

**APPENDIX 1**

**Table A1 – Descriptive information and Estimation results for the preferred model – RURAL SAMPLE**

VARIABLES	Child Nutrition Equation (1)			Maternal Autonomy Equations (2) and (3)	
	Mean SD	Coeff est (SE)	Coeff est (SE)	Mean SD	Coeff est (SE)
	(1)	(2)	(3)	(4)	(5)
		<b>HAZ</b>	<b>Stunted</b>		
Maternal Autonomy - z-score	-0.38 (0.99)	0.161*** (0.051)	-0.032** (0.014)	0.00 (1.00)	
<b>Child characteristics</b>					
Age (base: age<6 months)	0.26				
6-11	0.37	-0.318*** (0.100)	0.058** (0.025)		
12-17	0.37	-1.032*** (0.099)	0.237*** (0.027)		
Girl child	0.48	0.178** (0.071)	-0.039** (0.019)		
Part of multiple births	0.01	-2.392*** (0.442)	0.630*** (0.162)		
<b>Family characteristics</b>					
Wealth index factor score/100000	-0.36 (0.82)	0.210*** (0.072)	-0.067** (0.020)	-0.58 (0.78)	-0.043*** (0.017)
Family is a nuclear family	0.21	-0.082 (0.106)	0.015 (0.026)	0.47	0.454*** (0.021)
<b>Age difference between the partners</b>					
<b>Base: less than 3 years</b>				0.12	
Husband older by 3-5 years				0.47	0.008 (0.025)
Husband older by 6-10 years				0.30	0.053* (0.027)
Husband older by more than 10 years				0.11	0.074** (0.034)
<b>Mother characteristics</b>					
Mother's - age in years	21.47 (3.69)	0.042*** (0.013)	-0.010*** (0.003)	27.03 (5.8)	0.028*** (0.002)
Whether the mother is anaemic i.e. haemoglobin <11gm/dl	0.57	-0.006 (0.080)	-0.005 (0.021)		
Mother's height is less than 145cm	0.11	-0.630*** (0.121)	0.132*** (0.036)		
Mother has low BMI i.e. BMI<18.5	0.37	-0.340*** (0.080)	0.098*** (0.022)		
Mother's BMI missing	0.001	-0.481 (0.323)	0.083 (0.268)		
<b>Caste</b>					
<b>Base: 'Normal' caste</b>	0.28			0.25	
Schedule caste	0.17	-0.120 (0.122)	0.041 (0.034)	0.18	0.027 (0.026)
Schedule tribe	0.18	0.024 (0.148)	-0.020 (0.037)	0.20	-0.009 (0.032)
Other Backward Caste (OBC)	0.32	-0.119 (0.099)	0.067** (0.029)	0.33	-0.080*** (0.024)
Woman: caste missing	0.05	-0.243 (0.195)	0.066 (0.054)	0.05	-0.004 (0.047)

**Table A1 – Continued**

VARIABLES	Child Nutrition Equation (1)			Maternal Autonomy Equations (2) and (3)	
	Mean	Coeff est	Coeff est	Mean	Coeff est
	SD	(SE)	(SE)	SD	(SE)
	(1)	(2)	(3)	(4)	(5)
		HAZ	Stunted		
<b>Religion</b>					
<b>Base: Hindu</b>	0.75			0.74	
Christian	0.08	-0.078 (0.219)	0.062 (0.048)	0.10	0.086* (0.049)
Muslim	0.10	0.224 (0.146)	-0.079** (0.039)	0.13	-0.132*** (0.030)
Other	0.07	0.018 (0.188)	0.014 (0.048)	0.03	-0.042 (0.046)
<b>Education</b>					
<b>Base: no education</b>	0.38			0.57	
Completed primary or incompleted secondary	0.49	0.114 (0.090)	-0.065** (0.027)	0.36	0.125*** (0.021)
Completed Secondary	0.07	0.032 (0.182)	-0.047 (0.045)	0.03	0.277*** (0.049)
Higher Education	0.06	0.258 (0.193)	-0.028 (0.051)	0.03	0.348*** (0.057)
<b>Media exposure:</b> Mother listens to either the radio or watches tv or reads newspapers at least once a week	0.62	-0.058 (0.088)	0.018 (0.025)	0.51	0.045** (0.019)
<b>Occupation</b>					
<b>Base: no occupation</b>	0.70			0.55	
Professional, Technical, Managerial, Clerical, Sales, Services	0.03	-0.663 (0.933)	0.294** (0.118)	0.04	0.068 (0.162)
Agricultural employee	0.22	-0.525 (0.919)	0.314*** (0.115)	0.33	-0.126 (0.157)
Skilled or Unskilled Manual	0.05	-1.020 (0.948)	0.422*** (0.125)	0.08	-0.102 (0.159)
<b>Working status in the last 12 months</b>					
<b>Base: not working</b>	0.69			0.54	
works_yr_cash	0.07	0.738 (0.955)	-0.321*** (0.120)	0.11	0.261* (0.159)
works_yr_oth	0.09	0.755 (0.912)	-0.364*** (0.114)	0.13	0.214 (0.158)
works_s_occ	0.15	0.506 (0.941)	-0.298** (0.118)	0.22	0.244 (0.158)
<b>Partner Characteristics</b>					
<b>Education: base is no education</b>	0.31			0.46	
Completed primary or incompleted secondary	0.55	0.082 (0.096)	-0.019 (0.028)	0.45	-0.051*** (0.019)
completed secondary education	0.03	0.421** (0.204)	-0.088 (0.058)	0.02	-0.093 (0.058)
Higher education	0.11	0.153 (0.170)	-0.016 (0.045)	0.07	-0.080** (0.040)

**Table A1 – Continued**

VARIABLES	Child Nutrition Equation (1)			Maternal Autonomy Equations (2) and (3)	
	Mean SD	Coeff est (SE)	Coeff est (SE)	Mean SD	Coeff est (SE)
	(1)	(2)	(3)	(4)	(5)
		<b>HAZ</b>	<b>Stunted</b>		
<b>Occupation</b>					
<b>Base: Manual + a handful of unemployed</b>	0.39			0.38	
Prof. Tech. Manag.	0.07	-0.067 (0.177)	-0.005 (0.044)	0.05	0.102** (0.041)
Clerical	0.03	0.188 (0.198)	-0.059 (0.054)	0.03	-0.025 (0.048)
Sales	0.10	-0.198 (0.143)	0.014 (0.035)	0.09	0.005 (0.029)
Agric-Employee	0.36	-0.098 (0.091)	0.023 (0.025)	0.40	-0.031 (0.019)
Services	0.05	0.122 (0.178)	-0.029 (0.045)	0.05	0.087** (0.039)
<b>State</b>					
<b>Base: Uttar Pradesh</b>	0.13			0.10	
Jammu and Kashmir	0.02	0.317 (0.276)	-0.046 (0.076)	0.03	-0.352*** (0.065)
Himachal Pradesh	0.03	0.148 (0.259)	-0.028 (0.066)	0.03	0.238*** (0.063)
Punjab	0.04	-0.125 (0.265)	0.037 (0.068)	0.03	0.397*** (0.070)
Uttaranchal	0.03	-0.461* (0.257)	0.089 (0.068)	0.03	-0.015 (0.059)
Haryana	0.03	-0.236 (0.233)	0.023 (0.066)	0.03	0.440*** (0.063)
Rajasthan	0.05	0.219 (0.210)	-0.063 (0.060)	0.05	-0.266*** (0.051)
Bihar	0.04	0.317* (0.184)	-0.141** (0.061)	0.05	-0.029 (0.046)
Sikkim	0.02	0.561 (0.386)	-0.049 (0.075)	0.02	0.813*** (0.093)
Arunachal Pradesh	0.02	0.092 (0.397)	0.041 (0.106)	0.02	0.717*** (0.084)
Nagaland	0.02	0.268 (0.367)	-0.153** (0.076)	0.04	1.042*** (0.080)
Manipur	0.04	0.540** (0.239)	-0.056 (0.059)	0.04	1.079*** (0.076)
Mizoram	0.01	-0.078 (0.400)	0.076 (0.118)	0.02	1.315*** (0.127)
Tripura	0.03	0.200 (0.257)	-0.096 (0.072)	0.02	0.052 (0.070)
Meghalaya	0.01	-0.011 (0.439)	0.005 (0.106)	0.02	1.132*** (0.097)
Assam	0.05	0.032 (0.229)	-0.006 (0.064)	0.04	0.999*** (0.071)
West Bengal	0.05	0.293 (0.213)	-0.025 (0.060)	0.05	-0.116** (0.048)
Jharkhand	0.03	0.251 (0.307)	-0.050 (0.077)	0.04	0.280*** (0.056)

**Table A1 – Continued**

VARIABLES	Child Nutrition Equation (1)			Maternal Autonomy Equations (2) and (3)	
	Mean SD	Coeff est (SE)	Coeff est (SE)	Mean SD	Coeff est (SE)
	(1)	(2)	(3)	(4)	(5)
		<b>HAZ</b>	<b>Stunted</b>		
Orissa	0.05	0.190 (0.210)	-0.073 (0.055)	0.05	0.358*** (0.051)
Chhatisgarh	0.03	-0.330 (0.221)	0.093 (0.069)	0.04	0.173*** (0.053)
Madhya pradesh	0.04	0.387* (0.225)	-0.119* (0.062)	0.05	-0.101** (0.048)
Gujarat	0.03	-0.041 (0.243)	0.022 (0.076)	0.03	-0.129** (0.057)
Maharashtra	0.05	0.064 (0.239)	0.017 (0.059)	0.03	0.415*** (0.061)
Andhra Pradesh	0.02	0.593* (0.305)	-0.239*** (0.066)	0.03	0.043 (0.061)
Karnataka	0.04	0.440* (0.243)	-0.132** (0.058)	0.04	-0.208*** (0.053)
Goa	0.02	0.115 (0.239)	-0.031 (0.081)	0.02	0.483*** (0.085)
Kerala	0.04	0.002 (0.249)	-0.013 (0.063)	0.02	0.634*** (0.071)
Tamil Nadu	0.03	0.240 (0.264)	-0.061 (0.065)	0.03	0.427*** (0.066)
Constant		-1.441*** (0.364)	0.382*** (0.088)		
Number of Observations		1,931	1,931		17,749

Notes: (i) Anomy index was created using the sample of women who had children who were less than 5 years old with valid observations on nutritional status variables at the survey time and thus contributed to the 'nutrition' analyses. (ii) The nutritional status equation was estimated using the sample of firstborns who were aged less than 18 months at the time of the survey. (iii) All variables are binary except when a SD is indicated in parenthesis in columns (1) and (4). (iv) Bootstrapped standard errors(SE) in parenthesis in columns (2) and (3). (v) all standard error calculations allow for clustering at the primary sample unit level. (v) \*\*\* p<0.01, \*\* p<0.05, \* p<0.1 .

## **Appendix 2 - Other measures of autonomy**

Here we discuss the estimated autonomy effects using routinely used measures. We compare these measures in two ways: (i) bivariate plots to see how the ranking of the autonomy status compares;<sup>1</sup> (ii) whether there is a role for maternal autonomy in child nutrition using the same sample which we used in our preferred specification - first-borns who are aged less than 18 months. We have labelled various models as Model 2-5 keeping our preferred specification as Model 1.

In the models that require pre-estimation of the autonomy index (Models 2, 4a & 4b below), we use the same sample of rural women as before.

### **Model 2 – Principal Component Analysis (PCA)**

The autonomy index  $a_i$  is often estimated as the first principal component from the set of measurements (Chakraborty and De (2011)). This is a data dimension reduction technique and the first component is a linear combination of the observed data (measurements) which explains the largest variation in the observed measurements. The construction of this index does not allow for associations between the index and other covariates which we used in our model for the creation of the index.

### **Model 3 – Average of the Measurements**

Another popular method used is an index defined as the *average* of a set of measurements (Jensen and Oster (2009)). This is equivalent to using OLS to estimate the woman-level ‘fixed effects’  $a_i$  in the specification,

$$m_{ij} = a_i + \varepsilon_{ij} \tag{A1}$$

$j=1,\dots,9$  are the measurements and  $i$  is the woman/partner/household.

---

<sup>1</sup> Note, bivariate correlation between the ranks would not be informative when many mothers have the same score such as in the measure that uses an average of a set of binary measurements.

Importantly, this specification (a linear probability model) assumes, unlike ours, that the effect of autonomy  $a_i$  is the same on all measurements. This is a crucial shortcoming as discussed earlier as we expect the autonomy to play different roles in different dimensions.

#### Model 4 - Restricted versions of Model 1

We consider two different restricted versions of our preferred model. First, we restrict all factor loadings and intercepts to be the same across the various measurements without accounting for equation (3) (Model 4a). This is the random effects logit model. Second, we relax the equality of intercepts and factor loadings without accounting for equation (3) (Model 4b). These restrictions can then be tested using likelihood ratio tests. The autonomy index is then created using the Empirical Bayes method as before (see footnote 25 in the main paper).

#### Model 5 – Measurements included directly in the nutrition equation

All individual measurements are directly used in the ‘nutrition’ equation (1).<sup>2</sup>

The bivariate plots in Figures A1-A4 provide a visual assessment of the correlation between our measure of autonomy and other measures of autonomy. The PCA factor is highly correlated with the index created using the simple average of the measurements. The important point to note from these plots is that some women who are assessed to have an autonomy index below the mean of 0 according to our measure (vertical axis) are given an index value which is above the mean according to other measures (and vice versa).

The estimated effects of autonomy from using different measures are presented in Table A2. When the measurements are entered separately in place of one summary index, the effects are generally not significant.

In summary, the ranking of women in terms of how much ‘autonomy’ they have, is sensitive to the measure one creates and hence relative comparisons of women’s autonomy status are not valid across these measures. Trying to mitigate the possible endogeneity caused by ‘son preference’ in the sample

---

<sup>2</sup> Dancer and Rammohan (2009) and Imai, et al. (2014) are examples that take this approach.

used for the estimation, the highest effect of autonomy is estimated for our measure. This also enables us to separate the direct associations of maternal and family characteristics in our model for nutrition, from their indirect associations that work through maternal autonomy.

**Figure A**  
**Plots of Our measure of autonomy (Model 1) against the other measures from Models 2 to 4b.**

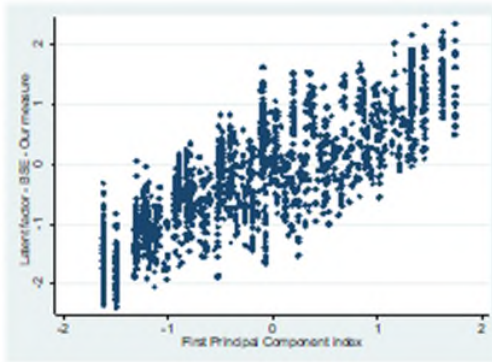


Figure A1 – Model 1 vs Model 2

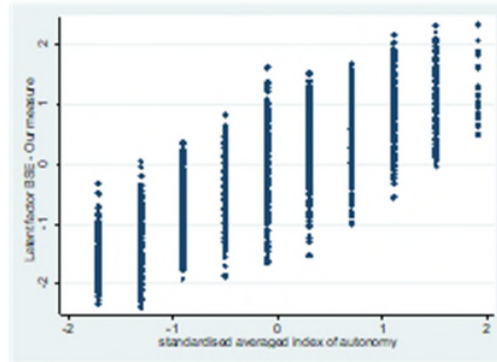


Figure A2 - Model 1 vs Model 3

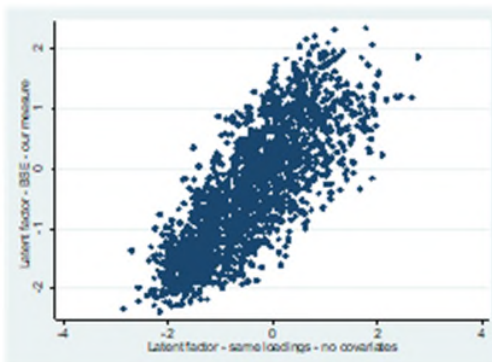


Figure A3 – Model 1 vs Model 4a

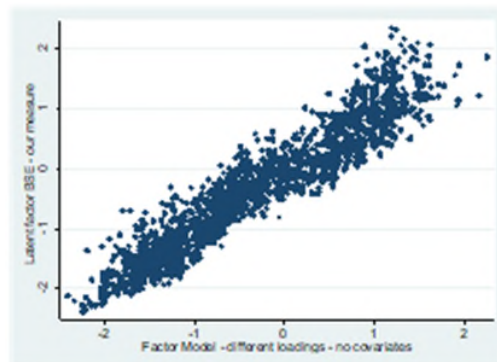


Figure A4 - Model 1 vs Model 4b

Notes: Our measure of autonomy is plotted against:

- i. Figure A1: the first principal component – Model 2;
- ii. Figure A2: based on a simple average of the measures – Model 3;
- iii. Figure A3: measure created using a latent factor model without any covariates and with the same loadings – Model 4a;
- iv. Figure A4: measure created using a latent factor model without any covariates but with different loadings – Model 4b.

The sample used in the estimation of the different indexes, consists of women who had children who were less than 60 months old at the survey time and thus contributed to the ‘nutrition’ analyses.

**Table A2 –Nutritional Status: HAZ scores –sample of first-borns aged less than 18 months; Autonomy coefficient and the intercept estimate (std error)**

Model		Mean (std deviation)	Autonomy Coeff (SE)	Intercept Coeff (SE)
1	<b>Preferred specification: Factor Model with Covariates</b>	-0.375 (0.99)	0.161*** (0.051)	-1.441*** (0.364)
2	First Principal Component	-0.353 (0.98)	0.113** (0.043)	-1.541*** (0.342)
3	Simple average	-0.354 (0.98)	0.105** (0.043)	-1.563*** (0.340)
4A	Factor Model with <b>same</b> factor loading and <b>no</b> adjustment for covariates	-0.405 (0.95)	0.093** (0.039)	-1.586*** (0.336)
4B	Factor Model with <b>different</b> factor loading and <b>no</b> adjustment for covariates	-0.326 (0.99)	0.119*** (0.041)	-1.567*** (0.338)
5	All measurements entered separately			
	<b>m1:</b> Woman is allowed to go to the market alone	0.356	0.183 (0.130)	-1.685*** (0.346)
	<b>m2:</b> Woman is allowed to go to the health facility alone	0.319	-0.200 (0.139)	
	<b>m3:</b> Woman is allowed to go to places outside the community alone	0.269	0.103 (0.114)	
	<b>m4:</b> Woman has the final say alone on purchases for daily needs	0.186	0.065 (0.108)	
	<b>m5:</b> Woman has the final say together on own health care	0.521	0.037 (0.088)	
	<b>m6:</b> Woman has the final say together large household purchases	0.374	0.061 (0.100)	
	<b>m7:</b> Woman has the final say together visiting family and friends	0.479	0.207** (0.094)	
	<b>m8:</b> Woman has the final say together on what to do with her husband's money	0.532	-0.025 (0.084)	
	<b>m9:</b> Woman has money for her own use	0.326	-0.107 (0.088)	

Notes: (i) Bootstrapped standard errors (allows for clustering at the district level with 500 replications) in parentheses; (ii) \*\*\* p<0.01, \*\* p<0.05, \* p<0.1; (iii) The dependent variable used is the Height-for-Age Z-scores (HAZ) defined according to the World Health Organisation (iv) Model 1 is our preferred one – see Table 5 Panel [2] columns (3) and (4) in the main paper; (v) All autonomy measures that were created as a single measure (used in Models 2, 4A and 4B) are based on the same sample of women used in our preferred specification (Model 1) and they have also been standardised to have 0 mean and unit variance. (vi) Number of observations used is 1,931 children who were the firstborns and aged<18 months at the time of the interview.



### Appendix 3 – URBAN SAMPLE RESULTS

**Table A3 – Descriptive information and Estimation results for the preferred model – URBAN SAMPLE**

VARIABLES	Child Nutrition Equation (1)			Maternal Autonomy Equations (2) and (3)	
	Mean SD	Coeff est (SE)	Coeff est (SE)	Mean SD	Coeff est (SE)
	(1)	(2)	(3)	(4)	(5)
		<b>HAZ</b>	<b>Stunted</b>		
Maternal Autonomy - z-score	-0.33 (1.01)	0.011 (0.057)	0.015 (0.014)	0.00 (1.00)	
<b>Child characteristics</b>					
Age in months (base: age<6 months)	0.24				
6-11	0.38	-0.255** (0.123)	-0.014 (0.025)		
12-17	0.39	-1.148*** (0.115)	0.185*** (0.028)		
Girl child	0.50	0.049 (0.084)	-0.037* (0.021)		
Part of multiple births	0.01	-1.471*** (0.514)	0.300* (0.181)		
<b>Family characteristics</b>					
Wealth index factor score/100000	0.65 (0.83)	0.442*** (0.084)	-0.065*** (0.022)	0.49 (0.87)	-0.079*** (0.018)
Family is a nuclear family	0.30	0.051 (0.106)	-0.020 (0.025)	0.49	0.384*** (0.024)
<b>Age difference between the partners</b>					
<b>Base: less than 3 years</b>				0.12	
Husband older by 3-5 years				0.50	0.064** (0.030)
Husband older by 6-10 years				0.47	0.053 (0.032)
Husband older by more than 10 years				0.11	0.290 (0.042)
<b>Mother characteristics</b>					
Mother's - age in years	23.27 (4.0)	-0.013 (0.013)	-0.002 (0.003)	27.28 (5.1)	0.027*** (0.002)
Whether the mother is anaemic i.e. haemoglobin <11gm/dl	0.49	-0.123 (0.082)	0.026 (0.023)		
Mother's height is less than 145cm	0.10	-0.744*** (0.141)	0.174*** (0.042)		
Mother has low BMI i.e. BMI<18.5	0.27	-0.066 (0.103)	0.007 (0.025)		
Mother's BMI missing	0.00	1.590 (1.660)	-0.109 (0.082)		
<b>Caste</b>					
<b>Base: 'Normal' caste</b>	0.27			0.40	
Schedule caste	0.15	-0.103 (0.146)	0.030 (0.037)	0.16	-0.026 (0.030)
Schedule tribe	0.07	0.075 (0.213)	-0.052 (0.051)	0.09	0.121** (0.052)
Other Backward Caste (OBC)	0.32	-0.110 (0.113)	0.009 (0.028)	0.32	0.025 (0.025)
Woman: caste missing	0.04	0.067 (0.271)	0.022 (0.060)	0.04	-0.003 (0.057)

**Table A3 – Continued**

VARIABLES	Child Nutrition Equation (1)			Maternal Autonomy Equations (2) and (3)	
	Mean	Coeff est	Coeff est	Mean	Coeff est
	SD	(SE)	(SE)	SD	(SE)
	(1)	(2)	(3)	(4)	(5)
		HAZ	Stunted		
<b>Religion</b>					
<b>Base: Hindu</b>	0.70			0.68	
Christian	0.07	-0.045	-0.061	0.09	0.211***
		(0.257)	(0.048)		(0.053)
Muslim	0.18	-0.200	0.027	0.19	-0.029
		(0.125)	(0.033)		(0.027)
Other	0.05	0.238	-0.067	0.04	0.059
		(0.193)	(0.049)		(0.051)
<b>Education</b>					
<b>Base: no education</b>	0.18			0.29	
Completed primary or incompleted secondary	0.47	0.103	-0.088**	0.45	0.120***
		(0.148)	(0.040)		(0.026)
Completed Secondary	0.12	-0.060	-0.086*	0.09	0.164***
		(0.181)	(0.051)		(0.042)
Higher Education	0.24	0.166	-0.121**	0.17	0.298***
		(0.196)	(0.051)		(0.044)
<b>Media exposure:</b> Mother listens to either the radio or watches tv or reads newspapers at least once a week	0.62	-0.228	-0.002	0.84	0.117***
		(0.165)	(0.040)		(0.029)
<b>Occupation</b>					
<b>Base: no occupation</b>	0.87			0.78	
Professional, Technical, Managerial, Clerical, Sales, Services	0.08			0.12	
		-0.776	0.113		-0.049
		(1.152)	(0.149)		(0.145)
Agricultural employee	0.01	-1.570	0.166	0.03	-0.159
		(1.143)	(0.161)		(0.153)
Skilled or Unskilled Manual	0.03	-1.073	0.211	0.07	-0.148
		(1.176)	(0.163)		(0.149)
<b>Working status in the last 12 months</b>					
<b>Base: not working</b>	0.87			0.78	
works_yr_cash	0.09	0.785	-0.111	0.15	0.381**
		(1.172)	(0.156)		(0.149)
works_yr_oth	0.02	1.168	-0.275**	0.02	0.357**
		(1.097)	(0.114)		(0.139)
works_s_occ	0.03	0.609	-0.107	0.05	0.240
		(1.163)	(0.152)		(0.149)
<b>Partner Characteristics</b>					
<b>Education: base is no education</b>	0.17			0.25	
Completed primary or incompleted secondary	0.52	0.074	0.033	0.50	0.001
		(0.145)	(0.039)		(0.026)
completed secondary education	0.03	-0.278	0.078	0.02	0.082
		(0.295)	(0.077)		(0.066)
Higher education	0.28	-0.007	0.045	0.22	0.040
		(0.191)	(0.047)		(0.039)

Table A3 – Continued

VARIABLES	Child Nutrition Equation (1)			Maternal Autonomy Equations (2) and (3)	
	Mean SD	Coeff est (SE)	Coeff est (SE)	Mean SD	Coeff est (SE)
	(1)	(2)	(3)	(4)	(5)
		<b>HAZ</b>	<b>Stunted</b>		
<b>Occupation</b>					
<b>Base: Manual + a handful of unemployed</b>	0.43			0.46	
Prof. Tech. Manag.	0.14	-0.026 (0.153)	0.030 (0.038)	0.13	0.029 (0.035)
Clerical	0.06	0.083 (0.190)	-0.018 (0.046)	0.07	0.032 (0.040)
Sales	0.27	0.114 (0.103)	-0.036 (0.027)	0.22	-0.045* (0.025)
Agric-Employee	0.04	0.252 (0.288)	0.073 (0.065)	0.05	0.008 (0.045)
Services	0.06	-0.055 (0.188)	0.006 (0.047)	0.08	-0.001 (0.036)
<b>State/Union Territory</b>					
<b>Base: Uttar Pradesh</b>	0.10			0.11	
Jammu and Kashmir	0.01	0.386 (0.473)	-0.092 (0.119)	0.01	-0.686*** (0.096)
Himachal Pradesh	0.02	-0.313 (0.245)	-0.025 (0.078)	0.02	-0.115 (0.083)
Punjab	0.03	0.253 (0.280)	-0.056 (0.076)	0.03	0.085 (0.073)
Uttaranchal	0.01	0.126 (0.342)	-0.146** (0.057)	0.02	-0.068 (0.082)
Haryana	0.02	0.007 (0.280)	-0.033 (0.084)	0.02	0.389*** (0.097)
Delhi (Union Territory)	0.03	-0.434 (0.332)	0.088 (0.087)	0.04	0.149* (0.077)
Rajasthan	0.03	0.756** (0.325)	-0.155** (0.070)	0.03	-0.148* (0.077)
Bihar	0.02	0.437 (0.304)	-0.146* (0.088)	0.03	-0.140** (0.066)
Sikkim	0.01	-0.595 (0.436)	0.028 (0.128)	0.01	0.631*** (0.128)
Arunachal Pradesh	0.02	0.814* (0.483)	-0.101 (0.082)	0.01	0.162 (0.114)
Nagaland	0.03	0.381 (0.312)	-0.113 (0.079)	0.04	0.709*** (0.085)
Manipur	0.05	0.941*** (0.276)	-0.181*** (0.058)	0.05	0.599*** (0.075)
Mizoram	0.01	0.349 (0.443)	0.094 (0.112)	0.02	0.736*** (0.127)
Tripura	0.01	0.381 (0.381)	-0.097 (0.120)	0.01	-0.072 (0.121)
Meghalaya	0.01	0.080 (0.690)	0.199 (0.150)	0.01	0.163 (0.114)
Assam	0.02	-0.270 (0.336)	-0.039 (0.092)	0.02	0.766*** (0.093)
West Bengal	0.05	0.410* (0.223)	-0.099* (0.059)	0.05	-0.353*** (0.055)

**Table A3 – Continued**

VARIABLES	Child Nutrition Equation (1)			Maternal Autonomy Equations (2) and (3)	
	Mean SD	Coeff est (SE)	Coeff est (SE)	Mean SD	Coeff est (SE)
	(1)	(2)	(3)	(4)	(5)
		<b>HAZ</b>	<b>Stunted</b>		
Jharkhand	0.02	0.464 (0.338)	-0.105 (0.082)	0.02	-0.091 (0.074)
Orissa	0.01	1.042*** (0.368)	-0.233*** (0.074)	0.03	0.110 (0.081)
Chhatisgarh	0.03	0.253 (0.265)	-0.046 (0.071)	0.02	-0.085 (0.073)
Madhya pradesh	0.07	0.304 (0.223)	-0.050 (0.056)	0.07	-0.244*** (0.050)
Gujarat	0.03	-0.017 (0.306)	-0.043 (0.077)	0.03	-0.273*** (0.065)
Maharashtra	0.10	-0.081 (0.201)	0.030 (0.058)	0.10	0.265*** (0.049)
Andhra Pradesh	0.08	0.254 (0.192)	-0.074 (0.055)	0.07	-0.230*** (0.050)
Karnataka	0.03	0.185 (0.275)	-0.061 (0.081)	0.03	-0.089 (0.066)
Goa	0.03	0.487 (0.302)	-0.131* (0.068)	0.03	0.078 (0.078)
Kerala	0.02	0.267 (0.368)	0.055 (0.088)	0.02	0.410*** (0.083)
Tamil Nadu	0.07	0.787*** (0.259)	-0.103 (0.066)	0.05	0.144** (0.070)
<b>Type of Urban Area-Base is Large City</b>	0.35	0.221	-0.023	0.33	
Mega City	0.10	(0.241)	(0.055)	0.11	-0.009 (0.055)
Small City	0.15	(0.146)	(0.040)	0.16	-0.115*** (0.035)
Large Town	0.07	0.155 (0.190)	-0.035 (0.053)	0.08	-0.098* (0.050)
Small Town	0.33	0.241 (0.151)	-0.034 (0.037)	0.32	-0.098*** (0.033)
Constant		-0.331 (0.367)	0.353*** (0.105)		
Number of Observations		1,372	1,372		11,187
R-Squared		0.232	0.171		
Maximised Log likelihood value					-57,546

Notes: (i) Autonomy index was created using the sample of women who had children who were less than 5 years old with valid observations on nutritional status variables at the survey time and thus contributed to the 'nutrition' analyses. (ii) The nutritional status equation was estimated using the sample of firstborns who were aged less than 18 months at the time of the survey. (iii) All variables are binary except when a SD is indicated in parenthesis in columns (1) and (4). (iv) Bootstrapped standard errors(SE) in parenthesis in columns (2) and (3). (v) all standard error calculations allow for clustering at the primary sample unit level. (v) \*\*\* p<0.01, \*\* p<0.05, \* p<0.1. (vi) The rest of the coefficients are in Appendix 3 Table A4.

**Table A4: Estimates of Equation (2) Parameters (Standard errors)- URBAN SAMPLE  
(Impact of Women’s Autonomy on Probability of Positive Response to the Measurement  
Question)**

	<b>FACTOR LOADING</b>	<b>INTERCEPT</b>
<b>MEASUREMENTS (binary indicators)</b>	<b>[1]</b>	<b>[2]</b>
woman is allowed to go to market alone – <b>intercept</b> (m1)	1	-0.380*** (0.093)
woman is allowed to go to health facility alone (m2)	0.874*** (0.037)	-0.168*** (0.054)
woman is allowed to go to places outside community alone (m3)	0.816*** (0.038)	-0.965*** (0.060)
final say alone on purchases for daily needs (m4)	0.828*** (0.044)	-1.295*** (0.068)
final say together on own health care (m5)	2.153*** (0.100)	-0.919*** (0.112)
final say together on large household purchases (m6)	3.404*** (0.172)	-2.903*** (0.213)
final say together on visiting family and friends (m7)	3.827*** (0.197)	-2.469*** (0.244)
final say together on what to do with husband's money (m8)	1.566*** (0.074)	-0.562*** (0.079)
woman has money for her own use (m9)	0.160*** (0.029)	0.138 (0.091)
Estimated variance of woman-level heterogeneity	0.571*** (0.042)	
Estimated variance of PSU level heterogeneity <sup>#</sup>	0.513*** (0.027)	
<b>'RELIABILITY' MEASURE<sup>+</sup> (percentage)</b>		
woman is allowed to go to market alone	13.1	
woman is allowed to go to health facility alone	10.3	
woman is allowed to go to places outside the community alone	9.1	
final say alone on purchases for daily needs	9.3	
final say together on own healthcare	41.0	
final say together on large household purchases	63.5	
final say together on visiting family and friends	68.7	
final say together on what to do with the husband's money	26.9	
woman has money for her own use	0.4	
<b>Maximised log-likelihood value</b>	-57546	

(i) \*\*\*, \*\*, \* p-value<0.01, 0.05 and 0.10 respectively. (ii) The 'reliability' measure provides the percentage of variation attributed to the autonomy variable in the total variation observed in that **particular** measurement. A measurement with a larger "reliability" measure is able to explain a larger proportion of the variability in the observed pattern of women's answers to that question relative to another measurement with a smaller reliability measure. <sup>#</sup> PSU is the primary sampling unit; (iii) Rest of the results are provided in Appendix 3 Table A3.