Table S1. Odds ratios for females from multilevel mixed effects logistic regression models estimating the association between student reports of violence and self-reported absenteeism (ever missed a day of school this year), Malawi Schooling and Adolescent Study, 2007-2011 (n = 59 schools; 869 female students at baseline).

Demographic & SES variables	Bivariate		Model 1		Model 2		Model 3		Model 4		Model 5		Model 6	
By type of school violence														
Physical violence	1.04		0.93		0.89		0.90		0.89		0.88		0.85	
Sexual harassment	1.02		1.07		1.09		1.08		1.08		1.06		1.17	
Sexual violence	1.08		1.04		1.06		1.05		1.06		1.02		1.03	
Domestic violence in the last month	1.12				1.09		1.11		1.12		1.15		1.13	
Age at baseline (ref = 14)														
15	1.36	+					1.41	+	1.42	+	1.39	+	1.37	+
16	1.25						1.35		1.33		1.19		1.06	
17	1.78	+					2.45	*	2.45	*	2.24	*	1.93	
Ethnic group (ref = Chewa)														
Yao	0.91						0.89		0.88		0.85		0.86	
Lomwe	0.88						0.85		0.85		0.85		0.90	
Ngoni	0.80						0.76		0.75		0.79		0.86	
Other	0.95						1.18		1.21		1.19		1.26	
Orphan status(ref = both parents living)														
Father deceased	0.98								1.04		0.99		0.96	
Mother deceased	1.32								1.38		1.45		1.45	
Both parents deceased	0.83								0.78		0.85		0.95	
Time since first menses	0.94								1.02		1.04		1.05	
Work last 12 months (ref = no)	1.47	*									1.23		1.22	
Mother compl. Prim. (ref = no)	0.45	***									0.50	**	0.47	***
Father compl. Prim. (ref = no)	0.79										1.09		1.18	
Household wealth	0.90	***									0.93	**	0.93	**
Late entry to school (ref = no)	1.51	*											1.42	†
Early repetition (ref = none)														
Once	1.60	*											1.73	**
More than once	1.32												1.36	
Chichewa reading comprehension	0.65	**											0.79	†
Constant			5.38	***	5.09	***	4.38	***	4.18	***	6.31	***	4.73	***
Log likelihood			-1024.21		-990.64		-985.93		-984.67		-971.62		-948.94	

[†] p < 0.10; * p < 0.05; ** p < 0.01; ***p < 0.001. Absenteeism and violence are measured in the same round. Variables in italics are time-varying. In addition to the variables listed in the table, all models control for round of data collection and time (in days) since the first interview was conducted in that round.

Table S2. Odds ratios for males from multilevel mixed effects logistic regression models estimating the association between student reports of violence and self-reported absenteeism (ever missed a day of school this year), Malawi Schooling and Adolescent Study, 2007-2011 (n = 59 schools; 884 male students at baseline).

Demographic & SES variables	Bivariate		Model 1		Model 2		Model 3		Model 4		Model 5		Model 6	
By type of school violence														
Physical violence	0.98		0.90		0.91		0.91		0.91		0.93		0.94	
Sexual harassment	0.94		0.92		0.88		0.88		0.87		0.86		0.86	
Sexual violence	1.49	*	1.57	*	1.54	*	1.54	*	1.55	*	1.54	*	1.56	*
Domestic violence in the last month	1.17				1.15		1.15		1.15		1.13		1.17	
Age at baseline (ref = 14)														
15	1.03						1.05		1.03		1.02		1.01	
16	1.03						1.05		1.00		0.98		0.97	
17	0.85						0.85		0.77		0.71		0.70	
Ethnic group (ref = Chewa)														
Yao	1.16						1.13		1.12		1.07		1.12	
Lomwe	1.12						1.09		1.09		1.03		1.02	
Ngoni	1.10						1.13		1.14		1.18		1.18	
Other	1.09						1.04		1.01		0.94		0.92	
Orphan status(ref = both parents living)														
Father deceased	1.04								1.10		1.09		1.05	
Mother deceased	1.00								0.99		0.94		0.95	
Both parents deceased	0.82								0.76		0.77		0.73	
Time since entrance to puberty	0.99								1.04		1.03		1.03	
Work last 12 months (ref = no)	2.17	***									2.14		2.18	***
Mother compl. Prim. (ref = no)	0.79										0.94		0.95	
Father compl. Prim. (ref = no)	0.84										0.88		0.90	
Household wealth	0.94	**									0.96		0.96	†
Late entry to school (ref = no)	1.08												1.07	
Early repetition (ref = none)														
Once	1.14												1.31	
More than once	1.24												1.31	
Chichewa reading comprehension	0.84												0.96	
Constant			3.89	***	3.92	***	3.54	***	3.44	***	3.61	***	3.04	***
Log likelihood			-1390.50		-1354.94		-1354.25		-1352.38		-1326.88		-1299.89	

[†] p < 0.10; * p < 0.05; ** p < 0.01; ***p < 0.001. Absenteeism and violence are measured in the same round. Variables in italics are time-varying. In addition to the variables listed in the table, all models control for round of data collection and time (in days) since the first interview was conducted in that round.

Table S3. Odds ratios from multilevel mixed effects logit regression models estimating the association between student reports of violence (in the previous round) and performing equal to or above the median Chichewa reading comprehension score (in the current round), Malawi Schooling and Adolescent Study, 2007-2011 (n = 59 schools; 869 female students at baseline).

	Bivariate		Model 1		Model 2		Model 3		Model 4		Model 5		Model 6	
By type of school violence														
Physical violence	0.64	**	0.73	*	0.77	†	0.77	+	0.76	+	0.75	†	0.83	
Sexual harassment	1.14		1.10		1.07		1.07		1.07		1.07		0.96	
Sexual violence	0.75		0.96		1.09		1.08		1.08		1.08		1.18	
Domestic violence in past month	0.75	*			0.96		0.95		0.94		0.92		0.93	
Age at baseline (ref = 14)														
15	0.79						0.63	*	0.59	*	0.62	*	0.61	*
16	0.91						0.74		0.65		0.71		0.62	+
17	0.59	†					0.34	*	0.28	**	0.30	**	0.25	***
Ethnic group (ref = Chewa)														
Yao	1.19						1.32		1.36		1.42		1.38	
Lomwe	1.89	**					2.09	**	2.05	*	1.96	*	1.36	
Ngoni	2.25	**					2.54	*	2.47	*	2.19	*	1.75	+
Other	1.64	†					1.91	+	1.89		1.81		1.39	
Orphan status (ref = both parents living)														
Father deceased	0.94								0.88		0.91		0.86	
Mother deceased	1.01								0.92		0.92		0.85	
Both parents deceased	2.03	*							2.21	*	2.28	*	1.90	+
Time since first menses	1.23	***							1.11		1.09		1.07	
Work last 12 months (ref = no)	0.79	*									0.78	†	0.80	
Mother compl. Prim. (ref = no)	1.32										0.97		0.85	
Father compl. Prim. (ref = no)	1.73	***									2.09	***	1.75	**
Household wealth	1.05	*									1.02		1.00	
Late entry to school (ref = no)	0.51	***											0.76	
Early repetition (ref = none)														
Once	0.90												0.91	
More than once	0.41	***											0.59	*
Last grade attended	1.71	***											1.68	***
Constant			0.64		0.62		0.57		0.49	*	0.37	**	0.03	
Log likelihood			-1678.93		-1606.64		-1596.75		-1593.04		-1583.51		-1536.59	

[†] p < 0.10; * p < 0.05; ** p < 0.01; ***p < 0.001. Notes: Variables in italics are time-varying and lagged one round, including school and domestic violence measures. Chichewa reading comprehension was measured as a dichotomous variable based on whether students scored equal to/above the median score (5) for all students in all rounds (range = 0-6). All models control for round of data collection.

Table S4. Odds ratios from multilevel mixed effects logit regression models estimating the association between student reports of violence (in the previous round) and performing equal to or above the median Chichewa reading comprehension score (in the current round), Malawi Schooling and Adolescent Study, 2007-2011 (n = 59 schools; 884 male students at baseline).

	Bivariate		Model 1		Model 2		Model 3		Model 4		Model 5		Model 6	
By type of school violence														
Physical violence	0.78	†	1.04		1.14		1.13		1.12		1.12		1.10	
Sexual harassment	1.12		1.10		1.11		1.08		1.07		1.06		0.92	
Sexual violence	0.42	***	0.48	***	0.51	**	0.50	**	0.51	**	0.51	**	0.60	**
Domestic violence in past month	0.59	***			0.79		0.79		0.79		0.80		0.87	
Age at baseline (ref = 14)														
15	1.15						1.01		0.97		0.98		0.83	
16	1.41	†					1.61	*	1.42		1.45		1.02	
17	1.10						0.79		0.66	*	0.68		0.52	+
Ethnic group (ref = Chewa)														
Yao	0.85						0.84		0.85		0.85		1.07	
Lomwe	1.45						1.61	+	1.61	†	1.62	†	1.64	*
Ngoni	1.09						1.09		1.12		1.08		1.26	
Other	1.40						1.43		1.43		1.43		1.39	
Time since puberty	1.31	***							1.11	†	1.12	†	1.06	+
Orphan status(ref = both parents living)														
Father deceased	0.94								0.99		1.00		1.03	
Mother deceased	1.01								0.76		0.76		0.89	
Both parents deceased	2.03	*							1.09		1.09		0.95	
Work last 12 months (ref = no)	0.70	***									0.75	**	0.79	*
Mother compl. Prim. (ref = no)	1.03										1.10		0.90	
Father compl. Prim. (ref = no)	0.97										0.96		0.87	
Household wealth	1.06	**									1.04		1.00	
Late entry to school (ref = no)	0.51	***											0.80	
Early repetition (ref = none)														
Once	0.93												0.74	
More than once	0.46	***											0.52	**
Last grade attended	1.63	***											1.84	***
Constant			0.79		0.78		0.62	+	0.56	*	0.52	*	0.03	***
Log likelihood			-1954.64		-1904.72		-1897.25		-1895.13		-1890.610		-1815.04	

[†] p < 0.10; * p < 0.05; ** p < 0.01; ***p < 0.001. Notes: Variables in italics are time-varying and lagged one round, including school and domestic violence measures. Chichewa reading comprehension was measured as a dichotomous variable based on whether students scored equal to/above the median score (5) for all students in all rounds (range = 0-6). All models control for round of data collection.

Table S5. Hazard ratios for females from Cox proportional hazard models estimating the association between student reports of violence and school dropout, Malawi

Schooling and Adolescent Study, 2007-2011 (n = 869 female students at baseline).

Demographic & SES variables	Bivariate	Model 1	Model 2	Model 3	Model 4	Mo	odel 5	Model 6	
By type of school violence									
Physical violence	1.08	1.07	1.04	1.05	1.05	2	1.05	1.03	
Sexual harassment	1.07	1.06	1.05	1.03	1.03	, -	1.03	1.04	
Sexual violence	1.07	1.02	1.01	0.99	0.98	().96	0.96	
Domestic violence - last month	1.11		1.10	1.14	1.13	<u>.</u>	1.14	† 1.13	
Age at baseline (ref = 14)									
15	1.11			1.16	1.15	†	l.15	† 1.14	
16	1.36			1.36	1.35	**	1.30	* 1.26	*
17	1.33			1.19	1.19	-	l.13	1.08	
Ethnic group (ref = Chewa)									
Yao	1.15			1.09	1.09	<u>:</u>	1.09	1.11	
Lomwe	0.93			0.86	0.87	(0.86	0.90	
Ngoni	1.01			0.97	0.97	().98	1.03	
Other	1.00			1.01	1.02		1.02	1.08	
Orphan status (ref = both parents living)									
Father deceased	1.15	†			1.06	3	L.04	1.04	
Mother deceased	1.04				1.06	3	1.09	1.09	
Both parents deceased	0.92				1.02	3	L.04	1.07	
Time since first menses	1.02				1.01	-	1.01	1.01	
Work last 12 months (ref = no)	1.18					3	1.21	* 1.20	*
Mother compl. Prim. (ref = no)	0.70	**				().78	† 0.79	+
Father compl. Prim. (ref = no)	0.88	†				-	1.05	1.07	
Household wealth	0.95	**				().97	* 0.97	*
Late entry to school (ref = no)	1.28	**						1.17	+
Early repetition (ref = none)									
Once	0.93							0.93	
More than once	1.12							1.08	
Chichewa reading comprehension	0.82	**						0.91	
Log pseudolikelihood		-3589.18	-3426.94	-3421.42	-3421.20	-34	15.35	-3398.94	
LR chi2 (p-value)		0.75	0.54	0.006	0.011	<0	.0001	0.0002	

[†] p < 0.10; * p < 0.05; ** p < 0.01; ***p < 0.001. *Notes:* Variables in italics are time-varying and lagged one round, including the violence variables. In addition to the variables listed in the table, all models control for round of data collection and time (in days) since the first interview was conducted in that round.

Table S6. Hazard ratios for males from Cox proportional hazard models estimating the association between student reports of violence and school dropout, Malawi Schooling and Adolescent Study, 2007-2011 (n = 884 male students at baseline).

Demographic & SES variables	Bivariate		Model 1		Model 2		Model 3		Model 4		Model 5		Model 6	
By type of school violence														
Physical violence	0.86		0.86		0.87		0.87		0.87		0.89		0.89	
Sexual harassment	0.83	†	0.90		0.89		0.86	†	0.86	†	0.88		0.90	
Sexual violence	1.41	*	1.79	***	1.72	***	1.70	***	1.72	***	1.65	**	1.53	**
Domestic violence - last month	1.06				1.06		1.08		1.07		1.04		1.03	
Age at baseline (ref = 14)														
15	1.52	**					1.45	*	1.46	*	1.44	*	1.42	*
16	2.18	***					2.00	***	1.98	***	1.91	***	1.97	***
17	2.10	***					2.06	**	2.04	**	1.84	**	1.82	**
Ethnic group (ref = Chewa)														
Yao	1.19						1.15		1.16		1.13		1.10	
Lomwe	0.99						0.99		0.99		0.97		0.98	
Ngoni	1.00						1.13		1.13		1.19		1.20	
Other	0.84						0.84		0.83		0.78		0.78	
Orphan status (ref = both parents living)														
Father deceased	1.31	*							1.26	*	1.24	*	1.22	*
Mother deceased	1.26								1.27		1.28		1.27	
Both parents deceased	1.13								0.95		1.04		1.06	
Time since entrance to puberty	1.04	†							1.00		1.00		1.01	
Work last 12 months (ref = no)	1.94	***									1.93	***	1.93	***
Mother compl. Prim. (ref = no)	0.61	**									0.75		0.76	
Father compl. Prim. (ref = no)	0.68	***									0.81	†	0.81	†
Household wealth	0.91	***									0.95	**	0.95	**
Late entry to school (ref = no)	1.28	**											1.02	
Early repetition (ref = none)														
Once	0.78	*											0.89	
More than once	1.03												0.93	
Chichewa reading comprehension	0.60	***											0.66	***

Log pseudolikelihood	 -2293.73	-2247.93	-2234.11	-2232.02	-2205.01	-2183.78
LR chi2	 0.001	0.003	<0.0001	<0.0001	<0.0001	<0.0001

[†] p < 0.10; * p < 0.05; ** p < 0.01; ***p < 0.001. *Notes:* Variables in italics are time-varying and lagged one round, including the violence variables. In addition to the variables listed in the table, all models control for round of data collection and time (in days) since the first interview was conducted in that round.