

# Do natural hazards and other ecological threats predict the strength of cultural norms?

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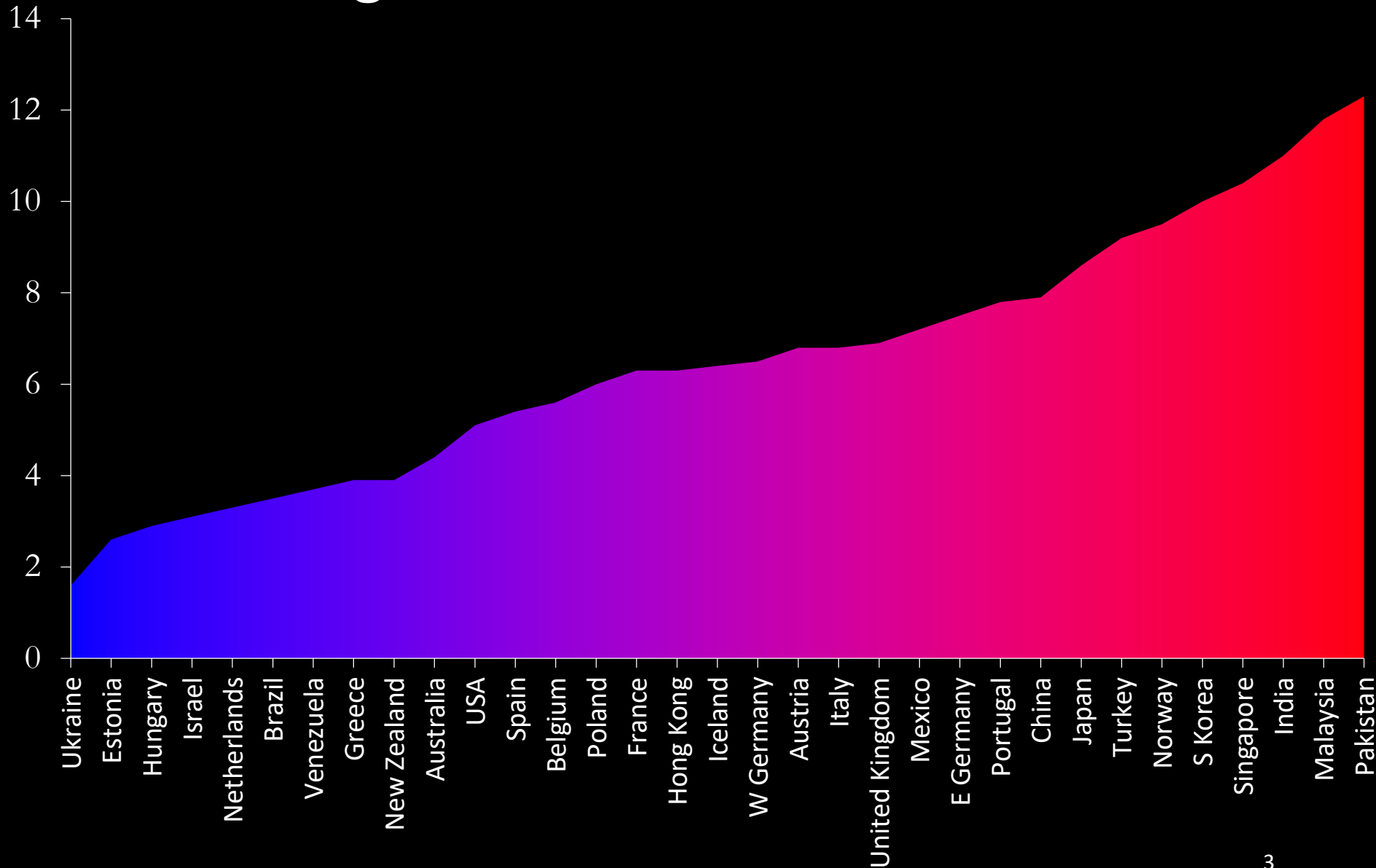
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# Strength of Cultural Norms

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- For shorthand, we use the phrase “tight” vs. “loose” cultures
- “Tight” refers to the degree to which social norms are pervasive, clearly defined, and reliably imposed (Gelfand et al. 2011)

# Strength of Norms Across 33 Countries



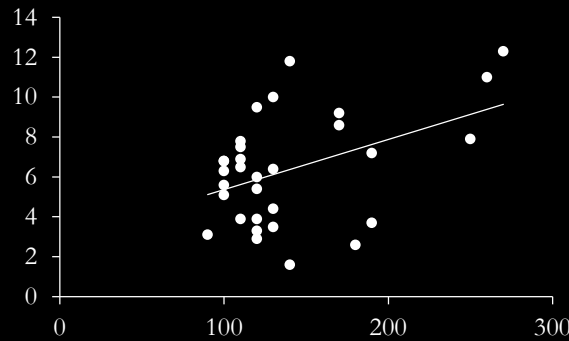
# What may account for the variation?

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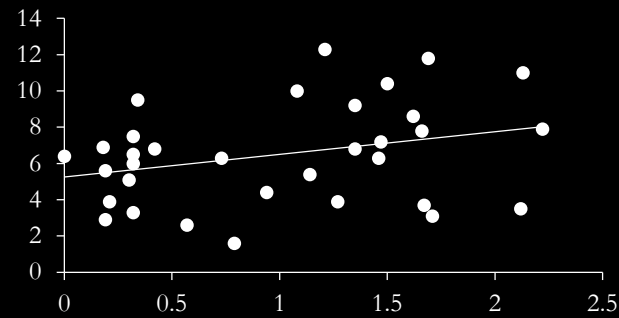
- A country's greater experience with ecological threats (such as natural hazards) is a predictor of "tightness" (Gelfand et al. 2011)
- U.S. states with more natural hazards are also "tighter" (Harrington and Gelfand 2014)



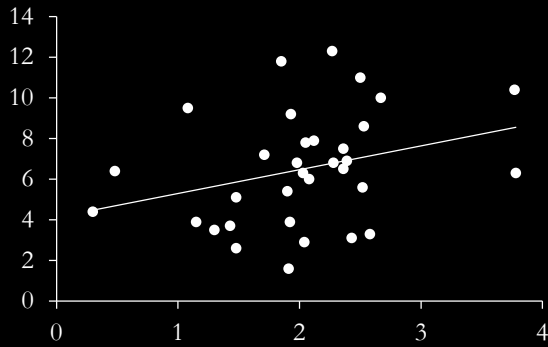
Food Deprivation



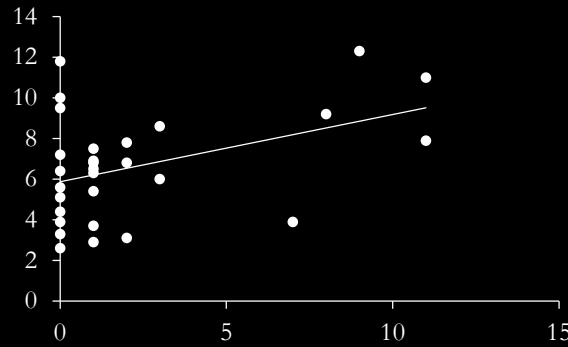
Pathogen Prevalence



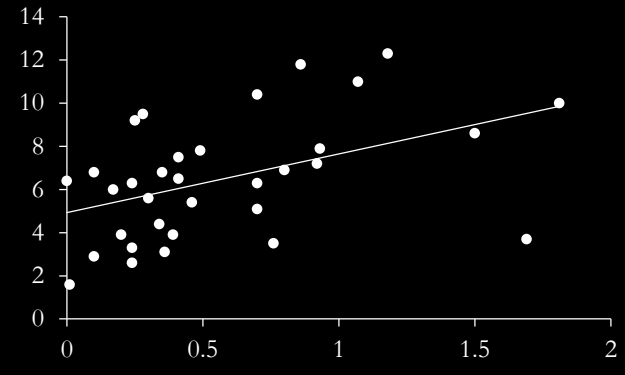
Population Density



Territorial Threat



Disasters



Gelfand *et al.*, 2011. The difference between tight and loose cultures. *Science*

Does this relationship hold in the ethnographic record?

# Research Design

## Standard Cross-Cultural Sample (SCCS)

- We coded strength of norms in 6 domains (wherever possible using eHRAF World Cultures)
- Coded **86** societies in random order from the SCCS that were previously reliably measured on resource problems (about ½ the sample)

The screenshot displays the eHRAF World Cultures Advanced Search interface. At the top, there is a navigation bar with the eHRAF logo and the text "WORLD CULTURES". Below this, there are four tabs: "BASIC Search", "ADVANCED Search", "Browse CULTURES", "Browse SUBJECTS", and "Browse DOCUMENTS". The "ADVANCED Search" tab is currently selected. The main content area is titled "Advanced Search" and is divided into two panels: "AddCultures" and "AddSubjects".

In the "AddCultures" panel, a search box contains "Saami (EP04)". Below the search box, it indicates "1 Cultures Selected" and provides "Select All | Clear All" options. There are two buttons: "Add CULTURES" and "Add All".

In the "AddSubjects" panel, there are radio buttons for "And" and "Or". Below these, a list of subjects is shown with checkboxes: "Socialization (860)", "Techniques of socialization (861)", "Weaning and food training (862)", "Cleanliness training (863)", "Sex training (864)", and "Aggression training (865)". To the right of this list are radio buttons for "And", "Or", and "Not". Below the list, it indicates "10 Subjects Selected" and provides "Select All | Clear All" options. There are two buttons: "Add SUBJECTS" and "Add All".

# Measuring Strength of Norms in the Ethnographic Record

For each of the following domains of life:

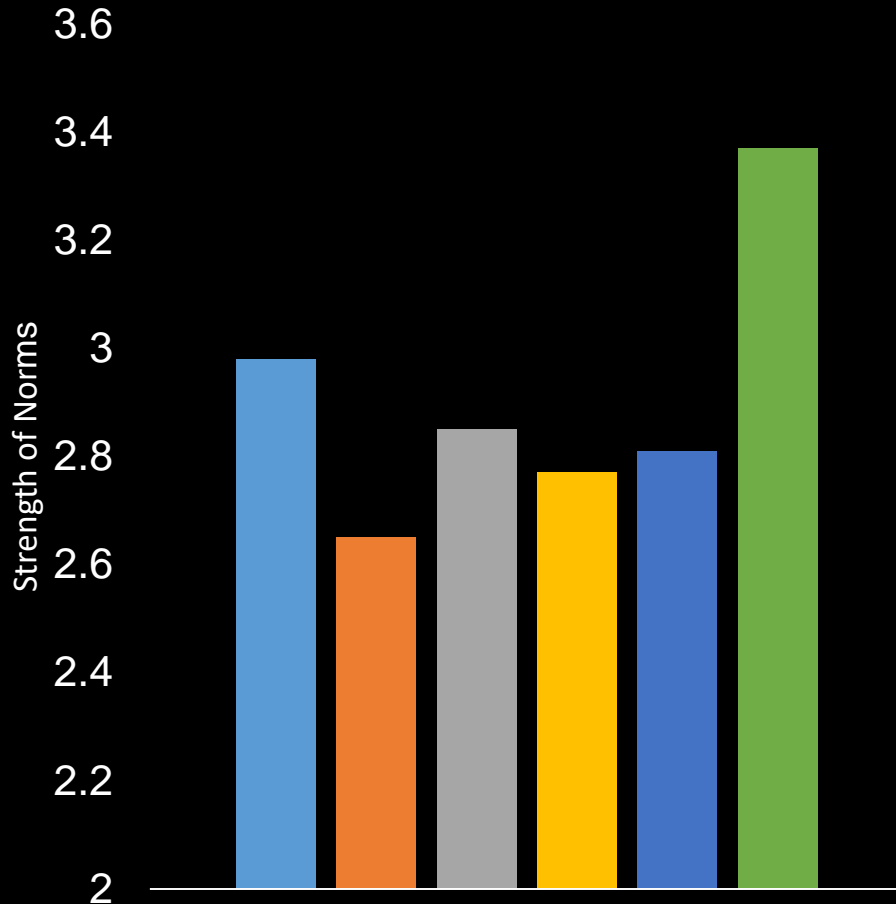
- Law and Ethics
- Gender
- Socialization
- Marriage
- Sexuality
- Funerals and Mourning

We asked coders to assess:

- The degree to which norms constrained behavior
- The extent norms were followed
- Expected degree of punishment
- Harshness of punishment
- An overall assessment of tightness



# Strength of Norms Across Domains



■ Law and Ethics

■ Socialization

■ Gender

■ Marriage

■ Sexuality

■ Funerals and Mourning

	1.	2.	3.	4.	5.	6.
1. Law	-					
2. Socialization	.70**	-				
3. Gender	.62**	.47**	-			
4. Marriage	.62**	.56**	.50**	-		
5. Sexuality	.56**	.49**	.46**	.43**	-	
6. Funerals	.49**	.51**	.32*	.46**	.33*	-

# Tightest and Loosest Societies

## **Tightest**

1. Aranda (3.77)
2. Mbau Fijians (3.75)
3. Irish (3.75)
4. Japanese (3.71)
5. Koreans (3.67)
6. Manus (3.63)
7. Ganda (3.60)
8. Bambara (3.38)
9. Mapuche (3.33)
10. Amhara (3.33)
11. Saramacca (3.29)
12. Bellacoola (3.27)
13. Kurd (3.25)
14. Kapauku (3.29)
15. Tallensi (3.21)

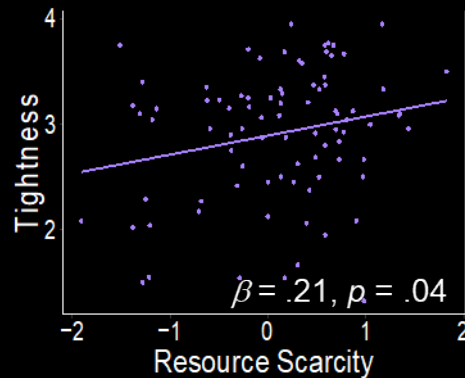
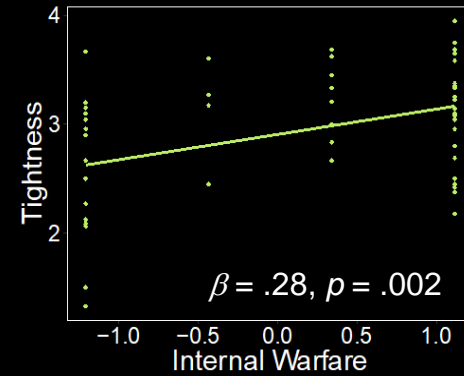
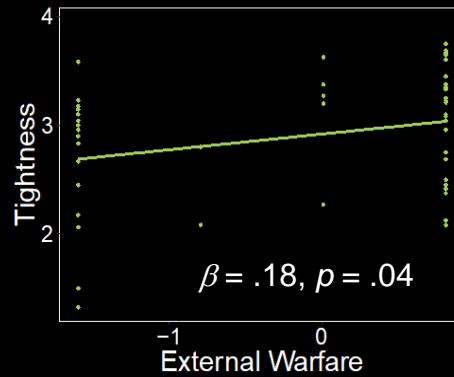
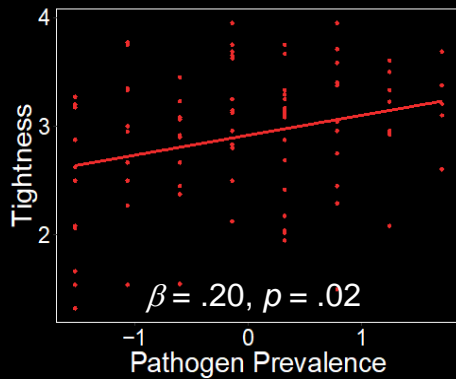
## **Loosest**

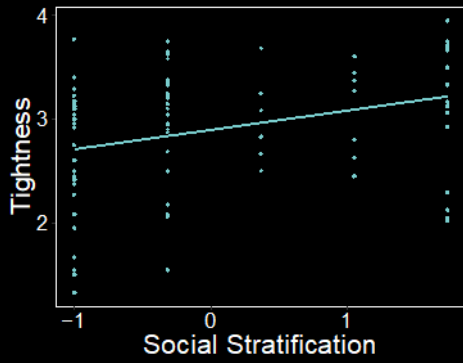
1. Mbuti (1.50)
2. Tehuelche (1.54)
3. Siamese (2.02)
4. Javanese (2.04)
5. Huron (2.08)
6. Warrau (2.08)
7. Havasupai (2.27)
8. Burmese (2.29)
9. Orokaiva (2.42)
10. Klamath (2.50)
11. Papago (2.50)
12. Carib (2.60)
13. Tikopia (2.67)
14. Trobrianders (2.67)
15. Marshallese (2.67)

Is ecological threat a predictor of more tightness in the ethnographic record?

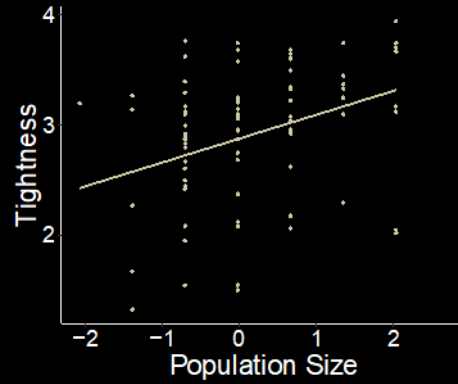
- Yes, generally.
- More tightness is significantly predicted by a number of ecological and social stressors

# Stress Predictors

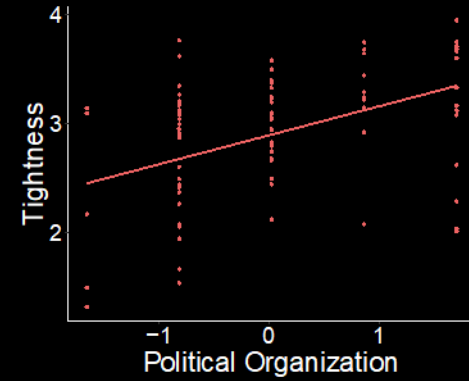




$\beta = .22, p = .004$



$\beta = .26, p = .001$

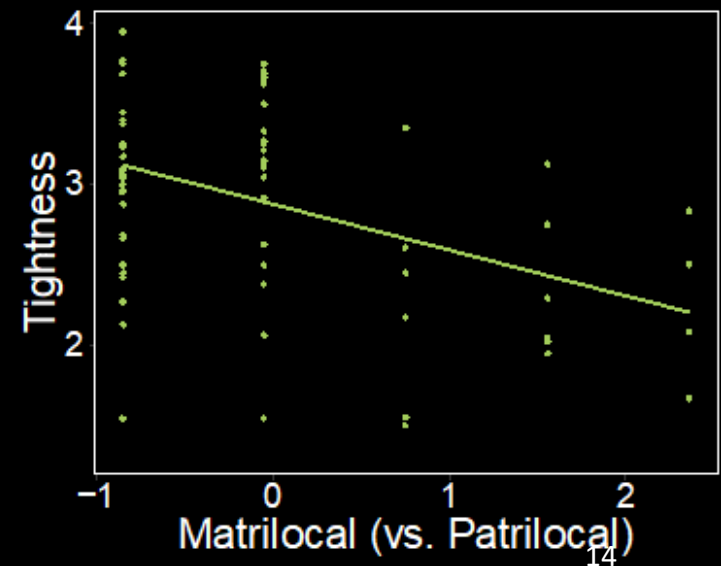


$\beta = .27, p < .001$

## Complexity Correlates

## Other Significant Predictors of Tightness

- Few checks on leaders  $\beta = -.22$ ,  $p = .01$
- Hostility towards other societies  $\beta = .23$ ,  $p = .004$
- Low contact with other societies  $\beta = .28$ ,  $p = .002$
- Moral high gods  $\beta = .17$ ,  $p = .03$
- Matrilocality  $\beta = -.34$ ,  $p < .001$



# Summary and Implications

1. Tightness-looseness appears to be consistent across different domains of life
2. Just as in countries, ecological threat predicts societal tightness in societies at very different scales
3. The fact that relationships are similar in both types of sample suggests that the results may be generalizable to societies at all scales.

- We need to understand more about the mechanisms. What are the drivers of this process?
- Do parents in unpredictable environments adopt different socialization practices?





**Is socialization the driver of tightness or looseness?**

# Additional questions

- Do people in tighter societies cooperate more?
- Can tightness impede the ability to adapt to changing circumstances?

# Acknowledgements



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# Thank You!

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ROYSTER  
SOCIETY OF FELLOWS

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