Technical Information

Mexico	2017	1,563	Self-weighted	January 28th – March 23rd

The Latin American Public Opinion Project (LAPOP) is a pioneer in survey research methods. In the 2016/17 round of the AmericasBarometer, LAPOP has continued this tradition of innovation, with heretofore unprecedented improvements in monitoring interview quality on a daily basis during the course of fieldwork. This was done by making significant advances in the use of handheld and expansion of electronic devices for data collection, coupled with a wide variety of new quality control techniques utilizing LAPOP's FALCON© system (see details below).

In the 2016/17 round of the AmericasBarometer, handheld devices for data collection were used in 100% of the countries surveyed, for all interviews. The sole exception is Haiti, where approximately 50% of interviews were conducted using paper questionnaires, a choice dictated by scarcity in data signals, internet connections and power to recharge devices. As in prior rounds of the AmericasBarometer, the U.S. and Canada studies were conducted online while all other interviews were conducted face-to-face. In the 2016/17 round, we predominantly used the SurveyToGo© (STG) software (as an exception, we used Adgys in the 6 OECS countries), running on Android tablets and phones, to conduct field interviews. LAPOP has found this software to be very reliable and flexible. Importantly, the adaptable platform and accessible programming language has allowed LAPOP to program in numerous customized modules that enable our quality control protocols.

The use of electronic devices for interviews helps us improve efficiency in data collection in several ways. First, it eliminates data entry errors that occur when handwritten responses are transferred to digital formats by coders and data entry clerks. Second, it supports user-friendly switching among multiple languages, especially important in countries like Paraguay, in which large proportions of respondents code-switch between Spanish and Guaraní. Third, it provides quality control teams the ability to audit and track the progress of fieldwork on a daily basis. The LAPOP auditing and tracking process includes verifying that interviews are being carried out in the pre-selected sampling locations, ensuring the correct and precise reading of the full wording of questions and response choices, checking the identity of interviewers for each survey to

in kilometers (and fractions of a kilometer) between the interviewer's location at the moment of the interview and the closest point of the circumference around the census segment or municipality (i.e., the limit of the geo-fence). If the flag shows a minor variation, this might be a result of inaccurate GPS data. In other circumstances, DAM may uncover unintentional or intentional errors on the part of the field staff that would lead the supervisors or LAPOP auditors to cancel the errant interview.

FALCON's Location Consistency Check (LCC) assures that interviewers are in the correct (i.e., designated) location before each interview takes place. If the location of interviewers is not the one assigned by fieldwork supervisors, the software immediately informs the interviewer of the problem so that it can be corrected. The interviewer is not allowed to proceed if the sample segment assigned by the home office is located in a municipality (and district) different from the one indicated by the interviewer. The LCC thus helps ensure that interviewers collect data from the location selected in the sample and not from another community with an identical or similar name.

In addition to the checks highlighted above, the SurveyToGo software is programmed to collect additional information that allows monitoring both the quality of interviews and the identity of interviewers. With respect to the quality of interviews, LAPOP silently records a subset of questions over the course of each interview in order assess if the survey questions are being read appropriately.[3] Additionally, LAPOP times the net duration of the interviews to determine if they are being carried out in a reasonable timeframe. Concerning the identity of interviewers, the software silently captures photographs of the interviewer, and collects their signatures with the purpose of providing evidence that the person gathering data is the one LAPOP trained and certified as interviewer. Once this information is in the system, fieldwork teams listen to the recordings, check the photographs, review the net durations, and verify the signatures from 100% of interviews to assure that enumerators adhered to best survey practices. If interviews comply with LAPOP quality standards, they are initially approved; otherwise, they are canceled. A second level quality control team audits a random subset of initially approved interviews to assure the quality of interviews and the quality of field teams' checks. Following this protocol allows LAPOP projects to provide quality feedback to interviewers and field supervisors in real time, correcting errors, coaching interviewers to read more clearly or slowly, canceling and replacing low-quality interviews, and giving appropriate recognition to high-quality work.

As per the sample design, the 2016/17 round of the AmericasBarometer continues to use the sample strategy introduced for the first time in the 2012 round of the surveys and that was also employed in 2014. This sample design continues to use, in almost all cases, the same stratification employed since 2004, making adjustments where necessary when census information is updated. The samples are all representative at the stratum level. The new design, however, stabilized the PSU and cluster sizes, with the selection of each PSU based on PPS (Probability Proportional to

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[3] Interviewers are informed in training that their voices would be recorded, though not told which sections would be captured. Respondents, in the information instructions read to them before the interview began, are likewise told that portions of the interview would be recorded for quality control purposes.

Size). Within PSUs, clusters are also standardized (typically 6 interviews) to minimize intra-class correlation while taking advantage of economies of fieldwork that simple random selection of interviews within the entire PSU would not make possible.

The tradeoff continues to make the sample design very efficient with very low intra-class correlations. With the cluster

The sample consists of 130 primary sampling units and 130 final sampling units including all states in Mexico. A total of 1250 respondents were surveyed in urban areas and 313 in rural areas. The estimated margin of error for the survey is ± 2.5. The margin of sampling errors is not adjusted for weights. Table 1 shows the sample size in each of the four

Frequency matching avoids the extremely costly effort involved in making multiple callbacks to each missed unit within each PSU in an effort to obtain a balanced sample. In national, face-to-face interviewing, multiple callbacks are often impractical from a cost standpoint. Our experience reveals that even three callbacks leave the sample with a notable gender imbalance (more women than men, since women are more likely to be at home than men). Rather than having to include post-hoc weights to adjust for this sample error, which can be large, we resolve the problem in the field via using a distribution of interviews among gender and ages that reflects the structure of the population.[6]

A single respondent was selected in each household, following the frequency matching distribution programmed into the sample design, by gender and age as mentioned above. Respondents are limited to household members who reside permanently in that household (thus excluding visiting relatives), who fit the age and residency requirements (limited to adult citizens and permanent residents). If two or more people of the same sex and age group were present in the household at the moment of the visit of our interviewer, the questionnaire was applied to the person who most recently celebrated a birthday (i.e., the "last birthday" system) in order to avoid selection bias.

Geo-fences were programmed at the segment level in Mexico and compliance reviewed on a daily basis to assure that interviews took place in the correct location.

The dataset contains a variable called "wt" which is the "country weight" variable. Since in the case of Mexico the sample is self-