



### World Values Survey Wave 7 in Macao: Sample Design.

In 2017, the total population of Macao was 653,100 (including migrant workers) and the size of local residents was 539,800. It is estimated that the size of people aged 18 and above was 419,700.

The sampling frame covers the entire Macao territory [Macao SAR is not included into the sampling frame for China PRC Mainland survey].

The Statistics and Census Service of Macao government will randomly sample thousands of household addresses to the research team. Only one respondent will be interviewed in each household (PSU).

Kish Gird Within Household Sampling Table will be used for the selection of respondent in the household. The sample will be divided into 6 groups. Each group will have a household sampling table. In each group of households, individual within household will be selected according to the Kish gird table:

Group							
A	No. of adult in the household Interview adult numbered	1 1	2 1	3 3	4 2	5 5	6 or above 1
B	No. of adult in the household Interview adult numbered	1 1	2 2	3 1	4 3	5 4	6 or above 2
C	No. of adult in the household Interview adult numbered	1 1	2 1	3 2	4 4	5 1	6 or above 3
D	No. of adult in the household Interview adult numbered	1 1	2 2	3 3	4 1	5 2	6 or above 4
E	No. of adult in the household Interview adult numbered	1 1	2 1	3 2	4 1	5 3	6 or above 5
F	No. of adult in the household Interview adult numbered	1 1	2 2	3 1	4 4	5 3	6 or above 6

Source: Kirh, L. (1949). "A Procedure for Objective Respondent Selection within the Household," *Journal of the American Statistical Association*, 44(247): 380-387.

It will be a household survey. Interviewers will be deployed to the sampled household and conduct face-to-face interview.

Face-to-face interview will be adopted. Interviewers will conduct the survey through smartphone. The University of Macau has installed Qualtrics for online survey. The research team will upload the questionnaire to the Qualtrics system and interviewers can connect to the system with their smartphone when doing the interview.

Generally, the survey will be conducted during the working days unless respondents agree for doing the survey during the weekend/public holidays.

In terms of representativity, the team conducted a household survey in 2011. In terms of gender, the survey data is more or less the same as the survey data published in 2017 by the Statistics and Census Service, Macao government. In terms of age, the percentage of group of aged 36-50 are more or less the same between the government data and survey sample. There is a small gap for the groups of aged 18-35 and aged 50 and above, with more youth (aged 18-35) but fewer older people (aged 50 and above). The major reason is that the response rate of older people is lower while young people were likely to answer the questionnaire. However, the gap is within an acceptable margin.



The WORLD VALUES SURVEY ASSOCIATION

[www.worldvaluessurvey.org](http://www.worldvaluessurvey.org)

	% in census data	% in your survey	$\Delta$ %
Male	46.8	42.3	4.5
Female	53.2	57.7	4.5
18-35	33.3	37.4	4.1
36-50	30.0	31.3	1.3
50+	36.7	31.3	5.4

The major difficulty for doing survey in Macao is the respond rate. There have been many surveys being conducted by different institutes and organizations. Many residents have been tired for receiving interview. The research team will have to take time to pursue respondents.

No approval is needed. However, we will have to apply for household sampling service by the Statistics and Census Service of Macao government.