

# Why Rights Revolutions are Rare?

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# Motivation

- Recognition of the marginalized is fundamental for economic and political empowerment of vulnerable groups (Smith, 1759; Hegel, 1820)
  - Campaigns for equal rights are in fact “struggles for recognition” (Taylor, 1992, p. 26).

# The Research Questions

- ① How can progressive attitudes be fostered?
- ② How do these attitudes transmit and spillover to others?
- ③ Why are progressive attitudes not universally adopted?

# The Context

- Primary School Teachers in Government Schools of Pakistan
  - Civil servants: public school teachers
  - These teachers teach 5 to 12 year-olds
- We conduct a randomized control trial in collaboration with the Progressive Education Network (PEN)
  - PEN is one of the largest network of public schools in the world with about 300 schools operating across Pakistan

# Study Design

- We randomly assign teachers to a Visual Narrative + A self-reflection workshop on themes of the movie
  - Visual Narrative: live screening of the movie “Bol” emphasizing gender rights
- Another treatment arm reinforces the augmented Visual Narrative with a semester-long gender studies curriculum
  - The teachers teach the course to students
  - “Self-Persuasion” exercise (Schwardmann et al., 2022)

# This Paper - I

- Visual Narrative + Hour-long structured discussion induces teachers to become more supportive of equitable gender rights
- Gender attitudes transmit from teachers to students
- Effects are heightened, when the Visual Narrative is combined with the curriculum
- Bottomline: Greater recognition of gender rights can be fostered and even transmitted!

## This Paper - II

- But this “moral entrepreneurship” is costly
  - The cultivation of more equitable gender views is stressful
  - Stress is measured in self reported surveys but also via teachers’ hormonal responses in their blood plasma concentrations
  - Treated teachers have higher self-reported stress and elevated blood cortisol concentration
- This negative effect of increased stress attenuates via a moral bandwagoning effect:
  - The negative effects dissipate as more and more teachers adopt new gender attitudes
  - Progressive gender norms can be cultivated but they come with costs
  - This may explain why progressive gender norms do not easily take hold
    - Societies can get stuck in a “traditional gender norm equilibrium”

# Related Literature and Contributions

## ● Social Norms

- A vibrant literature has looked at how social norms impact economic, political and social behavior (Bursztyn and Jensen, 2015; Fujiwara et al., 2019; Bursztyn et al., 2020; Dhar et al., 2022; Mehmood et al., 2022)
- We contribute to this literature by documenting the sanctions that stymie rights revolutions from taking root

## ● Bandwagoning and Herd Behavior

- A classic literature on bandwagoning provides theoretical framework for herd behavior (Becker, 1991; Bikhchandani and Hirshleifer, 1992; Banerjee, 1992; Shiller, 1995).
- People have herd mentality: financial markets, protests, voting etc
- We provide causal evidence on how herding may reduce the costs of adopting new moral norms



# Roadmap

- ① Background
- ② Data
- ③ Empirical Specification
- ④ Results
- ⑤ Experimental Demand
- ⑥ Conclusion
- ⑦ Appendix: Additional Robustness Checks

## Context and Sample

- We collaborate with the Progressive Education Network (PEN) and embed a field experiment within their regular teacher training
- PEN works to improve the quality of education via a public-private partnership, similar to charter schools in the US.
- These schools are managed using public funds by the private actors in a public-private partnership
- Sample is all PEN schools in Punjab: 607 teachers, 15000 students

# Visual Narrative Treatment

- Bol Movie as the Visual Narrative Treatment
  - We arranged a live screening of the movie about gender rights
  - The film that was part of a maternal and child health project and implemented by Johns Hopkins University (John Hopkins News, 2012)
  - The screening of the movie followed an hour-long discussion about recognition of gender rights
- The movie features a strong female lead on death row telling the story of why she found it necessary to murder her father
- The movie is critically acclaimed and one of the highest-grossing Pakistani films of all time

# The Visual Narrative

## The Movie Bol



# Visual Narrative + Self-Persuasion Treatment

- Visual narrative augmented with self-persuasion
  - Self-Persuasion: gender studies curriculum
  - Designed by pedagogical experts (AK and PEN Foundation)

# Gender studies curriculum

- Teachers and students self-reflect together:
  - Draw all the work that your father does.
  - Draw all the work that your mother does.
  - Which of these are the same? Which are different?
  - **Why is that?**
  - Would you want the job of your mother or your father when you grow up?
  - **Why is that?**

# Gender Studies Curriculum

## A Typical Lesson Log Entry

Subject/ Date	Topic/ Page#	No. of Periods	Pedagogical Strategy/Teaching Methodology	Resource Material (AV Aids)	Assign- ment
			<p>Q → Would you want the job of your mother or your father, when you grow up?</p> <p><u>Part 1</u> :- Ask the class on what their mothers' &amp; fathers' do.</p> <p><u>Part 2</u> :- Ask the class, what they would choose to become, from what their parents do?</p> <p><u>Part 3</u> :- Show them the following pictures.</p>	<ul style="list-style-type: none"> <li>- Book</li> <li>- Pictures</li> <li>- Board.</li> </ul>	<p>Write a note on what your job in future is more likely to look like? And does it resemble any of your parent's job?</p>
			<p><u>Part 4</u> :- Initiate an open discussion on what the children choose from the above pictures as their job &amp; why?</p>		

# The Data

- The Progressive Education Network Administrative Records
- Large data collection exercise:
  - Surveys to construct gender rights index, implicit association tests, petitions to parliament, plasma cortisol tests



# Gender Rights Index

Likert Scale:

1. Totally Disagree
2. Disagree
3. Neutral
4. Agree
5. Totally Agree

S1. Women should be allowed to work outside the home.

S2. Women and men should have equal rights to jobs.

S3. I have no problem with my sister or female cousin from working outside the home.

S4. Daughters should have a similar right to inherited property as sons.

S5. Women and men should have equal rights to get an education as men.

S6. Wives should not be less educated than their husbands.

S7. Boys should not get more opportunities and resources for education than girls

S8. It would be a good idea to elect a woman as the village Sarpanch (local politician).

S9. Women and men have equal rights to be President or Prime Minister.

# Implicit Association Tests

Press "E"

**Woman**

Press "I"

**Men**

1

This page contains instructions. The game starts on the next page.

No word appears:  
Press your finger left key "E" for the kind words she.  
Press the key with your right index finger. Words for "I" Type Male.

**X** appears during an error. Correct the error by pressing the correct key.  
Go as fast as possible while making some mistakes.

Click **space bar** to start.

دائیں "E" پر

**عورت**

دائیں "I" پر

**مرد**

1

ان صفحے میں ہدایات ہیں۔ کھیل اگلے صفحے پر شروع ہوتا ہے۔

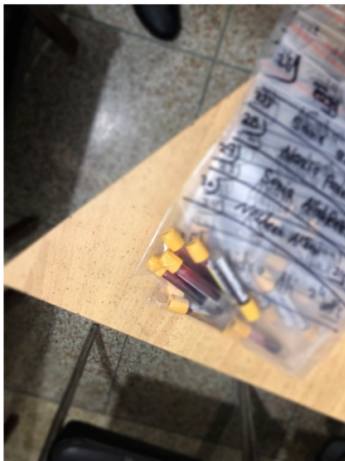
جب کوئی لفظ ظاہر ہوتا ہے  
کے لئے "E" پر دایں طرف کی انگلی کی چابی پر  
کے لئے "I" پر دایں طرف کی انگلی سے کلید دیا جائے۔

انکے لفظ کے دوران صحیحہ کے دیکھنے سے غلط کرنا گناہ ہے۔

# Collecting Blood Samples for Cortisol - I



# Collecting Blood Samples for Cortisol - II



# OLS Estimation

$$Y_i = \theta + \alpha_1 \text{Visual Narrative}_i + \alpha_2 \text{Visual Narrative \& Self Persuasion}_i + \mathbf{W}'_i \boldsymbol{\psi} + \epsilon_i$$

(1)

- Subscript  $i$  is an individual teacher or student
- $Y$  represents the respective outcome
- $\mathbf{W}$  is a vector of controls
- Standard errors are clustered at the teacher level
- $\alpha$ 's give the causal impact of visual narrative and joint treatments

# Summary of Experimental Design

- Teachers are randomly assigned to a Visual Narrative
  - They watch the movie “Bol” (3 hours)
  - The movie, Bol (literally, to speak up), is a Pakistani Urdu-language social drama with a strong female lead on death row
  - She tells her story of why she found it necessary to murder her father as her “right to exist as a woman” was subverted
  - Engage in a structured discussion of gender-related themes of the movie (1 hour)
- Teachers are randomly assigned to Visual Narrative and Self-Persuasion
  - The visual narrative treatment is augmented with gender studies curriculum which teachers teach for 4 months.
  - Teachers and students self-reflect and envision equal rights
  - Recent research suggests teaching concepts can be a instrument of self-persuasion

# Balance

**Panel A: Teacher Characteristics**

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
	Pre-Treatment Stress	Pre-Treatment Domestic Violence (z-value)	Pre-Treatment Gender Index	Married	Bol Movie Watched	Av. Teaching Hours	Teaching Experience	Years of Education
Visual Narrative	0.0639 [0.145]	0.00533 [0.134]	-0.0720 [0.0775]	-0.0767 [0.0674]	0.0869 [0.0675]	0.418 [0.356]	0.0238 [0.400]	0.0719 [0.206]
Visual Narrative & Self-Persuasion	0.0942 [0.147]	0.0510 [0.136]	0.00463 [0.0789]	-0.0619 [0.0687]	0.0598 [0.0688]	0.130 [0.362]	0.481 [0.407]	0.138 [0.210]
School Fixed Effects	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Observations	607	607	607	607	607	607	607	607
R-squared	0.119	0.091	0.105	0.078	0.075	0.063	0.075	0.057
F Statistics (Joint Significance)	0.41	0.18	0.93	0.96	0.55	0.57	0.77	0.50
Mean of dependent var.	2.153	0.000	0.00	0.473	0.532	30.277	4.608	12.679

**Panel B: Students Characteristics**

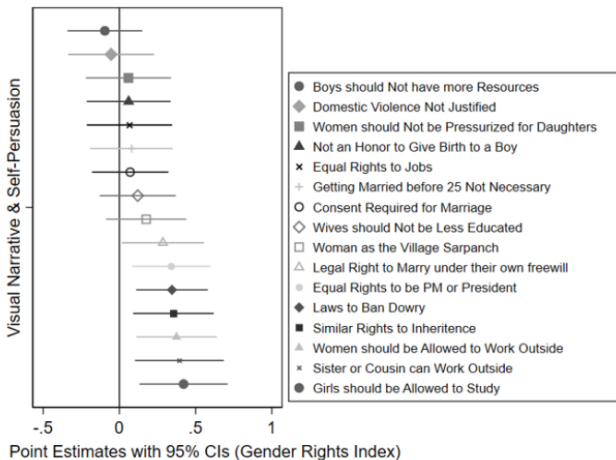
	Gender	Grade 1	Grade 2	Grade 3	Grade 4	Grade 5	Grade 6	Pre-Treatment Student's Gender Rights Index
Visual Narrative	-0.00445 [0.0243]	0.0242 [0.0454]	0.0863* [0.0480]	-0.0392 [0.0464]	0.0162 [0.0442]	-0.0448 [0.0358]	0.00105 [0.0206]	0.00101 [0.0267]
Visual Narrative & Self-Persuasion	0.00169 [0.0272]	-0.0483 [0.0443]	0.0598 [0.0481]	-0.0690 [0.0455]	0.00437 [0.0414]	0.0846* [0.0450]	-0.00831 [0.0195]	-0.0360 [0.0271]

# Effect on Gender Attitudes - I

	(1)	(2)	(3)	(4)
	<i>Gender Rights Index</i>	<i>Petition to Criminalize Dowry</i>	<i>Petition to Abolish Polygamy</i>	<i>Gender IAT Score</i>
<i>Visual Narrative</i>	0.140*** [0.0511]	0.362*** [0.130]	0.349** [0.140]	0.247* [0.136]
<i>Visual Narrative &amp; Self-Persuasion</i>	0.187*** [0.0510]	0.566*** [0.143]	0.512*** [0.146]	0.348** [0.162]
Individual Controls	Yes	Yes	Yes	Yes
School Fixed Effects	Yes	Yes	Yes	Yes
Observations	607	607	607	527
R-squared	0.138	0.140	0.200	0.131
Mean of dependent var	0.000	0.000	0.000	0.000
p-value (VN = VN & SP)	0.388	0.206	0.409	0.538

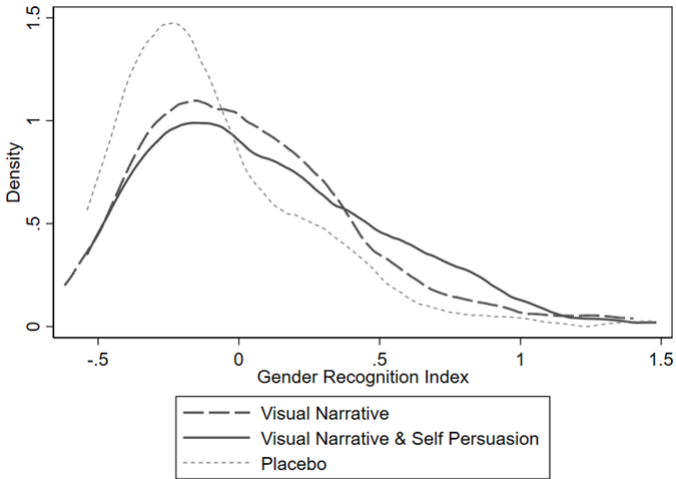


## Effect on Gender Attitudes - II



# Effect on Progressive Gender Attitudes

## Distributions



# Transmission from Teacher to Students

- Do these attitudes transmit from teachers-to-students?

# Transmission of Attitudes

<i>Student's Gender Rights Index</i>						
	(1)	(2)	(3)	(4)	(5)	(6)
	<i>Overall</i>		<i>Girls</i>		<i>Boys</i>	
<i>Visual Narrative</i>	0.145*** [0.0521]	0.138*** [0.0530]	0.263*** [0.0761]	0.266*** [0.0766]	0.0540 [0.0591]	0.0488 [0.0595]
<i>Visual Narrative &amp; Self-Persuasion</i>	0.254*** [0.0494]	0.243*** [0.0504]	0.406*** [0.0696]	0.400*** [0.0698]	0.135** [0.0616]	0.112* [0.0636]
Individual Controls	No	Yes	No	Yes	No	Yes
School Fixed Effects	Yes	Yes	Yes	Yes	Yes	Yes
Observations	13,911	13,911	6,802	6,802	7,107	7,107
R-squared	0.038	0.043	0.051	0.062	0.034	0.041
Mean of Dep. Variable	0.00	0.00	0.00	0.00	0.00	0.00
p-value (VN = VN & SP)	0.021**	0.027**	0.032**	0.036**	0.154	0.269

# Bottomline

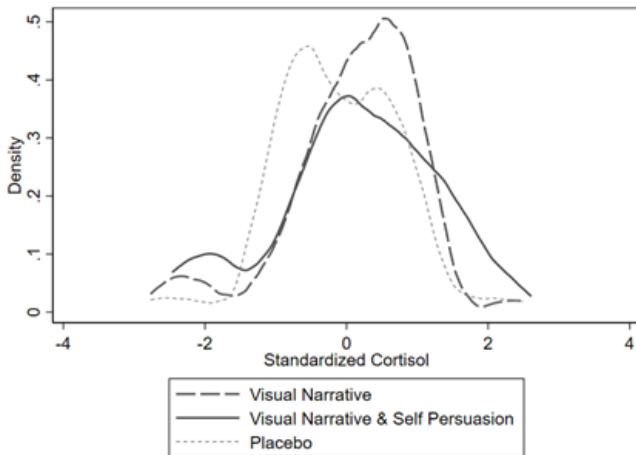
- Progressive gender norms can be fostered and even transmitted through a visual narrative + structured discussion

## Effect on Stress

	(1)	(2)	(3)	(4)
	<i>Stress Likert</i>	<i>Stress Dummy</i>	<i>Cortisol Levels</i>	<i>Standardized Cortisol</i>
<i>Visual Narrative</i>	0.306** [0.153]	0.189*** [0.0343]	0.694* [0.419]	0.210* [0.127]
<i>Visual Narrative &amp; Self-Persuasion</i>	0.444*** [0.158]	0.231*** [0.0406]	1.138*** [0.427]	0.344*** [0.129]
Individual Controls	Yes	Yes	Yes	Yes
School Fixed Effects	Yes	Yes	Yes	Yes
Observations	607	607	607	607
R-squared	0.156	0.293	0.145	0.145
Mean of Dep. Variable	2.269	0.091	11.152	0.000
p-value (VN = VN & SP)	0.450	0.435	0.322	0.322

# Effect on Stress

## Distributions



# Effect on Domestic Violence

*Panel A: Impact on Domestic Violence (Standardized)*

	(1)	(2)	(3)	(4)	(5)	(6)
	<i>Victim of Domestic Violence</i>		<i>Beliefs about Domestic Violence</i>		<i>Victim of Domestic Violence (Marlowe-Crowne)</i>	
<i>Visual Narrative</i>	0.285** [0.129]	0.273** [0.128]	-0.216* [0.128]	-0.205 [0.129]	0.274* [0.162]	0.267* [0.161]
<i>Visual Narrative &amp; Self-Persuasion</i>	0.375*** [0.144]	0.357** [0.144]	0.0996 [0.135]	0.114 [0.135]	0.344** [0.172]	0.332* [0.173]
Individual Controls	No	Yes	No	Yes	No	Yes
School Fixed Effects	Yes	Yes	Yes	Yes	Yes	Yes
Observations	607	607	607	607	526	526
R-squared	0.093	0.101	0.123	0.130	0.096	0.106
Mean of Dep. Variable	0.000	0.000	0.000	0.000	0.000	0.000



# A Step Back

- Progressive Gender Attitudes can be fostered but it comes at costs
- Norm subverters bear the brunt through Internal and Social Sanctions
- Might Explain why rights revolutions are so rare!
- But can we mitigate the damage?

# Moral Bandwagoning Effect on Internal Sanctions

	(1)	(2)	(3)	(4)
	<i>Stress Likert</i>	<i>Stress Dummy</i>	<i>Cortisol Raw</i>	<i>Standardized Cortisol</i>
<i>Fraction of Joint Treated Teachers X Joint Treatment</i>	0.854 [1.160]	-0.120 [0.317]	-5.988** [2.666]	-1.810** [0.806]
<i>Visual Narrative &amp; Self-Persuasion</i>	0.217 [0.362]	0.263** [0.102]	2.729*** [0.823]	0.825*** [0.249]
Individual Controls	Yes	Yes	Yes	Yes
School Fixed Effects	Yes	Yes	Yes	Yes
Observations	607	607	607	607
R-squared	0.157	0.293	0.151	0.151
Mean of Dep. Variable	2.269	0.091	11.152	0.000

# Alternative Mechanism

## Moral Bandwagoning Effect on Attitudes & Social Sanctions

	(1)	(2)	(3)	(4)	(5)	(6)
	<i>Gender Recognition Index</i>	<i>Petition to Criminalize Dowry</i>	<i>Petition to Abolish Polygamy</i>	<i>Standardized Gender LAT Score</i>	<i>Beliefs about Domestic Violence</i>	<i>Victim of Domestic Violence</i>
<i>Fraction of Joint Treated Teachers X Joint Treatment</i>	-0.204 [0.332]	0.524 [1.012]	-0.194 [0.997]	-1.355 [1.232]	-1.235 [0.962]	1.064 [0.988]
<i>Visual Narrative &amp; Self-Persuasion</i>	0.242** [0.106]	0.426 [0.300]	0.564* [0.332]	0.693* [0.374]	0.441 [0.301]	0.0533 [0.297]
Individual Controls	Yes	Yes	Yes	Yes	Yes	Yes
School Fixed Effects	Yes	Yes	Yes	Yes	Yes	Yes
Observations	607	607	607	527	607	607
R-squared	0.139	0.141	0.201	0.134	0.133	0.107

# Discussion of Experimental Demand

- ① Unlikely, specially for blood cortisol concentrations
  - Cortisol is secreted by adrenal glands, involuntarily, in response to stress
- ② We use implicit association test, which is based on the idea that the easier the mental task, the faster the response:

IATs have the advantage of (1) mitigating social-desirability bias in the responses and (2) capturing implicit associations that may be unknown to the individual but may nevertheless affect attitudes and behavior
- ③ We find similar results when use Marlowe-Crowne social desirability scale that rigorously measures a person's propensity to give socially-desirable answers
  - When we discard individuals who score high on this social desirability scale, the results are essentially identical

# Conclusion

- We find that progressive gender norms can be cultivated:
  - These norms spillover from teachers to students
  - But the norm subverters pay
- Norm subvertors:
  - Have more progressive implicit and explicit gender attitudes
  - Are about 0.3 standard deviations more stressed
  - Are about 0.4 standard deviations more likely to experience domestic violence
  - The negative effect on stress virtually disappears as the new norms diffuse through society
  - Future research likely needs to work with husbands to reduce violence

# Thank You for Your Attention

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