Using the Theory of Normative Social Behavior (TNSB) to Understand Women’s Use of Modern Contraceptive Methods In Uttar Pradesh, India

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The Urban Health Initiative

- Five-year project focusing on reproductive health and family planning in Uttar Pradesh
- Funded by the Bill & Melinda Gates Foundation
- Prime Agency: FHI
- JHU/CCP: Demand generation component
- MLE: Research & data collection
Theory Background

- Normative beliefs influence behaviors in distinct ways
- The theory of normative social behavior (TNSB) posits that descriptive and injunctive norms affect behavior
  - Descriptive norms refer to people’s beliefs about the prevalence of a behavior. ➔ Perception about how common a behavior is
  - Injunctive norms refer to people’s beliefs about how much pressure they feel to conform. ➔ “Peer pressure”
- Past investigations in family planning and birth spacing have shown that socio-cultural norms play a role in decision-making
Theory of normative social behavior (TNSB)

(Rimal et al. 2007)
Literature Gap

- TNSB’s application in family planning and contraceptive use has yet to be explored

- Normative influences have yet to be examined in the context of Uttar Pradesh, which has a lower contraceptive prevalence than other states in India

- RQ: Are normative beliefs associated with contraception uptake in urban Uttar Pradesh?
Research Objectives

- Explore associations between normative beliefs and inter-spousal communication, on the one hand, with modern contraceptive use, on the other hand

- Apply TNSB and test the interaction of descriptive and injunctive norms with respect to women’s use of modern contraception

- Investigate variations of both main and combined effects by parity group
Methods

- **Data Collection**
  - Complex survey design to represent women living in urban UP
  - Slum populations were over sampled
  - Drew upon data from four cities (Agra, Aligarh, Allahabad, Gorakhpur)

- **Data Analysis**
  - Descriptive statistics for range of factors
  - Logistic regression models
Measures

- **Dependent variable**
  - Modern contraceptive use

- **Independent variables**
  - Descriptive norm (DN): “couples in community using FP”
  - Injunctive norm (IN): “husband’s approval of contraceptive use”
  - Interspousal communication
Results
Distribution of sample characteristics of women by parity

<table>
<thead>
<tr>
<th></th>
<th>No children (n=1134)</th>
<th>1 child only (n=1,749)</th>
<th>2 or more children (n=8,928)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Age (mean)</td>
<td>23.8 (sd=5.7)</td>
<td>26.5 (sd=6.2)</td>
<td>34.9 (sd=7.3)</td>
</tr>
<tr>
<td>% Completed high school</td>
<td>36.42</td>
<td>45.4</td>
<td>22.92</td>
</tr>
<tr>
<td>% Hindu</td>
<td>77.07</td>
<td>75.64</td>
<td>75.04</td>
</tr>
<tr>
<td>% upper (4th &amp; 5th) wealth quintiles</td>
<td>38.54</td>
<td>45.45</td>
<td>34.35</td>
</tr>
<tr>
<td>% Use of modern contraceptives</td>
<td>5.67</td>
<td>31.45</td>
<td>51.13</td>
</tr>
</tbody>
</table>
### Distribution of Norms and Interspousal Communication

<table>
<thead>
<tr>
<th></th>
<th>No children (n=1,134)</th>
<th>1 child only (n=1,749)</th>
<th>2 or more children (n=8,928)</th>
</tr>
</thead>
<tbody>
<tr>
<td>&quot;Couples in community using family planning&quot; (DN)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Low</td>
<td>43.21</td>
<td>30.8</td>
<td>29.43</td>
</tr>
<tr>
<td>Medium</td>
<td>18.08</td>
<td>20.03</td>
<td>20.7</td>
</tr>
<tr>
<td>High</td>
<td>38.71</td>
<td>49.17</td>
<td>49.87</td>
</tr>
<tr>
<td>Husband approval of contraceptive use</td>
<td>91.62</td>
<td>96.56</td>
<td>95.53</td>
</tr>
<tr>
<td>Interspousal communication</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Low</td>
<td>12.72</td>
<td>2.52</td>
<td>1.85</td>
</tr>
<tr>
<td>Medium</td>
<td>20.05</td>
<td>9.73</td>
<td>8.1</td>
</tr>
<tr>
<td>High</td>
<td>67.23</td>
<td>87.76</td>
<td>90.05</td>
</tr>
</tbody>
</table>
Logistic Regression Findings: Odds Ratios
Assessing Modern Contraceptive Use

<table>
<thead>
<tr>
<th></th>
<th>No children (n=1126)</th>
<th>1 child only (n=1738)</th>
<th>2 or more children (n=8,906)</th>
<th>All (n=11,773)</th>
</tr>
</thead>
<tbody>
<tr>
<td>&quot;Couples in community using family planning&quot; (DN)</td>
<td>1</td>
<td>1.10*</td>
<td>1.09***</td>
<td>1.09***</td>
</tr>
<tr>
<td>Husband approval of contraceptive use (IN)</td>
<td>1.4</td>
<td>1.45</td>
<td>1.67***</td>
<td>1.66***</td>
</tr>
<tr>
<td>Interspousal communication</td>
<td>4.87***</td>
<td>4.84***</td>
<td>1.93***</td>
<td>2.17***</td>
</tr>
<tr>
<td>x_DN_IN (interaction)</td>
<td>-</td>
<td>-</td>
<td>0.89†</td>
<td>0.88*</td>
</tr>
<tr>
<td>Parity</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>2.7***</td>
</tr>
</tbody>
</table>

*p<0.05, **p<0.01, ***p<0.001, †p<0.1 MLR and interaction models controlled for number of kids, husband as main source of info, age, education, wealth, religion, caste/tribe. Main effects represented in MLR, interaction effects represented in MLR+interaction model.
Combined effects in overall data (left) and highest parity group (right)

Combined effects of descriptive & injunctive norms on use of modern contraceptives

Combined effects of descriptive & injunctive norms on use of modern contraceptives in highest parity group
Summary Findings

Descriptive norms, injunctive norms, and interspousal communication positively affect uptake of modern contraception:

- Women are more likely to use contraceptives if they think others in their community are using them, their husbands approve, or they discuss FP with their spouses.

- There is a disproportionate effect of descriptive norms based on levels of injunctive norms:
  - Community norms around contraceptive use are less influential when husband approval is lacking.
Summary Findings

- Parity plays a significant role in predicting contraceptive use
  - Interspousal communication is a key factor for all parity groups
  - Descriptive norms begin to play a role in the one child group
  - Injunctive norms influence higher parity groups
- Interventions should focus on enhancing both descriptive norms and injunctive norms as well as take into account reproductive life stages
Study Limitations

- Cross-sectional data did not allow for detection of time trends and causal inference
- All data are self-reports, without objective verification
- No ‘couples’ data to substantiate self-reports
- Data subject to social desirability biases
- Normative beliefs may be the effects, not necessarily the causes, of contraceptive use
Conclusions and Programmatic Implications

- Norms matter!

- The socio-cultural norm around childbearing dominates until couples have 2 or more children, after which husband approval and community FP practices begin to influence choice.

- Initiatives that work on FP need to be cognizant of fertility-related and perceived norms as well as interspousal dynamics that affect reproductive decision-making.
References

Acknowledgements

- Measurement, Learning and Evaluation (MLE) Project for the Urban Reproductive Health Institute
- Urban Health Initiative (UHI) India
- Johns Hopkins Center for Communications Programs (JHUCCP)
- Johns Hopkins Center for Global Health (CGH)
THANK YOU!