

Table 1: Dependent(UNICEF report) variables

Statistic	N	Mean	St. Dev.	Min	Max
Male Homicide rate (per 100,000) 2012	172	5.2	7.1	0	42
Female Homicide rate (per 100,000) 2012	172	2.3	2.8	0	14
Total Homicide rate (per 100,000) 2012	172	3.8	4.7	0	27
Any Violent discipline at home (%) 2005-2013*	62	77.8	13.1	45	95
Physical Punishment at home (%) 2005-2013*	59	60.1	16.4	25	86
Psychological aggression at home (%) 2005-2013*	59	69.9	15.5	31	92
Bullying - peer violence (%) 2003-2013*	106	33.8	14.2	7	74
Physical fights - peer violence (%) 2003-2013*	104	38.0	10.0	14	68
Physical attacks - peer violence (%) 2003-2013*	25	38.4	12.8	19	60
Male Experience of physical violence since age 15(%) 2005-2013*	6	34.8	14.6	11	54
Female Experience of physical violence since age 15(%) 2005-2013*	42	24.7	12.9	4	56
Male Lifetime experience of sexual violence (%) 2004-2013*	4	3.2	2.6	1	7
Female Lifetime experience of sexual violence (%) 2004-2013*	40	8.7	6.3	0.1	22.0
Male Intimate partner violence (%)2005-2013*	3	31.3	30.0	2	62
Female Intimate partner violence (%)2005-2013*	43	32.8	16.5	2	73
Male Attitudes towards wife-beating (%) 2002-2013*	63	40.1	20.6	2	83
Female Attitudes towards wife-beating (%) 2002-2013*	102	40.8	24.2	1	89
Attitudes towards physical punishment (%) 2005-2013*	59	26.9	16.7	3	82

*Data refer to the most recent year available during the period specified

Table 2: Independent variables

Statistic	N	Mean	St. Dev.	Min	Max
Human Development Index (HDI) Value 2012	186	0.7	0.2	0.3	1.0
Life expectancy at birth(years) 2012	193	69.9	9.5	48.1	83.6
Mean years of schooling(years) 2010	186	7.7	3.0	1.2	13.3
Expected years of schooling(years) 2011	191	12.4	3.0	2.4	19.7
Gross national income (GNI) per capita (2005 PPP\$) 2012	186	12,594.1	14,462.7	319	87,478
Nonincome HDI 2012	186	0.7	0.2	0.3	1.0
Inequality-adjusted HDI (IHDI) 2012	132	0.5	0.2	0.2	0.9
Quintile income ratio 2000-2010	134	9.3	6.3	3.6	40.2
Income Gini coefficient 2000-2010	135	40.4	9.2	25.0	65.8
Gender Inequality Index 2012	148	0.4	0.2	0.04	0.7
Maternal mortality ratio (deaths per 100,000 live births) 2010	179	170.4	225.0	2	1,100
Adolescent fertility rate (births per 1,000 women ages 15-19) 2012	193	45.9	39.3	0.6	193.6
Female Population with at least secondary education (% ages 25 and older) 2006-1	157	53.7	30.2	0.9	100.0
Male Population with at least secondary education (% ages 25 and older) 2006-10	157	58.9	27.5	3.2	100.0
Female Labour force participation rate (% ages 15 and older) 2011	176	52.9	16.3	13.1	88.2
Male Labour force participation rate (% ages 15 and older) 2011	176	75.2	8.1	45.1	95.2
Median age (years) 2010	180	27.6	8.3	15.5	44.7

Table 3

Region	male_homi- cide	female_homi- cide	total_homi- cide	violent_disci- pline	physical_- punishment	psychological_- aggression
CEE-CIS	1.5 (1.3)	0.7 (0.7)	1.2 (1.0)	66.3 (9.2)	44.1 (10.2)	59.1 (10.9)
EAP	2.9 (1.6)	1.8 (1.9)	2.5 (1.6)	72.1 (12.4)	49.0 (19.7)	60.2 (17.5)
ESA	8.8 (5.6)	5.2 (3.3)	7.2 (4.2)	89.0 (-)	66.0 (-)	82.0 (-)
IC	0.7 (1.2)	0.4 (0.6)	0.6 (0.9)	- (-)	- (-)	- (-)
LAC	14.2 (11.9)	3.6 (3.7)	9.1 (7.3)	71.1 (13.6)	52.6 (14.7)	58.9 (15.0)
MENA	2.4 (1.9)	1.1 (1.4)	1.8 (1.7)	87.5 (7.0)	71.9 (8.8)	82.9 (10.0)
SA	3.1 (3.4)	1.6 (1.3)	2.4 (2.5)	74.0 (-)	69.0 (-)	62.0 (-)
WCA	7.1 (4.3)	4.4 (2.6)	5.8 (3.3)	88.3 (4.4)	73.6 (6.3)	80.8 (6.0)
Observations	166	166	166	62	59	59

Table 4

Region	bullying	physical_- fights	physical_at- tacks	experience_- violence_- male	experience_- violence_fe- male	male_sex- ual_violence
CEE-CIS	24.0 (14.3)	37.1 (9.0)	22.5 (3.5)	41.0 (-)	7.7 (3.5)	- (-)
EAP	40.1 (17.0)	37.3 (14.2)	31.3 (9.6)	- (-)	25.2 (9.0)	- (-)
ESA	48.9 (11.7)	39.8 (12.0)	56.0 (0.0)	41.0 (18.4)	26.3 (11.8)	5 (2.8)
IC	26.4 (9.7)	34.0 (6.3)	- (-)	- (-)	- (-)	- (-)
LAC	27.4 (8.4)	35.2 (7.5)	32.6 (8.3)	11.0 (-)	19.8 (10.0)	1 (-)
MENA	38.6 (13.8)	47.3 (5.7)	44.7 (11.3)	- (-)	35.5 (6.4)	- (-)
SA	38.7 (2.1)	38.0 (8.5)	48.0 (-)	- (-)	20.3 (10.0)	- (-)
WCA	50.3 (10.4)	47.7 (13.8)	60.0 (-)	37.5 (4.9)	34.2 (11.5)	2 (-)
Observations	104	102	24	6	42	4

Table 5

Region	female_sex- ual_violence	male_part- ner_violence	female_part- ner_violence	male_ati- tude_wife_- beating	female_atti- tude_wife_- beating	punishment_- attitude
CEE-CIS	1.6 (2.7)	2 (-)	14.3 (10.4)	24.4 (23.0)	18.2 (18.4)	10.3 (5.4)
EAP	2.4 (2.4)	- (-)	30.8 (9.4)	55.3 (22.3)	48.4 (23.3)	31.5 (17.7)
ESA	13.4 (4.7)	30 (-)	39.6 (13.3)	42.8 (13.8)	50.5 (15.5)	82.0 (-)
IC	- (-)	- (-)	- (-)	- (-)	30.0 (-)	- (-)
LAC	6.2 (2.9)	62 (-)	35.5 (8.4)	21.4 (5.5)	12.4 (6.8)	19.4 (10.1)
MENA	- (-)	- (-)	23.5 (3.5)	- (-)	51.9 (20.3)	29.2 (11.8)
SA	8.0 (4.2)	- (-)	33.0 (10.4)	35.7 (10.3)	50.5 (19.5)	41.0 (-)
WCA	13.8 (6.1)	- (-)	37.8 (22.4)	44.2 (18.5)	53.0 (19.6)	39.9 (11.0)
Observations	40	3	43	63	102	59

	region	region_code
1	Central and Eastern Europe and the Commonwealth of Independent States	CEE-CIS
2	East Asia and the Pacific	EAP
3	Eastern and Southern Africa	ESA
4	Industrialized Countries	IC
5	Latin America and the Caribbean	LAC
6	Middle East and North Africa	MENA
7	South Asia	SA
8	West and Central Africa	WCA

Table 6

	<i>Dependent variable:</i>		
	male_homicide	dependentvariable female_homicide	total_homicide
	(1)	(2)	(3)
		NA	NA
life_expectancy	0.02 (0.16)	−0.13** (0.05)	−0.06 (0.10)
mean_years_schooling	−0.13 (0.64)	0.26 (0.21)	0.08 (0.40)
expected_years_schooling	0.23 (0.48)	−0.25 (0.16)	0.03 (0.30)
gni_per_capita	−0.0000 (0.0001)	0.0000 (0.0000)	−0.0000 (0.0000)
quintile_income_ratio	0.81*** (0.28)	0.34*** (0.09)	0.57*** (0.18)
income_gini_coefficient	−0.03 (0.19)	−0.08 (0.06)	−0.05 (0.12)
mmr	−0.001 (0.01)	−0.002 (0.002)	−0.001 (0.004)
adolescent_fertility	0.05** (0.02)	0.0003 (0.01)	0.03* (0.01)
female_pop_sec_education	0.12 (0.09)	0.02 (0.03)	0.06 (0.05)
male_pop_sec_education	−0.13 (0.09)	−0.07** (0.03)	−0.09 (0.06)
lfp_female	−0.03 (0.05)	0.01 (0.01)	−0.004 (0.03)
lfp_male	−0.001 (0.11)	−0.07* (0.04)	−0.03 (0.07)
median_age	−0.07 (0.18)	−0.02 (0.06)	−0.04 (0.11)
Constant	−0.51 (15.60)	20.19*** (5.11)	9.77 (9.83)
Observations	115	115	115
R ²	0.48	0.59	0.52
Adjusted R ²	0.42	0.54	0.46
Residual Std. Error (df = 101)	6.16	2.02	3.88
F Statistic (df = 13; 101)	7.26***	11.20***	8.44***

Note:

*p<0.1; **p<0.05; ***p<0.01

Table 7

	<i>Dependent variable:</i>		
	violent_discipline	dependentvariable physical_punish- ment	psychological_ag- gression
	(1)	(2)	(3)
		NA	NA
life_expectancy	−0.04 (0.39)	−0.03 (0.43)	−0.24 (0.47)
mean_years_schooling	3.52 (2.14)	4.34 (2.57)	5.44* (2.83)
expected_years_schooling	−2.40 (1.49)	−1.65 (1.61)	−3.07* (1.77)
gni_per_capita	−0.0002 (0.001)	−0.001 (0.001)	−0.0001 (0.001)
quintile_income_ratio	−2.35** (1.06)	−1.68 (1.16)	−3.80*** (1.28)
income_gini_coefficient	1.40** (0.67)	1.42* (0.74)	1.94** (0.81)
mmr	−0.004 (0.02)	−0.002 (0.02)	−0.002 (0.02)
adolescent_fertility	−0.08 (0.06)	−0.05 (0.07)	−0.12 (0.08)
female_pop_sec_education	−0.70** (0.26)	−0.95*** (0.28)	−0.78** (0.31)
male_pop_sec_education	0.33 (0.30)	0.60* (0.32)	0.31 (0.35)
lfp_female	0.01 (0.12)	−0.18 (0.13)	−0.06 (0.15)
lfp_male	−0.62* (0.31)	−0.22 (0.34)	−0.60 (0.38)
median_age	−0.75 (0.50)	−0.85 (0.54)	−0.94 (0.59)
Constant	132.28*** (47.51)	74.26 (51.40)	135.77** (56.62)
Observations	43	42	42
R ²	0.64	0.71	0.63
Adjusted R ²	0.48	0.58	0.46
Residual Std. Error	10.40 (df = 29)	11.12 (df = 28)	12.25 (df = 28)
F Statistic	3.93*** (df = 13; 29)	5.38*** (df = 13; 28)	3.66*** (df = 13; 28)

Note:

*p<0.1; **p<0.05; ***p<0.01

Table 8

	<i>Dependent variable:</i>		
	bullying	dependentvariable physical_fights	physical_attacks
	(1)	(2)	(3)
		NA	NA
life_expectancy	−0.76 (0.51)	0.26 (0.39)	−0.04 (9.31)
mean_years_schooling	−2.56 (1.85)	0.38 (1.43)	12.13 (12.94)
expected_years_schooling	2.99* (1.59)	−0.67 (1.23)	−0.72 (16.47)
gni_per_capita	0.0001 (0.0001)	0.0001 (0.0001)	−0.003 (0.01)
quintile_income_ratio	−0.16 (0.66)	−0.51 (0.51)	1.97 (9.12)
income_gini_coefficient	0.19 (0.43)	0.42 (0.33)	−1.40 (6.74)
mmr	0.01 (0.03)	0.03 (0.02)	0.04 (0.36)
adolescent_fertility	0.06 (0.08)	0.06 (0.06)	0.16 (1.08)
female_pop_sec_education	−0.47* (0.26)	−0.18 (0.20)	−1.62 (3.38)
male_pop_sec_education	0.84*** (0.29)	0.30 (0.23)	0.76 (3.90)
lfp_female	−0.16 (0.14)	−0.26** (0.10)	−0.47 (0.99)
lfp_male	0.50 (0.34)	−0.15 (0.26)	−0.20 (5.66)
median_age	−0.45 (0.43)	−0.15 (0.34)	0.93 (7.30)
Constant	17.06 (45.92)	23.80 (35.84)	58.99 (487.18)
Observations	69	67	15
R ²	0.39	0.32	0.90
Adjusted R ²	0.25	0.15	−0.43
Residual Std. Error	11.69 (df = 55)	8.94 (df = 53)	16.81 (df = 1)
F Statistic	2.70*** (df = 13; 55)	1.88* (df = 13; 53)	0.68 (df = 13; 1)

Note:

*p<0.1; **p<0.05; ***p<0.01

Table 9

	<i>Dependent variable:</i>		
	experience_vio- lence_male (1)	dependentvariable experience_vio- lence_female (2) NA	male_sexual_vio- lence (3) NA
life_expectancy	−1.37	−1.06** (0.46)	−1.41
mean_years_schooling	−2.36	2.42 (1.75)	−4.71
expected_years_schooling	21.66	1.30 (1.26)	13.60
gni_per_capita	−0.01	0.001 (0.001)	
quintile_income_ratio	−1.41	0.41 (0.62)	
income_gini_coefficient		−0.51 (0.50)	
mmr		−0.02 (0.02)	
adolescent_fertility		0.05 (0.06)	
female_pop_sec_education		−0.62** (0.24)	
male_pop_sec_education		0.18 (0.20)	
lfp_female		−0.22 (0.13)	
lfp_male		−0.79** (0.29)	
median_age		−1.63*** (0.57)	
Constant	−73.91	201.80*** (53.87)	−45.17
Observations	6	34	4
R ²	1.00	0.76	1.00
Adjusted R ²		0.61	
Residual Std. Error		8.50 (df = 20)	
F Statistic		4.95*** (df = 13; 20)	

Note:

*p<0.1; **p<0.05; ***p<0.01

Table 10

	<i>Dependent variable:</i>		
	female_sexual_vio- lence (1)	male_partner_vio- lence (2) NA	female_partner_vio- lence (3) NA
life_expectancy	−0.02 (0.21)	29.08	0.21 (0.69)
mean_years_schooling	0.10 (0.85)	−54.88	0.77 (2.75)
expected_years_schooling	0.51 (0.68)		0.46 (1.90)
gni_per_capita	−0.0001 (0.0004)		0.002 (0.001)
quintile_income_ratio	−0.22 (0.27)		−0.11 (0.98)
income_gini_coefficient	0.19 (0.23)		0.49 (0.80)
mmr	0.01 (0.01)		0.03 (0.03)
adolescent_fertility	0.07** (0.03)		0.01 (0.09)
female_pop_sec_education	−0.02 (0.13)		−0.36 (0.36)
male_pop_sec_education	−0.003 (0.11)		0.22 (0.29)
lfp_female	0.11 (0.08)		0.13 (0.19)
lfp_male	−0.33** (0.14)		−0.49 (0.45)
median_age	−0.32 (0.31)		−0.85 (0.87)
Constant	18.19 (25.65)	−1,378.27	27.84 (80.67)
Observations	34	3	35
R ²	0.74	1.00	0.53
Adjusted R ²	0.57		0.24
Residual Std. Error	4.16 (df = 20)		13.37 (df = 21)
F Statistic	4.35*** (df = 13; 20)		1.82 (df = 13; 21)

Note:

*p<0.1; **p<0.05; ***p<0.01

Table 11

	<i>Dependent variable:</i>		
	male_attitude_wife_- beating	female_attitude_- wife_beating	punishment_atti- tude
	(1)	(2)	(3)
		NA	NA
life_expectancy	0.26 (0.57)	-0.44 (0.50)	-1.19** (0.49)
mean_years_schooling	1.84 (2.61)	-1.85 (2.24)	1.35 (2.98)
expected_years_schooling	-2.47 (1.78)	0.21 (1.64)	0.01 (1.87)
gni_per_capita	0.001 (0.001)	-0.0000 (0.001)	0.0001 (0.001)
quintile_income_ratio	-1.97* (1.15)	-1.52 (0.92)	-1.81 (1.35)
income_gini_coefficient	1.68* (0.84)	0.69 (0.65)	1.10 (0.86)
mmr	0.06*** (0.02)	0.03 (0.02)	-0.001 (0.02)
adolescent_fertility	-0.08 (0.08)	-0.15** (0.07)	-0.13 (0.08)
female_pop_sec_education	0.02 (0.38)	-0.04 (0.26)	-0.20 (0.33)
male_pop_sec_education	0.25 (0.34)	0.18 (0.28)	-0.14 (0.37)
lfp_female	-0.12 (0.20)	-0.29* (0.15)	-0.08 (0.15)
lfp_male	0.64 (0.41)	-0.01 (0.38)	-0.38 (0.40)
median_age	-0.76 (1.04)	-2.12*** (0.70)	-0.51 (0.62)
Constant	-70.32 (71.77)	124.19** (54.46)	137.23** (59.61)
Observations	41	69	42
R ²	0.55	0.57	0.62
Adjusted R ²	0.34	0.47	0.45
Residual Std. Error	14.55 (df = 27)	16.68 (df = 55)	12.90 (df = 28)
F Statistic	2.59** (df = 13; 27)	5.60*** (df = 13; 55)	3.58*** (df = 13; 28)

Note:

*p<0.1; **p<0.05; ***p<0.01

Life expectancy at birth : Number of years a newborn infant could expect to live if prevailing patterns of age-specific mortality rates at the time of birth stay the same throughout the infants life.

Mean years of schooling : Average number of years of education received by people ages 25 and older, converted from educational attainment levels using official durations of each level.

Expected years of schooling : Number of years of schooling that a child of school entrance age can expect to receive if prevailing patterns of age-specific enrolment rates persist throughout life

Gross national income (GNI) per capita : Aggregate income of an economy generated by its production and its ownership of factors of production, less the incomes paid for the use of factors of production owned by the rest of the world, converted to international dollars using PPP rates, divided by midyear population.

Quintile income ratio :Ratio of the average income of the richest 20% of the population to the average income of the poorest 20% of the population.

Income Gini coefficient : Measure of the deviation of the distribution of income among individuals or households within a country from a perfectly equal distribution. A value of 0 represents absolute equality, a value of 100 absolute inequality.

Maternal mortality ratio : Ratio of the number of maternal deaths to the number of live births in a given year, expressed per 100,000 live births.

Adolescent fertility rate : Adolescent fertility rate is the number of births per 1,000 women ages 15-19.

Labour force participation rate : Proportion of a countrys working-age population (ages 15 and older) that engages in the labour market, either by working or actively looking for work, expressed as a percentage of the working-age population.

Homicide rate : No. of homicide victims aged 0 to 19 years per 100,000 popln.

Any violent discipline : Percentage in age 2 to 14 years who experienced any violent discipline(psychological aggression and/or physical punishment) in the past month.

Physical punishment : Percentage in age 2 to 14 years who experienced physical punishment in the past month.

Psychological aggression : Percentage in age 2 to 14 years who experienced psychological aggression in the past month.

Bullying : Percentage of adolescents aged 13 to 15 years who reported being bullied at least once in the past couple of months.

Physical fights : Percentage of adolescents aged 13 to 15 years who reported being in a physical fight one or more times during the past 12 months.

Physical attacks : Percentage of students aged 13 to 15 years who reported being physically attacked one or more times in the past 12 months.

Experience of physical violence since age 15 : Percentage of girls and boys aged 15 to 19 years who experienced any physical violence since age 15.

Lifetime experience of sexual violence : Percentage of girls and boys aged 15 to 19 years who ever experienced forced sexual intercourse or any other forced sexual acts

Intimate partner violence : Percentage of ever-married girls and boys aged 15 to 19 years who ever experienced any physical, sexual or emotional violence committed by their spouses or partners.

Attitudes towards wife-beating : Percentage of girls and boys aged 15 to 19 years who think that a husband/partner is justified in hitting or beating his wife/partner

Attitudes towards physical punishment : Percentage of adults who think that physical punishment is necessary to raise/educate children.

Table 12: Summary statistics for states data

Statistic	N	Mean	St. Dev.	Min	Max
Net State Domestic Product per capita 2011(2005 INR)	32	45,359.4	24,067.4	12,089.8	110,306.0
Population (2011)	32	37,809,942.0	45,197,156.0	380,581	199,812,336
Sex ratio (Women per 1000 men)	32	945.5	53.1	818	1,084
Literacy rate (percent)	32	77.2	8.5	61.8	94.0
Female literacy rate (percent)	32	70.3	10.9	51.5	92.1
Male literacy rate (percent)	32	83.8	6.6	71.2	96.1
Labour force participation (per 1000)	32	360.6	35.5	272	428
Female labour force participation (per 1000)	32	155.0	52.7	56	298
Male labour force participation (per 1000)	32	550.7	46.0	454	612
Public health expenditure per capita (2010 INR)	32	898.5	807.5	161.2	3,535.2
Net State Domestic Product per capita 2010 (2005 INR)	32	42,356.2	22,510.4	10,635.2	97,525.0
Public education expenditure per capita (2010 INR)	32	636.3	754.5	81.4	3,242.3
Police expenditure per capita (2010 INR)	32	779.4	706.3	42.3	3,006.1
Kidnappings, murders, rapes against 14-18 year olds	27	364.2	447.9	7	1,434
Population 15 - 19 years	27	4,413,503.0	4,961,767.0	66,937	23,040,380
Total kidnappings, murders, rapes	32	2,975.4	3,110.6	42	12,342
Crime rate per 100,000 (14-18)	27	85.1	33.8	46.9	201.9
Crime rate per 100,000	32	9.5	4.8	3.9	27.7

Table 13: Indian states regression

	<i>Dependent variable:</i>	
	crime_rate	crime_rate_14_18
	Crime rate	Crime rate 14-18 year olds
	(1)	(2)
Net State Domestic Product per capita 2010 (2005 INR)	−0.00004 (0.0001)	0.00004 (0.0001)
Sex ratio (Women per 1000 men)	−0.016 (0.024)	−0.028 (0.043)
Female literacy rate (percent)	0.281 (0.266)	0.027 (0.329)
Male literacy rate (percent)	−0.242 (0.362)	0.335 (0.424)
Female labour force participation (per 1000)	−0.036 (0.028)	0.009 (0.035)
Male labour force participation (per 1000)	−0.009 (0.031)	−0.096** (0.039)
Public health expenditure per capita (2010 INR)	−0.00001 (0.004)	0.010 (0.006)
Public education expenditure per capita (2010 INR)	0.001 (0.004)	−0.003 (0.005)
Police expenditure per capita (2010 INR)	0.001 (0.002)	−0.007* (0.003)
Constant	36.375 (28.497)	55.797 (45.654)
Observations	32	27
R ²	0.230	0.438
Adjusted R ²	−0.085	0.140
Residual Std. Error	5.040 (df = 22)	5.715 (df = 17)
F Statistic	0.729 (df = 9; 22)	1.472 (df = 9; 17)

Note:

*p<0.1; **p<0.05; ***p<0.01