Are Caste Categories Misleading? The Relationship Between Gender and Jati in Three Indian States

Shareen Joshi (Georgetown University)

Nishtha Kochhar (Georgetown University)

Vijayendra Rao (World Bank)

What is caste?

- Varna categorizations based on ancient Hindu texts: Brahmins, Kshatriyas, Vaishyas, Shudras, and those outside the caste sytem including "untouchables"

- Government categories to redress discrimination against lower castes: Forward Caste, Backward Caste (BC), Other Backward Caste (OBC), Scheduled Caste (SC), Scheduled Tribe (ST)

- Definitions of who gets included in these govt. categories have changed with time and become increasingly political

- All large sample surveys restrict information on caste to these "broad" categories

- So our understanding of broad patterns in the link between gender and caste is limited to these government categories with SCs and STs considered "low caste".

But caste is lived as *Jati*

- Several thousand jatis

- Endogamous groups

- Specific to regions and sub-regions

- Specific to particular dialects and languages

- Large ethnographic literature on how jati matters for women's empowerment with upper castes facing more patriarchal restrictions (e.g. Chen, 1995, Kapadia, 1997; Jeffrey and Jeffrey 1996; Seymour 1999; Srinivas 1977, 1979, etc)

- But this ethnographic literature is limited to a few villages, and is now rather dated.

Literature with large samples using government defined caste categories

- Lower caste women have higher labor force participation rates than upper caste women (large literature - e.g. Boserup 1970, Deshpande 2001)

- Lower castes have better female-male sex ratios (e.g. Miller 1981, Dasgupta 1987, Dreze and Sen 2000)

- Lower caste women have higher labor participation rates but face many other deprivations that show that they are much worse off than upper caste women (Deshpande 2001, 2002)

Economics literature on *Jatis*

Specialized samples looking at specific topics:

- Jati networks are centrally important for insurance, marriage, upward mobility and migration (e.g. Banerjee and Munshi, 2004; Munshi and Rosenzweig, 2009; Munshi, 2011; Munshi 2016)

- Jatis have important implications for understanding the relationship between identity and politics (Rao and Ban 2007, Ban, Jha and Rao 2012, Cassan 2015, Huber and Suryanarayan, 2016)

- But, to our knowledge, no one has looked at how jatis broadly matter for women's labor force participation and empowerment

Contribution of our work

- Looks at large samples from three Indian states (Bihar, Odisha and Tamil Nadu)

- Combines data on jati categories with an expenditure module, and indicators of women's labor force participation, intra-household bargaining, and physical mobility. (Surveys that have data on women's empowerment do not have data on household expenditures)

- Compares how govt. caste categories and jati categories relate to women's economic and social empowerment

Limitations of our work

- Baseline data from evaluations of women centered anti-poverty programs in rural areas

- So data is representative of poor, rural populations in these states and not of the entire state

- This is a reduced form exercise so we are not testing theory or making causal claims, but comparing associations of gendered outcomes with broad caste categories and jati categories

Some information about the three states

	India	Bihar	Odisha	Tamil Nadu
GDP per-capita at current prices	Rs. 74,380	Rs. 33,199	Rs. 59,229	Rs. 128,366
GDP per capita in $ at current market exchange rates	$1627	$682	$1150	$2464
Rank (among 33 states and union territories of India) for GDP	-	33	27	8
SC population	16.2%	8.2%	16.5%	20.0%
ST population	8.6%	1.3%	22.8%	1.1%
Literacy	74.04%	63.82%	73.45%	80.33%
Literacy among SCs	66.1%	48.65%	69.02%	73.26%
Urban Population	31.16%	11.30%	16.68%	48.45%
Sex-ratio	943	996	979	916
Female literacy	65.46%	53.33%	64.36%	73.86%

Source: GDP numbers are from the Ministry of State Planning and Implementation (2016). Retrieved from). Retrieved from http://statisticstimes.com/economy/gdp-of-indian-states.php (Nov 8, 2016). Demographic numbers are from the Census of India (2011).

Distribution by district in each state

Bihar	Sample %	Odisha	Sample %	Tamil Nadu	Sample %
Gaya	3.4	Anugul	11.8	Ariyalur	21
Madhepura	31	Balasore	11.9	Dharmapuri	5.2
Madhubani	5.1	Bhadrak	10.2	Dindigul	10.3
Muzaffarpur	18.5	Cuttack	11.8	Karur	7.9
Nalanda	5.6	Jagatsinghpur	8.3	Krishnagiri	16.5
Saharsa	19.1	Jajpur	2.7	Madurai	9.4
Supaul	17.4	Kendrapada	11.8	Pudukkottai	10.7
		Khurda	8.6	Sivaganga	9.9
		Nayagarh	11.1	Virudhunagar	9.1
		Puri	11.9		

Caste distribution, by state

Bihar	Sample %	Odisha	Sample %	Tamil Nadu	Sample %
SC	70.8	SC	21.1	SC	32.2
ST	1.2	ST	7.3	MBC	25.2
EBC	5.3	OBC	33.8	BC	42.7
OBC	14.8	Muslim	1.7		
Muslim	3.5	FC	30.1		
FC	4.3				

Jati distribution, by state

Bihar	Sample %	Odisha	Sample %	Tamil Nadu	Sample %
EBC: Others	7.9	OBC: Others	13	Kallar	4.8
Brahmin	1.3	Brahmin	5.4	Naidu	1.3
Rajput	1.5	Karan	2.6	Parkavakulam	4
FC: Others	0.8	Khandayat	18.6	Thevar	1.9
Muslim: Others	3.8	FC: Others	3.5	Vellalar	10.1
Dhanuk	1.2	Muslim: Others	1.7	Yadava	2.1
Kurmi	1.3	Chasa	9.1	MBC: Others	6
Yadav	6.6	Goala	4.5	Adi Dravidar	22.3
OBC:Others	4.7	Guria	2.2	Pallar	4.2
Chamar	20.5	Tanti	2.5	SC: Others	3.5
Dobha/Dobh	2.5	Teli	2.4	ST: Others	1.8
Dushad	16.7	Barui	3.1	Ambalakarar	3.4
Musahar	25.9	Dobha	2.7	Muthuraja	1.9
Sardar	2.1	Keuta	2.6	Vanniyar	13.3
SC: Others	2.3	Kondara	3.9	Chettiar	1.6
ST: Others	1.1	Pana	7.6	Nadar	1.2
		SC: Others	7.4	Reddiyar	1.4
		ST: Others	7.3	Chakkaliyan	1.6
				Vishwakrma	1.3
				BC: Others	12.2

Summary Statistics from our data

	Bihar (2011)	Odisha (2011)	Tamil Nadu (2013)
Sample size	8969	2462	3384
Per capita household monthly expenditure (average)	610.1	1176.9	2150.3
Land holding (acres) (average)	0.5	1.0	2.0
Female household head	16.3	6.0	16.7
Number of members in the household (average)	5.9	5.2	4.4
Average distance to nearest town	22.5	54.5	18.8
Education profile of the household head			
Never went to school	56.6	0.5	31.3
Primary	18.2	41.8	10.1
Above primary but below or equal to senior secondary	22.5	25.0	54.7
Above senior secondary	2.6	32.7	3.9

Characteristics of female respondents (means), by state

	Bihar	Odisha	TN
Age	34.1	42.3	39.8
Age at the time of marriage	17.9	18.9	19.3
Employment	80.3	24.1	76.9
Marital status			
Married	96.3	93.3	90
Unmarried	1.3	0.8	0.7
Widowed/Separated/Not cohabiting	2.4	5.9	9.3
Education profile			
Never went to school	78.1	0.6	40
Primary	11	47.2	9.1
Above primary but below or equal to senior secondary	10.3	28.1	48.5
Above senior secondary	0.6	24.1	2.4

Characteristics of female respondents (means), by state

	Bihar	Odisha	TN
Intra-household decision making: Does women respondent provide any input in the following decisions made in the household?			
Purchase of household durables	91.7	82.9	86.3
Children's education	84.1	63.1	84.8
Own livelihood activity	79.5	64.3	77.4
Politics (like who to vote for)	78.6	41.5	87.3
Mobility of woman respondent			
Bank	20.1	21.3	76
Store	75.1	45.4	-
Health centre	93.1	94.2	-
Friend/ neighbour/ relative	97.4	96.2	-
Taluk Office	-	-	30
Police Station	-	-	5.5

Reduced form regressions

OUTCOMES:
- Female LFP, Measures of Intra-household decision-making, female physical mobility

CONTROLS:
- Household level controls: per capita monthly consumption expenditure and its squared, land holding, number of members in the household, gender of the household head, dummy for female headed household
- Individual controls: education level, age, age squared and age at marriage of the female respondent, and
- Panchayat-level fixed effects.

Regressions with government-defined caste categories

Bihar

Bihar	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
		Input:					Mobility:		
	Employed	Durables	Tuition	Livelihood	Politics	Store	Health center	Friend	Bank
ST	-0.0314	-0.0382	-0.0337	-0.0329	-0.110*	0.0193	-0.0740	-0.00487	0.0441
OBC	-0.0998***	0.00552	0.0256*	-0.0975***	0.00206	-0.130***	-0.0231**	0.00133	0.00283
EBC	-0.0825***	-0.00583	0.0230	-0.0942***	0.0222	-0.0562**	-0.00256	-0.00832	0.0227
Muslim	-0.200***	0.00493	-0.0131	-0.148***	-0.0312	-0.123***	0.00268	-0.0143	-0.0258
General	-0.282***	-0.00750	0.00989	-0.188***	-0.00751	-0.301***	-0.00111	-0.0230*	-0.0416
Some Schooling	-0.105***	0.0185*	0.0544***	-0.0172	0.0355***	-0.0946***	0.00112	0.00712	0.135***
Female headed household	0.0576***	0.0187*	0.0258*	0.0631***	0.0195	0.0659***	-0.0143	-0.00841	0.0126
Per capita expenditure	-0.163**	-0.0582	0.0633	-0.111	0.132*	-0.0366	-0.0160	0.0458	0.229***
Per capita expenditure squared	0.0234	0.0187	-0.0554	0.0437	-0.0703*	-0.0372	0.00454	-0.0219	-0.0575
Land	-0.0137***	0.00131	0.00553**	-0.00587	0.00257	-0.0199***	-0.00214	0.00203*	0.0121***
Observations	13059	8968	8968	8968	8968	8968	8968	8968	8968
Adjusted R-squared	0.299	0.086	0.122	0.116	0.134	0.199	0.088	0.022	0.085

Regressions with government-defined caste categories

Odisha

Odisha	Input:					Mobility:			
	Employed	Durables	Tuition	Livelihood	Politics	Store	Health center	Friend	Bank
FC	-0.142***	-0.0308	0.0234	-0.0434	0.0381	-0.0656*	0.0152	0.0192	0.0542*
OBC	-0.0860***	-0.0828***	0.00676	-0.0825**	0.0548*	-0.0353	-0.00443	0.0161	0.0323
ST	0.228***	-0.0228	-0.0352	-0.0663	-0.0685	0.0391	0.0245	0.0219	-0.0528
Muslim	0.0537	0.169*	0.18	-0.0543	0.0673	0.0422	0.0334	0.019	-0.00591
Some Schooling	-0.0740***	0.0699***	0.0706**	0.0258	0.0191	-0.0975***	0.00426	0.00219	0.127***
Female headed household	0.131*	0.00641	-0.0433	-0.0789	0.167*	0.134*	0.0411	0.00672	-0.0494
Per capita expenditure	-0.00707	-0.000318	0.0102	0.0156	-0.00653	-0.0115	0.00499	0.00349	0.0000353
Per capita expenditure squared	0.00036	0.00009	-0.000225	-0.00048	0.000295	0.00058	-0.0000994	-0.0000191	0.000242
Land	-0.0124	0.0108*	0.00947	-0.0124	0.00687	-0.0426***	0.00252	0.00476*	-0.00449
Observations	2230	2231	2231	2231	2231	2231	2231	2231	2231
Adjusted R-squared	0.247	0.145	0.185	0.197	0.195	0.245	0.071	0.058	0.079

Regressions with government-defined caste categories

Tamil Nadu

Tamil Nadu		Input:					Mobility:		
	Employed	Durables	Tuition	Livelihood	Politics	Bank	Taluk Office	Police Station
EBC	-0.0136	-0.0311	-0.0447**	-0.0214	-0.0450**	0.00984	-0.0587**	-0.00888
BC	-0.0554***	0.0116	-0.00867	0.00677	-0.00558	0.0425*	-0.0307	-0.0259**
Female headed household	0.0727***	0.0634***	0.0739***	0.0159	0.0665***	0.0476*	0.00640	0.00502
Some Schooling	0.0347**	0.00883	0.00545	0.0262	0.0209	0.0680***	0.0657***	0.0123
Per capita expenditure	-0.0217***	0.00227	0.00721	0.0127*	0.00978*	0.0395***	0.0509***	0.0103**
Per capita expenditure squared	0.000160***	-0.0000131	-0.0000456	0.0000897*	-0.0000569	-0.000256***	-0.000359***	-0.0000753**
Land	0.000157	-0.00111**	0.000282	-0.00124*	0.000513*	0.000271	0.000539	-0.000152
Observations	5287	3339	3336	3339	3335	3355	3355	3355
Adjusted R-squared	0.272	0.113	0.115	0.146	0.072	0.130	0.146	0.049

Interaction of government-defined caste categories with per capita monthly consumption expenditure

	Input					Mobility			
	Employed	Durables	Tuition	Livelihoods	Politics	Store	Health Centre	Friend	Bank
(a) Bihar									
ST x exp	0.399***	0.176	-0.0509	0.197	-0.21	0.156	0.0604	0.131	-0.154
OBC x exp	-0.0568	0.000703	0.0678	0.0453	0.0829*	-0.0381	0.0256	0.0151	-0.0729
EBC x exp	0.0204	-0.0837	-0.0484	-0.149	0.093	-0.0219	-0.0175	-0.0457	0.109
Muslim x exp	-0.0999	0.0632	0.0117	-0.135	-0.0305	-0.0235	-0.0652	-0.026	-0.0312
FC x exp	-0.187**	0.0335	0.0815	0.0366	-0.065	0.00969	-0.012	0.014	-0.0786
(b) Odisha									
FC x exp	-0.00522	0.00625	0.00897	0.000513	0.0159*	0.00698	0.00493	0.0000227	0.00398
OBC x exp	-0.0182*	0.00910	0.0168	-0.00233	0.0196	0.00910	0.00308	-0.000186	0.00104
ST x exp	-0.0921*	0.0156	0.0343	0.0157	0.0522	0.0458	0.0204	0.00868	-0.0413
Muslim x exp	0.0234	-0.00622	-0.00642	-0.0297	-0.0225	-0.00217	0.00266	-0.00194	-0.00876

	Input:					Mobility:		
	Employed	Durables	Tuition	Livelihood	Politics	Bank	Taluk Office	Police Station
(c) TN								
EBC × exp	-0.00801	-0.00479	-0.0104	-0.0177	-0.0116	-0.0286	-0.0228	-0.000491
BC × exp	-0.0124	0.00127	-0.00185	0.00138	-0.00805	0.00284	0.0166	-0.00543

Jati level analysis, by state

- Upper panels report coefficients for Scheduled Caste and Tribe Jatis with all non-SC/ST jatis as the omitted category

- Lower panels report coefficients for non-SC jatis with SC/ST jatis as the omitted category

Bihar

SC Jatis	Employed	Input:				Mobility:			
		Durables	Tuition	Livelihood	Politics	Store	Health center	Friend	Bank
SC:CHAMAR	0.117***	-0.00281	-0.00921	0.101***	0.0149	0.134***	0.00884	0.00559	0.0000168
SC:DOBHA	0.0554*	-0.0247	0.000514	0.0699*	-0.0602*	0.0115	0.0328*	-0.00671	0.0103
SC:DUSHAD	0.0821***	0.0137	-0.00497	0.0987***	-0.000641	0.109***	0.0174*	0.00792	0.0366*
SC:MUSAHAR	0.172***	-0.00741	-0.0450***	0.124***	-0.0241	0.179***	0.0182*	-0.000135	-0.0301*
SC:SARDAR	0.0409	0.00674	-0.0000734	0.134***	0.0837*	0.0341	0.00360	0.00191	0.0160
SC:OTHERS	0.0772**	0.0135	-0.0812**	0.142***	0.000498	0.0854**	-0.00763	-0.00521	-0.0477
ST	0.0980*	-0.0484	-0.0663	0.0864*	-0.109*	0.152***	-0.0513	-0.00476	0.0332
Observations	13059	8908	8908	8908	8908	8908	8908	8908	8908
Adjusted R-squared	0.298	0.084	0.120	0.114	0.133	0.197	0.088	0.021	0.086
Other Jatis									
OBC:DHANUK	-0.0243	0.0269	0.0113	-0.0465	0.00819	-0.0940*	-0.0930**	-0.00282	-0.0200
OBC:KURMI	-0.0883**	0.0299	0.0440	-0.0422	0.0177	-0.0507	0.0219	0.00829	0.00921
OBC:YADAV	-0.0810***	0.00443	0.0171	-0.0836***	0.0338*	-0.153***	-0.00344	0.00692	-0.00725
OBC:OTHER	-0.0692***	-0.00577	0.0181	-0.0827***	0.0239	-0.0451*	0.00169	-0.00841	0.0219
FC:BRAHMIN	-0.331***	-0.00333	-0.00602	-0.228***	-0.00492	-0.274***	0.0290	-0.0202	-0.0784*
FC:RAJPUT	-0.209***	-0.00990	0.00707	-0.155***	-0.0394	-0.381***	0.00879	-0.0295	-0.0127
FC:OTHER	-0.239***	-0.0166	0.0106	-0.105*	0.0660	-0.111*	-0.0231	-0.0121	-0.0349
Observations	13059	8908	8908	8908	8908	8908	8908	8908	8908
Adjusted R-squared	0.296	0.084	0.118	0.110	0.132	0.197	0.089	0.021	0.084

Odisha

SC Jatis	Input:					Mobility:			
	Employed	Durables	Tuition	Livelihood	Politics	Store	Health center	Friend	Bank
SC: BARUI	0.216***	0.0992	-0.0507	-0.0585	0.0000469	0.174*	-0.0223	0.00872	-0.0153
SC: DOBHA	0.0552	0.106	0.0430	0.220***	-0.0577	0.0843	0.0292*	-0.0402	-0.0161
SC: KEUTA	0.113**	0.0918***	0.0199	0.144*	-0.0816	0.0310	0.0115	0.0226	-0.0834
SC: KONDARA	-0.00304	0.0999*	-0.0209	0.0783	-0.0790	-0.0133	0.0305	0.0184	-0.0471
SC: PANA	0.0193	-0.0696	-0.0543	0.0952	-0.00567	0.00523	-0.0324	-0.0809*	0.0182
SC: OTHERS	0.118***	0.0165	-0.0624	-0.0343	-0.180***	0.0331	0.00368	-0.0404	-0.0865*
ST	0.262***	0.0439	-0.0741	-0.0322	-0.0626	0.118*	0.0200	0.00570	-0.0643
Observations	3403	1770	1770	1770	1770	1770	1770	1770	1770
Adjusted R-squared	0.222	0.144	0.186	0.203	0.193	0.242	0.054	0.056	0.076
Other Jatis									
OBC: CHASA	-0.0457	-0.0296	0.00754	0.00121	0.0973*	-0.0746	-0.0144	0.00717	0.0929*
OBC: GOALA	-0.0905***	-0.0959*	0.0246	-0.0664	-0.0541	-0.0208	-0.00435	0.0409	-0.0240
OBC: GURIA	-0.0600	-0.0575	0.0618	0.0447	0.0851	0.0599	-0.0179	-0.0724	-0.0472
OBC: TANTI	-0.0564	0.0203	0.0442	-0.0522	-0.0429	-0.0143	-0.0290	0.0152	0.0551
OBC: TELI	-0.000595	0.0227	0.106	-0.0558	0.0672	-0.0737	0.0195	0.0209	0.00449
FC: BRAHMIN	-0.109***	0.0684	0.0805	0.0181	0.0447	-0.0423	0.0400	0.0243	0.00273
FC: KARAN	-0.0782**	-0.0185	0.0391	-0.108	-0.0107	-0.0676	0.0231	0.0125	0.0417
FC: KHANDAYAT	-0.0773***	-0.0238	0.00990	-0.0135	0.00222	-0.0789*	0.00466	0.0247	0.0288
Observations	3403	1770	1770	1770	1770	1770	1770	1770	1770
Adjusted R-squared	0.205	0.140	0.186	0.196	0.189	0.241	0.053	0.051	0.075

Tamil Nadu

		Input:				Mobility:		
SC Jatis	Employed	Durables	Tuition	Livelihood	Politics	Bank	Taluk Office	Police Station
SC: ADIDRAVIDAR	0.0399**	0.0134	0.0396**	0.0222	0.0259	-0.0203	0.0576**	0.0219*
SC: CHAKKALIYAN	0.0445	-0.016	0.0366	-0.0658	-0.0745	0.0253	-0.0448	0.0394
SC: PALLAR	0.0406	-0.012	-0.0211	-0.00668	0.0604*	-0.012	0.0189	-0.0077
SC: OTHERS	0.0105	-0.0109	-0.0183	-0.0602	-0.00116	-0.135**	-0.00848	0.031
ST	0.122*	-0.0535	-0.0827	-0.0673	-0.0805	-0.0769	0.0471	0.0155
Observations	5287	3339	3336	3339	3335	3355	3355	3355
Adjusted R-squared	0.271	0.112	0.115	0.147	0.073	0.131	0.145	0.048
Other Jatis								
EBC: AMBALAKARAR	0.0494	-0.00199	-0.0855	0.0118	-0.0694	-0.059	-0.138**	0.0104
EBC: MUTHURAJA	0.0298	-0.0543	0.0189	0.00493	-0.0231	0.000805	-0.00977	-0.0165
EBC: VANNIYAR	-0.00699	-0.0211	-0.0354	-0.0298	-0.0172	0.0431	-0.0409	-0.0172
EBC: OTHERS	-0.0732**	-0.0537	-0.0521	-0.0332	-0.0750*	-0.000948	-0.0596	-0.00726
BC: CHETTIAR	-0.0582	0.000675	-0.00964	-0.044	-0.0456	0.00638	-0.0266	0.0354
BC: KALLAR	0.000378	0.029	-0.00351	0.0747	-0.0474	-0.00702	0.022	-0.00644
BC: NADAR	-0.0881	-0.0206	-0.0451	-0.0358	-0.03	0.0758	0.0113	-0.0474**
BC: NAIDU	-0.172*	0.0877	0.00847	0.0165	0.0476	0.0931*	-0.0153	-0.0405
BC:PARKAVAKULAM	0.0399	0.0374	0.0126	-0.0372	0.0144	0.0929*	-0.0446	0.00868
BC: REDDIYAR	-0.144*	-0.103	-0.0975	-0.0737	-0.125	-0.0496	-0.0063	-0.0649**
BC: THEVAR	0.0502	0.0276	-0.00572	0.0757*	0.0312	0.0671	0.0546	-0.0113
BC: VELLALAR	-0.0722**	0.0175	0.00173	0.0211	0.00926	0.00718	-0.0529	-0.0365*
BC: VISHWAKRMA	-0.0155	-0.0443	0.0338	0.0388	0.0496	0.0456	-0.094	-0.0344
BC: YADAVA	-0.0792	0.00306	-0.0205	-0.0285	-0.0334	0.166***	0.055	-0.034
BC: Other	-0.0832***	0.00394	-0.0196	-0.00277	-0.0054	0.0513	-0.0583*	-0.0349*
Observations	5287	3339	3336	3339	3335	3355	3355	3355
Adjusted R-squared	0.275	0.113	0.113	0.146	0.073	0.131	0.146	0.048

Jati interactions with per capita monthly expenditure

Bihar

SC Jatis		Input:				Mobility:			
	Employed	Durables	Tuition	Livelihood	Politics	Store	Health center	Friend	Bank
SC:CHAMAR × Exp	0.147***	0.00766	-0.125**	0.0407	-0.0457	0.00418	-0.00425	0.0121	0.0279
SC:DOBHA × Exp	-0.129	0.119	0.158	0.0676	-0.134	0.0638	0.00549	-0.0254	0.103
SC:DUSHAD × Exp	0.112*	-0.0244	0.0190	-0.0143	-0.0350	0.0629	0.0414	-0.0279	0.0690
SC:MUSAHAR × Exp	0.107*	0.000905	-0.0704	-0.00765	-0.0327	0.102	-0.0514	0.000404	0.00918
SC:SARDAR × Exp	-0.0591	0.0218	-0.0534	0.000390	-0.190	0.0598	-0.0268	0.0623	0.117
SC:OTHERS × Exp	0.164	-0.114	-0.0528	0.00780	-0.252*	0.218	-0.0164	-0.0320	0.0740
ST × Exp	0.482***	0.228	0.0825	0.247	-0.233	0.0232	0.0397	0.192	-0.414*
Observations	13059	8908	8908	8908	8908	8908	8908	8908	8908
Adjusted R-squared	0.299	0.084	0.121	0.113	0.134	0.197	0.088	0.021	0.086
Other Jatis									
OBC:DHANUK × Exp	0.0829	0.0332	0.127	-0.192	0.0956	0.122	-0.125	0.0321	-0.184
OBC:KURMI × Exp	0.147	-0.0214	0.154	0.107	0.191*	0.0630	0.0648	0.0208	-0.234
OBC:YADAV × Exp	-0.0680	-0.0322	0.0183	0.105	0.0555	-0.0312	0.0274	-0.000726	0.0485
OBC:OTHER × Exp	0.0410	-0.0957	-0.0683	-0.143	0.0780	0.00142	-0.0175	-0.0472	0.131
FC:BRAHMIN × Exp	-0.256**	-0.0192	-0.0409	-0.258*	-0.0199	-0.338***	0.0508	-0.00624	-0.0618
FC:RAJPUT × Exp	-0.0536	-0.0544	-0.120*	-0.343***	-0.00799	-0.466***	-0.00254	-0.0440	0.0612
FC:OTHER × Exp	-0.236*	0.0460	0.156	0.208	0.236*	-0.0675	0.0796	-0.0736	-0.0620
Observations	13059	8908	8908	8908	8908	8908	8908	8908	8908
Adjusted R-squared	0.296	0.083	0.118	0.112	0.132	0.197	0.088	0.021	0.084

Jati interactions with per capita monthly expenditure

Odisha

SC Jatis	Employed	Input: Durables	Tuition	Livelihood	Politics	Mobility: Store	Health center	Friend	Bank
SC:BARUI × Exp	0.0138	-0.00198	0.00822	-0.00833	-0.00244	0.00593	-0.00193	0.00173	0.0101
SC:DOBHA × Exp	0.0147	-0.000384	-0.0783***	0.00207	0.0268	-0.0392	-0.00825	0.00633	-0.00785
SC:KEUTA × Exp	0.000377	0.0173	0.0101	0.0165	-0.00708	-0.0168	0.00357	-0.00124	0.00463
SC:KONDARA × Exp	-0.0247	-0.0232	-0.0592	-0.0643	-0.106***	0.0356	-0.0224**	0.00714	-0.0659*
SC:PANA × Exp	0.0203	-0.0198	-0.00328	-0.0107	-0.0367**	0.0135	-0.0296	0.00478	0.0242
SC:Others × Exp	-0.0289**	-0.0157	-0.0275	0.0101	-0.00757	-0.0489	0.00652	-0.00173	0.0163
ST × Exp	-0.0329	0.000620	0.0137	0.0223	0.0224	0.0503	0.0159	0.000376	-0.0564*
Observations	3403	1770	1770	1770	1770	1770	1770	1770	1770
Adjusted R-squared	0.224	0.143	0.186	0.202	0.193	0.243	0.055	0.053	0.075
Other Jatis									
OBC:CHASA × Exp	0.00714	0.000368	0.00709	0.0192	0.0294*	0.0100	0.0124	-0.00303	0.00158
OBC:GOALA × Exp	0.110	0.104	-0.0969	-0.308**	-0.00807	0.142	-0.0736	-0.00149	-0.0322
OBC:GURIA × Exp	0.00445	0.0282	0.0208	-0.00352	-0.00304	0.0129	-0.00961	0.00502	-0.0169
OBC:TANTI × Exp	-0.00618	0.00831	0.0114	0.0481***	0.0455***	0.0157	0.0133	-0.00789	0.0550***
OBC:TELI × Exp	-0.00207	-0.0452	0.0153	-0.0109	0.0268	0.0652**	0.00213	-0.000605	-0.00851
FC: BRAHMIN × Exp	0.00763	0.00959	-0.0169	0.0144	0.0162	-0.0144	0.00397	-0.00436	0.00987
FC:KARAN × Exp	0.00755	0.0167	0.00220	0.0402*	0.0454**	0.0147	0.0164	-0.00541	0.0273
FCl:KHANDAYAT × Exp	0.0178	0.0161	0.0102	-0.00179	0.00913	-0.000119	0.000337	-0.00191	-0.00465
Observations	3403	1770	1770	1770	1770	1770	1770	1770	1770
Adjusted R-squared	0.205	0.140	0.184	0.198	0.189	0.240	0.052	0.047	0.075

Jati interactions with per capita monthly expenditure

Tamil Nadu

SC Jatis	Employed	Durables	Tuition	Livelihood	Politics	Bank	Taluk Office	Police Station
			Input:				Mobility:	
SC:ADIDRAVIDAR × Exp	0.0186	0.00196	0.0046	0.00772	0.00399	0.00725	0.000514	0.0065
SC:CHAKKALIYAN × Exp	-0.0143	-0.01	0.0456	-0.0468	0.046	0.00796	-0.0902*	-0.000327
SC:PALLAR × Exp	-0.0236	-0.033	-0.037	-0.0267	0.0115	-0.0134	-0.0463	0.0105
SC:Others × Exp	0.0015	-0.00197	0.000905	-0.018	0.000644	-0.00688	0.00278	-0.00731
ST × Exp	0.00447	0.00662	0.0243	0.0537	0.0838*	0.0349	-0.0693	-0.0146
Observations	5287	3339	3336	3339	3335	3355	3355	3355
Adjusted R-squared	0.271	0.112	0.115	0.147	0.073	0.131	0.145	0.048
Other Jatis								
EBC:AMBALAKARAR × Exp	-0.0408	-0.029	-0.0267	-0.052	-0.0506	-0.02	0.0268	0.0196
EBC:MUTHURAJA × Exp	-0.0262	-0.0268	-0.0486	-0.184*	-0.000958	-0.0485	0.159*	-0.0251
EBC:VANNIYAR × Exp	-0.00513	-0.0045	-0.00822	-0.0196	-0.0251	-0.0323	-0.0194	-0.000948
EBC:Others × Exp	0.00511	0.00458	-0.00702	0.0149	0.0205	-0.0346	-0.0771***	-0.00708
BC:CHETTIAR × Exp	-0.0613	0.0162	0.0272	-0.146**	-0.0883	-0.0743	-0.0124	-0.0431
BC:KALLAR × Exp	-0.00014	0.033	0.0506*	0.0132	-0.0391	-0.0204	0.00164	-0.0349
BC:NADAR × Exp	0.0113	-0.0958	0.00615	-0.0541	0.0313	0.0262	0.0196	-0.0288
BC:NAIDU × Exp	-0.0306	-0.0259	-0.029	0.004	-0.00401	-0.00583	0.0994*	0.021
BC:PARKAVAKULAM × Exp	-0.013	0.0033	0.0163	0.135***	-0.00838	0.0129	0.0745	-0.0024
BC:REDDIYAR × Exp	0.000736	-0.0124	-0.0338	0.00179	-0.016	-0.0151	-0.0895*	-0.00749
BC:THEVAR × Exp	-0.0971*	-0.0195	-0.0794	-0.0266	0.0104	0.0466	0.149***	0.0287
BC:VELLALAR × Exp	-0.0171	0.0045	-0.00921	-0.00793	-0.00388	-0.000857	-0.0105	-0.00985
BC:VISHWAKRMA × Exp	0.0633*	-0.0398	-0.0504	-0.0421	-0.0277	-0.0424	-0.0232	-0.0301
BC:YADAVA × Exp	0.00229	0.0335	0.0504	0.0503	0.00569	0.0356	0.0456	-0.016
BC:Other × Exp	-0.0134	0.00113	0.004	0.00666	0.00134	0.0154	0.0379	0.0112
Observations	5287	3339	3336	3339	3335	3355	3355	3355
Adjusted R-squared	0.275	0.111	0.114	0.152	0.073	0.13	0.154	0.048

Testing for equality of pairwise differences in jati coefficients

Percentage of pairwise differences that are significantly different

		Employment	Input in intra-household decision making	Mobility
Bihar	SC	42.9	25.0	23.8
	Non-SC	14.3	26.2	14.3
Odisha	SC-ST	61.9	23.8	13.1
	Non-SC	31.1	6.7	8.3
TN	SC	20.0	12.5	13.3
	Non-SC	11.4	11.2	7.9

Conclusion

- Focusing on government-defined broad caste categories can hide many details on the lived reality of how caste and gender is experienced
- This requires information on jati identity
- Even in this limited sample we find that for both upper and lower castes, there are important and interesting differences between jatis
- And also heterogeneity within jatis by expenditure
- Unpacking these complex relationships will require much more work
- But basing our understanding of the relationship between gender and caste entirely on government categories can make a complex story sound simpler than it is.
- This adversely affects the design and targeting of interventions.