

Supplemental Materials for “Quaking in their Boots...”

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Survey Measures

Local Policy Attitudes

PREAMBLE: Next, we are going to ask you a series of questions about how local governments and businesses might prepare for the consequences of major earthquakes that could cause catastrophic damage (loss of life, destruction of buildings). Please tell us the extent to which you agree or disagree with each of the following statements.

A. Local governments should require that new buildings in earthquake prone areas are built to resist major earthquakes, even if doing so is costly or hurts business' bottom line.

B. Local governments should invest more taxpayer dollars in programs that provide the public with information about earthquake preparedness.

C. Local governments should forbid businesses from constructing very tall buildings (like skyscrapers) in earthquake-prone sections of major U.S. cities, even if doing so forces businesses to relocate.

- <1> Strongly agree
- <2> Agree
- <3> Somewhat agree
- <4> Neither agree nor disagree
- <5> Somewhat disagree;
- <6> Disagree
- <7> Strongly disagree

Perceived Risk

PREAMBLE: Next, we'd like to ask you a few questions about earthquakes and natural disasters. Please answer each question to the best of your ability. Keep in mind that there are no right or wrong answers.

How likely do you think it is that a major earthquake causing catastrophic damage (loss of life, destruction of buildings) will hit WHERE YOU CURRENTLY LIVE in the next twenty years?

Please provide your answer on a scale ranging from 0 to 100, where 0 indicates that this will certainly not happen, 100 indicates that it will certainly happen, and 50 indicates that it is equally likely to either happen or not happen.

<Sliding Scale: 0 - 100>

Educational Attainment

What is the highest level of school you have completed or the highest degree you have received?

- <1> Less than a high school diploma
- <2> High school graduate- high school diploma or equivalent (for example=GED)
- <3> Some college but no degree
- <4> Associate degree (For example: occupational/vocational program or academic program)
- <5> Bachelors Degree (For example: BA, AB, BS)
- <6> Master's Degree (For example: MA, MS, MEng, MEd, MSW, MBA)

<7> Professional School Degree (For example: MD, DDS, DVM, LLB, JD) or Doctorate degree (For example: PhD, EdD)

NOTE: This variable is recoded into a dichotomous indicator of whether or not respondents have a bachelors degree or higher.

Political Ideology

We hear a lot of talk these days about liberals and conservatives. Here is a seven-point scale on which the political views that people might hold are arranged from extremely liberal to extremely conservative. Where would you place yourself on this scale?

- <1> Extremely Liberal
- <2> Liberal
- <3> Slightly Liberal
- <4> Moderate; Middle of the road
- <5> Slightly Conservative
- <6> Conservative
- <7> Extremely Conservative

Science Knowledge

NOTE: Science knowledge is an additive scale of correct responses to the following questions (correct re

A. All radioactivity is human-made

- <1> True
- <2> False *
- <3> Don't Know

B. Lasers work by focusing sound waves

- <1> True
- <2> False *
- <3> Don't Know

C. Antibiotics kill viruses as well as bacteria

- <1> True
- <2> False *
- <3> Don't Know

D. Which gas makes up most of the Earth's atmosphere?

- <1> Nitrogen *
- <2> Hydrogen
- <3> Carbon Dioxide
- <4> Oxygen

Race

NOTE: Race is recoded into a dichotomous indicator of whether or not respondents self-reported that they are White and non-Hispanic. Race data was collected by Lucid prior to taking the survey.

Sex

NOTE: Sex is recoded into a dichotomous indicator of whether or not respondents self-reported sex is "female." This information was collected by Lucid prior to taking the survey.

Supplemental Analysis

Table S1. Full Model Estimation for Figure 2 (With/Without Survey Weights)

	Weighted				Unweighted			
	Build.	Awareness	Location	Avg	Build.	Awareness	Location	Avg
Perceived Risk	0.10** (0.03)	0.08** (0.02)	0.17** (0.04)	0.16** (0.03)	0.04 (0.04)	0.06* (0.03)	0.10** (0.03)	0.10** (0.02)
Actual Risk	-0.03 (0.05)	-0.00 (0.03)	-0.09 (0.06)	-0.04 (0.04)	-0.00 (0.06)	0.01 (0.04)	-0.04 (0.04)	-0.01 (0.03)
Zip-level Pop (Standardized)	-0.03 (0.04)	-0.02 (0.04)	-0.00 (0.05)	-0.02 (0.04)	-0.04 (0.06)	-0.04 (0.05)	-0.03 (0.04)	-0.03 (0.03)
Conservatism	-0.09** (0.03)	-0.07** (0.02)	-0.16** (0.03)	-0.12** (0.03)	-0.08** (0.04)	-0.05 (0.03)	-0.11** (0.03)	-0.08** (0.02)
College	0.04** (0.02)	0.02* (0.01)	0.06** (0.02)	0.04** (0.02)	0.02 (0.02)	0.01 (0.02)	0.04** (0.01)	0.03** (0.01)
Female	-0.00 (0.02)	-0.01 (0.01)	-0.01 (0.02)	0.00 (0.02)	-0.01 (0.02)	0.02 (0.02)	-0.01 (0.02)	0.00 (0.01)
Science Knowledge	0.01 (0.03)	0.02 (0.02)	-0.05 (0.03)	-0.05** (0.02)	-0.13** (0.04)	-0.11** (0.03)	-0.06** (0.03)	-0.05** (0.02)
White	0.04** (0.02)	0.06** (0.01)	0.04** (0.02)	0.03* (0.02)	0.01 (0.02)	0.01 (0.02)	0.03** (0.02)	0.03** (0.01)
β_0	0.80** (0.04)	0.77** (0.03)	0.71** (0.05)	0.70** (0.04)	0.75** (0.05)	0.72** (0.04)	0.75** (0.04)	0.73** (0.03)
R ²	0.07	0.05	0.12	0.09	0.04	0.03	0.10	0.07
N	855	855	853	853	852	852	855	855

* p < 0.10, **p < 0.05; two-tailed

Note. Full Model output for Figure 2. OLS coefficients with standard errors in parentheses. Weighted models are presented in the main text, and unweighted models are presented for robustness. All variables are scored to range from 0-1. Outcome variables are attitudes toward each local policy position, described in the main text.

Table S2. Full Model Estimation for Figure 3 (With/Without Survey Weights)

	Weighted Policy Index Avg.	Unweighted Policy Index Avg.
Perceived Risk	-0.07 (0.06)	-0.05 (0.05)
Actual Risk	-0.29** (0.09)	-0.24** (0.07)
Perceived X Actual	0.42** (0.13)	0.37** (0.10)
Zip-level Pop (Standardized)	-0.01 (0.04)	-0.02 (0.03)
Conservatism	-0.11** (0.03)	-0.08** (0.02)
College	0.04** (0.01)	0.03** (0.01)
Female	-0.01 (0.02)	0.00 (0.01)
Science Knowledge	-0.06** (0.03)	-0.05** (0.02)
White	0.03** (0.02)	0.03** (0.01)
β_0	0.84** (0.05)	0.81** (0.04)
R ²	0.12	0.08
N	855	855

* p < 0.10, **p < 0.05; two-tailed

Note. Full Model output for Figure 2. OLS coefficients with standard errors in parentheses. Weighted models are presented in the main text, and unweighted models are presented for robustness. All variables are scored to range from 0-1. Outcome variables are attitudes toward each local policy position, described in the main text.

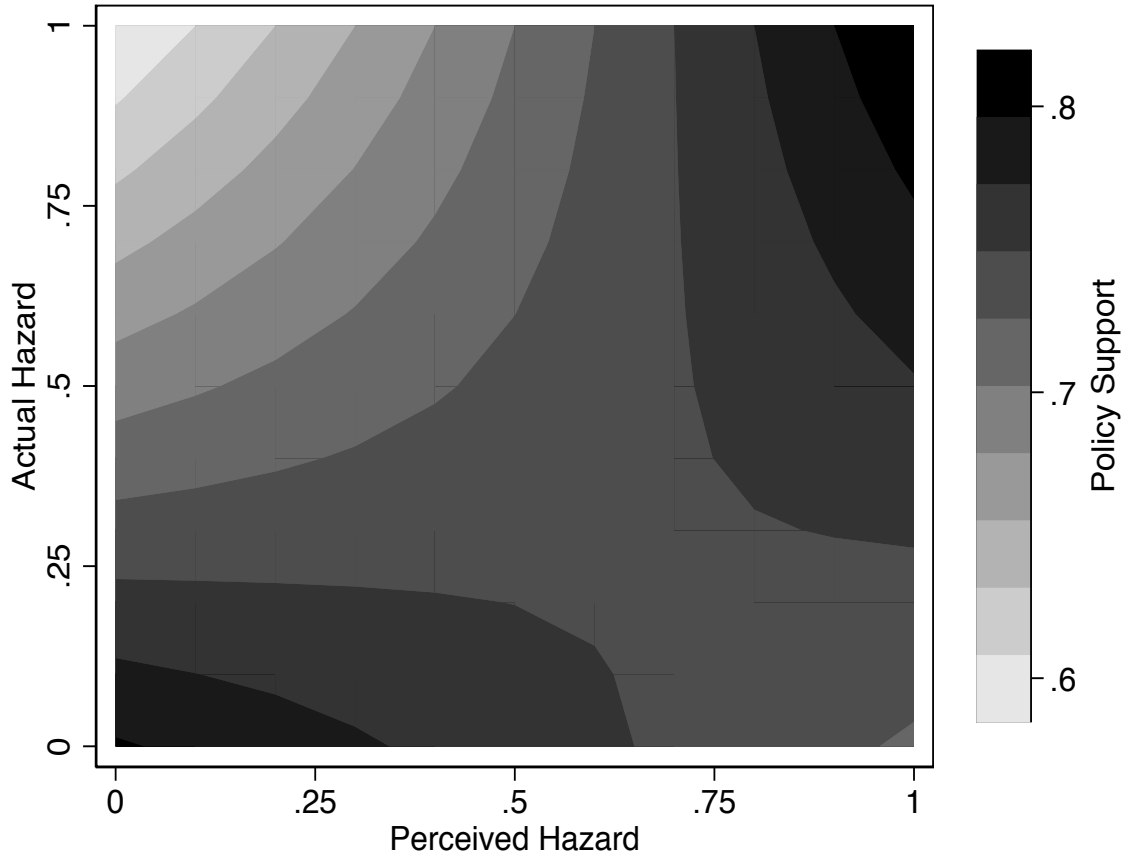
Table S3. Re-estimation of Table S1 and S2 with State-level Fixed Effects

	Table S1				Table S2
	Build	Awareness	Location	Policy Index	Policy Index
Perceived Risk	0.10** (0.03)	0.18** (0.04)	0.05 (0.04)	0.11** (0.03)	-0.07 (0.06)
Actual Risk	-0.02 (0.04)	-0.04 (0.04)	0.02 (0.05)	-0.02 (0.03)	-0.20** (0.07)
Perceived X Actual	-	-	-	-	0.31** (0.10)
Zip-level Pop (Standardized)	-0.05 (0.04)	0.02 (0.05)	-0.03 (0.06)	-0.02 (0.04)	-0.01 (0.04)
Conservatism	-0.10** (0.03)	-0.16** (0.03)	-0.08** (0.04)	-0.11** (0.03)	-0.11** (0.03)
College	0.04** (0.02)	0.07** (0.02)	0.02 (0.02)	0.04** (0.02)	0.04** (0.02)
Female	-0.00 (0.02)	-0.01 (0.02)	-0.01 (0.02)	-0.01 (0.02)	-0.01 (0.02)
Science Knowledge	0.00 (0.03)	-0.05* (0.03)	-0.13** (0.04)	-0.06** (0.03)	-0.06** (0.03)
White	0.05** (0.02)	0.04** (0.02)	0.02 (0.02)	0.04** (0.02)	0.04** (0.02)
CA	-0.01 (0.07)	-0.12* (0.07)	-0.09 (0.06)	-0.07 (0.06)	-0.09 (0.06)
HI	0.08 (0.08)	-0.06 (0.08)	0.03 (0.09)	0.02 (0.07)	-0.01 (0.07)
OR	-0.02 (0.08)	-0.08 (0.08)	-0.06 (0.07)	-0.05 (0.07)	-0.06 (0.06)
WA	-0.04 (0.07)	-0.10 (0.08)	-0.07 (0.07)	-0.07 (0.06)	-0.08 (0.06)
Constant	0.81** (0.08)	0.79** (0.09)	0.80** (0.08)	0.80** (0.07)	0.91** (0.08)
R ²	0.08	0.13	0.04	0.11	0.13
N	855	853	852	855	855

* p < 0.10, **p < 0.05; two-tailed

Note. Full Model output for Figures 2 and 3. OLS coefficients with standard errors in parentheses. These models add fixed effect state-level controls to the models presented in Supplemental Tables 1 and 2 (please refer to those tables for additional information). All data are weighted. In addition to recovering all findings presented in the main text, we find no evidence that respondents' policy orientations differ significantly or systematically across states.

Figure S1. Re-visualization of Figure 3 (Contour Plot)



Note. Alternate visualization of the marginal effects presented in Figure 3. The y-axis corresponds to the full distribution of actual hazard (re-scaled to range from 0-1), and the x-axis corresponds to the full distribution of perceived hazard. The z-axis denotes predicted levels of support for earthquake policy (on the itemized index). Darker shades correspond to higher level of support (with a bin width fixed at ten). The results add additional nuance to the results presented in Figure 3 – particularly with respect to the conditional effects of perceived hazard – and support the results presented in the main text. At high levels of objective hazard (approaching $y=1$), increased hazard perceptions (x-axis) are associated with increased policy support (darker shades on the z-axis). At low levels of objective hazard, levels of support remain constant; across levels of perceived risk. As noted in Figure 3, policy support tends to decline even as objective hazard increases for those respondents who perceive low levels of earthquake hazard.