

Supplementary Materials 3. Descriptive responses for each sample for hypothesised correlates

	Khulna Pilot, Bangladesh % (n)	Khulna Cohort, Bangladesh % (n)	Soroti, Uganda % (n)
n	313	891	538
Missed school due to last menstrual period	44.9 (137)	36.9 (321)	31.1 (161)
Experienced difficulty participating in class due to last menstrual period	47.5 (135)	45.8 (385)	-
Felt very confident managing menstruation at home	30.6 (96)	26.0 (232)	Felt confident 80.5 (432)
Felt confident managing menstruation at school	66.4 (207)	48.4 (431)	51.6 (277)

Supplementary Materials 3. MPNS-SF and MPNS-R total and sub-scale scores, internal consistency and associations with hypothesised correlates across the three included surveys

KHULNA PILOT	Mean	SD	α	α _{ordinal}	DASS r (p-value) ¹	Did not miss school due to last period OR (95%CI)	Did not experience difficulty participating in class due to last period OR (95%CI)	Very confident managing menstruation at home OR (95%CI)	Confident managing menstruation at school OR (95%CI)
MPNS-36 Total	2.16	0.37	0.86	0.92	-0.34 (p<.001)	1.22 (0.66-2.26)	2.72 (1.37-2.39)	1.13 (0.58-2.16)	3.94 (2.01-7.73)
MPNS-SF Total	2.21	0.39	0.78	0.88	-0.28 (p<.001)	1.07 (0.60-1.90)	2.56 (1.35-4.86)	1.40 (0.75-2.60)	2.91 (1.57-5.39)
(SF) Material and home environment needs (n=313)	2.35	0.54	0.55	0.67	-0.25 (p=.001)	1.50 (0.98-2.28)	1.94 (1.21-3.13)	1.49 (0.93-2.37)	2.62 (1.66-4.13)
(SF) Change and disposal Insecurity (n=313)	2.56	0.54	0.82	0.88	-0.33 (p<.001)	1.24 (0.81-1.88)	1.35 (0.87-2.10)	1.02 (0.65-1.60)	1.43 (0.93-2.18)
(SF) Material reliability concerns (n=313)	2.31	0.57	0.33	0.46	-0.26 (p<.001)	1.12 (0.76-1.67)	1.87 (1.22-2.87)	1.31 (0.85-2.02)	1.56 (1.03-2.35)
(SF) School environment needs (n=272)	0.83	0.92	0.65	0.77	0.14 (0.086)	0.86 (0.66-1.12)	1.31 (1.00-1.71)	1.26 (0.96-1.65)	1.17 (0.87-1.56)
(SF) Reuse needs (n=68)	2.68	0.58	0.81	0.90	- n=33			0.61 (0.25-1.50)	
(SF) Reuse insecurity (n=68)	2.27	0.76	0.77	0.84	- n=33			1.63 (0.66-4.00)	
MPNS-R Total	2.14	0.45	0.59	0.74	-0.32 (p<.001)	1.09 (0.66-1.83)	2.36 (1.33-4.19)	1.26 (0.73-2.16)	2.32 (1.35-3.98)

KHULNA COHORT	Mean	SD	α	α _{ordinal}	DASS r (p-value)‡	Did not miss school due to last period OR (95%CI)	Did not experience difficulty participating in class due to last period OR (95%CI)	Very confident managing menstruation at home OR (95%CI)	Confident managing menstruation at school OR (95%CI)
MPNS-SF Total	2.08	0.44	0.78	0.87	-0.36 (p<.001)	1.88 (1.37-2.57)	4.80 (3.36-6.86)	2.40 (1.66-3.47)	1.58 (1.17-2.14)
(SF) Material and home environment needs (n=891)	2.28	0.54	0.59	0.71	-0.21 (p<.001)	1.47 (1.14-1.89)	2.06 (1.58-2.69)	2.08 (1.53-2.83)	1.09 (0.85-1.39)
(SF) Change and disposal Insecurity (n=890)	2.34	0.74	0.78	0.86	-0.35 (p<.001)	1.51 (1.25-1.81)	1.70 (1.40-2.07)	1.17 (0.95-1.44)	1.09 (0.91-1.30)
(SF) Material reliability concerns (n=891)	2.01	0.77	0.43	0.54	-0.25 (p<.001)	1.37 (1.15-1.64)	1.86 (1.54-2.24)	1.21 (0.99-1.47)	1.24 (1.04-1.47)
(SF) School environment needs (n=780)	0.86	0.86	0.51	0.64	-0.08 (p=0.023)	1.16 (0.97-1.38)	1.50 (1.26-1.79)	1.42 (1.19-1.70)	1.66 (1.39-1.97)
(SF) Reuse needs (n=365)	2.55	0.64	0.60	0.80	-0.23 (p<.001)	1.42 (1.00-2.00)	2.27 (1.57-3.29)	2.04 (1.24-3.37)	1.24 (0.89-1.73)
(SF) Reuse insecurity (n=365)	2.09	0.88	0.59	0.72	-0.29 (p<.001)	1.15 (0.90-1.46)	2.19 (1.67-2.87)	1.24-0.92-1.68)	1.15 (0.90-1.46)
MPNS-R Total	1.99	0.49	0.60	0.72	-0.32 (p<.001)	1.77 (1.33-2.36)	3.65 (2.65-2.01)	2.36 (1.68-3.30)	1.54 (1.17-2.03)
SOROTI STUDY	Mean	SD	α	α_{ordinal}	DASS r (p-value)‡	Did not miss school due to last period OR (95%CI)	--	Confident managing menstruation at home OR (95%CI)	Confident managing menstruation at school OR (95%CI)
MPNS-36 Total ²	1.82	0.37	0.77	0.82	-0.11 (p=.013)	2.62 (1.52-4.50)	-	4.09 (2.52-7.06)	4.22 (2.52-7.06)
MPNS-SF Total	1.79	0.40	0.64	0.72	-0.12 (p=.005)	2.42 (1.48-3.97)		3.09 (1.75-5.45)	4.02 (2.50-6.46)
(SF) Material and home environment needs (n=525)	1.97	0.70	0.60		0.06 (p=.207)	1.11 (0.85-1.46)		2.64 (1.89-3.66)	1.74 (1.34-2.25)
(SF) Change and disposal Insecurity (n=525)	1.89	0.70	0.66		-0.24 (p<.001)	1.69 (1.28-2.24)		0.92 (0.67-1.26)	1.12 (0.88-1.43)
(SF) Material reliability concerns (n=525)	1.75	0.84	0.44		-0.26 (p<.001)	1.44 (1.15-1.81)		1.10 (0.85-1.42)	1.10 (0.90-1.35)
(SF) School environment needs (n=525)	1.36	0.91	0.64		0.13 (p=.003)	1.03 (0.84-1.26)		1.15 (0.91-1.46)	1.81 (1.47-2.20)
(SF) Reuse needs (n=286)	2.12	0.81	0.59		-0.03 (p=.640)	1.71 (1.25-2.34)		1.88 (1.31-2.38)	1.67 (1.23-2.27)
(SF) Reuse insecurity (n=285)	1.77	0.80	0.29		-0.20 (p<.001)	1.32 (0.96-1.82)		1.38 (0.95-1.99)	0.99 (0.74-1.32)
MPNS-R Total	1.79	0.47	0.43	0.48	-0.04 (p=.310)	1.48 (0.98-2.22)		2.27 (1.41-3.65)	3.46 (2.31-5.19)

¹ Khulna Pilot: Only half of the sample was administered the DASS, associations presented here are for this half of the sample (n=164 of 313 menstruating girls) | Khulna Cohort and Soroti data. ² Findings from the original study report³, provided here for ease of comparison