

July 15, 2021

# Measuring Patriarchy in India<sup>1</sup>

Existing indices of gender equality fail to adequately consider and contextualize the broader construct of patriarchy, a social system that underlies many gender inequitable practices. Addressing this gap is a key step towards mapping and understanding the differential manifestations of this system, and offers an important complement to other measures of gender equality.

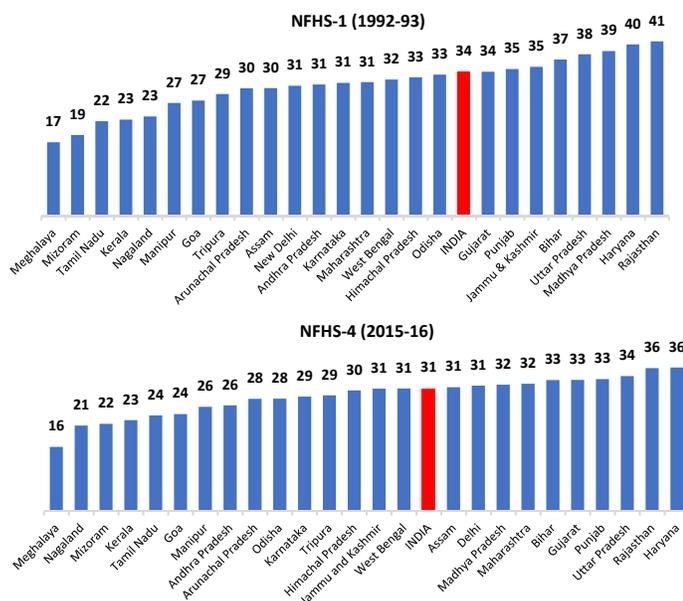
**OBJECTIVE:** This research brief discusses the development and testing of a novel composite measure, the India Patriarchy Index (IPI), to quantify the social and ideological construct of patriarchy using empirical data on family structure and gender roles collected in large-scale household surveys.

**METHODS:** We use nationally-representative data from the National Family Health Survey (NFHS) conducted in India in 1992-93, 2005-06, and 2015-16 to construct the IPI.

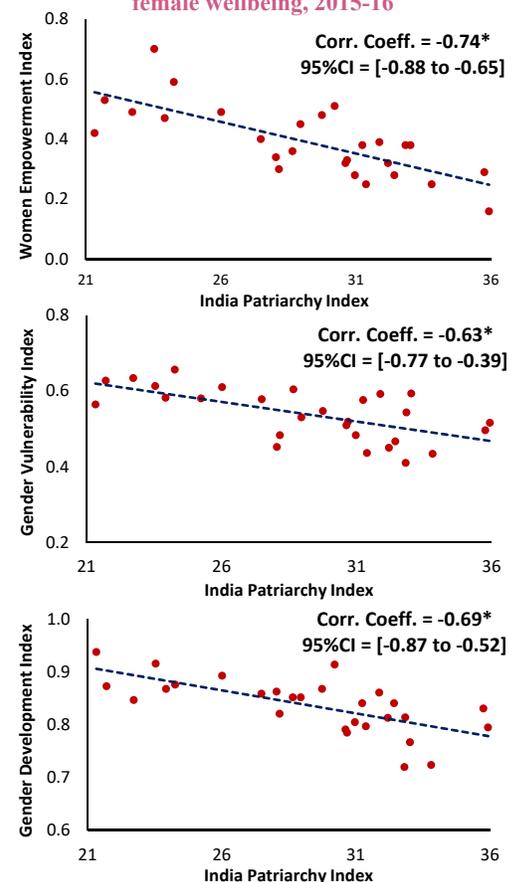
We modify the original Patriarchy Index developed in Europe by Gruber and Szotlysek (2016) in a number of ways to adapt it to India's middle-income country context. The IPI is based on five domains: 1) domination of men over women, 2) domination of the older generation over the younger generation, 3) patrilocality, 4) son preference, and 5) socio-economic domination. A total of 12 variables across the afore-mentioned five domains were selected for constructing the IPI.

We estimated Cronbach's Alpha to check the reliability of the constructed index, and psychometrically validated the IPI against the Gender Development Index (GDI), the Women's Empowerment Index (WEI), and the Gender Vulnerability Index (GVI).

**Figure 2: Ranking of States on India Patriarchy Index for NFHS-1 and NFHS-4**



**Figure 1: Correlation between the India Patriarchy Index and selected three indices of female wellbeing, 2015-16**



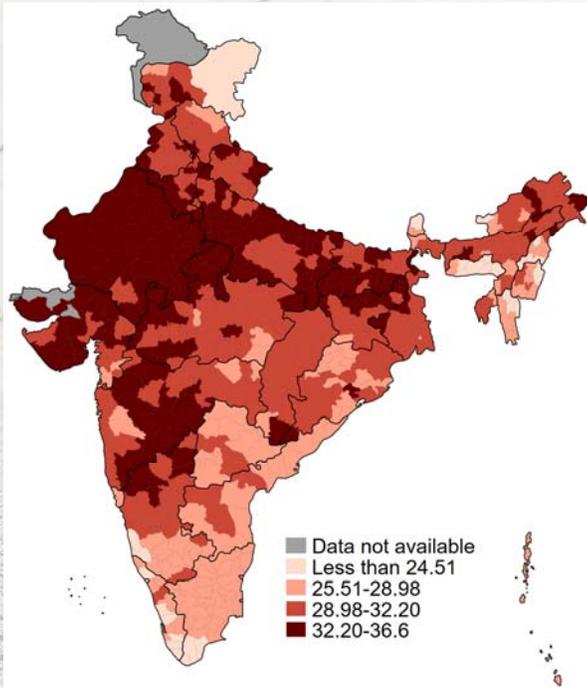
**KEY FINDINGS:**

- The internal reliability of the IPI was high; indicated by a Cronbach's alpha value of 0.77.
- Psychometric testing demonstrates good construct validity of the IPI. All the three indices - WEI, GVI, and GDI - were negatively correlated with the IPI (Figure 1).
- Spatial and temporal analyses further indicate much state-level variation in IPI scores (Figure 2).
- Temporal trends show slow changes in IPI over time, based on time trend analyses from 1992-93 to 2015-16.

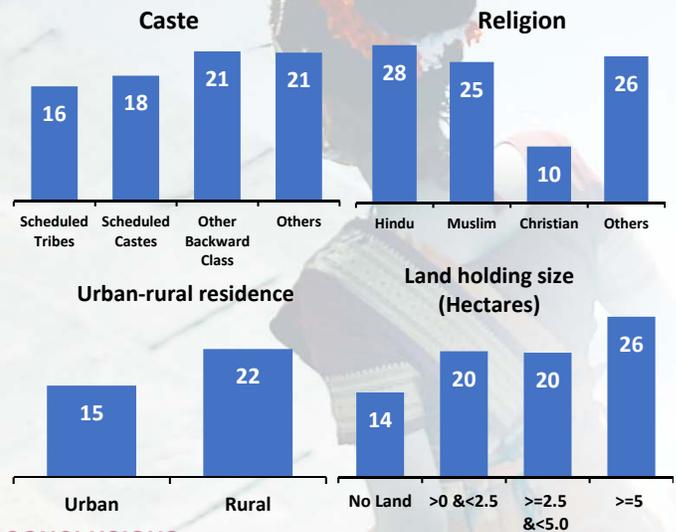
<sup>1</sup>This brief summarizes findings from the following research paper: Singh, A., Chokhandre, P., Singh, A., Barker, K., Kumar, K., McDougal, L., James, K.S., Raj, A., (2021). Development of India Patriarchy Index: Validation and Testing of Temporal and Spatial Patterning. Social Indicator Research, doi.org/10.1007/s11205-021-02752-1.

- In 2015-16, Meghalaya, a largely matrilineal state in north-east India had the lowest level of patriarchy. Haryana, a state in the north of India, had the highest level of patriarchy, followed by Rajasthan.
- The southern states generally had lower patriarchy levels compared to the northern, central, and western Indian states in each of the survey rounds.
- The IPI varied considerably vary by caste, religion, locality and household landholding size (**Figure 3**).
- Very high and high IPI values were seen primarily in districts of Rajasthan, Madhya Pradesh, Gujarat, Maharashtra, Bihar, Jharkhand, Punjab, Uttarakhand, and Uttar Pradesh (**Figure 4**).
- Very low and low IPI values were seen primarily in districts of Kerala, Tamil Nadu, and north-eastern India.
- The Moran's I value was 0.61, indicating strong spatial autocorrelation in the IPI across the districts of India.

**Figure 4: Spatial distribution of the India Patriarchy Index across the 640 districts of India, 2015-2016**



**Figure 3: India Patriarchy Index ranking by key socio-economic variables, 2015-16**



**CONCLUSIONS:**

- The IPI provides an additional lens through which women’s empowerment and gender equity in different communities across India can be better understood.
- Since the IPI is based on NFHS (DHS equivalent in India), similar locally-contextualized patriarchy indices can be constructed for other low- and middle- income countries.
- The consistent nature of the NFHS (DHS) data enables examination of geographic and time variability in the IPI at the sub-national level.
- The IPI offers the first opportunity to rank Indian states and union territories based on their levels of patriarchy.
- The IPI also allows researchers and policy-makers to quantitatively examine variations in patriarchy levels by caste, religion, urban-rural residence, and size of landholding.
- In addition, the IPI allows for identification of geographic district clusters with high, or low, levels of patriarchy.
- Finally, the IPI provides social- and population- scientists with a unique opportunity to examine the interlinkages of gender inequality with demographic and development indicators.

**Suggested Citation:** Singh, A., Chokhandre, P., Singh, A., Barker, K., Kumar, McDougal, L., K., James, K. S., & Raj, A. (2021). Development of the Indian Patriarchy Index: Validation and testing of Temporal and Spatial Patterning Research Brief No.8. Mumbai & San Diego: GENDER Project, International Institute for Population Sciences and Center for Gender Equity and Health University of California.



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