

Appendix A. Data sources, definitions and descriptive statistics

The QSSMEB survey covered both on secondary teachers and students in rural Bangladesh. The primary objective of the survey was to address the quality of education in public-aided secondary schools and madrasahs. We randomly selected 48 Unions from 12 districts (World Bank 2010). We surveyed all secondary educational institutions in each sample Union,ⁱ which gathered detailed information on all teachers and students of grade 8. All head teachers were interviewed about dress code and classroom organization of students as well as physical facilities at schools. The enumerators also collected self-reported household information from tested children enrolled in grade 8. Most importantly, socio-economic attitudes of pupils and teachers were collected using a set of questions adopted from the World Values Survey (WVS)ⁱⁱ. In total, data on 403 secondary educational institutions were collected. To our knowledge, this is the largest quantitative survey that provides nationally spread out data on Islamic schools in Bangladesh.

The QSSMEB data is ideal for our purpose as it covered non-religious secondary schools as well as recognized and unrecognized madrasahs -- 35% of our sample respondents report being in madrasahs (27% in recognized and 8% in traditional) and 65% of recognized madrasah students are girls against 24% in traditional madrasahs. Seventy-four per cent of our sampled unrecognized madrasahs is all male while only 9.5% are coeducationalⁱⁱⁱ. In contrast, 80% of our sampled recognized madrasahs is coeducational. Similarly, 83% of our sample schools is coeducational. This composition of our sample presents a unique institutional setting where students are exposed to three different educational regimes that differ in terms of intensity of religious education, teacher background as well as gender-norms in schools.

Table A1: Summary statistics

Variables	All students		Non-madrasah sample		Madrasah sample			
	Mean	Std. Dev.	Mean	Std. Dev.	Recognized		Traditional	
	Mean	Std. Dev.	Mean	Std. Dev.	Mean	Std. Dev.	Mean	Std. Dev.
School type attended								
Recognized secondary madrasah	0.27	0.44						
Unrecognized secondary madrasah	0.08	0.27						
Child attributes								
Child age	13.35	1.42	13.05	0.96	13.35	1.16	15.94	2.50
Female	0.59	0.49	0.61	0.49	0.65	0.48	0.24	0.43
Student upset	0.24	0.43	0.25	0.43	0.23	0.42	0.25	0.43
Family background								
Mother's edu: grade 5 completed	0.19	0.39	0.19	0.39	0.20	0.40	0.17	0.38
Mother's edu: grades 6-9 completed	0.17	0.37	0.17	0.37	0.17	0.37	0.17	0.37
Mother's edu: grades 10 completed	0.13	0.33	0.13	0.34	0.12	0.32	0.09	0.29
Mother's edu: grade 10+ completed	0.06	0.24	0.07	0.26	0.04	0.19	0.04	0.19
Father's edu: grade 5 completed	0.12	0.32	0.12	0.32	0.13	0.33	0.09	0.29
Father's edu: grades 6-9 completed	0.17	0.37	0.17	0.38	0.17	0.37	0.18	0.38
Father's edu: grades 10 completed	0.16	0.36	0.16	0.36	0.16	0.37	0.14	0.35
Father's edu: grade 10+ completed	0.18	0.38	0.19	0.39	0.14	0.35	0.21	0.41
Newspaper-magazine at home	0.39	0.49	0.39	0.49	0.33	0.47	0.54	0.50
Asset index	0.01	1.00	0.10	1.02	-0.13	0.94	-0.30	0.88
Teacher characteristics								
Proportion of female teachers	0.15	0.14	0.18	0.12	0.09	0.12	0.11	0.23
Mean teacher experience	13.90	5.23	14.48	4.94	12.89	5.23	12.53	6.63
Proportion of trained teachers	0.54	0.32	0.70	0.25	0.25	0.18	0.21	0.32
Proportion of teachers with religious education	0.25	0.26	0.08	0.05	0.52	0.13	0.73	0.17
Proportion of non-Muslim teachers	0.12	0.15	0.18	0.16	0.01	0.04	0.00	0.04
Mean family size	1.97	1.59	1.98	1.49	1.81	1.68	2.45	2.02
District								

Barisal	0.08	0.27	0.07	0.26	0.08	0.28	0.14	0.34
Bogra	0.07	0.26	0.07	0.26	0.07	0.25	0.08	0.27
Chandpur	0.11	0.31	0.11	0.32	0.12	0.32	0.01	0.10
Chittagong	0.08	0.27	0.06	0.24	0.07	0.26	0.26	0.44
Comilla	0.15	0.36	0.17	0.38	0.13	0.33	0.08	0.27
Faridpur	0.07	0.25	0.07	0.25	0.06	0.25	0.08	0.27
Jessore	0.12	0.32	0.13	0.33	0.11	0.32	0.04	0.20
Kurigram	0.06	0.24	0.06	0.24	0.08	0.27	0.02	0.15
Laksmipur	0.11	0.31	0.11	0.31	0.11	0.31	0.05	0.22
Mymensing	0.06	0.24	0.06	0.23	0.07	0.25	0.08	0.27
N	8604		5642		2305		657	

Table A1 presents the summary statistics based on the working sample that we use for our main empirical analysis. Since we are interested in attitudes towards gender equality, it is also important to understand the gender orientation of the institutional environment across secondary schools and madrasahs. A hallmark of madrasahs in Bangladesh and elsewhere is the visible focus on religious symbolism. These Islamic schools implement strict dress codes along an orthodox Islamic style and impose restrictions on female mobility in and outside school.

Table A2: Gender norms in dress codes by school type

	Female Dress				
	No dress code	<i>Salwar & kameez</i>	Head cover only	<i>Niqab</i>	<i>Burqa</i>
Non-religious schools (N=199)	0.11	0.87	0.38	0.04	0.01
Recognized madrasah (N=123)	0.15	0.30	0.35	0.13	0.69
Unrecognized madrasah (N=19)	0.00	0.32	0.32	0.21	1.00
	Male Dress Code				
	No dress code	Turban/ <i>Topi</i>	<i>Panjabi/Alkhella</i>	Pajama/ <i>Lungi</i>	Trouser & shirt
Non-religious schools (N=175)	0.11	0.02	0.00	0.00	0.89
Recognized madrasah (N=103)	0.29	0.57	0.80	0.29	0.02
Unrecognized madrasah (N=72)	0.11	0.63	0.82	0.31	0.02

Note: (a) 63 (62) are only girls (boys) schools; these are discarded when examining data on dress code for boys (girls). (b) Figures correspond to multiple responses to the question: “Is there any uniform for boy (girl) students of this school/madrasah?” and hence row figures don’t add up to 1. (c) *Salwar* and *kameez* refers to a type of suit, typically worn by South Asian women, with loose trousers and a long shirt. *Niqab* is a piece of cloth covering the whole face except the eyes. *Burqa* is a long, loose robe covering the whole body from head to feet. (d) Turban refers to head covering for men while *Topi* is a religious cap. (e) *Panjabi*, also known as *kurta* in India and Pakistan, is a collarless long shirt while *Alkhalla* is worn as a long frock extending to below the knees. Both are popular upper garments for Muslim men. *Lungi* is lower garment for men, worn as a skirt in Bangladesh and neighboring West Bengal province of India.

Table A2 reports data on female dress-codes in sample schools. First note that there is not a single unrecognized madrasah (out of 19 coeducational or girls-only) without a dress code on female students. On the other hand, their recognized counterparts appear to practice a slightly more liberal regime - 15% of them do not have any official dress code for their female students. The same pattern prevails when we look at the nature of the required attire female students are officially expected to wear. In all unrecognized madrasahs, girls are required to wear *Burqa* (compared to 69% of recognized madrasahs). Similarly, the incidence of *Niqab* is most common in unrecognized madrasahs: 21% of these madrasahs implement this as a dress code compared to only 10% recognized madrasahs. However, when compared to boys, girls are subject to much stricter dress code (see Table A2). First, 29% of recognized

madrasahs do not have any official dress code for male students. Second, in 82% unrecognized madrasahs, boys are required to wear ‘Panjabi’ (long Islamic dress covering full body) compared to the requirement of *Burqa* for girls in all unrecognized madrasahs.

We additionally asked head teachers to comment on any official policies relating to the practice of ‘purdah’ inside the madrasah/school compound. ‘Purdah’ can range from strict segregation of the sexes to wearing a loose scarf around one’s head when out in public. Once again, unrecognized madrasahs appear to strictly implement the policy of ‘purdah’ irrespective of whether it is outside or inside the classroom. But so do state-regulated madrasahs: 85% of recognized madrasahs require female students to practice ‘purdah’ inside the classroom compared to 95% of unrecognized students.

ⁱ There are 7 administrative divisions and 64 districts in total in Bangladesh with Dhaka being the capital district. Each district comprises of several sub-districts (also known as Upazilas) while each sub-district comprise of several Unions. In other words, Unions are the smallest rural administrative and local government units in the country. One Union usually contains 9-10 villages. It is noteworthy to mention that in the rare event when institutions attended by children were outside our original sample Union, we also covered those secondary schools and madrasahs located in neighbouring Unions.

ⁱⁱ The QSSMEB study also included a household module. However, given our focus on matched teacher-student attitudinal data, we do not use the household survey data in this paper.

ⁱⁱⁱ In all of our coeducational unrecognized madrasahs, however, boys and girls had separate classroom.