The Seduction of Applied Conformity

Charles Efferson, Sonja Vogt, Ernst Fehr

Department of Economics
University of Zurich
Study 1

The Distribution of Attitudes and Practice

(Efferson et al., 2015, Science)
Female genital cutting is not a social coordination norm

New data from Sudan question an influential approach to reducing female genital cutting

By Charles Efferson,
Sonja Vogt,
Amy Elhadi,
Hilal El Fadil Ahmed,
Ernst Fehr

Cutting rates in Gezira communities. Red diamonds show ordered cutting rates as predicted by the coordination game model (12). Blue dots show actual cutting rates across the 45 communities with 95% boot-strapped confidence intervals.
Discontinuities in implicit attitudes?

- We developed an implicit association test for cut versus uncut girls.

- Given neutrality ($D = 0$), disparate cutting norms imply a bimodal distribution for $D$.

- Measured implicit attitudes with 2260 adults in the same 45 communities.

- Example stimuli:
Anonymous Laboratory Conditions

(Chauchard, 2013)
Pearson’s correlation, $\rho = -0.423$, with two-dimensional weighted bootstrapping, $p < 0.0008$. 
$D > 0 \Rightarrow$ an Uncut/Good Association

Hartigans’ dip test of unimodality, $p = 1$. Tests of unimodality by community are also not significant.
Study 2

Dramatising the Tension Within

(Vogt et al., 2016, Nature)
Colonial Intrusion and Local Backlash

- If one views cutting as locally pervasive and entrenched (Shell-Duncan and Hernlund, 2000), abandonment implies the need for foreign values and ideals.

- This can accentuate inter-cultural divisions and lead to backlash (Thomas, 2000; Shell-Duncan, 2008; Camilotti, 2015) or misrepresentation (Cloward, 2014).

- Cutting is not necessarily locally pervasive (Efferson et al., 2015; Bellemare et al., 2015).

- **Produced four movies** (90 mins each) that dramatise members of an extended family as they confront each other with divergent views about whether to continue cutting.

  ⇒ Tension between cutting and abandonment is as local as possible.
The Power of a Good Story

• Entertainment can change attitudes and behaviours (Jensen and Oster, 2009; La Ferrara et al., 2012; Kearney and Levine, 2015; La Ferrara, 2015).

• Entertainment to promote socially beneficial change is often based on social learning theory (Bandura, 1977; Sabido, 1981; La Ferrara, 2015).

• The demand for entertainment is ubiquitous (DellaVigna and La Ferrara, 2015; La Ferrara, 2015), which means ventures can be sustainable and biased participation minimised.
Private Values versus Marriage Prospects

Four movies of 90 minutes about an extended family in contemporary Sudan.

- **Control**: main plot (100%) with heady mix of love, intrigue, deception, and forgiveness.

- **Values**: main plot (70%) plus sub-plot (30%) dramatising discordant views on health, Islam, and femininity.

- **Marriageability**: main plot (70%) plus sub-plot (30%) dramatising discordant views on how cutting affects marriage prospects.

- **Combined**: main plot (70%) plus sub-plot (30%) dramatising discordant views in terms of values and marriageability.
The Yard: Dramatising the Tension Within
Experimental Procedures

- **Experiment 1:** Movies randomly assigned to groups of people within a *community*, and we immediately elicited implicit attitudes after the movies (189 participants, 5 communities).

- **Experiment 2:** Movies randomly assigned to groups of communities within a *region*, and we elicited implicit attitudes one week later (7729 participants, 122 communities).
Changing cultural attitudes towards female genital cutting

Sonja Vogt1*, Nadia Ahmed Mohmmed Zaid2, Hilal El Fadil Ahmed1, Ernst Fehr3§ & Charles Efferson1*§

LETTER

A

Difference in mean IAT scores

-0.05 -0.05

0 0

0.05 0.05

n = 3272 n = 3671 n = 3525 n = 3438

Control Values Marriageability Combined

B

Mean IAT score

-0.4 -0.4

0.4 0.4

0 0

n = 45 n = 48 n = 48 n = 48

Control Values Marriageability Combined

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## Intention to Treat, Difference-in-Difference

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Complete cases</th>
<th>Inverse Prob. Weighting</th>
<th>Multiple Imputation</th>
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<td>Estimate (Std. error)</td>
<td>Estimate (Std. error)</td>
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<tr>
<td>Intercept</td>
<td>-0.0544 (0.0492)</td>
<td>-0.101 (0.0703)</td>
<td>-0.0536 (0.0491)</td>
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<tr>
<td>Follow-up</td>
<td>-0.0348 (0.0265)</td>
<td>-0.0463 (0.0268)</td>
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<tr>
<td>Values</td>
<td>-0.0905 (0.0623)</td>
<td>-0.0610 (0.0542)</td>
<td>-0.0899 (0.0622)</td>
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<td>Marriageability</td>
<td>-0.0550 (0.0477)</td>
<td>-0.0500 (0.0413)</td>
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<tr>
<td>Combined</td>
<td>-0.0201 (0.0532)</td>
<td>-0.00951 (0.0465)</td>
<td>-0.0202 (0.0533)</td>
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<tr>
<td>Follow-up × Values</td>
<td>0.0450 (0.0369)</td>
<td>0.0406 (0.0371)</td>
<td>0.0447 (0.0370)</td>
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<tr>
<td>Follow-up × Marriageability</td>
<td>0.0675** (0.0338)</td>
<td>0.0611 (0.0339)</td>
<td>0.0667 (0.0340)</td>
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<tr>
<td>Follow-up × Combined</td>
<td>0.111** (0.0345)</td>
<td>0.113** (0.0352)</td>
<td>0.111** (0.0346)</td>
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</tbody>
</table>

Community controls - ✓
Individual controls - ✓
Num. subjects - 7729
Num. observations - 13,906
Num. imputed - 0

Robust standard errors clustered on 88 blocks of communities.

*** $p \leq 0.001$    ** $p \in (0.001, 0.01]$    * $p \in (0.1, 0.05]$
## Intention to Treat, Difference-in-Difference (Controls)

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<td>-0.0544</td>
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<tr>
<td>Woman</td>
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<td>0.0933***</td>
<td>0.0936***</td>
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<tr>
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<td>(0.0253)</td>
<td>(0.0253)</td>
<td>(0.0241)</td>
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<tr>
<td>Age</td>
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<td>0.00218**</td>
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<td>(0.000818)</td>
<td>(0.000816)</td>
<td>(0.000790)</td>
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<td>Spouse born same community</td>
<td>-0.0323</td>
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<td>(0.0217)</td>
<td>(0.0217)</td>
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<td>-0.211***</td>
<td>-0.212***</td>
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<td>(0.0231)</td>
<td>(0.0231)</td>
<td>(0.0229)</td>
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<tr>
<td>Ancestors nomads</td>
<td>-0.150***</td>
<td>-0.147***</td>
<td>-0.149***</td>
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<tr>
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<td>(0.0235)</td>
<td>(0.0233)</td>
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</tr>
<tr>
<td>Daughters</td>
<td>0.0521*</td>
<td>0.0516*</td>
<td>0.0528*</td>
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<tr>
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<td>East Gezira</td>
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<td>(0.0367)</td>
<td>(0.0381)</td>
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<tr>
<td>High cutting</td>
<td>0.0164</td>
<td>0.0159</td>
<td>0.0126</td>
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<tr>
<td></td>
<td>(0.0396)</td>
<td>(0.0394)</td>
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<tr>
<td>High population</td>
<td>0.0604</td>
<td>0.0596</td>
<td>0.0402</td>
</tr>
<tr>
<td></td>
<td>(0.0407)</td>
<td>(0.0405)</td>
<td>(0.0388)</td>
</tr>
</tbody>
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Robust standard errors clustered on 88 blocks of communities.  

*** $p \leq 0.001$  ** $p \in (0.001, 0.01]$  * $p \in (0.1, 0.05]$
Study 3

Immigrants vs. Countries of Origin

(Vogt et al., 2017, *SSM - Population Health*)
The risk of female genital cutting in Europe: Comparing immigrant attitudes toward uncut girls with attitudes in a practicing country

Sonja Vogt⁎, Charles Efferson, Ernst Fehr

Department of Economics, University of Zurich, Blumlisalpstrasse 10, 8006 Zurich Switzerland

Abstract

To examine these possibilities, we used a fully anonymous, computerized task to elicit implicit attitudes toward female genital cutting among Sudanese immigrants living in Switzerland and Sudanese people in Sudan. Results show that Sudanese immigrants in Switzerland were significantly more positive about uncut girls than Sudanese people in Sudan. Immigrants were also significantly more positive about uncut girls than residents in a country where cutting was historically practiced. Sudanese immigrants and residents in Sudan were significantly more positive about uncut girls than Swiss residents, who all live in a country where cutting is not traditionally practiced and may even be illegal.

Keywords: Implicit association test, Immigration, Female genital cutting

ARTICLE INFO

1. Introduction

Female genital cutting is defined as an intentional injury to the female genitalia without medical justification. The practice occurs in at least 29 countries in Africa, the Middle East, and Asia. In addition, globalization and migration have brought immigrants from countries where cutting is commonly practiced to countries where cutting is not traditionally practiced and may even be illegal. In countries receiving immigrants, governments and international organizations are increasingly concerned about the prevalence and risk of cutting among immigrant populations. In particular, immigrants might differ in terms of attitudes toward female genital cutting. Attitudes can differ between countries of origin and in countries of destination. Differences in attitudes can be due to sample of people from the country of origin or because immigrants acculturate after arriving in a new country. Moreover, policy makers also need to understand how heterogeneous attitudes can affect the risk of cutting among immigrant communities. The risk of cutting among immigrants can be estimated from data on prevalence and incidence rates in practicing countries. Extrapolating from the prevalence and incidence rates in practicing countries, however, is generally not sufficient to guarantee a valid estimate of risk in immigrant populations. More broadly, our results highlight the need for methods for estimating cutting risk among immigrant populations. More broadly, our results highlight the need for methods for estimating cutting risk among immigrant populations. More broadly, our results highlight the need for methods for estimating cutting risk among immigrant populations.
Conclusions

- Local heterogeneity in attitudes and practices exists.

- Emphatically, local heterogeneity does NOT imply that positive social influence is absent (Hayford, 2005; Howard and Gibson, 2017).

- Local heterogeneity does imply that positive social influence is probably not creating the kind of path-dependent cultural evolutionary dynamics that a policy maker might want to exploit to accelerate behaviour change.

- Local heterogeneity can be used to design effective (entertainment-based) interventions that avoid emphasising inter-cultural conflict.
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Thank you!
References


