

Public Support for Disaster Risk Reduction (DRR) in the Americas: a 17-country study

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July 15, 2021

Levitt et al.

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Project Research Team

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The Puzzle:

Appropriate DRR policies (bldg. codes, construction regs.) can save lives & protect property, when enforced.

The “politics of policy”: policies & enforcement are shaped by politics; public opinion, i.e. preferences of voters & residents, matters

What factors shape public support for DRR policies & their enforcement?

- Individual & collective; subjective & objective
- Change over time, esp if *experiencing* disaster

The Puzzle:

Results from existing research on public support for DRR are uneven, point in different directions.

Our focus: the effects of 3 sets of factors on support for DRR.

1. **Governance** (trust in government; perceptions of effectiveness / integrity in DRR; personal experience with corruption; national levels of corruption)
2. **Disaster risk** (perception of the likelihood, severity, and type of hazard events; perception of risk as individual or general; national and local hazard risk profiles)
3. **“Experience” with disasters** (as an individual/family, community, or nation)

Prior Research by Project Team

“Public Perceptions of Code Enforcement and Safer Buildings in Latin America and the Caribbean”
(*Natural Hazards Review*, 2019)

Findings:

- Higher expectations of regulatory integrity (less corruption; more consistent code enforcement) increase the value that people place on safer construction.
- Living in a higher-risk country does not.

(Data: 2014 AmericasBarometer survey; 12 countries)

Prior Research by Project Team

“The Political Culture(s) of
Disaster Risk Reduction (DRR) in Mexico,
Before and After the Sept. 2017 Earthquake”

Findings:

- Support for enforcement of DRR policies (e.g. building codes) increased after the 2017 earthquake, then declined.
- Perception of future disaster risk was positively associated with support for DRR policies.
- Suffering individual harm from the earthquake had no significant effect on support for DRR policies.

(Data: Multiple waves of AB surveys in Mexico; 2 post-event surveys in Greater Mexico City)



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Prior Research by Project Team

“Support for Disaster Risk Reduction (DRR) Policies in the Bahamas after Hurricane Dorian”

Findings:

- Support for DRR increased after 2019 hurricane, then declined—then increased again in 2020 (during COVID-19 pandemic)
- Perception of future disaster risk was positively associated with support for DRR policies.
- Perceived risk from one kind of disaster (storms/floods) was positively associated with perceived risk from another (pandemic).
- Individual harm from 2019 Hurricane Dorian did not shape risk perceptions or support for DRR in 2020.
- Individual harm from pandemic in 2020 increased perceptions of storm/flood risk—but not risk from future pandemics.

(Data: AB survey, 4 post-event surveys in the Bahamas; supported by NSF RAPID grant.)



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The Current Project:

- A 3-yr Collab project (funded by NSF HDBE)
 - FIU: Extreme Events Institute (EEI)
 - VU: Latin American Public Opinion (LAPOP) Lab, biennial AmericasBarometer survey
- Phase 1 survey data collection: baseline
 - Module on 2021 AB survey (experiences of disaster; perceptions of disaster risk; support for DRR policies)
 - 17 countries (16 Lat Am & Carib, + US); n= ~25,500
 - Open-access dataset (incl. previous waves)
- Phase 2 survey data collection: post-event

The Data (Phase 1) : 2021 AmericasBarometer

- National phone surveys using random-digit dial.
- (Previous waves conducted faced-to-face.)
- Eligible respondents are voting age adults.
- Sample size is ~3,000 per country.
- Disaster module assigned to a random split, n= ~1,500.
- Data weighted to calculate estimates for the population.
- (Previous waves representative at district/region.)

The Data (Phase 1) : 2021 AmericasBarometer

- Data collection in progress or complete in 16 LAC countries (Mexico, Guatemala, El Salvador, Honduras, Nicaragua, Costa Rica, Panama, Ecuador, Bolivia, Peru, Chile, Uruguay, Brazil, Argentina, Dominican Republic and Haiti.)
- Data collection in the U.S. will take place in July-Aug. 2021.

Early Look at Phase 1 Project Data

Chile: Feb.- May, 2021
El Salvador: April - June, 2021



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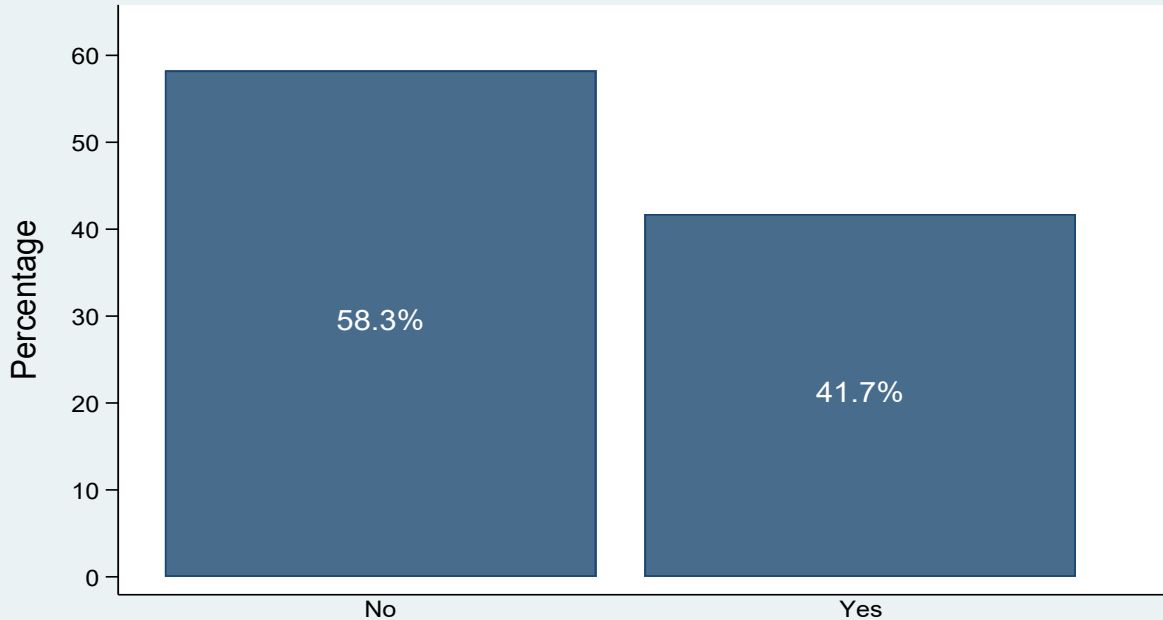
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Have you or someone in your immediate family ever been affected by a natural disaster such as floods, earthquakes, or hurricanes/landslides/tornados/storms resulting in injury, death, or damage to the home or other property here in [country]?

(1) Yes

(2) No

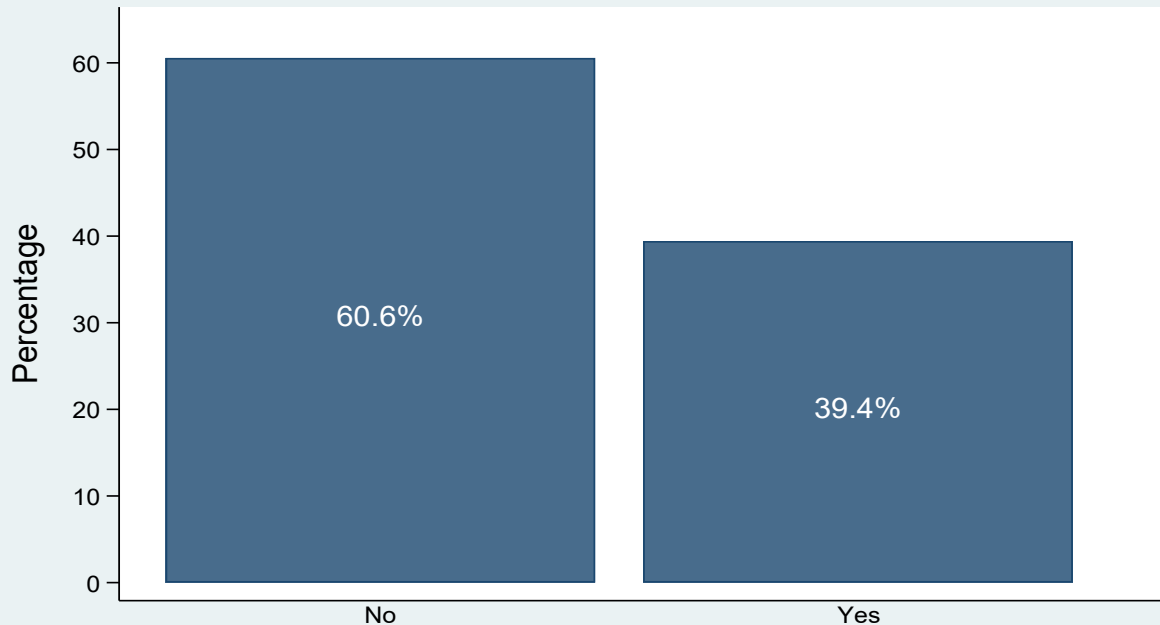
El Salvador



Experience: Self/family been affected by a natural disaster

Source: © AmericasBarometer, LAPOP, 2021; El Salvador 20210701 (variable drr1)

Chile



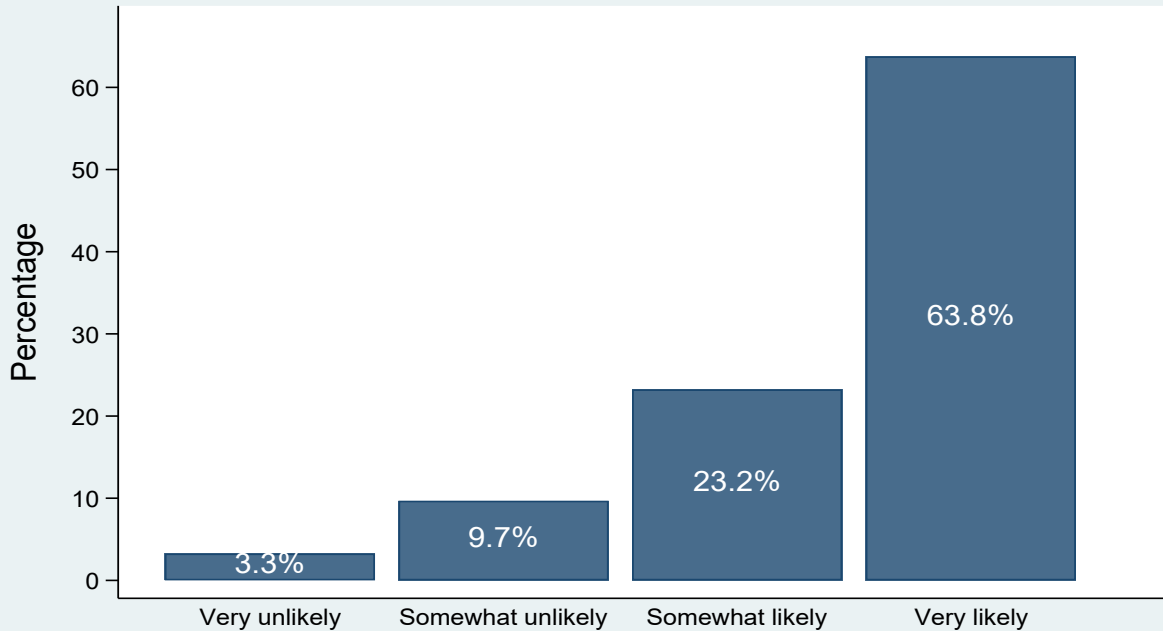
Experience: Self/family been affected by a natural disaster

Source: © AmericasBarometer, LAPOP, 2021; Chile 20210701 (variable drr1)

How likely do you think it is that [country] could experience a natural disaster (such as floods, earthquakes, hurricanes, landslides, tornados / storms) in which people may be injured or killed, in the next 10 years? Do you think it is...?

- (1) Not likely***
- (2) A little likely***
- (3) Somewhat likely***
- (4) Very likely***

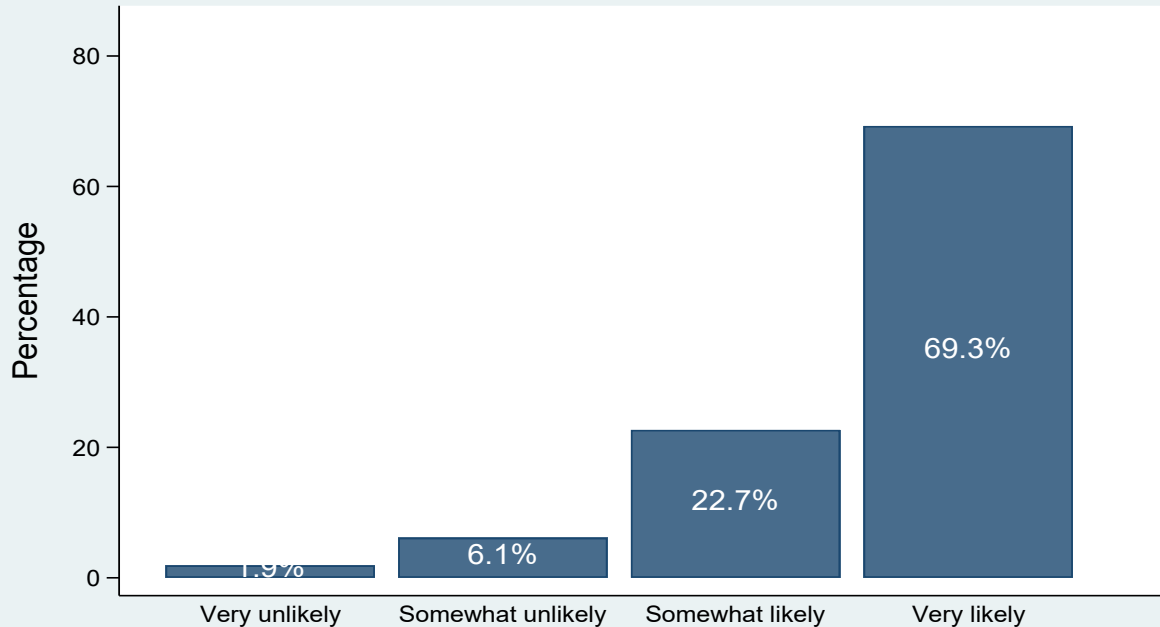
El Salvador



Risk assessment: Likelihood [country] experiences natural disaster in next 10 yrs

Source: © AmericasBarometer, LAPOP, 2021; El Salvador 20210701 (variable drk1c)

Chile



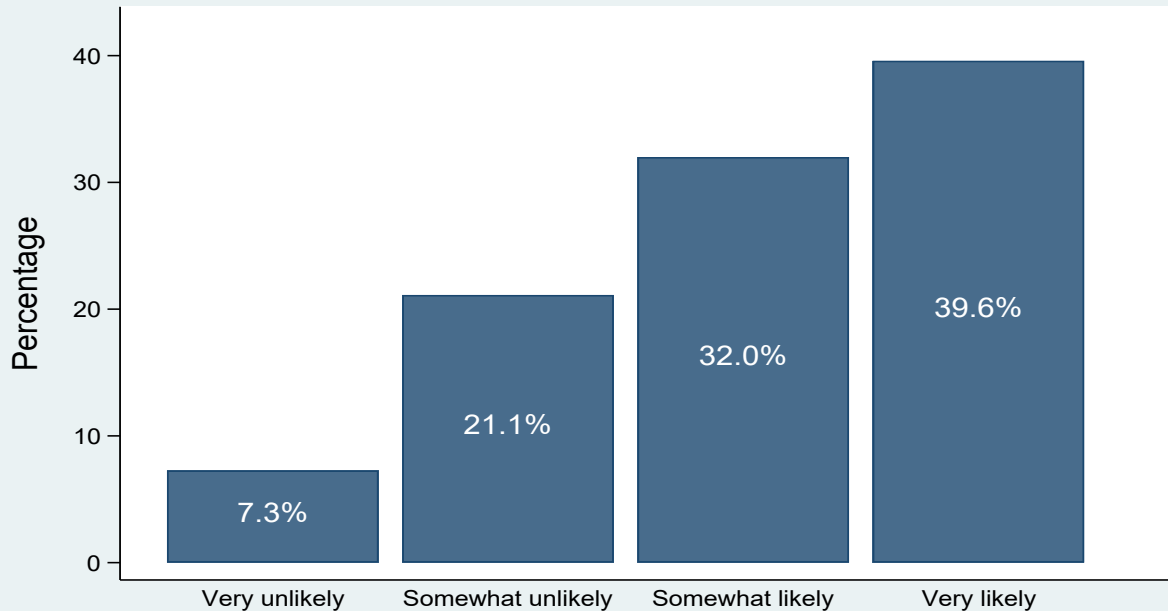
Risk assessment: Likelihood [country] experiences natural disaster in next 10 yrs

Source: © AmericasBarometer, LAPOP, 2021; Chile 20210701 (variable drk1c)

How likely do you think it is that you or someone in your immediate family here in [country] could experience a natural disaster (such as floods, earthquakes, hurricanes, landslides, tornados / storms) in which people may be injured or killed, in the next 10 years? Do you think it is...?

- (1) Not likely***
- (2) A little likely***
- (3) Somewhat likely***
- (4) Very likely***

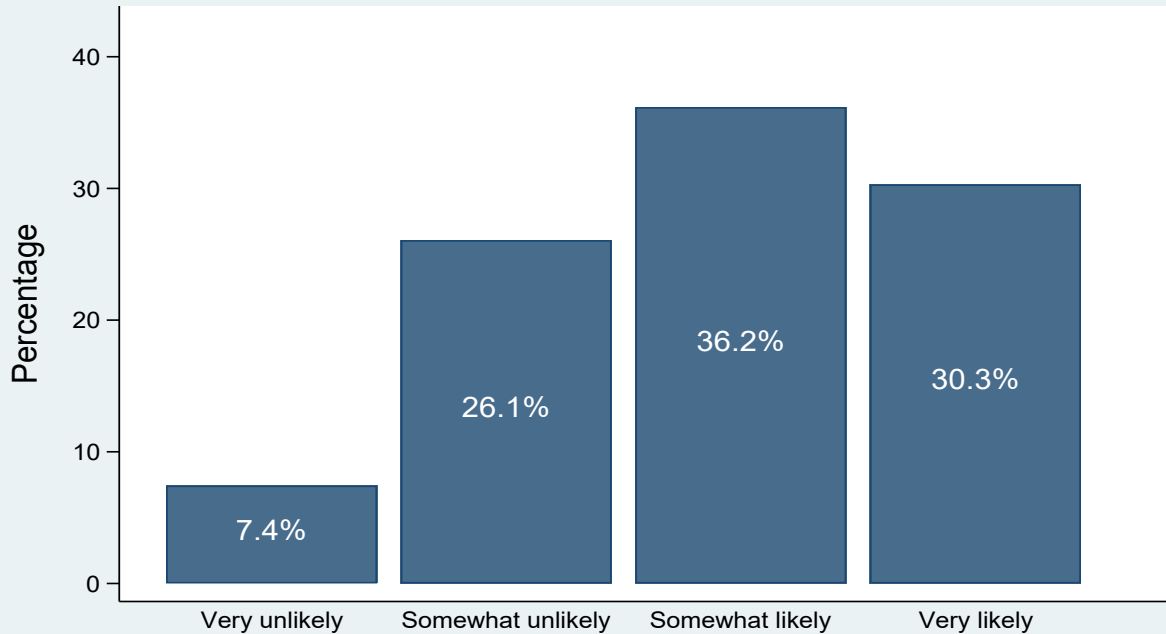
El Salvador



Risk assessment: Likelihood self/family is harmed/killed by disaster in next 10 yrs

Source: © AmericasBarometer, LAPOP, 2021; El Salvador 20210701 (variable drk1n)

Chile



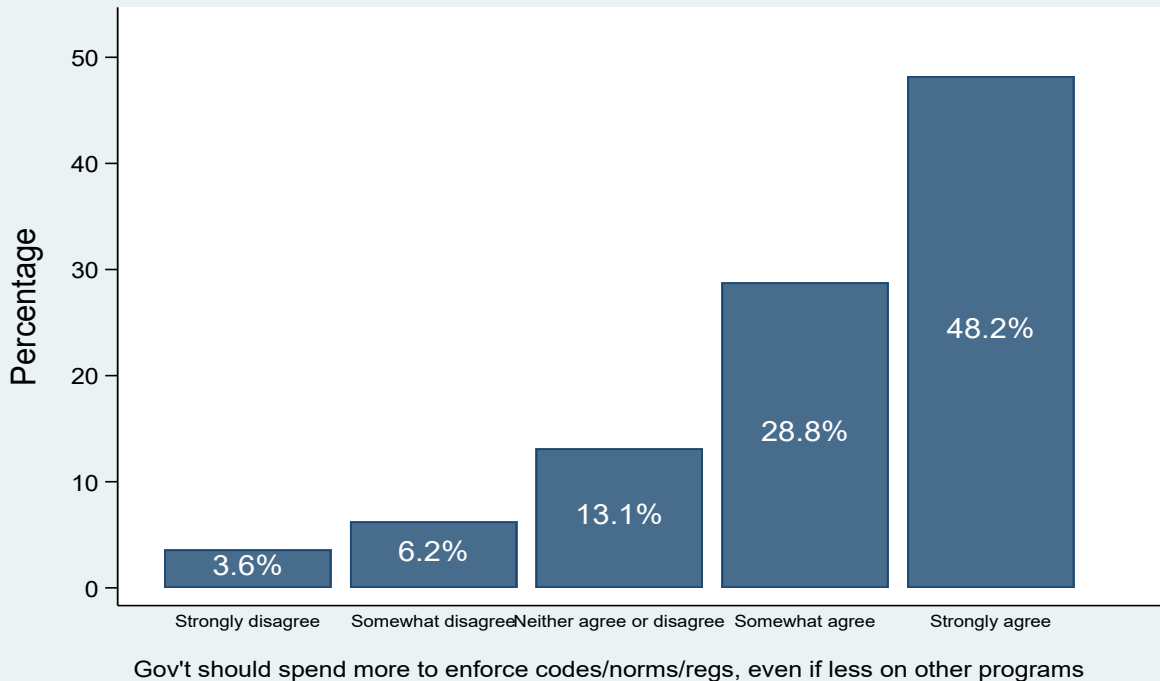
Risk assessment: Likelihood self/family is harmed/killed by disaster in next 10 yrs

Source: © AmericasBarometer, LAPOP, 2021; Chile 20210701 (variable drk1n)

***“The government should spend more money to enforce building codes/norms/regulations to make homes safer from natural disasters, even if it means spending less on other programs.”
How much do you agree or disagree with this statement?***

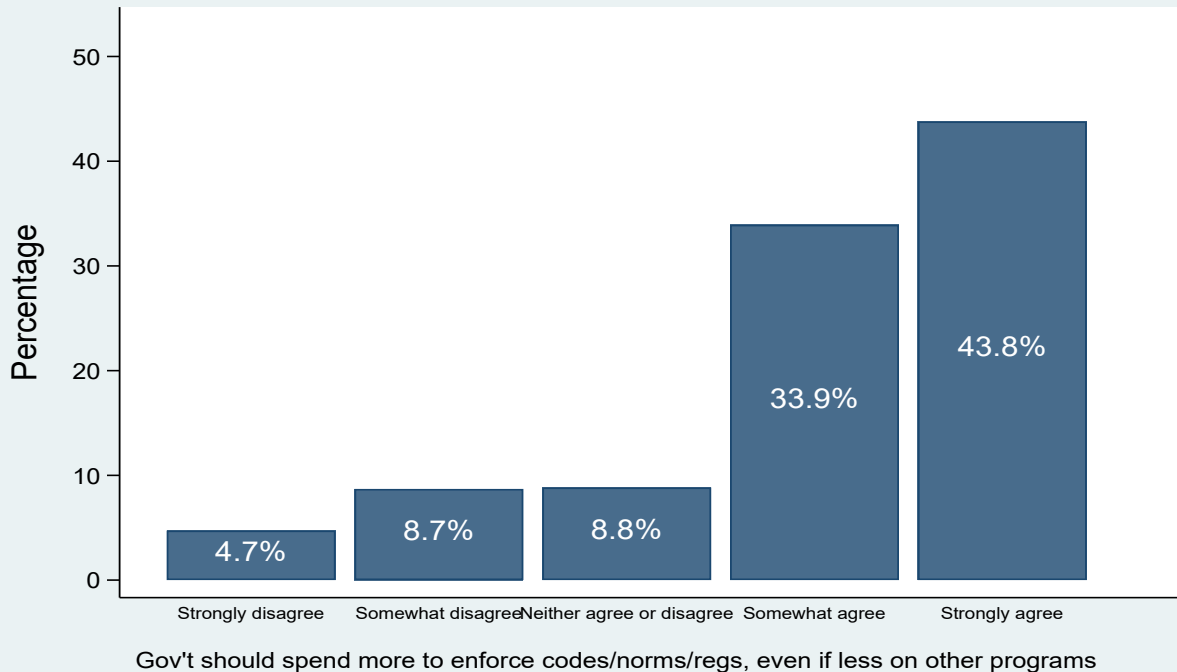
- (1) Strongly agree***
- (2) Somewhat agree***
- (3) Neither agree nor disagree***
- (4) Somewhat disagree***
- (5) Strongly disagree***

El Salvador



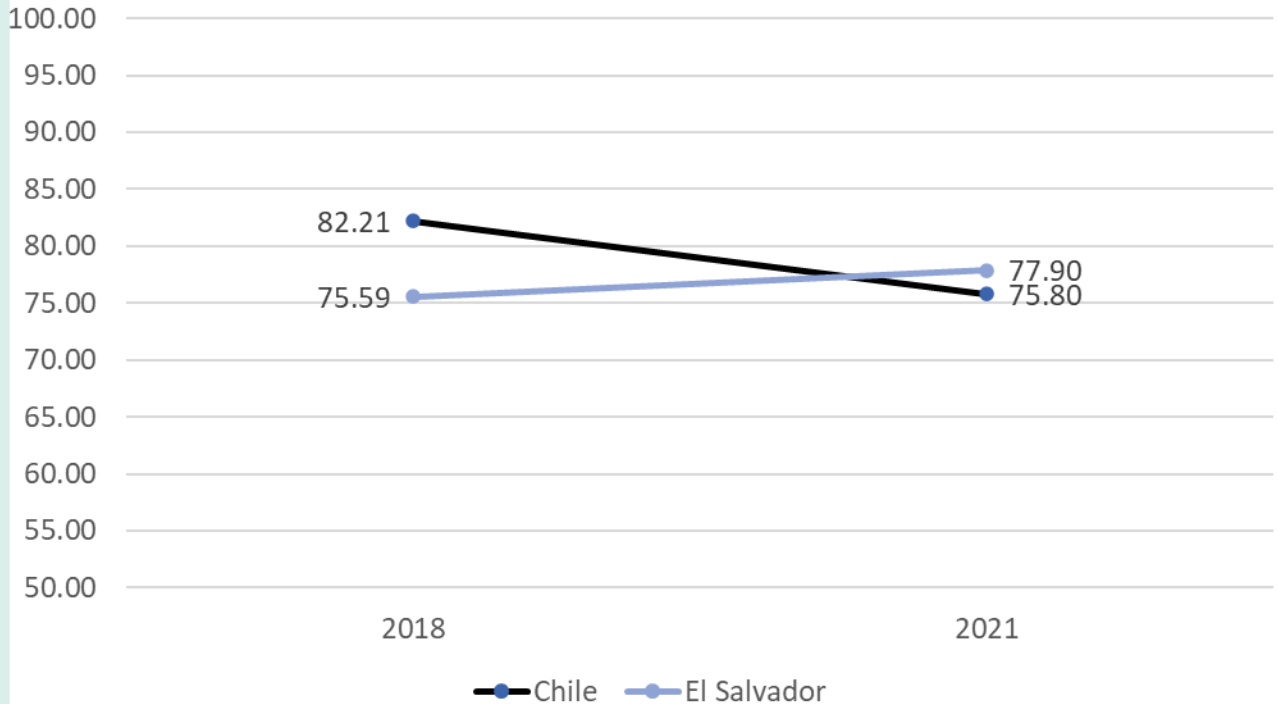
Source: © AmericasBarometer, LAPOP, 2021; El Salvador 20210701 (variable dst1bn)

Chile



Source: © AmericasBarometer, LAPOP, 2021; Chile 20210701 (variable dst1bn)

Avg. Support for Govt. Spending on Codes/Regs (2018-21)



Please Spread the Word:

- **Dataset available by end of 2021
(previous waves already available)**
- **<https://www.vanderbilt.edu/lapop/raw-data.php>**
- **<https://www.vanderbilt.edu/lapop/interactive-data.php>**

Select A Variable
Environment:Spend More to Enforce Building Codes (dst1b)

Country
All

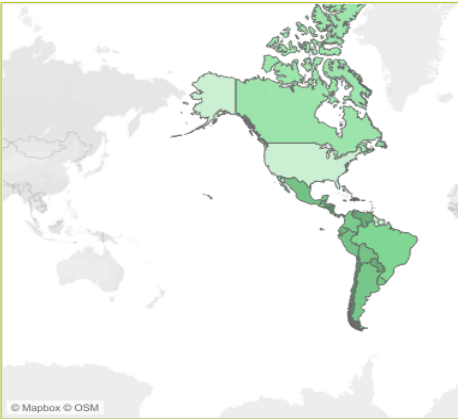
Year
15
4

AmericasBarometer
Barómetro de las Américas

Environment:Spend More to Enforce Building Codes (dst1b)
The government should spend more money to enforce building codes to make homes safer from natural disasters, even if it means spending less on other programs... How much do you agree or disagree?

Statistical Summary

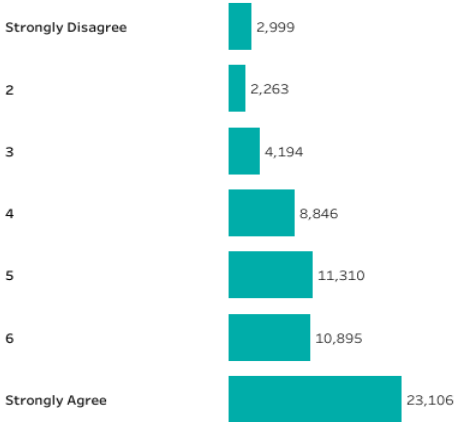
Count: 63,613	Min: 0	Max: 100.0	Median: 83.33	Average: 72.19	Standard Deviation: 28.66
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Source: AmericasBarometer Version: v0.13.5

Note: All responses have a numeric code. Ordinal variables are rescaled from 0 to 100. Hover cursor over bars in figure below to see correspondence between response ("Variable Label") and numeric value ("Variable Order").

Calculate Average by Secondary Variable:
None



Please Spread the Word:

- RA opp. for incoming PhD student(s)

DISASTER RISK REDUCTION, PUBLIC OPINION, POLICY, AND POLITICS

PhD RESEARCH ASSISTANTSHIP

The **Extreme Events Institute (EEI)** and the **Steven J. Green School of International and Public Affairs (SIPA)** at Florida International University offer a **doctoral research assistantship (RA)** in the general area of disaster risk reduction, public opinion, policy, and politics. This research assistantship will be awarded to an **incoming PhD student** in Political Science, International Relations, Public Affairs (Public Policy), or other doctoral program within SIPA.

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Thank You!