# How Disasters Affect Political Support: Experimental Evidence from an Air Crash Accident

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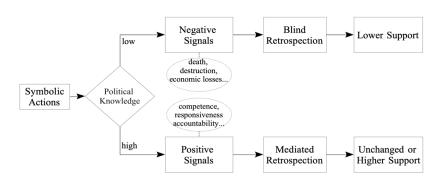
#### The Politics of Blame Attribution

- ▶ Blind retrospection: voters tend to blindly blame politicians for events outside their control
  - ► Started with Achen and Bartels (2004, 2016)
  - Further corroborated in other similar studies (Heersink, Peterson and Jenkins, 2017; Eriksson, 2016; Healy and Malhotra, 2010; Carlin, Love and Zechmeister, 2014)
- Mediated retrospection: voters do not necessarily blame politicians for disastrous events as long as the latter work diligently to reduce damages and deliver benefits such as reliefs
  - ➤ Supported by a number of studies on natural disasters and politically irrelevant events (Healy and Malhotra, 2010; Lazarev et al., 2014; Gallego, 2018; Reeves, 2011; Cole, Healy and Werker, 2012; Cooperman, 2022; Healy and Malhotra, 2009; Bechtel and Hainmueller, 2011; Blankenship et al., 2021)

#### Drawbacks in the Literature

- Government behavior during and after disasters can be more than mitigating damages and delivering benefits
  - ► Leader inspections and speeches
  - Proactive resignations of responsible officials
  - ▶ Sanctions of public employees such as demotion and demerit
- Government behavior can influence not only disaster victims but also unaffected citizens
  - Putin's inspection of disaster-hit regions also improved the support among people in adjacent regions which are not affected by the wildfire
  - ▶ "demonstration effect" (Lazarev et al., 2014)

# Theory and Hypotheses



- Hypothesis 1: Symbolic actions amid disasters will yield a null or positive effect on political support among politically sophisticated citizens.
- Hypothesis 2: Symbolic actions amid disasters will have a negative effect on political support among politically unsophisticated citizens.

#### Methods

- Survey experiment capitalizing on the 2022 air crash in China
- Survey sample: convenience sample collected in summer 2022
- ➤ Sample size: 1,035 responses with 377 cases dropped for poor quality (658 left)
- Dependent variables
  - ▶ Political support: 1–7 point scale (1=not support at all)
  - ► Government satisfaction: 1–7 point scale (1=very dissatisfied)

# Dependent Variables

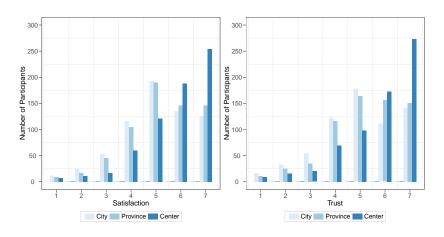


Figure 1: Frequency distribution of dependent variables

#### **Treatments**

- Control: Do you think that accountability sanctions can reduce the possibility of future accidents?
- ► Treatment 1 (2004 air crash): A similar air disaster occurred eighteen years ago. An aircraft of China Eastern Airlines crashed near Baotou Airport on November 21, 2004, killing over forty people and causing an economic loss of more than 100 million Yuan. This accident led the government to subject 12 responsible persons to accountability sanctions.
- Treatment 2 (2010 air crash): A similar air disaster occurred twelve years ago. An aircraft of Henan Airlines crashed at the Lindu Airport in Yichun city on August 24, 2010, killing over forty people and causing an economic loss of more than 100 million Yuan. This accident led the government to subject 23 responsible persons to accountability sanctions.
- ► Treatment 3 (sanction scope): According to incomplete statistics, 21,552 officials or public employees have been held accountable for 2,355 accidents since 2001, with an average of nine per accident.
- ▶ Treatment 4 (sanction level): According to incomplete statistics, a total of 27 provincial and ministerial officials (including deputies) and 139 municipal officials (including deputies) have been held accountable as the highest level of officials for the 2,355 accidents occurring since 2001, including the former minister of the Railway Ministry Liu Zhijun and the former mayor Han Zheng of Shanghai municipality.

# Checking the Balance of Covariates

Variables	Control	T1	T2	Т3	T4	P Values
Age	28.43	29.03	27.42	29.49	28.72	0.19
Rural Hukou	0.36	0.47	0.45	0.39	0.38	0.33
Party Member	0.49	0.44	0.41	0.47	0.43	0.78
Female	0.50	0.58	0.52	0.55	0.61	0.40
Education	3.52	3.31	3.48	3.43	3.45	0.20
Income	3.28	3.01	3.38	3.19	3.06	0.60
Regime Insider	0.12	0.13	0.12	0.13	0.19	0.42
Ethnic Minority	0.08	0.10	0.07	0.05	0.07	0.73
Disaster Experience	0.34	0.33	0.34	0.32	0.36	0.97
Political Knowledge	2.42	2.29	2.18	2.22	2.40	0.48
Observations	127	133	128	133	137	

#### Baseline Results

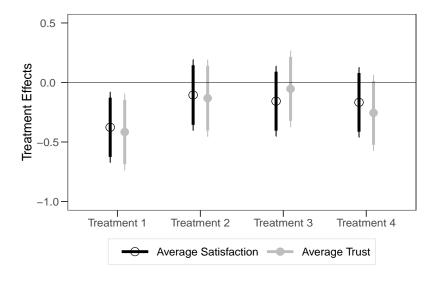


Figure 2: Treatment effects of on political attitudes

## Treatment Effects by Hierarchical Levels

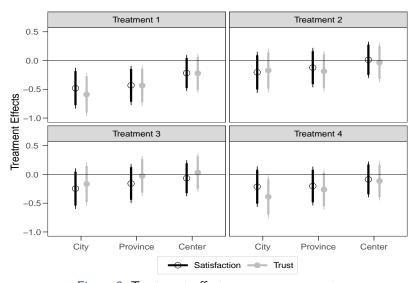


Figure 3: Treatment effects across governments

# Moderating Role of Political Knowledge

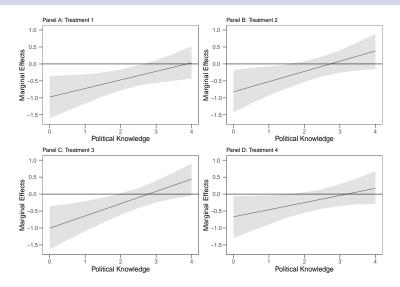


Figure 4: Marginal treatment effects on satisfaction

#### A Similar Effect on Trust

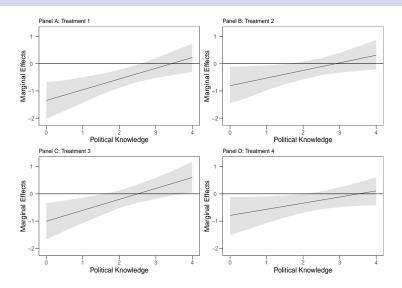


Figure 5: Marginal treatment effects on trust

### **Examining Alternative Explanations**

Note:

Table 1: Examining Alternative Explanations

	Satisfaction	Trust	Satisfaction	Trust
	(Outsiders)	(Outsiders)	(Insiders)	(Insiders
	(1)	(2)	(3)	(4)
Treatment 1	-1.367***	-1.933***	-0.045	-0.076
	(0.401)	(0.433)	(0.585)	(0.630)
Treatment 2	-1.048***	-1.164***	0.004	0.252
	(0.397)	(0.429)	(0.574)	(0.619)
Treatment 3	-1.017**	-1.202***	-0.813	-0.427
	(0.421)	(0.455)	(0.542)	(0.585)
Treatment 4	-0.850**	-0.919**	-0.021	-0.215
	(0.416)	(0.449)	(0.590)	(0.637)
Political Knowledge	-0.175	-0.257*	-0.002	0.087
	(0.127)	(0.137)	(0.152)	(0.164)
Treatment 1×Political Knowledge	0.369**	0.576***	-0.019	0.032
	(0.163)	(0.177)	(0.198)	(0.214)
Treatment 2×Political Knowledge	0.300*	0.313*	0.130	0.058
	(0.167)	(0.180)	(0.194)	(0.210)
Treatment 3×Political Knowledge	0.348*	0.440**	0.320*	0.265
	(0.178)	(0.192)	(0.185)	(0.199)
Treatment 4×Political Knowledge	0.209	0.232	0.081	0.097
	(0.170)	(0.183)	(0.197)	(0.213)
Controls/Intercept	✓	✓	✓	✓
Observations	381	381	277	277
Adjusted R <sup>2</sup>	0.046	0.073	0.028	0.041

\*p<0.1; \*\*p<0.05; \*\*\*p<0.01

#### Conclusion

- Disasters do not necessarily undermine public support.
- In addition to damage mitigation and benefit delivery, politically symbolic behavior can also influence mass support for the government.
- ▶ This effect is contingent on the political sophistication of the public, with politically unsophisticated people being more critical of the government (focusing on the negative signals) and politically sophisticated people being more supportive of the government (focusing on the positive signals) when they see disaster-induced sanctions.

# Thanks for your attention! All comments are appreciated! hui.zhou@slu.edu