Poverty Among Indigenous Groups in Chile: An Empirical Analysis

Poverty is one of the main problems affecting indigenous groups across the globe

(Psacharopoulos and Patrinos 1994; Gonzalez 1994; Eversole 2005). Latin America contains a

diverse indigenous population (Gonzalez 1994) that totals over 40 million (Eversole 2005) and

lives in a range of countries and contexts. The indigenous people today account for about 11%

of the population in Latin America (Psacharopoulos and Patrinos 1994). Empirical studies of

indigenous poverty in Latin America have been scarce (Psacharopoulos and Patrinos 1994).

Despite the size and diversity of the indigenous population, they are studied as an aggregate

group and compared to non-indigenous people. This aggregation is most often due to lack of

data and clear identification of indigenous groups (Gonzalez 1994). Grouping the total

population into one aggregate dichotomous variable of indigenous or non-indigenous masks the

heterogeneity between distinct groups.

This paper examines the situation of indigenous people in one Latin American country –

Chile. Chile has about 1.2 million indigenous people which represent about 8% of the

population (IADB). The population in Chile, who live below the poverty line, contains a

disproportionate amount of indigenous people. In order to understand the poverty situation in

Chile disaggregating the population identified as indigenous becomes necessary. The overall

goal of this research is to advance an understanding of indigenous poverty in Chile. This article

focuses on poverty amongst and between indigenous groups in Chile.

Every two years the Ministry of Planning and Cooperation (MIDEPLAN) implements a

household survey called the National Characterization Socioeconomic Survey (Encuesta

Caracterizacion Socioeconomica Nacional) CASEN. This is a government funded household

survey of 73,720 (in 2006) households throughout Chile. This survey gathers data on household

demographic variables, employment, income, education, and health related issues. It is a stratified cluster sample that, when weighted by region, is nationally representative. This paper uses the 2006 dataset that was released in 2007. This is the first time that the CASEN survey has the category of indigenous identity disaggregated into separate groups. Although the government officially recognizes 9 indigenous groups in Chile, there are insufficient cases for most of the distinct groups to analyze them separately.

The Mapuche, Aymara and Atacameno are the three largest indigenous groups in Chile. The Mapuche correspond historically to the south where as the Aymara and Atacameno are from the north. Prior research has combined these groups together. This paper separates the largest group, Mapuche, from the others. All other groups were combined into a "other indigenous" category. These were made into dummy variables and compared to the non-indigenous population as the reference group. The basic descriptive results, when comparing characteristics of indigenous to non-indigenous householders, shows that indigenous people have a higher rate of poverty, with 14.6 percent living in poverty versus only 11.0 percent of non-indigenous people. Indigenous people have a higher rate of rural residence and correspondingly a higher rate of employment in extractive industries. The rate of unemployment, for indigenous, is slightly higher than non-indigenous. Also compared to non-indigenous, indigenous heads of households have higher rates of being in single and co-habiting relationships.

Using a dichotomous variable (poor non-poor) in a logistic regression, this paper analyzes the likelihood of living in poverty for an aggregated indigenous category as well as for disaggregated groups using non-indigenous as the control variable. Poverty is defined by the survey as a measure of income. The absolute poverty line is calculated using an estimated consumption level needed for basic survival. In the regression analysis poverty is regressed onto

basic demographic characteristics, household structure, geographic and human capital

characteristics, in order to find which factors mediate against the likelihood of living in poverty.

One of the interesting findings in this analysis was the variation between likelihoods of

poverty between indigenous groups. Without controlling for other variables, the Mapuche, who

are the dominant group in Chile, are significantly more likely (p<.001) than non-indigenous to be

poor. But the other indigenous groups are less likely than non-indigenous to be poor although

this is not statistically significant. After controlling for other variables these differences

decreased and became insignificant. This suggests that there is some heterogeneity between

the indigenous groups. This provides some insight to indigenous studies in general. Previous

studies on indigenous people, by categorizing all indigenous people into one group, may be

masking some of the heterogeneity between groups.

The variable that had the most effect on decreasing the likelihood of living in poverty

was years of education. Clearly, being indigenous can be mediated in the model by controlling

for a combination of variables. To say that all things being equal, indigenous people are not any

more or less likely to be in poverty than non-indigenous is useful in a statistical model, however

in reality, all things are not equal. Indigenous people do not share the same experiences or

situations between themselves or when compared to non-indigenous people. Levels of

education, types of employment, family structure may all play a part when dealing with

incidences of poverty. This may have further policy implications for example: programs that

deal with indigenous poverty may need to focus on access to education. The implications for

research are apparent: further analysis is needed to understand the distinctions and underlying

mechanisms that create varying levels of poverty within the indigenous population.

Table 2. Logistic Regression Results for the Likelihood of Living in Poverty

Variables	Model I	Model II	Model III	Model IV	Model V	Model VI	Model VII	Full Model
Indigenous Status								
Mapuche	1.45***	1.37***	1.25***	1.42***	1.44***	1.51***	1.50***	1.10
Other	0.95	0.87	0.94	0.79	0.97	.67*	0.86	.68**
Non-Indigenous (ref)								
Individual Characteristics								
Female		1.62***						1.03
Age		0.97***						0.95***
Disabled		1.57***						1.30***
Human Capital								
Years of Education			0.92***					0.86***
Household Size								
Number of people				1.37***				1.37***
Civil Status								
Cohabiting				1.79***				1.19***
Anulled				1.17				1.21
Seperated				2.57***				2.10***
Divorced				1.14				1.00
Widow				1.10*				0.95
Single				2.31***				1.54***
Married (ref)								
Employment Status								
Unemployed					8.05***			9.16***
Inactive in Labor Market					1.55***			2.81***
Employed (ref)								
Employed in Extractive Industries								
Extractive						1.51***		---
Other Type (ref)								
Location of Residence								
Santiago							0.56***	.624***
Rural Areas							0.69***	.541***
Other Urban (ref)								
N=	73157	73157	73157	73157	73157	73157	73157	73157
-2LL	50414	49145	49419	47714	48740	31076	49948	42241
Pseudo R^2 (Nagelk	.002	.036	.029	.075	.047	.008	.014	.214
Model Chi-square	57	1326	1052	2756	1731	176	523	8230

* =sig <.05, **=sig<.01, ***=sig<.001