% of women who have experienced sexual or physical violence in the past 12 months

% of women who have experienced psychological violence in the past 12 months

Percentage of level of women’s education by state

Percentage of level of men’s education by state

Percentage of women’s mother tongue by total state population

Percentage of women’s mother tongue by total state population

In the landlocked country of Bolivia, the indigenous and post-colonial cultures have interacted and influenced one another for hundreds of years. As these cultures have merged, they have formed a unique set of social and cultural norms that govern the Bolivian peoples’ attitudes and behaviors towards all aspects of life. These social and cultural norms play both a constructive and deconstructive role in creating gender roles, identities, and expectations. They also shape what are considered appropriate and inappropriate behaviors between men and women.

A behavior that is prevalent in Bolivia is violence against women. The 2008 Demographic and Health Survey (DHS) estimates that 47% of women, married or in common unions, have experienced psychological, physical, or sexual violence in the past 12 months. In 2010, 72 women in Bolivia were victims of murder. Records show that 42% of murder victims were between 18 and 30 years old and that their intimate partners were responsible for more than 50% of their deaths. In 2010, 4,515 women were admitted to hospitals due to serious violence-related injuries. A cross-country study led by Victor Asai and Mitchell Brown established that, in comparison with 31 other countries, violence against women in Bolivia can be considered widespread.

This project aims to unpack the prevalence of violence against women in Bolivia and identify key risk factors that are present. Due to Bolivia’s demographic diversity, it is important to analyze these factors by state. By using GIS to plot key risk factors one is better able to present data and prescribe policy interventions.

% of women who have experienced sexual or physical violence in the past 12 months

% of women who have experienced psychological violence in the past 12 months

This project will use Lori Heise 1998 Violence against Women: An Integrated, Ecological Framework, which incorporates a multi-level and multi-factor approach to analyzing violence against women. The Ecological Framework is made up of four levels of analysis that include the interplay between individual characteristics, relationships, community, and society. Within each level, Heise outlines a series of risk factors that are considered true causal factors that affect the likelihood of an individual becoming a victim of intimate partner violence.

In this analysis, I have chosen to focus primarily on four key community-based indicators. They are: female and male illiteracy, female and male unemployment, and poverty. Since province or municipality data could not be found, the information is plotted at the state administrative level. In addition, I have opted to add an indicator: the number of individuals who identify themselves as indigenous. Since this specific data point could not be found, “self-identified mother tongue” is used as a proxy indicator. The use of this indicator is an attempt to determine whether there is a correlation between violence against women, where people live, and their perceived culture.

Data on the prevalence of physical, sexual, and psychological violence against women, and the associated risk factors is derived from the Demographic Health Survey (DHS) and the National Statistic Institute of Bolivia. The DHS data is one of the most robust collections of health-related data (the latest survey was conducted in 2008). The National Statistic Institute of Bolivia conducted its latest population survey in 2001. The foundational maps that provide the background to input the data come from ArcGIS.

The first step taken to prepare the data analysis was inputting the data from tabular format into GIS. Once that data was inputted, a layer was created for each of the risk factors. Then two foundational layers were created to highlight (1) the percentage of women who had experienced sexual and physical violence, and (2) the percentage of women that had experienced psychological violence. Depending on the risk factors, pie or bar graphs were created to illustrate whether a particular state had high percentage of violence also had a high risk factor.

There is a general prevalence of violence against women across all provinces. Across the country, between 20% and 28% of women had experienced sexual or physical abuse in the past 12 months. The overall variance between 20% and 28% is not significant. Likewise, psychological violence is also prominent throughout the country with 30% to 37% of women experiencing abuse in the past 12 months. While the lack of a significant variance in either one of these statistics shows that the country needs to work hard to address violence, it does not indicate how it should go about doing so nor does it indicate how it should prioritize strategies.

When correlating geography, prevalence of violence, and literacy rates one gains a greater depth of understanding into the policy options that the government of Bolivia may have. Throughout Bolivia, women are, on average, less educated than men. Provinces with the highest prevalence of violence against women also have the greatest percentage of women that have not completed primary school. Increasing women’s literacy and education standards is a policy option that may reduce both poverty and the prevalence of violence against women.

Having an indigenous language as a mother tongue may be the most adequate proxy to represent culture. Bolivia is a very diverse country in which multiple cultures have interacted for centuries. There appears to be little correlation between the percentage of people who speak a certain language and whether there is a high prevalence of violence in that state. For instance, in the state of Potosí, more than fifty percent of the population speaks an indigenous language as their mother tongue. However, neighboring province Oruro, which also has a high prevalence of sexual or physical violence, the majority of people speak Spanish. More detailed studies at the micro-administrative level need to take place to truly determine if there is a relationship or not. What is certain is that any policy initiative will have to be communicated in a multi-lingual format in order to reach the greatest number of households.

Poverty is another risk factor that Lori Heise identifies in her study as leading to violence against women. In the Bolivian case, it becomes apparent that provinces with a high prevalence of sexual and physical violence also have more than 50% of the population living in the lowest three income quintiles. When one compares Potosí and Santa Cruz, it becomes evident that not only does Santa Cruz have lower rates of violence against women, but wealthier people also reside in this province. Unemployment rates for men are generally steady between 22% and 11%. However, unemployment rates for women vary extensively across provinces from 45% to 21%. Hence, another policy option for the government of Bolivia is to tackle both unemployment and poverty.