# Cultural Worldview, Perceived Risks, and Vaccination Policy Preferences

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### **Research Question**

- What explains these differences in policy preference regarding vaccinations?
  - Mandatory vaccination policy
  - Religious exemption policy
  - Philosophical exemption policy
  - Who should decide? (Parents vs. Government)

### **Public Health Concerns**

- Recent pertussis outbreak in California
- Low vaccination rate in certain regions
- Government vaccination policy
  - Universal vaccinations
  - Providing the means to "opt out"
- Vaccine controversies

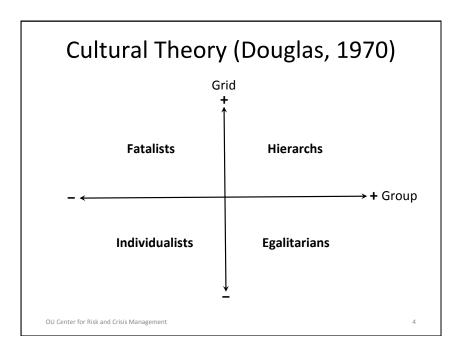
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# Cultural Theory of Policy Preference Formation

- The meaning of public policy
  - Important component of institutional arrangement
  - Influence on social relations
- Cultural orientations and preference formation (Wildavsky, 1987)
  - Orientations for desirable social relations
  - Cultural orientations shape policy preference

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### Cultural Type & Hypothesized Preferences for **Childhood Vaccination Policy**

	Mandatory Vaccination	Religious exemption	Philosophical exemption	Parent should decide?
Hierarch	Strongly support	Strongly oppose	Strongly oppose	Strongly disagree
Egalitarian	Conflictingly support	Conflictingly oppose	Conflictingly oppose	Conflictingly disagree
Individualist	Conflictingly oppose	Conflictingly support	Conflictingly support	Conflictingly agree
Fatalist	Strongly oppose	Strongly support	Strongly support	Strongly agree

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## **Competing Explanations**

- Other components of personal beliefs
  - Organic culture (Ernst, 2001; Lehrke et al., 2001)
  - Political ideology (Plutzer et al., 1998)
  - Religious beliefs
- Demographic characteristics
  - Vaccine related knowledge
  - Domestic composition
  - Gender, age, race, education and income

# Data, Variables and Measures

- Health Policy Survey
  - Nationwide Internet survey of 1,213 American adults in early 2010
- Dependent variables
  - Preferences for three existing vaccine policies
    - · Mandatory vaccination, religious exemption, and philosophical exemption
  - Preferences for intrinsic governance framework
    - Parents, not government, as chief immunization decision maker

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## Data, Variables and Measures

- Primary independent variables
  - Cultural orientations
    - · Hierarchism, egalitarianism, fatalism and individualism
- Control variables
  - Other components of personal beliefs
    - Organic culture, political ideology and religious beliefs
  - Demographic Characteristics
    - Vaccine related knowledge, domestic composition, age, gender, race, education and income

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8

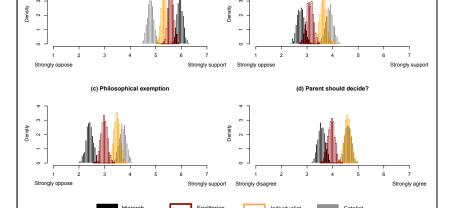
#### **Regression Results**

_	Dependent variable				
	Mandatory vaccination	Religious exemption	Philosophical exemption	Parent should decide?	
Hierarchism	0.272***	-0.238***	-0.258***	-0.209***	
	(0.044)	(0.055)	(0.060)	(0.057)	
Egalitarianism	0.137***	-0.110**	-0.062	-0.024	
	(0.039)	(0.048)	(0.047)	(0.047)	
Individualism	0.034	0.162***	0.205***	0.253***	
	(0.041)	(0.051)	(0.055)	(0.050)	
Fatalism	-0.101***	0.195***	0.194***	0.175***	
	(0.038)	(0.048)	(0.049)	(0.048)	
F	10.01***	15.48***	15.94***	14.84***	
Adjusted R <sup>2</sup>	0.112	0.169	0.173	0.162	
D.O.F	1054	1053	1056	1058	

\*p<0.10. \*\*p<0.05. \*\*\*p<0.01. (Robust standard errors in parentheses)
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9

# Vaccination Policy Preference by Cultural Type (a) Mandatory vaccination (b) Religious exemption



## **Implications**

- Influence of cultural orientations on the formation of vaccine policy preference
- Is enlightening the general public enough?
  - Necessary to provide culturally nuanced health information

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1