Topical Brief #037

LAPOP Expands Access to AmericasBarometer Data with the Launch of Its Data Playground

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Key Findings:

- LAPOP announces the launch of a new interactive data analysis tool

- Users can explore data from the AmericasBarometer between 2004 and 2019

- The tool allows users to tabulate frequencies for a single variable, visualize cross-country comparisons, and conduct cross-tabulations

- Available for free in English and Spanish, the Data Playground can be accessed here: www.vanderbilt.edu/lapop/interactive-data.php

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AmericasBarometer
Barómetro de las Américas
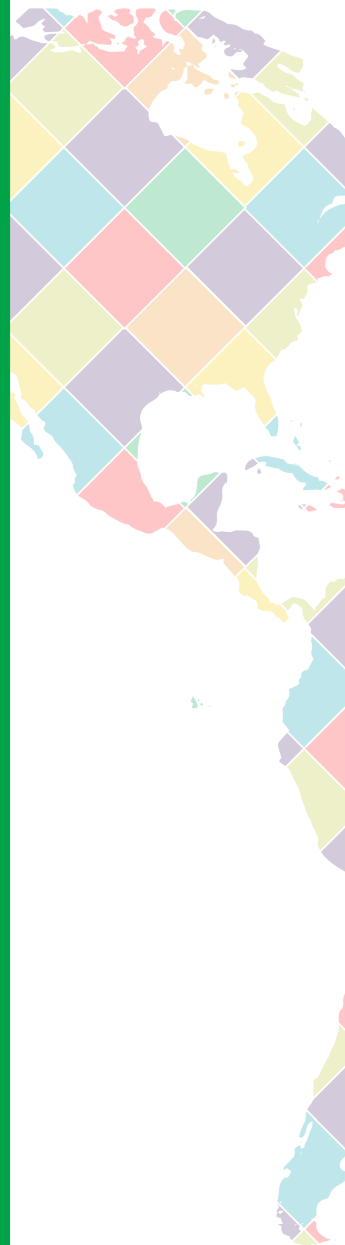
Increasing access to high-quality public opinion data is a core tenant of LAPOP's mission. The launch of its Data Playground builds on the lab's efforts to fulfill this mission by providing a free, online, interactive data analysis tool. The Data Playground allows users to explore data from the AmericasBarometer, LAPOP's core project, for every country in which the lab has conducted interviews between 2004 and 2019. The new tool is particularly useful for those who do not have access or the training to use advanced statistical software programs. It allows users to calculate descriptive statistics for a single variable, visualize cross-country comparisons, and conduct cross-tabulations.

Access to AmericasBarometer Data from 2004 to 2019

LAPOP's Data Playground gives users access to data for all Americas-Barometer survey rounds between 2004 and 2019.[1] This includes 128 variables from more than 300,000 interviews in over 30 countries in North, Central, and South America, as well as the Caribbean. Variable topics include the economy, political participation, citizen security, corruption, political tolerance, and democracy. The Data Playground allows users to conduct cross-country and cross-time comparisons by covering survey items that are asked in most countries across most rounds of the AmericasBarometer.

Estimates Based on Weighted and Rescaled Survey Responses

Selecting a variable in the Data Playground provides basic information for that survey item, such as question wording and frequency distribution for response options. The tool also automatically calculates a set of summary statistics, including the variable count, minimum value, maximum value, median, mean, and standard deviation. All Data Playground estimates

are based on weighted data. That is, estimates based on responses that are scaled so that each country-year has 1,500 respondents. Some country-years also have poststratification weights to match the survey sample with country population distributions according to subnational regions, urban/rural residency, gender, age, education levels, and/or wealth. These weights are applied to ensure cross-country and cross-time comparability.

To further facilitate the interpretation of estimates, most survey responses are recoded to have a numeric value between 0 and 100. The summary statistics calculated by the Data Playground are determined based on these numeric values. For survey items with two response options, one option (e.g., "No") is given a value of 0 and the other (e.g., "Yes") a value of 100. The average for these variables can be thought of as the percentage of respondents in the "100" category.

Survey items with more response options, particularly those with ordered response categories or scales, are assigned numeric values and rescaled from 0 to 100. For example, the variable corresponding to Support for Democracy (i.e., ING4, Democracy is Better than Any Other Form of Government) is asked in the field with a seven-point agreement scale, where 1 means "strongly disagree" and 7 means "strongly agree." A number in between 1 and 7 represents an intermediate score. In the Data Playground, these responses are recoded as 0, 16.667, 33.333, 50, 66.667, 83.333, and 100. The averages for these variables are not percentages, but the mean on this recoded scale. Exceptions to this rescaling approach include categorical variables corresponding to survey items with open-ended responses, such as age, years of schooling, ethnicity, and religion. These variables maintain their original coding in the Data Playground.

Interactive Functionalities for Data Visualization

LAPOP's Data Playground allows for three types of interactive data visualizations powered by Tableau. First, a user must select a main variable, as well as the country and year for which they want to analyze that variable.[2] Once the user makes these selections, the tool displays a bar graph with the frequency distribution of responses for the variable in the corresponding country and year. Users can hover over individual bars to customize display options for the graph and see detailed information for each response category.

The Data Playground will also display mean values by country for a selected variable using a color gradient scale in an interactive map. Users can then hover over sections of the map to see values for individual countries. Using the map's visualization options, users can also customize map views by highlighting sections and zooming in or out.

A third interactive feature of the Data Playground allows users to select a second variable to calculate a two-way cross-tabulation. Once a secondary variable is selected, the tool produces an additional bar graph that displays the average of the main selected variable for each category of the secondary variable. Users can then use the graph visualization tools to customize display options.

Users can download the summary data and/or visualizations provided by the Data Playground using the options displayed by icons in the lower-right hand corner of the playground. Users can download output and summary statistic data in the form of an image, Excel spreadsheet, CSV, PDF, PowerPoint slide, or Tableau Workbook.

The Data Playground, as well as LAPOP Lab's questionnaires, reports, and raw datasets are available for free at www.lapopsurveys.org.

Notes

1. "Year" variable options in the Data Playground are labeled by the even year of each AmericasBarometer round.

2. Users can select multiple countries and years simultaneously. The Data Playground's estimates will be aggregated for those countries and years.
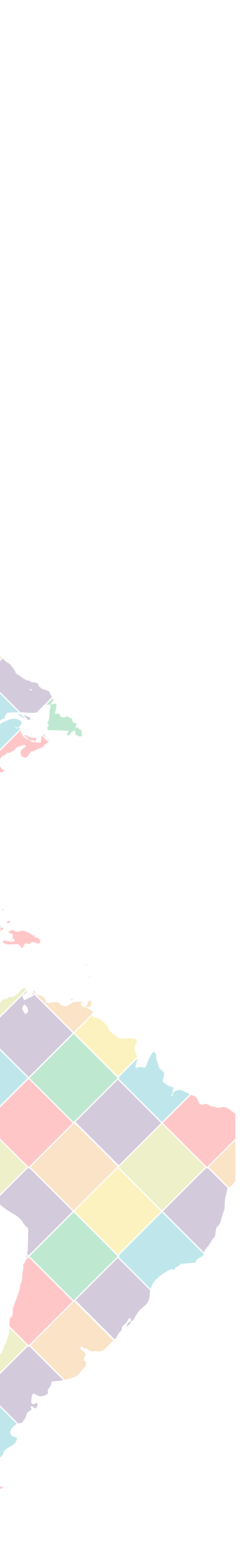
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