

Setting up a mixed-mode probability-based panel over the COVID-19 pandemic

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Acknowledgments



Datavoz

Medium-sized company working in the sample design with LEAS and in charge of fielding the CATI and CAWI surveys and managing the panel for LEAS.

Motivation

Chile has a strong reliance on F2F surveys.

- Benefits: high-quality data.
- Problems: longer questionnaires, population changes faster than sampling frames, problems of access to apartment buildings, interviewer effects

Internet penetration in Chile is 87.4%.

- Lower than the Netherlands (95.5%), but similar to Germany (88.4%) and the USA (87.9%) (source: <http://www.internetworldstats.com>, 2015).
- 1/3: broadband only; 1/3: mobile only; 1/3: broadband + mobile.

F2F surveys are not possible to field when important events disrupt the regular functioning of major cities.

Initial plan

Presented at the RISCAPÉ workshop “Mapping the global on-line probability-based panel landscape” that took place in Amsterdam 11-12 December 2019.

5-year project

- One big recruitment stage in year 1 (on the back of a F2F survey). 2500 households initially selected by a multi-stage probability sampling. Recruit all household members older than 15 years ($N \approx 4000$ or 6000).
- 4 mixed-mode waves per year (incentives for responding each survey: CLP 4,000 \approx USD 5,5 gift card; the cheapest gift card available). 1000 individuals per wave.
 - Why not unconditional incentives? Too expensive for us.
- Web surveys for on-liners. CATI surveys for off-liners.
 - Giving electronic devices to off-liners? Too expensive for us. Do they change their behavior and become onliners? (Perrin and Bertoni 2017).
- One refreshment sample per year (500 households, F2F interviews). Oversampling hard-to-reach groups.

COVID-19 Pandemic in Chile



First positive case in March 3rd.

School closures and stay-at-home orders since mid-March.

Night-time curfews and targeted dynamic lockdowns applied at the municipality (comuna) level. Some municipalities had very long lockdowns (> 150 days).

In July 2020, roughly 60% of the population was on lockdown. In April 2021, roughly 95%!

In August 2020, Chile was top 5 in terms of COVID-19 cases per million across the globe.

Impossible to field F2F surveys when the information to understand the ongoing events was critical!

New plan

Changes after COVID-19

- Impossible to field F2F surveys in 2020.
- Less resources for this project.

5-year project

- ~~• One big recruitment stage in year 1 (on the back of a F2F survey). 2500 households initially selected by a multi-stage probability sampling. Recruit all household members older than 15 years ($N \approx 4000$ or 6000).~~
- Respondents are selected through probability sampling by random-digit dialing (RDD) of cellphone numbers across all regions and are asked to join the panel at the end of the interview.
 - Why not ABS?
- ~~• 4 mixed-mode waves per year (incentives for responding each survey: CLP 4,000 \approx USD 5,5 gift card; the cheapest gift card available). 1000 individuals per wave.~~
- Experiment on incentives
 - 1600 individuals were asked to join the panel at the end of the interview and promised to receive a gift card of CLP 4,000 after responding each survey
 - 1600 individuals were asked to join the panel and promised to receive 2000 points that can be redeemed for a gift card.
- Web surveys for on-liners. CATI surveys for off-liners.

New plan

5-year project

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	Gift card	Loyalty points
Coverage rate	92 percent of adult population	
AAPOR's RR 3	11.4	10.5
Agreement to join	71.3	50.0

Panel composition: two incentive schemes

	Census	F2F	CATI	Gift Card Mixed mode	Loyalty Points Mixed mode
Sex					
Men	48.3	39.17	44.39	44.14	42.7
Women	51.7	60.83	55.61	55.86	57.3
Age brackets					
18-34	35.47	27.67	34.66	37.94	40.95
35-54	36.08	32.29	40.52	39.95	38.84
55+.	28.45	40.04	24.81	22.12	20.21
Education					
Primary education or less	23.09	25.62	19.70	18.36	11.99
Secondary education	45.95	44.59	34.73	34.18	30.84
Vocational training	9.29	14.26	15.02	15.47	21.35
Tertiary education	19.68	13.11	27.62	28.93	32.21
Posgraduate degree	1.99	2.42	2.93	3.06	3.62

* Unweighted figures. Census: Population Census (2017); F2F: CEP survey (December 2019); CATI: Recruiting stage (August 2020)

Panel composition: the relevance of mixed-modes

	Census	F2F	CATI	Gift card		Loyalty points	
				Web only	Mixed mode	Web only	Mixed mode
Sex							
Men	48.3	39.17	44.39	44.33	44.14	43.14	42.7
Women	51.7	60.83	55.61	55.67	55.86	56.86	57.3
Age brackets							
18-34	35.47	27.67	34.66	44.21	37.94	44.36	40.95
35-54	36.08	32.29	40.52	40.35	39.95	39.76	38.84
55+.	28.45	40.04	24.81	15.44	22.12	15.88	20.21
Education							
Primary education or less	23.09	25.62	19.70	12.98	18.36	8.96	11.99
Secondary education	45.95	44.59	34.73	34.27	34.18	29.13	30.84
Vocational training	9.29	14.26	15.02	16.84	15.47	22.97	21.35
Tertiary education	19.68	13.11	27.62	32.63	28.93	35.01	32.21
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González (LEAS UAI)

Some points for developing countries

Online or mixed-mode probability-based panels are not useful in developing countries because...

(1) Internet access is not universal in those countries.

- That happens everywhere! Find the right mix of web-phone. Beware of mode effects.

(2) incentives reduce the cost effectiveness of fielding cross-sectional studies.

- Yes, they might as the Chilean case illustrate.

	F2F	CATI	Gift card		Loyalty points	
			Web only	Mixed mode	Web only	Mixed mode
Costs (N = 1500) (as a fraction of F2F cost)	100	19.91	16.20	20.13	10.20	14.13

(3) respondents in developing countries lack literacy skills for self-completion mode.

- Possible, but consider that web panelists should handle the self-completion and low-educated respondents can be reached by phone. It can be cost effective. Beware of mode effects.

What next?

Expanding the size of the panel

- Using the loyalty points scheme.
- No more recruitment on the back of a survey.
- Recruitment by IVR is possible in Chile? Ongoing process.

Passive data collection

- We are developing an app collecting GPS locations to study the lives of platform workers (e.g. the number of trips, miles traveled, time required).
- Also, collecting data from pop-up questions sent at random times to know how they feel over the day.
- Integrate the app and the panel at the end of 2021.

Thank you!

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