sojourn (that is, migrate on a temporary basis) for employment. Sojourning behavior poses a complicating challenge for those researching internal migration and changing ethnic identity. It is difficult to say what exactly we mean when we talk of internal migration. It is possible that those who migrate on a permanent basis have to confront the challenge of integrating into a new society. For those who sojourn this may not be the case. How does moving on a temporary basis affect people's well-being and their sense of Mapuche identity? Is it sojourning when we talk of children who come to town for a week to attend class? Are issues of Mapuche identity more complicated for Rosie, who only goes home to her community on weekends? What about those, like Sandra, who spend a few weeks in Santiago before returning to her community? How about those who move to Santiago for years but only with the goal of saving money to return to the South? Surely that must count as migration, however, to say that ethnic identity and migration are linked presupposes that we have an understanding of and can define both ethnic identity and migration. Unfortunately this is not always as easy as it might seem. However despite how we define migration, from the interviews it seems that when people travel they are often confronted with issues of identity. Some confrontations can be brushed aside with little impact but other confrontations are more significant and influences people's access to employment, livelihoods, and well-being.

Even for those moving to Santiago on a longer-term basis their ethnic roots and Southern ways often stay with them promoting an emotional attachment to their homelands. One couple I interviewed explained that it is very common for Mapuche in the South to move to Santiago when they are young looking for employment or educational opportunities. Some do end up staying, but many return to the South, especially those with access to some land and who are
trying to retire. The couple explained it this way:

Our plan when we got married was to move to Santiago to make some money. There were lots of us during those times that went to Santiago. Not everyone has returned but that was our idea, to return one day. The Mapuche always return to our land. We are like elephants, we come to die here. The young people usually leave looking for work and the retirees come back to their land. If you walk around this community you'll see that there a lot of people coming back to retire. Of course not all old people come back. It depends on the situation. Take my daughters, for example, they were born and raised in Santiago. Living here in the South is not their home. We brought them here to a habitat that was not natural for them. But because they are Mapuche, we felt they needed to come to know this land, the land of their heritage. We wanted them to know how the people live here, what it was like, everything. So we had to teach them that part. And, thanks to God, they've understood and taken to heart those teachings. They're not ashamed of being Mapuche. In fact, they participate in the ceremonies, and they take pride in their heritage. They even dress as Mapuche. I told him just as my father told me, ‘daughter, you should never be ashamed of being Mapuche. You should always feel proud, because your blood is pure, and it's not mixed’. So that's what I taught my daughters.

It is responses like these that lead me to conclude that, indeed, Mapuche identity and migration are linked. It seems that not only where someone comes from but also where they live makes a difference to whether or not being Mapuche will have an effect on their well-being. For those who live amongst others who have similar heritage, being Mapuche is not necessarily a topic of interest. However, when in situations like in Santiago they often have to confront their ethnic identity. Bengoa recognizes this phenomenon and explains that indigenous communities historically did not necessarily have a need to express their ethnic identity and did not develop a strong discourse regarding it. They did not need to tell the world who they were, because they lived more isolated lives within their own communities, where everyone was Mapuche. When, in the recent past, they have been confronted with capitalist expansion of industries, such as mining, forestry and export-oriented agriculture, or as he puts it the "wave of globalization", they needed a stronger sense of identity in order to defend their positions and subsequently created a stronger discourse regarding what it means to be Mapuche (Bengoa 2000, 78). This increased strength of indigeneity discourse happens on a communal level, but also on an individual level as people move and are confronted with different views of their ethnic heritage.

So in conclusion, the qualitative interviews were meant to provide a more thorough
understanding of how indigeneity is connected to well-being. More specifically, I wanted to
delve deeper into the connection between poverty, being Mapuche, and the factors that help
explain the differences between Mapuche and nonindigenous poverty levels. Respondents saw a
clear link between being Mapuche and having a higher chance of living in poverty. They
explained this connection in terms of conflict between national economic development strategies
and community desires as well as discrimination on a more individual level. Respondents
described discrimination as a factor keeping them from participating in educational institutions
as well as in the labor market. Being Mapuche makes it harder to get a good education and
obtain a higher paid job because the larger society views Mapuche identity negatively, and
therefore denies Mapuche people access to opportunities. One mechanism by which that
happens is through surnames, although general discrimination based on phenotype, dress,
language ability and accents also occur. These findings support other studies about Mapuche
discrimination (Merino et al 2009).

The concept of Mapuche identity is complicated. Ethnic identity can change through time as
well as across space (Nagel 1994). People in different areas have to deal with varying degrees of
discrimination because of their identity. This leads some to abandon their Mapuche history.
Feelings from respondents about the loss of identity when traveling to urban areas supports
previously published work on Mapuche identity. Briones reports that youth from rural areas that
have been obligated or desired to leave them in search of wage labor, do not
necessarily vocalize their sense of belonging to [the Mapuche community].
Despite the fact that some of these young people do accompany adults in
community activities, the elderly tend to view them as emblematic of the next
disappearance of cultural ancestry. The elders fear their abandonment of the use of
traditional language, the gradual transformation of practices, and the decrease in
respect owed to the [community] (Briones 2007, 105).

In attempting to mitigate some of the negative consequences of discrimination the state has
created programs to help the Mapuche people, however problems arise when the state defines
who is or is not Mapuche. The state's mechanism for defining ethnic identity does not
necessarily correlate with individuals realities, which benefits some but not others.

In regards to how to identify the Mapuche, the respondents claimed that the Mapuche have a
different cosmological view of the world. This cosmology involves ideas and values of health
and relationships to the natural world. This holds true whether they are Mapuche from urban areas or rural communities. These varying health and environmental views lend credence to the idea of questioning national definitions of poverty and development. If the Mapuche hold a different world view, then analyses of poverty that use a relative measure of poverty may be more applicable to the quantitative analysis of Mapuche poverty. It also suggests that more research is needed into how indigeneity influences perceptions of poverty and development; research that could strengthen social programs to help the Mapuche economic situation in Chile.

Past research shows that Mapuche identity in cities is taking on a new form as Mapuche populations recognize the large numbers of Mapuche residents in urban areas, and are associating for cultural and political support (Ancán 1997). As generations of Mapuche are growing up in cities, many are adopting cultural practices within cities that were traditionally seen as rural. Briones talks about Mapuche residents changing the discourse of identity and forming new terms, such as Mapurbe or Mapuche urban, to attempt to describe the urban nature of Mapuche identity (Briones 2007). This suggests an emerging shift in how the Mapuche identify themselves. As the Mapuche population in urban areas grows, the programs to assist Mapuche development, programs formed based a view of the Mapuche people as predominantly rural, may need to readjust to accommodate the changing population structure and sense of identity.
Chapter 7: Conclusions

The air was chilly as I awoke. I was lying under a pile of blankets, my head just peeking out of the top. They had made sure that I had enough blankets to keep warm throughout the night. I was in the son’s bedroom because he was away at boarding school. I could see the sky through the window; it was before sunrise but the sky was starting to grow light. I had told Carlos that I would help milk the cows in the morning and I could hear him already gathering buckets for the milk. I could see my breath as I quickly dressed, pulling on multiple sweatshirts. Maria greeted me in the kitchen with a hot cup of tea. She was concerned about my nights rest. I reassured her that everything was fine and excused myself to go help with the cows.

Steam rose from the bucket as the frothy milk streamed down from the young cow’s udder. Carlos had never seen a gringo milk a cow and he chuckled at the site. We carried the buckets of milk into the house where Maria was going to make cheese. She can sell the small cheese rounds in the local town for cash which she uses to buy household items she could not grow or make herself; Things like sugar, and batteries for the radio.

We had sat around the table late into the night, the fire in the pot belly stove keeping us warm. They talked of survival, of failed infrastructure. They told tales of supernatural occurrences, and religious views of the local people, many of whom were Mapuche. They told me their personal histories, about their family backgrounds and why they ended up where they are. Maria had inherited the land from her family. They had always lived in this area. Now she and Carlos worked the land, raising cows, sheep, and tilling the soil for raising crops. They had an orchard where they harvested apples, plums, and pears. They used hoop houses for growing vegetables in the winter and of course they had chickens. Their water came from a spring, just up the hill. They had recently installed a hose system that used gravity to bring the water to a tap just outside the house. They had dug a new pit for the outhouse this year and were pleased to show it to me.

We sat at the breakfast table eating fresh baked bread; the thick warm slices slathered with fresh butter and fruit preserves from the orchard. Carlos told me how the previous week he had hired
a man to bring a portable saw to their land, where they cut some pine trees growing out back. Carlos needed some lumber for a new addition he was going to put on their small, one-story house. The fresh lumber was stacked at the side of the house, drying, with only the scraps remaining in the field. He wanted to know if I would help gather the scraps and help mend the fence. I was eager to help.

We spent the rest of the morning carrying large pieces of wood, usually the outside pieces of the log that still had bark attached, to the field to be nailed between fence posts. I would hold the lengths of wood against the fence posts, and Carlos would hammer them to the post with rusty nails he had been gathering and saving over the years. We placed the wood near the bottom of the posts. I assumed we were doing this to help keep the sheep and cows from escaping under the fence. It was hard work. The fresh cut timber was still wet and heavy. The crooked nails would often bend as Carlos hit them with the hammer and he would have to pull them out, straighten them, and try again. By early afternoon we had covered most of one fence line. There were still long pieces that remained, but I was starting to tire. My hands were scraped and covered in sap from the pine wood. I had ripped my pants on the barbwire fence, and I had mud and manure up to my knees. I only hoped my efforts were going to somehow keep in the sheep, and in some small way improve the livelihood of this family. I smiled as Carlos called it quits, saying he had had enough, and was ready for some food. As we walked back towards the house, I commented that our efforts were sure to help keep in the sheep. He looked at me quizzically. “What do you mean?” he asked.

“Well…um…” I hesitated, “weren’t we putting the wood on the fence to help keep the sheep in the field?” my confusion obvious on my face.

Carlos’s smile turned to a chuckle, “no no….I just thought it would look nice. Besides”, he asked with a shrug, “what else was I going to do with the wood?”

This chapter briefly discusses some of the conclusions that I want to make about this research project. After reviewing literature on ethnic identity and indigenous poverty, analyzing survey data, and traveling around Chile interviewing people, I have some thoughts on the social
construction of indigeneity, indigenous poverty, Chilean development, and the research process.

**Indigeneity**
Indigenous identity is complicated and often equated with culture. So the first conclusion that I must make, and I feel is particularly relevant and important to remember, is that culture is not static. Human beings have always moved around and at some point, hundreds if not thousands of years ago, a group of people moved to a fertile land to the west of the Andes mountains and established life there. Since then, life for those people has been continually changing. Some of those changes were drastic, like the arrival of the Spanish, or the creation of the Chilean nation state. As Chilean historian Boccara (2002) recounts, the Mapuche society experienced a whole process of restructuring through the adoption of the horse, the concentration of political structures, the re-organization of the economic sphere around trade in the frontiers post, raids in the Chilean and Argentinean estancias, cattle breeding, and the expansion towards the Argentinean Pampas. In short, a process of transformation or ethnogenesis that took place between the second half the 16th century and the end of the 18th century led to the emergence of a new sociopolitical entity and identity; the Mapuche, properly speaking (2002, 285).

However changes were not always imposed from the outside. Some changes have come from within as the Mapuche have adapted their lifestyles to changes over time.

In more recent times, as trade has increased along with globalization, and as the availability of technology increases, the Mapuche have to confront social changes that put into question their identity and cosmology. The boundary-making approach helps us understand that being Mapuche is about the process of maintaining the boundary between Mapuche and others, not a fixed category of ethnicity. Even when we use ‘thick’ indicators of identity, like family name or language, we find that even these can change over time.

Gans (1979) describes how when people are isolated there may not be a need to “be concerned with [ethnic] identity except during conflict with other ethnic groups” (1979, 8). I found this to be the case after talking to respondents who live on reservations, where everyone is Mapuche, and identity is rarely discussed. However, as the Mapuche interact with others, their ethnic identity becomes more salient. For Mapuche who live in urban areas, ethnic identity becomes an
important aspect of their lives, but the consequences often depend on whether they recently migrated to the cities or were raised there. For Gans (1979), second and third generation Mapuche in the cities “are still identified as such by others, particularly on the basis of name, but the behavioral expectations that once went with identification by others have declined sharply, so that ethnics have some choice about when and how to play ethnic roles” (1979, 8). Gans suggests that in these circumstances, ethnicity becomes expressive instead of instrumental to functioning in life. This means that people have more say in how and when their ethnicity matters. Gans refers to this as ‘symbolic ethnicity’ and suggests that “most people look for easy and intermittent ways of expressing their identity, for ways that do not conflict with other ways of life. As a result, they refrain from ethnic behavior that requires an arduous or time-consuming commitment, either to a culture that must be practiced constantly, or to organizations that demand active membership” (1979, 8). I found this to be true for many Mapuche that I interviewed in urban areas. Many had lives similar to other Chileans; eating the same food, going to the same church, watching the same TV, attending the same schools, working the same jobs. However, when asked about being Mapuche they claimed that identity, despite not having any strong commitments to Mapuche culture or organizations.

However, at the national level, the Mapuche are confronted with a dominant discourse about identity and development in the corporate media that often denies their existence and promotes a homogenous Chilean identity (Mellor 2009; Ray 2007). As Richards (2010) explains, that in neoliberal Chile the “authorities emphasize the role the Mapuche can play in enhancing the diversity of the Chilean society but downplay claims for recognition of their collective and cultural rights to territory and self-determination, particularly insofar as these are perceived to violate national development goals and the property rights of forestry companies and local elites (2010, 77). When the Mapuche attempt to interact with the wider Chilean public, and do something about these issues, they are often met with hostility, discrimination, and limited access to social goods (Mellor 2009). This discrimination and hostility can have long term consequences for Mapuche poverty.

**Mapuche Poverty**

It is important to talk about poverty and the ways it is measured. In 2012 an associated press
article exposed some problems with the Chilean government and their view on poverty, when the president was accused of reporting incorrect statistical results (Vergara and Quilodran 2012). He had claimed that his administration had been successful at decreasing poverty, and presented some statistical reports backing up his claim. However, the UN and research groups in Chile denounced his claims, suggesting that he was falsifying data to make his administration look better than it was (Vergara and Quilodran 2012). This shows the importance of understanding the poverty data and measures used in Chile, so that we can have an accurate understanding of the situation for the millions who live there.

Essentially in this dissertation I ask the seemingly simple question: Are the Mapuche more poor than non-Mapuche? And the simple answer is yes they are more poor, however an explanation is needed because it depends on how we conceptualize poverty. If we consider poverty as a negative concept relating to deprivation and basic human survival and we measure it with income, then the empirical evidence suggests that the Mapuche are more poor than the non-Mapuche. Part of the reason for this is because they have lower paying jobs and this is because they lack the human capital to obtain higher paid employment. This does not mean that there are not wealthy Mapuche people who have high paying jobs because there are, but according to the data, the proportion of Mapuche people who live in poverty is greater than the proportion of non-indigenous Chileans who live in poverty.

However I also question the definition of poverty. After talking to Mapuche respondents, it seems that some Mapuche question the concept of poverty. Some Mapuche become frustrated trying to understand the meaning of the word poverty, however most Mapuche just associate poverty with not having money to buy the things that they need or want. Poverty could incorporate broader ideas of happiness, social well-being and even spirituality in its definition, but it seems that in order to be useful, and easily measured, that a definition of poverty should just be something simple.

That is why many people (Mapuche, researchers, politicians) associate poverty with income. But as I showed above there are multiple ways to measure poverty using income, including a relative poverty measure. After talking to a number of people, it seems that a relative poverty line would
be the most preferred, according to the definitions and understanding that the Mapuche have about poverty. The respondents tend to view poverty as related to consumption and how people feel about their consumption is often dictated by comparing one's consumption to that of someone else's. So people feel poor when they are relatively more poor than a comparison group, like their neighbors.

However this becomes problematic because, as I showed, people living in diverse circumstances or coming from different cultural backgrounds, or at different times in their lives, may value certain types of consumption or they may compare themselves to different reference groups. This makes poverty more nuanced. However a way to get at it statistically is what I did in this research, by using income as a proxy for access, and comparing income based on the median household income. When we do this it shows that the Mapuche are relatively more poor than their non-indigenous counterparts, which means their ability to consume is more limited. However, situations of relative poverty vary, for example, whether we are talking about urban residents comparing themselves to other urban residents or whether we refer to rural Mapuche who compare themselves to their neighbors, the multinational forestry companies. In the latter situation, the relative difference in land ownership, and economic status is stark and often contributes to conflict.

**Chilean Development**

These conflicts over resources have continued since the arrival of the Spanish. As Richards (2010) remarks, in contemporary Chile, “the privileged status of neoliberal development over indigenous rights is at the root of these conflicts. Hydroelectric dams, airports, highways, corporate fisheries and garbage dumps are among the initiatives Mapuche communities find themselves struggling against. Perhaps most emblematically today in ancestral Mapuche territory, national and foreign timber companies own three times more land than the Mapuche” (2010, 68). Or as Renfrew (2011) describes it, under neoliberalism, “the resource-rich lands, rather than the people who live in them, have become the object of development” (2011, 588).

The Mapuche are confronted with a powerful government that is backed by military and economic elites who maintain ties with multi-national corporations. They are confronted with
capitalist expansion and the taking of communal land by multinationals that are given land concession by the government, with hopes of growing the economy (Bengoa 2000; Clapp 1998; Haughney 2006; Vergara and Barton 2013). Specifically they Mapuche are continually fighting with international timber companies and as Renfrew (2011) describes it, researchers and environmental NGOs have documented “how monoculture industrial plantation forestry has in several cases led to the destruction of native grasslands, soil erosion and acidification, the proliferation of invasive flora and fauna, new ‘forest’ fire hazards, water depletion and contamination, sometimes slave-like labor conditions, and the land concentration and privatization” (2011, 586). The economic growth discourse dominates discussion on land use and poverty. Chile is one of the first countries to adopt neoliberal economic policies (McMichael 2012), which gives us reason to see how the Chilean society has changed during this time.

The government and the Chilean people hold to the idea that in order for Chile to grow economically all citizens should have a sense of nationalism, a common economic goal, and should make an effort to assimilate into a homogenous Chilean community. This contradicts more recent ideas of multiculturalism and does not support the idea of maintaining a strong autonomous indigenous community. According to Ventura (2012) neoliberal government “represents the population’s wellbeing as intimately tied to individuals’ abilities to make market principles the guiding values of their lives, to see themselves as products to create, sell, and optimize” (2012, 2). This government view seems contrary to Mapuche demands. It seems that on one hand the Mapuche community wants to develop economically however they want to do it with a certain degree of autonomy. They want to be consumers of material goods but there is also a desire to retain culturally significant traditions, lifestyles, language and land tenure systems. These competing views make the development process a complex task.

I find it interesting that in many places, people, including those in Chilean society, our trying to manipulate indigenous people to integrate them into a free-market capitalist social system, but at the same time we recognize the many difficulties and problems created by that type of system. Contemporary society talks about ‘going green’ and improving our society in a more sustainable way, but at the same time we disregard indigenous ways of life as being backward. Why is that? This brings me to some thoughts on the research process.
Research Process
It can be challenging to get involved with indigenous issues when I am not “indigenous”. However that can be an asset as well because I am more removed from the process and problems associated with indigeneity. However because I was an outsider people were not always comfortable talking to me about their views. Subsequently, not all the interviews were recorded. Some people felt uncomfortable with this, so in some cases I just took notes as the interview happened, but in other cases I had to remember what was said and take notes after the interview had ended.

Travel to rural areas is often difficult because of limited transportation and limited time, so although a significant portion of my interviews were in rural areas more emphasis could be placed on interviewing people in a greater number of rural communities.

Talking to people about official definitions and how they would define them can be a challenge because people don’t always know about the official definitions, or the process of how those are created. The discourse that is used to describe poverty is spread through popular media. So someone may learn of a word through this media, and accept the definition of the idea based on the context of the media’s use of the word. Those words are not often described in other contexts so they may never be challenged. This means that when I ask them to challenge the word and give me their definition, it comes from how they have heard this word used. And that comes from the popular usage which is influenced by the popular discourse. In other words, people often repeated what they heard on television.

In conclusion, researching the Mapuche and trying to understand poverty, well-being, and the meanings they attach to these concepts is a challenge because there are a myriad of factors that go into understanding these concepts, including multiple definitions, measures, and sources of data. Although traveling around urban and rural Chile can be exciting and stimulating, it can also be difficult logistically. However after having lived and traveled there I can say what I have seen. There are poor people in Chile, who suffer and struggle to survive. There are people without electricity. There are people without means to provide for themselves or their families. There are
slums, homeless people, crime, disease, and violence. Although the economy has grown, and more people, including Mapuche people, have greater access to disposable income, they are, in my view, not necessarily improving their lives. Cheap consumer goods from Asia have flooded the markets. Poor quality processed foods fill the supermarket shelves. Conspicuous consumption is the new way to establish social status, and people have been eager to jump on this bandwagon. All these changes come at a cost. Mapuche society has always been changing, and will continue to do so. I just hope that those changes are for the better.
Bibliography


de Haan, A. (1999). "Livelihoods and poverty: The role of migration--a critical review of the


Latcham, R. E. (1924). La organización social y las creencias religiosas de los antiguos araucanos Santiago, Imprenta Cervantes.


Identities, 18(4), 417-434.


ethnicity. APPLIED DEVELOPMENT SCIENCE, 12(2), 108-111.
neighbourhoods in Chile." Journal of Epidemiology and Community Health 62(9): 790-792.
26(3): 1073-1119.
Press.
American Academy of Political and Social Science, 619(1), 59-77.
Smedley, A. and B. D. Smedley (2005). "Race as Biology is Fiction, Racism as a Social Problem
of Texas Press.
van der Ploeg, J. D. (2008). The New Peasantries: struggles for autonomy and sustainability in
an era of empire and globalization London, Earthscan.
Veiga, L. B. E. and A. Magrini (2009). "Eco-industrial park development in Rio de Janeiro,
Brazil: a tool for sustainable development." Journal of Cleaner Production 17(7): 653-661.
Vergara, Elvis Parraguez and Jonathan R. Barton (2013). “Poverty and Dependency in
Indigenous Rural Livelihoods: Mapuche Experiences in Andean Foothills of Chile”.
Vergara, Eva and Federico Quilodran (2012). “Chilean president accused of cooking poverty
data”. Associated Press Tuesday, September 11, 2012. Downloaded from:
Appendix A: Maps of Chile

Map 1: Relative Poverty in Chile, 2006

Comunas

Standard Deviation

- < -1.5 Std. Dev.
- -1.5 - -0.50 Std. Dev.
- -0.50 - 0.50 Std. Dev.
- 0.50 - 1.5 Std. Dev.
- > 1.5 Std. Dev.

Data Source: CASEN 2006

0 250 500 1,000 Miles
Map 2: Proportion Indigenous in Chile, 2006

Comunas
Standard Deviation
- Dark Brown: < -0.50 Std. Dev.
- Dark Green: -0.50 - 0.50 Std. Dev.
- Green: 0.50 - 1.5 Std. Dev.
- Light Blue: 1.5 - 2.5 Std. Dev.
- Light Blue Green: > 2.5 Std. Dev.

Data Source: CASEN 2006
Map 3: Portion Mapuche in Chile, 2006

Comunas
Standard Deviation
- < -0.50 Std. Dev.
-0.50 - 0.50 Std. Dev.
- 0.50 - 1.50 Std. Dev.
- > 1.50 Std. Dev.

Data Source: CASEN 2006

0 250 500 1,000 Miles
Map 4: Proportion Rural in Chile, 2006

Comunas

Standard Deviation
- < -0.50 Std. Dev.
- -0.50 - 0.50 Std. Dev.
- 0.50 - 1.5 Std. Dev.
- 1.5 - 2.1 Std. Dev.

Data Source: CASEN 2006

Map showing the proportion rural in Chile, 2006, with different colors representing standard deviation categories.
Appendix B: Interview Guide

Participant Interview Schedule

Social Perceptions of Poverty and Livelihood Choices among the Mapuche People in Chile

Name: __________________________________ Title: __________________________________

Time in position/community: __________ (yrs.) Address: _______________________________

City: __________ District: ______________________________ Postal Code: __________

Phone: __________ Email: ______________________________ Date: _______________________

Time started: ______________________ Time completed: ____________________________

Interview Location: _____________________________________________________________

1. How long have you lived in the area?

2. How do you describe your community?  
   [Is it a small community? Rural? Urban? How do you describe the level of poverty in your community?]

3. The government claims that in the last ten years Chile has made some rapid social changes. They say these changes have been successful in decreasing poverty. Have you seen any significant changes in poverty in your community in the last ten years? Can you please describe... [what changed, what was the outcome]

4. How would you describe the mood of your community towards social changes and programs the government has put into place? Can you please explain...[what are the feelings, who feels this way and why]

5. How is the level of happiness in your community? Has people’s level of happiness in your community changed in the last ten years? If so, how?
6. Can you identify any conflicts resulting from social changes? If so, can you please describe who feels this way and why?

7. The government defines poverty by measuring household income. What do you think of the way they define poverty? [What other things might be important to include when defining poverty? How would you define poverty?]

8. What does poverty mean to you? [How would you define poverty?]

9. Do you think the Mapuche are poor compared to non-Mapuche? [why? or why not?]

10. What can you tell me about the ways in which Mapuche people survive economically? [participation in the formal/informal economy, self-provisioning, resource/forest use, use of social programs]

11. Have there been any changes in the types of activities that people in your community or household participate in? [Do people rely on family in other areas? Remittances?]

12. How do people in your community decide what types of activities to engage in? [Do they decide as a family? Community? Where do they get information on types of livelihoods available?]

13. Age: __________ (yrs.)

14. Gender: _______

Can you recommend other individuals that I should talk to?

May I contact you again if I have more questions?

Thank you for your time and assistance.
Programa de Entrevistas con Participantes

Percepciones de Pobreza y Las Estrategias Escogidas por Ganarse La Vida:

Un Estudio Sobre la Gente Mapuche de Chile

Nombre: ____________________________________________  Titulo: __________________________

Tiempo en position/comunidad: _______ (anos)  Dirección: ________________________________

Ciudad: ____________________________  Comunidad: ________________________________

Teléfono: ____________  Email: ____________________________  Fecha: ______________________

Hora de Empezar: ________________  Hora de Terminar: ____________________________

Lugar de Entrevista: ______________________________________________________________

15. ¿Por cuánto tiempo ha vivido en su comunidad?

16. ¿Cómo se describe su comunidad?  [¿Es una comunidad pequeña? ¿Rural? ¿Urbano? ¿Cómo describiría el nivel de pobreza?]

17. El Gobierno ha dicho que en los últimos diez años Chile ha cambiado bastante y rápido. Dicen que estos cambios han sido exitoso en bajar el nivel de pobreza. ¿Ha visto usted algún cambio significativo en cuanto al nivel de pobreza? ¿Podría usted explicar... [¿qué cambio?, ¿qué paso?]

18. ¿Cómo podría usted describir la disposición del ánimo de la gente en su comunidad hacia los cambios sociales y los programas que el gobierno ha desarrollado? ¿Podría explicar...[¿Qué son los sentimientos? ¿Quién se siente así y porque?]

19. ¿Cómo es el nivel de felicidad de la gente en su comunidad? ¿Ha cambiado este nivel en los últimos diez años? ¿Si es así, cómo?

20. ¿Conoce usted algún conflicto que es un resultado de los cambios sociales? ¿Si es así, podría explicar quien se siente así y porque?
21. El gobierno de Chile se define pobreza a través una medida de los ingresos. ¿Qué piensa usted de esta manera de medir pobreza? [¿Qué otro tipo de cosas sería importante de incluir al medir pobreza?]

22. ¿Qué significa pobreza para usted? [¿Qué podría usted como definición de pobreza?]

23. ¿Piensa usted que la gente Mapuche es más pobre en comparación con la gente que no es Mapuche? [¿Porque? O ¿Por qué no?]

24. ¿Qué me puede explicar sobre cómo la gente Mapuche sobrevive económicamente? [participación en la economía formal/informal, proveerse, usar recursos naturales, usar programas sociales]

25. ¿Han sido algunos cambios de los tipos de actividades económicas en que participan su familia o la gente en la comunidad? [¿Depende más en la familia extendida? ¿Remesas?]

26. ¿Qué es el proceso de decidir en cual actividades se participan? [¿Deciden como familia? ¿Comunidad? ¿Dónde reciben su información sobre qué tipo de actividades son posible?]

27. Edad: __________ (anos)

28. Sexo: __________

¿Podría decirme el nombre de alguien más con quien debo conversar?

¿Puedo contactarle de nuevo si tengo más preguntas?

Muchas Gracias por su tiempo y ayuda.
### Appendix C: List of Respondents

#### List of Respondents with Gender, Age and Residence

<table>
<thead>
<tr>
<th>Interviewees</th>
<th>Gender</th>
<th>Age</th>
<th>Rural</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Key Informants</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Academic</td>
<td>M</td>
<td>Middle Age</td>
<td>No</td>
</tr>
<tr>
<td>Academic</td>
<td>M</td>
<td>Middle Age</td>
<td>No</td>
</tr>
<tr>
<td>Academic</td>
<td>F</td>
<td>Middle Age</td>
<td>No</td>
</tr>
<tr>
<td>Academic</td>
<td>F</td>
<td>Middle Age</td>
<td>No</td>
</tr>
<tr>
<td>Government Employee</td>
<td>M</td>
<td>Middle Age</td>
<td>No</td>
</tr>
<tr>
<td>Government Employee</td>
<td>M</td>
<td>Middle Age</td>
<td>No</td>
</tr>
<tr>
<td>Government Employee</td>
<td>F</td>
<td>Young Adult</td>
<td>No</td>
</tr>
<tr>
<td>Government Employee</td>
<td>F</td>
<td>Middle Age</td>
<td>No</td>
</tr>
<tr>
<td>NGO Employee</td>
<td>M</td>
<td>Young Adult</td>
<td>No</td>
</tr>
<tr>
<td>NGO Employee</td>
<td>F</td>
<td>Young Adult</td>
<td>Yes</td>
</tr>
<tr>
<td>NGO Employee</td>
<td>M</td>
<td>Middle Age</td>
<td>Yes</td>
</tr>
<tr>
<td><strong>Respondents</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Respondent 1</td>
<td>M</td>
<td>Retired</td>
<td>Yes</td>
</tr>
<tr>
<td>Respondent 2</td>
<td>M</td>
<td>Middle Age</td>
<td>Yes</td>
</tr>
<tr>
<td>Respondent 3</td>
<td>F</td>
<td>Middle Age</td>
<td>Yes</td>
</tr>
<tr>
<td>Respondent 4</td>
<td>M</td>
<td>Middle Age</td>
<td>Yes</td>
</tr>
<tr>
<td>Respondent 5</td>
<td>F</td>
<td>Middle Age</td>
<td>Yes</td>
</tr>
<tr>
<td>Respondent 6</td>
<td>M</td>
<td>Middle Age</td>
<td>Yes</td>
</tr>
<tr>
<td>Respondent 7</td>
<td>F</td>
<td>Middle Age</td>
<td>No</td>
</tr>
<tr>
<td>Respondent 8</td>
<td>F</td>
<td>Middle Age</td>
<td>No</td>
</tr>
<tr>
<td>Respondent 9</td>
<td>M</td>
<td>Middle Age</td>
<td>No</td>
</tr>
<tr>
<td>Respondent 10</td>
<td>F</td>
<td>Young Adult</td>
<td>No</td>
</tr>
<tr>
<td>Respondent 11</td>
<td>F</td>
<td>Middle Age</td>
<td>No</td>
</tr>
<tr>
<td>Respondent 12</td>
<td>F</td>
<td>Middle Age</td>
<td>No</td>
</tr>
<tr>
<td>Respondent 13</td>
<td>M</td>
<td>Young Adult</td>
<td>No</td>
</tr>
<tr>
<td>Respondent 14</td>
<td>M</td>
<td>Young Adult</td>
<td>No</td>
</tr>
<tr>
<td>Respondent 15</td>
<td>M</td>
<td>Middle Age</td>
<td>No</td>
</tr>
<tr>
<td>Respondent 16</td>
<td>F</td>
<td>Young Adult</td>
<td>Yes</td>
</tr>
<tr>
<td>Respondent 17</td>
<td>F</td>
<td>Middle Age</td>
<td>Yes</td>
</tr>
<tr>
<td>Respondent 18</td>
<td>M</td>
<td>Young Adult</td>
<td>Yes</td>
</tr>
<tr>
<td>Respondent 19</td>
<td>F</td>
<td>Young Adult</td>
<td>No</td>
</tr>
<tr>
<td>Respondent 20</td>
<td>F</td>
<td>Middle Age</td>
<td>Yes</td>
</tr>
<tr>
<td>Respondent 21</td>
<td>M</td>
<td>Retired</td>
<td>Yes</td>
</tr>
<tr>
<td>Respondent 22</td>
<td>M</td>
<td>Middle Age</td>
<td>No</td>
</tr>
<tr>
<td>Respondent 23</td>
<td>M</td>
<td>Middle Age</td>
<td>No</td>
</tr>
<tr>
<td>Respondent 24</td>
<td>M</td>
<td>Middle Age</td>
<td>No</td>
</tr>
<tr>
<td>Respondent 25</td>
<td>M</td>
<td>Young Adult</td>
<td>No</td>
</tr>
<tr>
<td>Respondent 26</td>
<td>F</td>
<td>Young Adult</td>
<td>No</td>
</tr>
<tr>
<td>Respondent 27</td>
<td>F</td>
<td>Retired</td>
<td>No</td>
</tr>
<tr>
<td>Respondent 28</td>
<td>M</td>
<td>Young Adult</td>
<td>No</td>
</tr>
<tr>
<td>Respondent 29</td>
<td>F</td>
<td>Young Adult</td>
<td>No</td>
</tr>
<tr>
<td>Respondent 30</td>
<td>M</td>
<td>Young Adult</td>
<td>No</td>
</tr>
<tr>
<td>Respondent 31</td>
<td>F</td>
<td>Retired</td>
<td>Yes</td>
</tr>
<tr>
<td>Respondent 32</td>
<td>F</td>
<td>Middle Age</td>
<td>No</td>
</tr>
<tr>
<td>Respondent 33</td>
<td>M</td>
<td>Middle Age</td>
<td>Yes</td>
</tr>
<tr>
<td>Respondent 34</td>
<td>F</td>
<td>Retired</td>
<td>No</td>
</tr>
<tr>
<td>Respondent 35</td>
<td>M</td>
<td>Retired</td>
<td>Yes</td>
</tr>
<tr>
<td>Respondent 36</td>
<td>F</td>
<td>Retired</td>
<td>Yes</td>
</tr>
<tr>
<td>Respondent 37</td>
<td>M</td>
<td>Middle Age</td>
<td>No</td>
</tr>
<tr>
<td>Respondent 38</td>
<td>F</td>
<td>Young Adult</td>
<td>No</td>
</tr>
<tr>
<td>Respondent 39</td>
<td>F</td>
<td>Young Adult</td>
<td>No</td>
</tr>
<tr>
<td>Respondent 40</td>
<td>M</td>
<td>Young Adult</td>
<td>Yes</td>
</tr>
<tr>
<td>Respondent 41</td>
<td>F</td>
<td>Retired</td>
<td>Yes</td>
</tr>
<tr>
<td>Respondent 42</td>
<td>M</td>
<td>Middle Age</td>
<td>Yes</td>
</tr>
</tbody>
</table>

Source: Interviews in Chile
DAVID R. ADER- VITA

EDUCATION

Current  PhD Candidate in Rural Sociology and Demography,  
The Pennsylvania State University  
2005  M.A. International Development, University of York

PUBLICATIONS


Glenna, Leland and David Ader, “The Efficacy of a Program Promoting Rice Self-Sufficiency in Ghana During a Period of Neoliberalism”, Accepted at Rural Sociology

TEACHING EXPERIENCE

Spring 2012  Community, Environment, and Development (CED 410): Global Seminar  
Spring 2012  Community, Environment, and Development (CED 499B): Rural Development  
Spring 2012  International Agriculture (INTAD 197A): Field Study in Costa Rica  
Fall 2011  Introduction to Rural Sociology (RSOC 011)  
Summer 2011  Sociology (SOC 408): Urban Ecology  
Spring 2010  Community, Environment, and Development (CED 497B) Rural Development in Honduras

PROFESSIONAL EXPERIENCE

2005-2007  Assistant Head of Programs, United Nations Association International Service, UK  
2003-2004  Livelihood Project Coordinator, Peace Corps, LIFE Project, Zambia  
1999-2001  Community Outreach, Santiago Norte, SUD, Chile