

# Community hygiene norm violators are consistently stigmatized: Evidence from four global sites and implication for sanitation interventions

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## Background

The Global Ethnohydrology Study is a transdisciplinary, multiyear, multisite research project which was designed to gain cross-cultural understandings of water issues through conducting surveys. This particular approach helps us compare and examine how climate context and developmental status affects how people perceive hygiene norm violators.

## Research Questions

- Are hygiene violators consistently stigmatized?
- Generally, are women held to higher standards, and/or more easily devalued when they cannot meet hygiene norm standards, compared to men?
- If so, are women endorsing those gendered stigmas that judge women more harshly?

## Data Collection

- The four countries selected had semi-rural or peri-urban areas to be able to compare the differences in water scarcity and developmental status.
- A purposive sampling strategy was used to find the institutional and cultural knowledge of local residents. There was a total of 267 respondents.
- The open-ended interviews were face-to-face which evoked responses about hygiene norm violators and demographic questions.
- The respondents were asked to imagine a man and woman who were hygiene violators. Their disgust sensitivity, perceived vulnerability to disease and social distance to poor hygiene was measured as well.
- There were 23,278 interview segments

## Four Study Sites based on Water Security

	Water Security	Water Insecurity
<b>Developed</b>	Wellington, New Zealand (N = 82)	Phoenix, United States (N = 61)
<b>Developing</b>	Viti Levu, Fiji (N = 59)	Acatenango, Guatemala (N = 65)

## Data Analysis

- The contextual data from the text segments was analyzed with MacQueen's method.
- All the statistical methods were run with SPSS 22.
- MAXDictio was used to find the frequency of coded segments for men and women.

## Three theoretical domains containing 10 codes

Empathy codes	Stigma codes	Disease codes
Unlucky	Social undesirable identity	Disease
Lack of support	Doesn't care about appearance	Mental Illness
Lack of money	Disgust	
	Contempt	
	Drug/alcohol/kava abuser	

## Results

- Hygiene violators are consistently stigmatized in all four sites such that they are considered to have failed to meet norms which makes them susceptible to contempt.
- There were consistently high level of stigma-related labels to towards both men and women who were violating the moral code across all four sites.
- There was no difference in the use of disease labels for gender when describing hygiene violators
- Females had lower incidences of applying non-empathy in comparison to male hygiene violators
- There was no difference between the odds of the respondents to male hygiene violators with regard to disease or empathy codes.

## Mean scores

	Viti Levu, Fiji N = 59, 33 women	Acatenango, Guatemala N = 65, 33 women	Wellington, New Zealand N = 82, 43 women	Phoenix, USA N = 61, 31 women
<b>Hygiene Behavior Scores</b>				
Men	3.27 (.34)	3.4 (.31)	3.01 (.37)	3.12 (.29)
Women	3.44 (.27) <sup>a</sup>	3.53 (.23)	3.07 (.34)	3.12 (.44)
<b>Disgust sensitivity Scores<sup>b</sup></b>				
Men	31.8 (11.4)	30.6 (14.3)	19.4 (11.3)	22.3 (7.8)
Women	35.5 (13.1)	34.6 (13.7)	25.9 (11.5) <sup>a</sup>	31.7 (16.3) <sup>a</sup>
<b>Perceived Vulnerability to Disease Scores<sup>b</sup></b>				
Men	44.8 (16.2)	43.7 (13.4)	37.1 (8.3)	40.4 (4.7)
Women	47.6 (13.4)	48.4 (16.2)	39.1 (9.0)	40.9 (1.4)
<b>Social Distance Scores<sup>b,c</sup></b>				
Men	2.31 (.65)	1.73 (.66)	2.27 (.75)	2.22 (.69)
Women	2.15 (.69)	1.80 (.79)	2.25 (.75)	2.06 (.82)

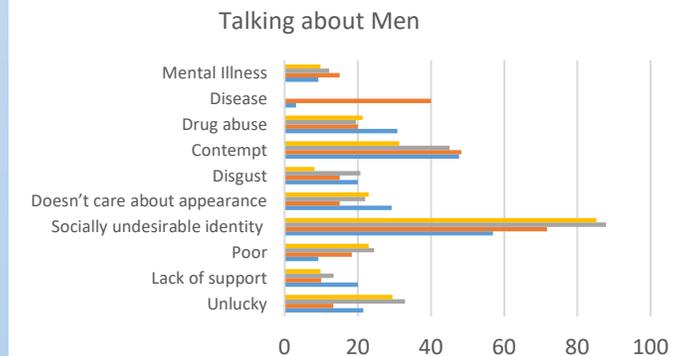
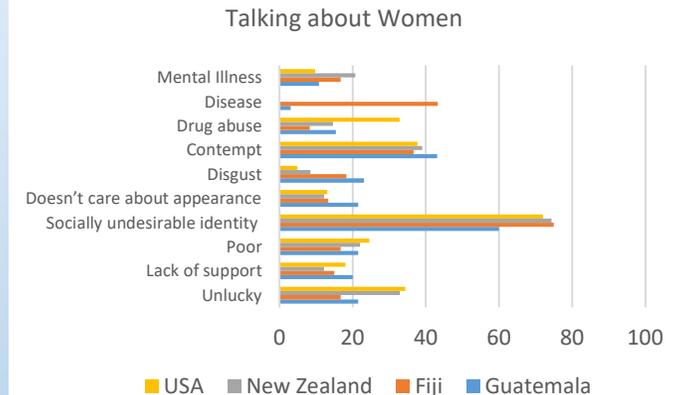
<sup>a</sup>Statistically significant gender difference, based on t-test.

<sup>b</sup>Statistically significant difference across sites, based on one-way ANOVA.

<sup>c</sup>Lower score represents preference less intimacy and greater social distance.

## Thematic Findings

Percentage of theme-coded responses applied to hygiene violators by site (men and women combined, talking about each gender).



## Conclusion

A disgust-based approach to change sanitation behavior does not save lives and it does not reduce the exposure of infectious disease in under-resourced communities. Stigmatizing labels were already attached to imagined hygiene violators regardless of community or gender. Disgust-based interventions must be carefully planned according to the results.