SACMEQ Gender Series Contribution #1
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Violence in Primary Schools in Southern and Eastern Africa: Some Evidence from SACMEQ[1]

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Introduction

When reflecting on the concept of quality of education, school climate is often considered as an important condition for pupil's well-being. Pigozzi (2006) stated that the safety and the security of the learning environment are crucial elements for the dynamic concept of the quality education. Following this idea, pupils might find it difficult to attend classes, concentrate on the school subjects, and reach their full potential in an environment where they feel unsafe, insecure or intimidated.

However, school violence seems to be a concept framed in multiple dimensions. Rabrenovic et al (2004) mentioned that school violence involves criminal acts and aggression in schools that may harm school's climate as well as students' development and learning. Other education specialists (Klein, 2006; Leach, 2003; Bokova, 2011; Kameri-Mbote, 2000) insisted on the importance of including distinguishable categories, such as: physical injury, sexual harassment, verbal aggression, psychological cruelty, bullying, and economic oppression. However, Brown et al (2008) considered 'bullying' as more serious behaviour than 'violence' since the former is associated with a systematic and repetitive behaviour and characterized by an imbalance of power while the latter is associated with fighting and physical abuse that may not be related to the imbalance of power.

Special attention was given to the issues related to school violence in the studies conducted by a consortium known as Southern and Eastern Africa Consortium for Monitoring Educational Quality (SACMEQ). These issues were included in the form of research questions which sought information on pupils' and teachers' behavioural problems at the primary school level. SACMEQ has conducted three large-scale surveys in 1995, 2000, and 2007, and the fourth survey is to be carried out in 2013. In all studies the target population has been the Grade 6 pupils registered in government or non-government schools in 15 Ministries[3] of Education in the African region. The sample was drawn using a two-stage cluster sampling based on a probability proportional to the size of the schools (PPS sampling) with a sampling accuracy which is equivalent to a simple random sample of 400 pupils for each country. A total sample of some 41,000 and 61,000 Grade 6 pupils participated in SACMEQ II in 2000 and SACMEQ III in 2007 respectively (Ross & Saito, in press).

[1] This article is based on the presentation made by the author during the UNESCO Workshop on Preventing Violence Against Women – Linking Research and Policy at UNESCO, Paris, on 24 November 2011.

[2] The author thanks Southern and Eastern Africa Consortium for Monitoring Educational Quality (SACMEQ) and its participating Ministries of Education for granting the use of data.

[3] These Ministries are Botswana, Kenya, Lesotho, Malawi, Mauritius, Mozambique, Namibia, Seychelles, South Africa, Swaziland, Tanzania (Mainland), Tanzania (Zanzibar), Uganda, Zambia, and Zimbabwe.

Research Questions

The paper will address the following three research questions:

(1) What were the changes in the perceived occurrence of school violence in SACMEQ school systems between 2000 and 2007?
(2) What were the differences in 'school violence composite scores' by the sex of school heads, by school location, by school type, and by school resource level within countries in 2007?
(3) What were the gender differences in absenteeism and learning achievement in SACMEQ school systems with low and high perceived occurrence of school violence in 2007?

Limitations

It should be noted that within the SACMEQ studies school violence has been measured following the 'perception' of School Heads. This means that School Heads' perceptions are not – and should not be considered as – the direct measure of the occurrence of school violence. In addition, SACMEQ questionnaires did not gather information about the sex of the victims or the offenders, which does not enable researchers to determine any incident as 'gender-based' school violence. The variables that were used in order to construct a composite variable on school violence index were: sexual harassment (pupil to pupil, pupil to teacher, teacher to teacher, teacher to pupil), bullying (pupil to pupil, pupil to staff, teacher to pupil), injuring staff, fights, vandalism, classroom disturbance, theft, and abusive language (by pupils and by teachers). Similarly, it is important to note that although school-level variables are used, the reported means and percentages need to be interpreted at a pupil level because that is the unit of analysis used in the SACMEQ data archive. Finally, an attempt is made to observe: (i) the relationship between different school categories and school violence index, (ii) the relationship between the school violence index and pupils' attendance, and (iii) the relationship between the school violence index and pupils' learning achievement. However, there is no intention of drawing a cause and effect presumption.

Results

Research question (1): What were the changes in the perceived occurrence of school violence in SACMEQ school systems between 2000 and 2007?

The data on the perceptions of School Heads about the occurrence of pupils' and teachers' problems were collected through a series of multiple-choice questions about how often the school has to deal with the given problems with three options: (i) never, (ii) sometimes, and (iii) often. The reported percentages in **Tables 1 and 2** are the percentages of Grade 6 pupils who were in schools where School Heads thought that the school has to deal with the problems sometimes or often. If the occurrence increased between two time points, a red triangle ▲ (statistically significant increase at 95% confidence level) or a pink triangle ▲ (reasonable increase at 90% confidence level) is used, while a dark green triangle ▲ (statistically significant) or a light green triangle ▲ (reasonable) is used if the occurrence was decreased. A grey side triangle ▶ is used if the change was marginal.

Table 1: Changes in the Perception of School Heads on the Occurrence of Sexual Harassment and Bullying in SACMEQ, 2000 and 2007

	Pupils Harass Pupils			Pupils Harass Teachers			Teachers Harass Teachers			Teachers Harass Pupils			Pupils Bully Pupils			Pupils Bully Staff			Teachers Bully Pupils		
	2000	2007		2000	2007		2000	2007		2000	2007		2000	2007		2000	2007		2000	2007	
Botswana	15	28	▲	0	3	▲	0	4	▲	1	4	▶	90	93	▶	27	36	▶	34	31	▶
Kenya	17	49	▲	4	8	▶	0	7	▲	5	12	▲	52	74	▲	21	33	▲	15	29	▲
Lesotho	12	23	▲	3	4	▶	3	4	▶	4	7	▶	84	78	▶	31	29	▶	26	35	▶
Malawi	36	42	▶	7	12	▶	7	14	▶	16	17	▶	66	71	▶	50	55	▶	33	37	▶
Mauritius	9	15	▶	0	2	▶	0	1	▶	0	3	▲	81	90	▲	23	23	▶	23	22	▶
Mozambique	22	20	▶	12	6	▶	3	0	▼	11	8	▶	63	52	▶	25	16	▼	12	19	▶
Namibia	36	38	▶	5	6	▶	2	8	▲	7	10	▶	73	87	▲	39	47	▶	26	38	▲
Seychelles	49	62	▲	5	0	▼	0	0	▶	0	0	▶	97	100	▲	56	63	▲	60	76	▲
South Africa	25	40	▲	6	5	▶	4	5	▶	4	5	▶	91	93	▶	33	45	▲	33	37	▶
Swaziland	34	39	▶	8	6	▶	4	9	▲	4	11	▲	79	87	▶	31	37	▶	35	32	▶
Tanzania	50	38	▼	22	20	▶	15	17	▶	18	19	▶	75	70	▶	44	39	▶	25	32	▶
Uganda	41	58	▲	19	30	▲	18	31	▲	17	37	▲	62	73	▲	48	65	▲	32	47	▲
Zambia	35	48	▲	14	12	▶	6	13	▶	11	20	▲	81	86	▶	39	51	▶	37	38	▶
Zanzibar	47	NA	XX	14	NA	XX	8	NA	XX	8	NA	XX	72	NA	XX	47	NA	XX	32	NA	XX
Zimbabwe	NA	42	XX	NA	12	XX	NA	19	XX	NA	19	XX	NA	94	XX	NA	37	XX	NA	53	XX
SACMEQ	29	NA	XX	8	NA	XX	5	NA	XX	7	NA	XX	75	NA	XX	35	NA	XX	29	NA	XX

Note 1: Zanzibar's results in 2007 cannot be reported in comparison due to a technical problem in Kiswahili translation. Consequently, the overall SACMEQ percentage cannot be calculated for 2007.
Note 2: Zimbabwe did not participate in the 2000 study.
Source: The table was constructed by the author based on the SACMEQ archive (2007).

The results in **Table 1** indicate that out of different forms of sexual harassment, the one between pupils is perceived to be very common by the School Heads, and a significant increase since 2000 was seen in seven SACMEQ school systems. Perceptions on all forms of bullying recorded relatively high percentages for all SACMEQ school systems. In terms of the perception on bullying between pupils, the percentages were extremely high with many countries reaching 80 percent or over, and a large increase was seen in five school systems. In Kenya and Uganda, a considerable increase was reported in the perception on all forms of sexual harassment and bullying since 2000. In Tanzania, although there was no increase, bullying occurrences among pupils have been perceived to be considerably high reaching 70 percent or over in both years.

Out of the other types of violence shown in **Table 2**, perceptions on pupil fights, vandalism, classroom disturbance, theft, and pupils' use of abusive language recorded very high percentages in all SACMEQ school systems, with most of them having little change since 2000, indicating that these problems were already perceived to be serious problems in 2000. Kenya, Seychelles, and Uganda had major increases in almost all of the domains between 2000 and 2007.

Table 2: Changes in the Perception of School Heads on the Occurrence of Other Types of Violence in SACMEQ, 2000 and 2007

	Pupils Injure Staff			Pupil Fights			Pupil Vandalism			Classroom Disturbance			Pupil Theft			Pupils Use Abusive Language			Teachers Use Abusive Language		
	2000	2007		2000	2007		2000	2007		2000	2007		2000	2007		2000	2007		2000	2007	
Botswana	3	8	▶	97	98	▶	58	67	▶	55	72	▲	88	85	▶	92	95	▶	33	37	▶
Kenya	2	8	▲	82	92	▲	50	58	▶	55	76	▲	77	90	▲	66	86	▲	25	47	▲
Lesotho	3	11	▲	96	92	▶	65	65	▶	77	76	▶	88	81	▶	88	75	▼	33	36	▶
Malawi	12	15	▶	94	94	▶	41	50	▶	69	78	▲	77	79	▶	77	81	▶	38	40	▶
Mauritius	3	4	▶	89	94	▶	41	55	▲	84	93	▲	64	76	▲	80	86	▶	18	20	▶
Mozambique	6	8	▶	71	76	▶	30	29	▶	48	43	▶	50	43	▶	56	54	▶	25	18	▶
Namibia	7	12	▶	92	98	▲	68	80	▲	72	75	▶	66	74	▶	82	89	▲	43	48	▶
Seychelles	10	11	▲	97	100	▲	79	85	▲	97	100	▲	87	87	▼	97	98	▲	22	51	▲
South Africa	8	8	▶	94	97	▶	69	76	▶	59	71	▲	82	86	▶	88	90	▶	31	39	▶
Swaziland	6	11	▶	90	95	▶	50	53	▶	54	55	▶	80	84	▶	75	80	▶	31	37	▶
Tanzania	13	23	▲	79	76	▶	79	73	▶	87	85	▶	79	77	▶	76	74	▶	28	31	▶
Uganda	28	32	▶	86	96	▲	67	81	▲	85	91	▲	85	92	▶	76	90	▲	42	64	▲
Zambia	9	16	▶	91	93	▶	76	79	▶	72	80	▲	76	85	▶	89	92	▶	45	51	▶
Zanzibar	28	NA	XX	85	NA	XX	52	NA	XX	85	NA	XX	66	NA	XX	73	NA	XX	28	NA	XX
Zimbabwe	NA	16	XX	NA	96	XX	NA	65	XX	NA	68	XX	NA	93	XX	NA	93	XX	NA	45	XX
SACMEQ	9	NA	XX	89	NA	XX	59	NA	XX	70	NA	XX	75	NA	XX	79	NA	XX	32	NA	XX

Note 1: Zanzibar's results in 2007 cannot be reported in comparison due to a technical problem in Kiswahili translation. Consequently, the overall SACMEQ percentage cannot be calculated for 2007.
Note 2: Zimbabwe did not participate in the 2000 study.
Source: The table was constructed by the author based on the SACMEQ archive (2007).

In the policy suggestions of SACMEQ III national reports, Kenya and Zanzibar made references to the problems of school violence (see **Appendix A**). It is worth noting that both countries are suggesting to either put a new mechanism or to revise the teacher codes of conduct. Although other countries reported high percentages, these results were not referred to in their policy suggestions for SACMEQ III.

However, cautions need to be taken when interpreting the above results since high percentages could imply the 'openness' of the schools where victims may feel comfortable in reporting any violent incident. In such cases, schools tend to be more gender sensitive through the provision of sound regulations and mechanisms that support victims (Parkes & Heslop, 2011). These management issues may vary from school to school. In a similar way, it is worth noting that an incident that is considered as a normal practice by an individual could be considered as behaviour associated with harassment by another. The next section is focussed on the perception of occurrence of school violence by different categories of schools.

> Research question (2): What were the differences in 'school violence composite scores' by the sex of school heads, by school location, by school type, and by school resource level within countries in 2007?

The options in the above 14 variables were summed to make a 'school violence composite scores' with a value ranging from 14 to 42. The school violence composite scores were then analysed by different categories of schools: by (a) sex of School Heads (male, female), (b) school location (rural, urban), (c) school type (government vs. non-government), and (d) school resource level (low level, high level). The school resource level was based on the School Resource Index (SRI) scores established by Saito (2005; 2007) using the Rasch measurement approach. Comparisons are made between schools belonging to SRI levels 1-3 (insufficient, limited, and basic levels) and schools belonging to SRI levels

4-6 (comfortable, affluent, and prosperous levels). In **Table 3**, the school violence composite scores and the sampling errors have been presented based on these four different categories for each country. It is interesting to observe that within a given country the variation between different sub-sets of schools was very little. However, in terms of school type (see **Table 3** column 3) it is worth noting that in the case of Kenya, Mozambique, Seychelles, South Africa and Zambia, the differences in the mean school violence composite scores were statistically significant ay 95 percent confidence level. Also, five other schools systems (Botswana, Swaziland, Uganda, Zanzibar and Zimbabwe) also showed reasonable differences for this category. In other words, non-government schools in these countries were scoring much lower on the school violence composite scores which might lead researchers to believe that school management practices appear to be more effective in terms of addressing school violence issues. For other school categorizations, fewer SACMEQ school systems recorded statistical significance.

Table 3: School Violence Composite Scores (Minimum=14; Maximum=42) by School Head Sex, School Location, School Type, and School Resource Levels in SACMEQ (2007)

School Systems	School Head					School Location					School Type					School Resource				
	Male SH		Female SH			Rural		Urban			Gov't		Non-Gov't			Low Res		High Res		
	M	SE	M	SE		M	SE	M	SE		M	SE	M	SE		M	SE	M	SE	
Botswana	21.9	.47	22.1	.45		22.4	.52	21.8	.42		22.2	.36	20.7	.78	*	23.0	1.20	21.9	.33	
Kenya	22.2	.49	21.7	.94		22.0	.55	22.4	.73		22.3	.46	19.4	.78	**	22.2	.54	21.9	.75	
Lesotho	21.3	.67	22.0	.52		21.4	.57	22.8	.59	*	22.6	1.08	21.7	.47		21.7	.49	22.1	.88	
Malawi	22.7	.64	21.5	1.10		22.5	.70	22.8	.92		22.6	.70	22.4	1.00		22.6	.59	22.6	1.43	
Mauritius	21.2	.41	20.0	.39	**	20.6	.40	20.9	.44		20.7	.35	20.8	.52		20.4	1.30	20.8	.30	
Mozambique	17.9	.26	18.9	.78	*	17.3	.30	18.7	.39	**	18.2	.28	16.4	.69	**	18.1	.27	18.9	1.17	
Namibia	23.7	.56	21.8	.42	**	22.7	.55	23.1	.44		22.9	.39	22.9	.89		22.9	.77	22.9	.38	
Seychelles	23.6	.00	23.2	.01	**	22.9	.02	23.5	.01	**	23.3	.01	22.0	.00	**	NA	NA	23.3	.01	
South Africa	22.8	.33	22.6	.52		22.3	.47	23.1	.30	*	22.8	.29	20.3	.67	**	22.4	.58	22.9	.31	
Swaziland	22.0	.51	21.9	.83		22.2	.56	21.5	.68		22.8	1.00	21.6	.45	*	22.5	.81	21.6	.50	
Tanzania	22.4	.57	22.9	1.22		22.8	.62	21.8	.91		22.5	.51	NA	NA		22.5	.52	22.9	2.99	
Uganda	27.3	.57	28.5	1.33		27.4	.59	28.0	1.16		27.8	.54	25.5	1.95	*	27.2	.56	29.2	1.52	*
Zambia	23.1	.56	23.6	.84		23.2	.60	23.5	.72		23.5	.49	21.0	1.08	**	23.4	.50	23.0	1.27	
Zanzibar	37.5	.45	37.0	.54		37.2	.55	37.7	.36		37.4	.38	36.7	.21	*	37.5	.40	36.6	1.10	
Zimbabwe	24.2	.74	23.0	1.05		24.7	.82	22.1	.64	**	22.7	.90	24.3	.75	*	24.7	.77	21.5	.60	**

Note 1: Zanzibar's results in 2007 should be used only for the within-country comparison.
Note 2: Statistically significant at 95% confidence level (**) and at 90% confidence level (*)
Source: The table was constructed by the author based on the SACMEQ archive (2007).

Table 4 shows the minimum and maximum scores depending on different school categorizations for each school system. Overall it is possible to say that non-government schools had the lowest school violence composite scores in seven SACMEQ school systems, while the highest school violence composite scores were reported in urban schools in five SACMEQ school systems. In addition, something very curious appears to be taking place in Mauritius and Namibia where the minimum score was obtained in schools headed by female principals and the maximum score was obtained in schools headed by male principals. This appears to suggest that the perceptions of school violence differ depending on the sex of the School Principal who reports on the levels of school violence taking place in his or her school. For some reason that was not revealed in the SACMEQ study, it would appear that in these two countries female School Heads perceive fewer cases of school violence than their male colleagues.

This is an important point that should receive further attention as it seems clear that School Heads' management style and intervention might play an important role in their evaluation of school violence.

Table 4: Maximum and Minimum School Violence Composite Scores for Each Country Based on Different Categories of Schools

	Minimum Score		Maximum Score	
Botswana	20.7	Private schools	23.0	Low resource schools
Kenya	19.4	Private schools	22.4	Urban schools
Lesotho	21.3	Schools headed by male	22.8	Urban schools
Malawi	21.5	Schools headed by female	22.8	Urban schools
Mauritius	20.0	Schools headed by female	21.2	Schools headed by male
Mozambique	16.4	Private schools	18.9	Schools headed by female
Namibia	21.8	Schools headed by female	23.7	Schools headed by male
Seychelles	22.0	Private schools	23.6	Schools headed by male
South Africa	20.3	Private schools	23.1	Urban schools
Swaziland	21.5	Urban schools	22.8	Government schools
Tanzania	21.8	Urban schools	22.9	Schools headed by female
Uganda	25.5	Private schools	29.2	Schools with high resources
Zambia	21.0	Private schools	23.6	Schools headed by female
Zanzibar	36.6	High resource schools	37.7	Urban schools
Zimbabwe	21.5	High resource schools	24.7	Rural schools

Source: The table was constructed by the author based on Table 3.

Research question (3): What were the gender differences in absenteeism and learning achievement in SACMEQ school systems with low and high perceived occurrence of school violence in 2007?

It is generally expected that school environment prone to violence may hamper pupils to concentrate, increase absenteeism and have a negative effect on pupils' performance which can be observed through their lower learning achievement levels. In this section, absent days as well as the learning achievement of SACMEQ Grade 6 boys and girls are compared in relation to the school violence composite scores. Based on the school violence composite scores that were calculated in the previous section, three categories were made to make approximately one-thirds of Grade 6 pupils in each category. This procedure resulted in the following intervals:

- Low: school violence composite scores ranging from 14 to 19
- Moderate: school violence composite scores ranging from 20 to 23
- High: school violence composite scores ranging from 24 to 42

In **Table 5**, the mean scores and the sampling errors for days absent that Grade 6 pupils reported for the previous month of the data collection have been reported for the low and high categories on the perceived school violence. The first observation is that in practically all SACMEQ countries, no matter what the category is, boys were absent more often than girls. In many countries, these differences were statistically significant at 95 percent or 90 percent confidence level. Secondly, contrary to the expectations, the schools in the high category were not necessarily the ones where pupils were absent more often as shown in the negative numbers in the final columns under "High-Low". Finally, in some countries, the gender differences were observed between the low and high categories. For

example, in Mauritius, schools in the low category (column 1) indicated that the mean of boys' absenteeism was higher than that for girls. Also this difference between boys' and girls' mean absenteeism proved to be statistically significant. However, schools in the high category (column 2) indicated that there were no statistically significant differences between boys' and girls' absenteeism. In Mozambique, while both boys and girls were absent less often in the schools in the high category, this difference was more remarkable for boys than for girls. On the other hand, in Uganda, both boys and girls had more absent days in schools in the high category, with more noteworthy difference for boys.

Table 5: Boys' and Girls' Absent Days in a Month Based on Category of Perceived School Violence

Absence	Low violence					High violence					High-Low				
	Boys		Girls			Boys		Girls			Boys		Girls		
	Mean	SE	Mean	SE		Mean	SE	Mean	SE		Diff	SE	Diff	SE	
BOT	.36	.06	.29	.05		.39	.07	.35	.07		.03	0.09	.06	.08	
KEN	1.13	0.13	1.01	0.13		1.55	0.18	1.38	0.25		.42	0.22	.38	.28	
LES	1.81	0.24	1.40	0.15	*	1.37	0.15	1.29	0.13		-.44	0.28	-.11	.20	
MAL	1.83	0.21	1.62	0.18		1.68	0.15	1.33	0.15	*	-.15	0.25	-.29	.23	
MAU	1.89	0.13	1.47	0.12	**	1.88	0.23	1.90	0.28		-.01	0.27	.42	.30	*
MOZ	1.24	0.10	1.01	0.08	*	.77	.14	.86	.23		-.47	0.17	-.15	.24	*
NAM	1.35	0.14	.98	.20	*	1.02	0.09	.78	.09	*	-.34	0.16	-.20	.21	
SEY	1.50	0.28	1.96	0.54		1.61	0.11	1.79	0.12	*	.10	0.30	-.16	.55	
SOU	1.07	0.12	.88	.08	*	1.02	0.09	.87	.08	*	-.05	0.15	-.02	.12	
SWA	.54	.08	.29	.04	**	.42	.06	.28	.06	*	-.12	0.10	.00	.07	
TAN	2.27	0.24	2.11	0.23		2.40	0.22	2.11	0.19	*	.13	0.33	.00	.30	
UGA	1.97	0.22	1.95	0.22		2.65	0.18	2.25	0.11	*	.68	0.29	.30	.24	*
ZAM	1.98	0.22	2.38	0.33	*	2.48	0.21	2.58	0.19		.50	0.30	.20	.38	
ZAN	NA	NA	NA	NA		2.21	0.15	1.46	0.08	**	NA	NA	NA	NA	
ZIM	1.62	0.30	1.57	0.22		1.84	0.17	1.47	0.18	*	.22	0.35	-.10	.29	

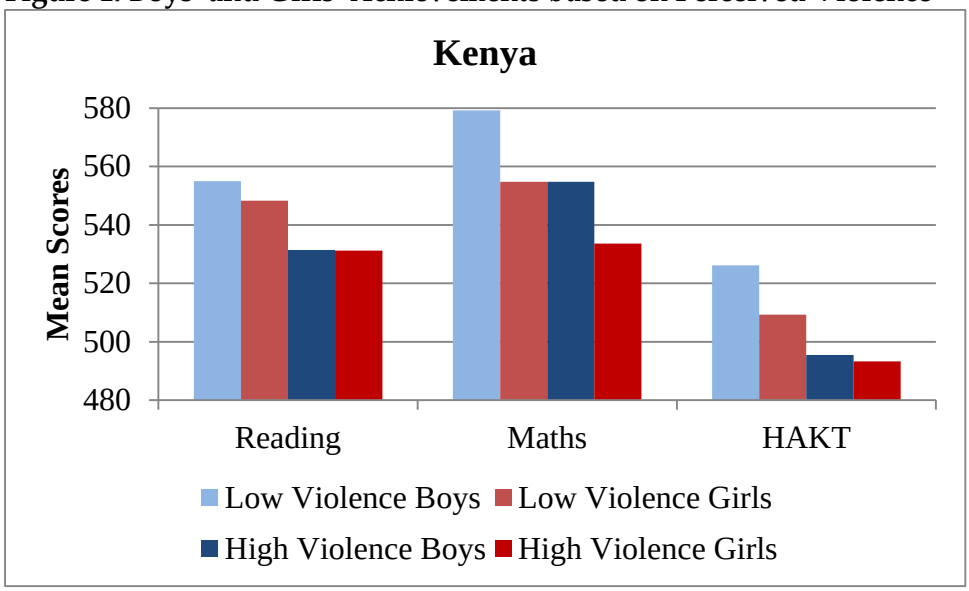
Note 1: All pupils in Zanzibar were either in moderate or high violence group.
Note 2: Statistically significant at 95% confidence level (**) and at 90% confidence level (*)
Source: The table was constructed by the author based on the SACMEQ archive (2007).

In order to examine the learning achievement, SACMEQ scores for Reading, Mathematics, and HIV and AIDS Knowledge tests (HAKT) were used. For Reading and Mathematics tests, the pupil mean score of 500 was set during SACMEQ II in 2000 as the reference point, and the use of Rasch measurement model linking the common items between studies enabled the comparable measures for SACMEQ III (Ross et al, 2004). For the HAKT, the pupil mean score of 500 was set during SACMEQ III (Dolata and Ross, 2010). The persistent gender differences in Reading and Mathematics test scores over time have been reported without taking consideration the level of violence in Saito (2011a; 2011b), and those for the HAKT, Dolata (2011) reported that there were practically no gender differences.

In **Appendix B**, boys' and girls' mean scores and sampling errors for Reading, Mathematics, and the HAKT have been presented based on the perceived school violence categories. In Botswana, Kenya, Mauritius, Seychelles, Swaziland, Uganda, Zambia, and Zimbabwe, the patterns of test achievements followed the expectations, i.e., the higher the perceived violence, the lower the achievements in all subjects. For example, as shown in **Figure 1**, in all subjects, Kenyan boys and girls scored lower in

schools where pupils were perceived to be experiencing more school violence. For Kenya's case, the gender differences were marginal in the high category for other subjects, while the size of gender difference was the same between low and high categories for Mathematics.

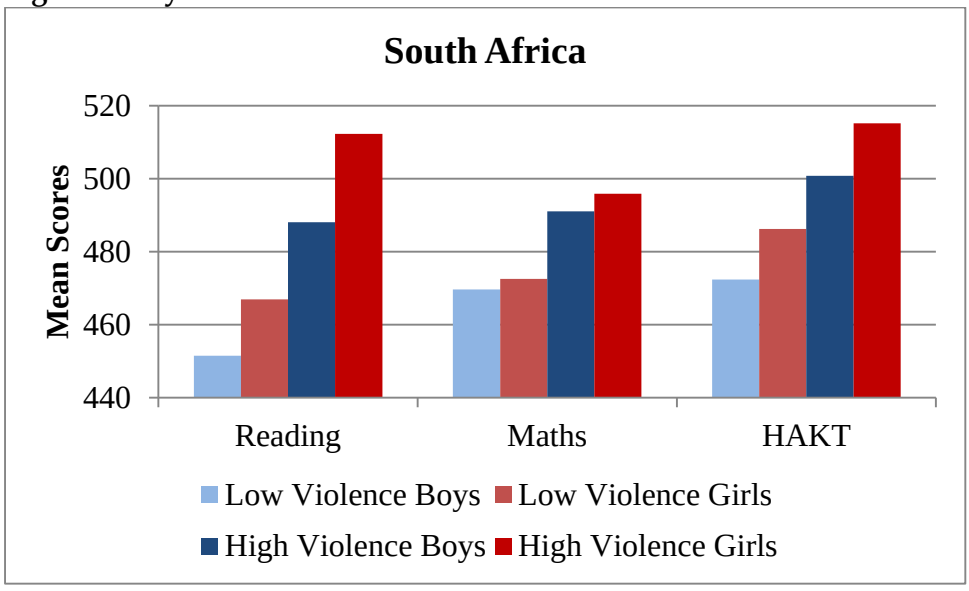
Figure 1: Boys' and Girls' Achievements based on Perceived Violence



Source: The chart was constructed by the author based on the SACMEQ archive (2007).

On the other hand, in Mozambique, Namibia, South Africa, and Tanzania, the pattern was completely opposite, i.e., the higher the perceived violence, the higher the achievements for all subjects as shown in **Figure 2** for the South African example. For South Africa, the size of the gender differences (much in favour of girls) was systematic between low and high categories. It may be hypothesized that these schools with higher reporting on occurrence of violence could be more open and more gender sensitive.

Figure 2: Boys' and Girls' Achievements based on Perceived Violence



Source: The chart was constructed by the author based on the SACMEQ archive (2007).

Discussions

In this article, selected pupils' and teachers' behavioural problems were examined as they are related to the school violence issue, and the relationship between the measures of perceived school violence and pupils' absence and learning achievements was studied. It was found out that in SACMEQ countries, sexual harassment between pupils, bullying between pupils, fighting between pupils, classroom disturbance by pupils, and pupils' use of abusive language were perceived to be serious problems. Not only were these incidents very common, they seem to be increasing over time. These results suggest that it would be essential to revisit the codes of conduct not only for teachers but also for pupils.

The examination of perceived school violence by different categorizations of schools revealed that within countries, the reporting of the occurrence of school violence varied little. Across countries, the patterns were mixed. These two notions make the identification of the causes perplexing. However, it is important to note that non-government schools seem to be systematically reporting more violence-free learning environments across countries. Therefore, it is recommended that the management style of these private schools should be studied in order to detect and replicate the management practices that make primary schools more conducive.

In terms of pupils' absenteeism, which seems to be more problematic for boys in any condition, high perception on violence occurrence was not necessarily associated with high levels of absenteeism. Moreover, the higher the perceived violence, the lower the achievement in eight SACMEQ school systems. In contrast, in other countries the pattern was completely opposite. It is therefore difficult to determine whether the reporting of school violence was indeed a reflection of good management or poor management. In addition, the gender differences were systematic between schools in the low and the high categories. For this reason, it is difficult to consider school violence as 'gender-based', which is congruent with the findings by Kadzamira & Moleni (2007).

In the present article, the measure of school violence composite consisted of a simple summation of selected variables at the school level. However, other methods that were not included in the present paper, could be also considered for exploration for the construction of a school violence index. Similarly, more reflections may be necessary in order to determine which variables should be selected and how much weight should be considered for each variable in order to construct this measure. Furthermore, within SACMEQ studies, which have been guided by priority policy concerns of the decision makers of SACMEQ school systems, the questions concerning the pupils' and teachers' behavioural problems were responded by School Heads, without identifying the sex of victims nor offenders.

However, some new developments have been already taking place at the time of writing the current article. Given the fact that some countries expressed their concerns in the form of the policy suggestions, SACMEQ Ministries decided to refine the instrument questions for the SACMEQ IV study (the pilot study in 2012 and the main study in 2013) in order to identify the sex of the victims and offenders of problems, especially for sexual harassment and bullying incidents. In addition, as a follow-up to the SACMEQ quantitative data collection, the UNESCO International Institute for Educational Planning (IIEP) has commenced an undertaking of a more qualitative research study in order to fill the gap in this area, among others. The project involved the capacity building of local planners and researchers to undertake exploratory study using interviews and observation

techniques in order to seek in-depth information about the role of leadership, classroom and school management, views and beliefs of teachers, pupils, and parents.

In order to monitor the quality of education, with particular attention to children's well-being, Ministries of Education are facing many challenges in terms of development of appropriate indicators to measure the school violence occurrence as well as identifying the causes for pupils' and teachers' behaviours leadings to high violence environment.

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Appendix A: SACMEQ Policy Suggestions Related to Behavioral Problems

Table A1: Policy Suggestions Related to Behavioral Problems in Kenya

Policy Suggestions	Responsible Unit	Time Frame	Cost Implication
Policy Suggestion5.11: The Ministry of Education should set mechanism to help schools to manage behavioural problems especially those of delinquent nature among pupils.	MoE	Short	Low
Policy Suggestion 5.12: As a matter of urgency, sex pests among pupils need to be identified and isolated for corrective action.	MoE	Short	Low
Policy Suggestion 5.15: The TSC should enhance efforts in stemming sexual offences committed by teachers in primary schools.	MoE & Teacher Service Commission	Short	Low
Policy Suggestion 5.13: There is need for TSC to put solid structures to manage teachers' behavioural problems such as guidance and counselling, psycho-social support and referrals.	MoE, Directorate of Quality Assurance & Standard	Short	Low

Source: Ogle & Wambua (2011)

Table A2: Policy Suggestions Related to Behavioral Problems in Zanzibar

Policy Suggestions	Responsible Unit	Time Frame	Cost Implication
Policy suggestion 5.8: The Ministry of Education and Vocational Training should build strong partnership with the Zanzibar Association of Teachers Union to revise and enforce teachers' code of conducts.	Principal Secretary	Short	Low
Policy suggestion 5.7: Teacher-Parents consultation meetings should be strengthened to ensure full support of parents in the education process of their children.	Dep't of Preprimary and Primary Education	Short	Low
Policy suggestion 5.6: The Guidance and Counseling Unit in the Ministry of Education and Vocational Training should work together with the District and Regional Education Offices to identify pupils' behaviour problems with their causes and formulate strategies to overcome.	Commissioner of Education	Medium	Moderate

Source: Abdalla et al (2011)

Appendix B: Boys' and Girls' Test Scores Based on Category on Perceived School Violence

Table B1: Boys' and Girls' Mean Scores and Sampling Errors for Reading Based on Category on Perceived School Violence

Reading	Low violence					High violence					High-Low			
	Boys		Girls			Boys		Girls			Boys		Girls	
	Mean	SE	Mean	SE		Mean	SE	Mean	SE		Diff	SE	Diff	SE
BOT	532.9	10.34	559.0	9.02	*	508.2	9.70	536.6	10.42	*	-24.6	14.18	-22.5	13.79
KEN	555.0	9.52	548.3	12.63		531.4	7.49	531.1	8.78		-23.6	12.11	-17.1	15.38
LES	462.0	6.97	470.3	5.57		467.2	5.64	468.9	4.80		5.3	8.96	-1.3	7.35
MAL	440.2	5.21	430.3	6.07	*	442.6	5.19	431.6	3.30	*	2.4	7.35	1.3	6.91
MAU	581.1	10.31	609.2	9.00	**	554.8	12.48	587.1	13.03	*	-26.3	16.19	-22.1	15.83
MOZ	475.1	3.84	467.6	4.71	*	507.0	13.34	494.4	20.74		31.9	13.88	26.8	21.27
NAM	471.9	5.37	485.4	6.20	*	489.3	6.32	503.0	6.42	*	17.4	8.29	17.6	8.92
SEY	561.4	18.46	622.1	16.34	**	537.1	6.37	604.5	5.47	**	-24.3	19.53	-17.6	17.24
SOU	451.5	8.97	466.9	8.44	*	488.1	8.63	512.2	8.62	*	36.5	12.45	45.3	12.06
SWA	549.6	5.88	557.0	4.91		539.6	6.37	544.4	6.62		-10.0	8.67	-12.6	8.24
TAN	583.2	5.87	564.0	6.56	**	591.5	6.59	573.5	6.10	**	8.2	8.83	9.5	8.96
UGA	488.2	9.22	489.5	8.67		481.4	4.71	473.8	4.82	*	-6.8	10.35	-15.7	9.92
ZAM	437.8	10.72	437.2	14.18		435.3	5.50	435.2	6.23		-2.5	12.05	-1.9	15.48
ZAN	NA	NA	NA	NA		526.2	3.50	540.4	3.36	**	NA	NA	NA	NA
ZIM	527.1	14.96	523.1	12.85		484.4	9.63	493.2	10.15		-42.8	17.79	-29.9	16.37

Note 1: All pupils in Zanzibar were either in moderate or high category.

Note 2: Statistically significant at 95% confidence level (**) and at 90% confidence level (*)

Source: The table was constructed by the author based on the SACMEQ archive (2007).

Table B2: Boys' and Girls' Mean Scores and Sampling Errors for Mathematics Based on Category on Perceived School Violence

Maths.	Low violence					High violence					High-Low				
	Boys		Girls			Boys		Girls			Boys		Girls		
	Mean	SE	Mean	SE		Mean	SE	Mean	SE		Diff	SE	Diff	SE	
BOT	527.4	7.9	530.1	7.0		510.5	7.0	516.7	8.2		-16.9	10.55	-13.4	10.79	
KEN	579.2	7.5	554.7	10.1	*	554.8	7.7	533.6	5.8	**	-24.4	10.76	-21.1	11.66	
LES	476.8	5.1	478.3	5.2		477.8	5.7	469.8	4.3	*	1.0	7.67	-8.5	6.75	
MAL	456.5	5.9	443.3	6.1	*	456.9	4.4	443.0	4.3	**	.3	7.38	-.3	7.49	
MAU	636.9	12.6	657.6	10.9	*	610.2	14.7	620.9	16.8		-26.7	19.37	-36.7	20.04	
MOZ	486.6	3.1	476.1	4.4	*	502.3	8.9	477.4	11.4	*	15.7	9.38	1.3	12.25	
NAM	456.3	4.5	453.5	4.5		468.4	5.0	470.0	4.8		12.1	6.74	16.6	6.59	
SEY	540.4	14.1	566.8	11.9	*	531.3	5.0	567.0	4.6	**	-9.2	14.99	.1	12.79	
SOU	469.7	7.5	472.6	6.6		491.0	7.0	495.9	5.9		21.3	10.31	23.3	8.87	
SWA	547.1	4.3	534.3	3.4	**	544.4	4.9	532.7	5.5	*	-2.7	6.55	-1.6	6.44	
TAN	565.5	5.7	532.6	6.5	**	573.2	6.9	536.0	5.6	**	7.7	8.99	3.4	8.58	
UGA	500.7	8.1	489.3	7.0	*	484.2	4.1	476.1	4.4	*	-16.4	9.12	-13.3	8.23	
ZAM	444.5	8.4	427.9	10.5	*	439.1	5.5	430.0	3.8	*	-5.3	10.01	2.1	11.21	
ZAN	NA	NA	NA	NA		489.2	2.6	484.0	2.1	*	NA	NA	NA	NA	
ZIM	546.7	14.2	524.5	9.6	*	509.2	9.6	506.0	9.7		-37.5	17.13	-18.6	13.65	

Note 1: All pupils in Zanzibar were either in moderate or high category.
Note 2: Statistically significant at 95% confidence level (**) and at 90% confidence level (*)
Source: The table was constructed by the author based on the SACMEQ archive (2007).

Table B3: Boys' and Girls' Mean Scores and Sampling Errors for HIV and AIDS Knowledge Category on Perceived School Violence

HAKT	Low violence					High violence					High-Low				
	Boys		Girls			Boys		Girls			Boys		Girls		
	Mean	SE	Mean	SE		Mean	SE	Mean	SE		Diff	SE	Diff	SE	
BOT	502.0	9.7	518.1	8.2	*	479.2	8.5	495.6	9.7	*	-22.8	12.88	-22.4	12.76	
KEN	526.2	8.4	509.3	11.7	*	495.5	6.3	493.3	7.7		-30.7	10.50	-15.9	14.00	
LES	458.7	8.5	469.4	8.0		468.5	9.3	465.8	6.8		9.8	12.63	-3.7	10.53	
MAL	537.4	10.5	519.6	9.2	*	519.5	12.1	494.9	13.4	*	-17.9	16.02	-24.7	16.22	
MAU	458.6	11.0	474.8	7.9	*	444.6	11.8	455.7	12.2		-14.0	16.13	-19.1	14.52	
MOZ	509.1	6.0	493.1	7.7	*	535.1	25.0	518.1	42.2		26.0	25.75	25.0	42.92	
NAM	484.3	7.3	486.3	7.8		502.1	6.1	506.1	6.4		17.8	9.47	19.8	10.07	
SEY	507.9	9.8	511.6	12.5		475.6	4.0	496.7	3.9	**	-32.3	10.58	-14.9	13.12	*
SOU	472.4	7.5	486.2	7.0	*	500.8	6.2	515.2	6.6	*	28.4	9.73	29.0	9.62	
SWA	535.6	6.8	533.9	5.9		525.6	6.5	520.7	4.8		-10.0	9.43	-13.2	7.63	
TAN	585.0	7.2	571.4	7.6	*	582.5	9.4	572.8	7.6		-2.6	11.85	1.4	10.72	
UGA	504.2	9.9	487.0	9.2	*	491.5	5.8	485.5	5.7		-12.7	11.48	-1.6	10.84	
ZAM	521.6	9.8	516.1	12.4		490.9	8.3	473.4	7.5	*	-30.7	12.86	-42.6	14.50	
ZAN	NA	NA	NA	NA		502.7	3.6	499.3	3.1		NA	NA	NA	NA	
ZIM	509.5	12.9	488.5	10.6	*	462.9	12.1	470.5	9.8		-46.5	17.70	-17.9	14.39	*

Note 1: All pupils in Zanzibar were either in moderate or high category.
Note 2: Statistically significant at 95% confidence level (**) and at 90% confidence level (*)
Source: The table was constructed by the author based on the SACMEQ archive (2007).