Explaining environmental health behaviors:
evidence from rural India on the influence of discount rates

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ONLINE APPENDIX

Table A1. *Descriptive statistics for determinants of discount rate (Zp)*

	Expected sign	**Value**
Personal characteristics		
Sex: Female	(-)	91%
Age	U-shape	Mean: 28.7/ StdDev: 9.9
Can do household accounts [a]	(-)	72%
Household characteristics		
Can access formal credit [b]	(-)	42%
Household size [a]	(+)	Mean: 6.4/ StdDev: 2.4
% Expenditure on staple foods [a]	(+)	Mean: 10.7%/ StdDev:12.5

Notes:
[a] Missing observations are discarded from estimation
[b] Missing observations are replaced with No or zero in estimation

Table A2. *Descriptive statistics for environmental health behaviors and determinants (Z_y)*

Environmental health behaviors	
Household has bed net (BNET)	20.5%
Household has individual latrine (IHL)	11.6%
Household cooks with clean fuel (CFUEL)	10.6%
Household treats drinking water[a] (TWATER)	62.4%
Respondent washes hands before eating *and* after defecating (HW)	44.3%
Exogenous drivers of environmental health behaviors	
Estimated discount rate	(See table A1)
Years of formal education [b]	Mean:2.26/Med:2
Can read newspaper (Yes/Y=1; No/N=0) [b]	61%
Faced HH crisis in past year (Y=1; N=0) [a]	14%
Total monthly household expenditure [b]	Mean: Rs3,066/Med: Rs2090[c]
Distance from health clinic (minutes walk) [b]	Mean: 33/Med: 15
Distance from village center (minutes walk)	Mean: 11.9/ Med:5
Concerned about disease in his/her village (Y=1; N=0) [a]	71%
Has access to improved water sources (Y=1; N=0) [b]	65%
Believes diarrhea is preventable (Y=1; N=0) [a]	26%
Statistics on credit access and socio-economic status reported in SM1	

Notes:
[a] Missing observations are replaced with No or zero in estimation
[b] Missing observations are discarded from estimation
[c] USD1=Rs 45 (at time of survey)

Table A3. *Comparison of respondents with consistent vs. inconsistent responses to time tradeoff questions*

Variable	Mean		Difference [a]	T-stat [b]
	Consistent	Inconsistent or Missing		
Observations (N)	8,297	1,908		
Sex: Female	90.7%	89.8%	-0.9%	-1.20
Age	28.68	28.72	0.05	0.18
Can do household accounts	73.3%	69.4%	-3.9%	-3.45
Can access formal credit	42.6%	40.7%	-1.9%	-1.48
Household size (members)	6.43	6.41	-0.02	-0.34
Expenditure on staple foods (%)	10.7%	10.7%	-0.02%	-0.06
Wealth index (principal component)	0.0007	-0.0031	-0.0038	-0.15

Notes:
[a] Difference = Mean inconsistent – mean consistent
[b] H0 : Mean inconsistent – mean consistent = 0

Table A4. *Environmental health behaviors and estimated time preferences (N = 9750)*

	BNET	IHL	CFUEL	TWATER	HW
Estimated time preference	-10.289 (8.10)***	-10.563 (6.55)***	-12.87 (6.47)***	0.037 (-0.02)	-7.214 (4.98)***
Can access credit (Y= 1, N= 0)	0.314 (5.70)***	0.259 (3.46)***	0.264 (3.47)***	0.152 (3.55)***	-0.122 (2.89)***
Household size (members)	-0.021 (1.81)*	-0.007 (-0.46)	-0.077 (4.33)***	-0.02 (2.04)**	-0.001 -0.1
Expenditure on staple foods (%)	-0.02 (4.56)***	-0.026 (3.50)***	-0.061 (4.22)***	0.011 (6.42)***	-0.009 (4.71)***
Wealth index (principal component)	-0.342 (10.30)***	0.727 (17.30)***	0.386 (8.47)***	0.036 (1.51)S	0.12 (5.12)***
Total monthly expenditure (Rs.)	1.365 (2.29)**	2.544 (3.97)***	4.083 (5.07)***	2.352 (3.09)***	-0.478 (-0.83)
Concerned about diseases in the village? (Y=1, N=0)	-0.16 (2.50)**	0.003 (-0.04)	-0.361 (4.41)***	0.188 (3.65)***	0.095 (1.79)*
Faced crisis in last 12 months (Y= 1, N= 0)	0.019 (-0.26)	-0.14 (-1.4)	-0.299 (2.78)***	0.01 (-0.16)	0.102 (1.73)*
Distance to clinic (min)	-0.005 (5.37)***	-0.008 (5.44)***	-0.011 (5.48)***	-0.002(3.67)***	-0.001 (-1.23)
Distance to village center (min)	-0.004 (1.66)*	-0.018 (3.78)***	-0.01 (2.62)***	0.007 (4.31)***	-0.004 (2.87)***
Formal education (years)	0.207 (6.67)***	0.258 (7.34)***	0.23 (6.19)***	0.048 (1.92)*	0.036 (1.48) §
Can read? (Y= 1, N= 0)	0.282 (3.18)***	0.545 (4.99)***	0.793 (6.17)***	0.052 (-0.86)	0.258 (3.91)***
Constant	0.024 (-0.09)	-1.24 (3.94)***	-0.072 (-0.18)	0.085 (-0.27)	0.878 (3.11)***

Notes: [a] Coefficients; Z-statistics in brackets; Standard errors computed through bootstrapping. Statistical significance: § *p*<0.15; * *p*<0.1; ** *p*<0.05; *** *p*<0.01.