Child Abuse & Neglect 67 (2017) 305–314

Contents lists available at ScienceDirect

Child Abuse & Neglect

Full Length Article

Associations between adolescent experiences of violence in Malawi and gender-based attitudes, internalizing, and externalizing behaviors

Vira Ameli[a,*], Franziska Meinck[a,b], Alistair Munthali[c], Boniface Ushie[d], Lisa Langhaug[d]

[a] Centre for Evidence-Based Intervention, Department of Social Policy and Intervention, University of Oxford, Oxford, UK
[b] OPTENTIA, School of Behavioural Sciences, North-West University, Vanderbeijlpark, South Africa
[c] Centre for Social Research, Zomba, Malawi
[d] Regional Psychosocial Support Initiative (REPSSI), Johannesburg, South Africa

ARTICLE INFO

Article history:
Received 5 May 2016
Received in revised form 15 February 2017
Accepted 17 February 2017

Keywords:
Child abuse
Gender-based violence
Risk factors
Violence prevention
Malawi

ABSTRACT

Little is known about adolescent exposure to and factors associated with violence in Malawi. The aim of this research was to describe the prevalence of exposure to violence among adolescents in Malawi, and test the hypotheses that such exposures are associated with gender-based violent attitudes, and with internalizing and externalizing problems. In 2014, 561 primary school pupils were interviewed (50% girls), and logistic regression analysis was performed on gender-stratified data, adjusting for sociodemographic differences. Both girls and boys had witnessed domestic violence (28.5% & 29.6%), experienced emotional abuse at home (23.1% & 22.9%), physical abuse at home (28.1% & 30.4%), physical abuse at school (42.4% & 36.4%), and been bullied (33.8% & 39.6%). Among girls, internalized violent attitudes towards women were associated with emotional abuse at home (OR 2.1) and physical abuse at school (OR 1.7). Condoning rape was associated with physical abuse at school (OR 1.9). Bullying perpetration was associated with emotional abuse at home (OR 4.5). Depression was associated with emotional abuse at home (OR 3.8) and physical abuse at school (OR 2.4). Among boys, violent attitudes towards women and condoning rape were not associated with violence exposure. Bullying perpetration was associated with having been a victim of bullying (OR 2.9) and physical abuse at school (OR 2.7). Depression was associated with emotional abuse at home (OR 2.9), domestic violence (OR 2.4) and physical abuse at school (OR 2.5). These findings can inform programs designed to reduce violence victimization among Malawian girls, both in homes and schools.

1. Introduction

Annually, more than 1 billion children – half of all the children in the world – are victims of violence (Hillis, Mercy, Amobi, & Kress, 2016). In Africa, prevalence of victimization is predominantly high (CDC, 2015) – yet, research on the consequences

* Corresponding author at: Centre for Evidence–Based Intervention, Department of Social Policy and Intervention, University of Oxford, Oxford OX1 2ER, UK.
E-mail address: vira.ameli@spi.ox.ac.uk (V. Ameli).

http://dx.doi.org/10.1016/j.chiabu.2017.02.027
0145-2134/

of childhood and adolescent experiences of violence is substantially lacking. In order to prevent and eliminate violence it is important to understand its prevalence, nature, and implications in a country-specific and culturally-relevant manner.

Emerging evidence from the Violence Against Children Surveys (VACS), a recent joint effort by the Centers for Disease Control (CDC) and UNICEF, systematically measures physical, emotional, and sexual violence, and has so far been released in 8 countries around the world (CDC, 2015). The highest rates of physical and emotional violence were reported among boys in Zimbabwe, where the lifetime exposure to physical abuse and emotional abuse, prior to turning 18 years of age, was 76% and 38% respectively. Moreover 38% of girls in Zimbabwe had experienced sexual abuse, which was also the highest prevalence seen among the studied countries (CDC, 2015). The most recent data was released in Malawi, where physical violence was experienced by 42% of girls and 65% of boys, sexual violence by 22% of girls and 15% of boys, and emotional violence by 20% of girls and 29% of boys (UNICEF & CDC, 2014).

Other studies have reported that children in sub-Saharan Africa suffer from predominantly high rates of exposure to violence (Akmatov, 2011; Stoltenborgh, van IJzendoorn, Euser, & Bakermans-Kranenburg, 2011). This is partially due to the fact that physical punishment as a form of discipline in the homes is ubiquitous (Naker, 2005; Slonim-Nevo & Mukuka, 2007), and schools are another predominant setting for physical and sexual abuse (Jewekes, Levin, Mbananga, & Bradshaw, 2002; Meinck, Cluver, Boyes, & Loening-voysey, 2016). In Swaziland, nearly 1 in 5 females has experienced childhood physical violence in her lifespan – 1 in 20 requiring medical attention due to the severity of the experience (Breiding, Mercy, Gulaid, Reza, & Hleta-Nkambule, 2013).

There is considerable literature documenting the long-lasting and harmful impacts of life-time exposure to physical and emotional violence on children (Finkelhor, Turner, Shattuck, & Hamby, 2013; Perry, 2001; Shonkoff, Boyce, & McEwen, 2009). Research in high-income countries has repeatedly demonstrated that children who have been exposed to emotional and physical violence are at greater risk of depression, suicidality, post-traumatic stress disorder, unwanted pregnancy, and sexually transmitted infections (Felitti et al., 1998; Krug, Mercy, Dahlberg, & Zwi, 2002; Turner, Finkelhor, & Ormrod, 2006). These children often develop a wide range of long-lasting externalizing and internalizing disorders, which are shown to be linked to experiences of violence in the household and community (Bensley, Van Eenwyk, & Simmons, 2003; Danese et al., 2013; Sachs-Ericsson et al., 2010). However, research has also shown that experiences of violence and factors associated with these exposures are contextual and as such, country specific data are needed.

In South Africa, there is evidence that the experience of emotional abuse of girls and women is associated with depression, suicidality, alcohol abuse, and HIV and HSV2 infections, and of men with depression and drug abuse (Cluver, Orkin, Boyes, & Sherr, 2016; Jewkes, Dunkle, Nduna, Jama, & Puren, 2010; Meinck et al., 2017). Gender-based violence in sub-Saharan countries is also linked to sexual risky behavior and HIV infection (Andersson, Cockcroft, & Shea, 2008). Other studies in South Africa suggest exposure to violence during adolescence is linked to anti-social and violent behavior, including rape perpetration (Jewkes, Nduna, Jama Shai, & Dunkle, 2012). However, evidence on the nature and implications of experiences of violence, during the formative teenage years, is still very limited in many sub-Saharan countries – especially in Malawi. Furthermore, most of the published research on the experience of abuse in sub-Saharan Africa is from one country, South Africa, limiting our ability to understand how this phenomenon is expressed elsewhere on the continent. Therefore, it is particularly valuable to shed light on new data from Malawi.

In order to better prevent and control the damaging impacts of violence through effective measures and evidence-based interventions, it is essential to consider the regional risk factors and outcomes associated with different forms of violence and abuse experienced by adolescents (Jewkes, 2014). Furthermore, it is important to study the prevalence and nature of attitudes towards gender-based violence as they are highly diversified across communities and cultures (Meinck, Cluver, Boyes, & Mhlongo, 2015). In 1992, the UN Convention Committee on the Elimination of All Forms of Discrimination against Women (CEDAW) adopted General Recommendation No 19 which clarifies that gender-based violence (GBV) is a form of discrimination and defined as "violence that is directed against a woman because she is a woman or that affects women disproportionately [. . .it includes] acts that inflict physical, mental or sexual harm or suffering, threats of such acts, coercion and other deprivations of liberty (United Nations, 1992)." Since then the definition of GBV has been broadened to the "general term used to capture violence that occurs as a result of the normative role expectations associated with each gender, along with the unequal power relationships between the two genders, within the context of a specific society." (Bloom, 2008). Thus, country and society specific research on the health and behavioral conditions associated with different forms of exposure to violence in adolescence, and its relationship with prevalence of gender-based violence is critical for programming and policy-making.

Malawi's society subscribes to a conservative cultural value system, where gender inequalities manifest in discrimination within families and institutions, as well as social and cultural norms that perpetuate practices that are detrimental to women (Prah, 2013). Thus, the most essential step in achieving gender equality and women's empowerment is overcoming socially accepted cultural beliefs and ideologies that emphasize male dominance (Prah, 2013). To further this, the government of Malawi has made a national commitment to ameliorating gender based inequality and violence in the country. The first priority of this national commitment is prevention of GBV by addressing the root causes and promoting transformation of harmful social norms. The strategy also aims to provide a strong framework for sustainable interventions to prevent and effectively respond to GBV (Malawi, 2014). To that effect, the country has also agreed to host the Violence Against Children (VAC) studies that were conducted across the globe (CDC, 2015). Programs and policies can promote important and positive change in men's gender-related attitudes and practices, including in reducing men's use of violence against women. Since the International Conference on Population and Development in 1994, national governments from around the world and

UN agencies have implemented many policies and community-based interventions intended to change social norms about gender. Furthermore, cross-country data from around the world shows that cultural attitudes can change, transforming gender-based attitudes and beliefs, which would lead to reducing the impact of GBV (Peacock & Barker, 2014).

The aim of this research was to first, describe the prevalence of exposure to violence among adolescents in Malawi, both within the household and the school, and second, to test hypotheses that such exposures were associated with prevalent depressive symptomatology, violent attitudes towards women, rape endorsement, and bullying perpetration. To the best of our knowledge, this is the first study of its kind in Malawi, thus the results could help inform and improve policy and programming measures that could reduce the negative impacts of exposure to violence in this country.

2. Methods

2.1. Procedure

As a response to the evidence of widespread gender-based-violence in Malawi (UNICEF & CDC, 2014), REPSSI (Regional Psychosocial Support Initiative) piloted an intervention aimed at preventing gender-based violence in primary school settings. The intervention was carried out in partnership with the Malawi Girl Guides Association (MAGGA) and the Ministry of Education. The program included two separate workshop-training materials for young people: i) a self-defense training program for girls; ii) an emotional awareness and empathy fostering program for boys. Baseline data collected before the implementation of the intervention was used for the purposes of this study.

2.2. Study population and data collection

Three zones were selected from Lilongwe Province (1 urban and 2 rural), and three schools were selected within each zone resulting in a total of 9 primary schools. Selected schools had to have an active Girl Guide and Boy Scout after school program. Pupils were eligible to participate in the intervention if they were i) attending one of the 9 primary schools; ii) were part of a MAGGA Girl Guide or Boy Scout group; and, iii) were aged 10–19 years old.

Children's recruitment was through a voluntary process, which involved introducing the program and research to the pupils and asking interested pupils to sign up as participants to the after school activity. A total of 720 school pupils were recruited during the third term of the 2013/2014 school year and written informed consent was obtained from parent/caregivers. At the start of the 2014/2015 school year, 561 (77.9%) pupils participated in the baseline survey. Participant response rate was affected by i) a number of students who had transferred or dropped out of school (72; 10%); ii) failure to reach parents/caregivers of the students to gain informed consent (33; 4.6%); iii) students themselves, following parental consent, did not agree to participate in the data collection (12; 2.0%).

Following written informed consent, data was collected from participating students with an interviewer-administered questionnaire using computer assisted self-interview (CASI) on tablets. Interviewers were matched by gender to the students, and interviews took place after school in a classroom where students were widely spaced apart to provide privacy.

2.3. Ethical considerations

Ethical approval for this study was obtained from the Malawian National Commission for Science and Technology (NCST). At each school, parents/caregivers of pupils who had signed up to participate in the program were invited to a community meeting, which provided information on the program and research. Written informed consent was obtained in a private space from parents for their child to participate in the study. Surveyors then proceeded into the community to obtain consent from parents who missed the parent meeting. Pupils of caregivers with consent provided informed written assent at the time of interviewer-administered baseline survey in the beginning of the 2014/2015 school year. All information was provided in the local language ChiChewa. Data was stored in a password protected file.

Interviewers were trained in dealing with very vulnerable children and were familiar with referral procedures. If children were emotionally affected by the questionnaire, time was set aside to allow them to regroup. Interviewers were instructed to stop the interview at any point in time based on the child's wishes, and to support children in accessing counselling if needed. However, no such instances occurred. The wide age range seen in this study is typical of the school system in Malawi, and the rest of sub-Saharan Africa. This is due to the variability of the age at which children enter and exit schools (Chisamya, Dejaeghere, Kendall, & Khan, 2011; Kaljee et al., 2017; Sharma, 2006) and to delays in grade progression (Sunny et al., 2017). However, the interviewers were trained to work with adolescents of this age group, and ensured that the children comprehended each question. Furthermore, we only used questions we thought were appropriate for this age group and adapted the phrasing to suit the age group (for example, we changed 'partner' to 'boyfriend/girlfriend'. A skip pattern ensured that young people who had not experienced romantic relationships did not answer questions about partners.

2.4. Measures

Emotional abuse in the home was measured using the following items: 'In the last month, I was insulted or humiliated by someone in my family in front of other people', or 'in the last month, I was threatened with physical punishment in my home.' Binary outcomes were created (0: never 1: less than once a week to almost every day).

Domestic violence was measured using the following items: 'How often do adults in your home shout at each other?' or 'how often do adults in your home hit each other?' Binary outcomes were created (0: never 1: less than once a week to almost every day)

Physical abuse in the home was measured using the following items: 'How often do adults in your home slap, punch or hit you on your head or face?' or 'How often do adults in your home beat you with a shoe, wet towel, or pinch you on any part of your body?' Binary outcomes were created (0: never 1: less than once a week to almost every day)

Physical abuse in the school was measured using the following items: 'In the last school term, I was beaten or physically punished at school by a teacher'. Binary outcomes were created (0: never 1: less than once a week to almost every day)

Bullying victimization was measured by responding yes to 'have you ever been teased or bullied?' and *Bullying perpetration* was measured by responding yes to 'have you ever teased or bullied someone else?'

Poverty was measured based on food insufficiency in the household, using an affirmative response to the items 'in the last week sometimes I had to go to bed hungry,' or 'in the last week, I had to go an entire day without eating because there was no food in the household'.

Depression was measured using the Shona Symptom Questionnaire (SSQ) through a 14-item, indigenous measure of common affective disorders. The questionnaire was developed for, and validated among patients attending primary care clinics and traditional medical practitioners in Harare, Zimbabwe, and asks about the presence of various symptoms of depression in the previous week (Patel, Simunyu, Gwanzura, Lewis, & Mann, 1997). It has also been validated among adolescents in Zimbabwe (Haney et al., 2014) and used multiple times with this age group in Zimbabwe(Dufour, 2011; Langhaug et al., 2010; Langhaugh, Cheung, Pascoe, Hayes, & Cowan, 2009; Mavhu et al., 2013) The SSQ measures depression through binary (yes/no) items such as: 'I found myself sometimes failing to concentrate', 'There were moments when I felt life was so tough that I cried or wanted to cry', 'At times I felt like committing suicide' and participants reporting 8 or more of the symptoms were considered depressed (Patel et al., 1997).

Attitudes towards violence and rape were measured by asking selected adapted questions (for items see Tables 1 and 2 in Supplementary Materials) from previous studies (Baker, Verma, & Contreras, 2011; Brown, Thurman, Bloem, & Kendall, 2006; Jewkes, Dunkle, Nduna, & Shai, 2010; Pulerwitz & Baker, 2016). Questions were selected if they were appropriate for this age group; phrasing was adapted slightly (for example, we changed 'partner' to 'boyfriend/girlfriend'). Answering yes to three or more of the questions was considered having violent attitudes, or attitudes which condone rape.

Other socio-demographic information such as whether participants lived in *urban or rural areas*, and their *age* and *gender* was also collected.

2.5. Statistical analysis

All data was analysed with the SAS software, version 9.3. Analyses were performed on gender-stratified data due to differences in victimization with regards to intimate partner and gender-based violence in previous studies (Stöckl et al., 2010).

First, descriptive statistics were obtained on gender-stratified data to describe the study sample's demographics, and life experiences using independent sample *t*-tests and chi-square test. Second, bivariate logistic regression analyses were performed to calculate odds ratios, determining the strength of the associations between potential risk factors and associated adverse outcomes. Next, all the variables that were found to have a bivariate association with each outcome – with *P-value*s less than or equal to 0.1, depicted in Table 2 – were then chosen for adjusted multivariate analyses (Hosmer, Lemeshow, & Sturdivant, 2013). Finally, multivariate logistic regression analyses were employed to assess adjusted and independent effects of potential risk factors. For each outcome, the associated risk factors, which were identified in the bivariate analysis, were included in the model. Additionally, all variables that were considered theoretically important predicting factors – namely, age, poverty, and urban versus rural residence – were included in the multivariate logistic-regression analyses. Logistic regression models with backward stepwise elimination was used. The first model fitted included all the variables from step 2, in addition to the theoretically important variables (Hosmer et al., 2013). The final parsimonious model, included only the statistically significant variables.

3. Results

Baseline characteristics and demographics are listed in Table 1. Girls were slightly younger than boys (mean age 13.04 versus 13.76, $P < 0.05$), and less likely to perpetrate bullying (8.90% & 17.50%, $P < 0.05$). However, there was no significant difference observed on all other baseline characteristics, exposures, and experiences. 69.75% of girls and 70.36% of boys lived in rural areas. 14.95% of girls and 16.43% of boys lived in poverty.

Both girls and boys had witnessed domestic violence (28.47% & 29.64%), experienced emotional abuse at home (23.13% & 22.86%), physical abuse at home (28.11% & 30.36%), physical abuse at school (42.35% & 36.43%), and been victimized

Table 1
Characteristics and Demographics of the Sample Study Population of Adolescents in Malawi.

	Girls (n = 281)	Boys (n = 280)
Mean age *	13.04	13.76
Living in poverty	14.95%	16.43%
Living in rural areas	69.75%	70.36%
Experience domestic violence	28.47%	29.64%
Experience emotional abuse at home	23.13%	22.86%
Experience physical abuse at home	28.11%	30.36%
Experience physical abuse at school	42.35%	36.43%
Victim of bullying	33.81%	39.64%
Perpetrated bullying *	8.90%	17.50%
Experienced depression	20.64%	16.43%
Have violent attitudes towards Women	37.01%	31.79%
Condone rape	53.38%	57.50%

Note: * statistically significant difference at $p < 0.05$.

Table 2
Bivariate associations of Adolescent exposure to violence associated with GBV attitudes, Depression, and Bullying among male adolescents in Malawi (N = 280).

Outcome Exposure	Violent Attitudes towards Women	Condoning Rape	Depression	Bullying Perpetration
	Odds Ratios (95% CI)	Odds Ratios (95% CI)	Odds Ratios (95% CI)	Odds Ratios (95% CI)
Physical Abuse at Home	1.16 (0.67, 2.00)	1.33 (0.79, 2.25)	3.09 (1.62, 5.92) ***	2.97 (1.58, 5.58) ***
Physical Abuse in School	1.12 (0.66, 1.88)	‘1.60 (0.96, 2.64)	3.36 (1.75, 6.46) ***	3.49 (1.84, 6.6)***
Emotional Abuse at Home	‘1.66 (0.93, 2.96)	1.31 (0.74, 2.32)	4.19 (2.15, 8.17) ***	2.34 (1.20, 4.54)*
Domestic Violence	1.42 (0.83, 2.45)	1.09 (0.65, 1.84)	3.24 (1.69, 6.19) ***	2.04 (1.08, 3.86)*
Victim of Bullying	0.91 (0.55, 1.53)	1.07 (0.66, 1.75)	3.16 (1.64, 6.09) ***	3.62 (1.89, 6.92) ***

Note: * statistically significant at $p < 0.05$, **statistically significant at $p < 0.01$, ***statistically significant at $p < 0.001$,‘ indicates statistically significant association of $p < 0.1$ and was included in the final model.

by bullying (33.81% & 39.64%). Similar proportions of boys and girls reported experiencing depression (20.64% & 16.43%), having violent attitudes towards women (33.81% & 39.64%), having condoned rape (33.81% & 39.64%). It is important to note that more than 50% of both boys and girls reported attitudes condoning rape, which was the only factor with such a high prevalence (Table 1).

3.1. Associations between internalizing and externalizing behaviors and exposure to violence

Data was stratified by gender and analysed separately for each stratum of 281 girls and 280 boys. Associations were found between measures of exposure to violence in homes and schools, with measures of gender-based violent attitudes, depression and bullying perpetration.

3.2. Depression

Stratified bivariate analysis showed that among both boys and girls, depression was associated with exposure to domestic violence, physical and emotional abuse at home, physical abuse at school and bullying victimization (Tables 2 and 3). For boys, depression continued to be associated with emotional abuse, domestic violence and physical abuse after adjusting for sociodemographic factors (Table 4). For girls, depression remained associated with emotional abuse in the home and physical abuse at school in the adjusted model (Table 4).

3.3. Bullying perpetration

Bullying Perpetration among both boys and girls was associated with experience of physical abuse and bullying victimization in school, and physical and emotional abuse at home (Tables 2 and 3). However, among boys – but not girls – bullying perpetration was also associated with witnessing domestic violence (Table 2). After adjusting for sociodemographic characteristics, no similarity was observed among boys and girls. For boys, bullying perpetration was associated with physical abuse at school and having been a victim of bullying. For girls, bullying perpetration was associated with experiencing emotional abuse (Table 4).

3.4. Violent attitudes towards women

In boys, having violent attitudes towards women was not associated with higher levels of exposure to violence. However, in girls, having violent attitudes towards women was associated with prior exposure to physical abuse at school, emotional

Table 3
Bivariate associations of Adolescent exposure to violence associated with GBV attitudes, Depression, and Bullying among female adolescents in Malawi (N = 281).

Odds Ratios (95% CI)		Odds Ratios (95% CI)	Odds Ratios (95% CI)	Odds Ratios (95% CI)
Outcome Exposure	Violent Attitudes towards Women	Condoning Rape	Depression	Bullying Perpetration
Physical Abuse at Home	1.42 (0.84, 2.42)	1.41 (0.83, 2.39)	1.95 (1.06, 3.59)*	2.60 (1.13, 5.99)*
Physical Abuse in School	1.98 (1.21, 3.24) **	3.36 (1.75, 6.46)**	2.76 (1.53, 5.01) ***	2.64 (1.12, 6.20) *
Emotional Abuse at Home	2.29 (1.30, 4.02) *	1.42 (0.81, 2.49) *	4.2 (2.27, 7.90) ***	4.25 (1.83, 9.86) ***
Domestic Violence	1.29 (0.76, 2.18)	0.88 (0.53, 1.49)	‘1.74 (0.95, 3.19)	0.97 (0.39, 2.43)
Victim of Bullying	1.94 (1.17, 3.22) *	1.71 (1.03, 2.83) *	2.37 (1.32, 4.29) **	2.75 (1.19, 6.32) *

Note: * statistically significant at p < 0.05, **statistically significant at p < 0.01, ***statistically significant at p < 0.001

Table 4
Multivariate logistic regressions of childhood experiences associated with GBV attitudes, depression, and bullying perpetration among adolescents in Malawi– by gender.

	Boys		Girls	
	Odds Ratio	95%CI	Odds Ratio	95%CI
Experience of Depression				
Emotional Abuse at Home	2.91**	1.44–5.90	3.77***	1.99–7.12
Domestic Violence	2.37*	1.19–4.73		
Physical Abuse at School	2.51**	1.27–5.00	2.38**	1.28–4.41
Bullying Perpetration				
Victim of Bullying	2.86**	1.46–5.61		
Emotional Abuse at Home			4.25***	1.83–9.86
Physical abuse at School	2.72**	1.40–5.29		
Violent attitudes towards women				
Emotional Abuse at Home			2.06*	1.15–3.68
Physical Abuse at School			1.68*	1.01–2.80
Condoning rape				
Physical Abuse at School			1.90*	1.15–3.12

Note: * statistically significant at *p* < 0.05, **statistically significant at p < 0.01, ***statistically significant at p < 0.001.
All models control for Age, Gender, and Urban versus Rural Residence.

abuse at home and bullying victimization (Table 3). Violent attitudes towards women remained associated with physical abuse at school and emotional abuse in the home after adjusting for sociodemographic factors (Table 4).

3.5. Condoning rape

In boys, condoning rape was not associated with higher levels of exposure to violence. However, among girls, condoning rape was associated with prior experience of physical abuse at school, emotional abuse at home, and bullying victimization in school (Table 3). In the adjusted model condoning rape remained associated with physical abuse at school (Table 4).

4. Discussion

Previously, little research has focused on the prevalence and implications of exposure to violence in Malawi. A recent VACS report demonstrates that adolescents in Malawi experience a high burden of violence victimization (UNICEF & CDC, 2014) but did not investigate factors associated with violence. This study shows the prevalence of these exposures in one urban and two rural communities in adolescents attending primary school. Moreover, to our knowledge, this is the first study with adolescents to quantify the association of experiences of violence victimization and exposure, with gender-based attitude formation, depression as a harmful internalizing disorder, and bullying perpetration as an externalizing behavior.

Out of all forms of exposure to violence measured, physical violence in schools was reported by a disproportionately large number of participants. In fact, abuse by teachers was the most prevalent form of exposure to violence for girls, and second most prevalent for boys. Even after adjusting for sociodemographic factors, exposure to physical violence in the school for girls remained strongly associated with experiencing depression, and attitudes condoning rape and violence towards women. Among boys, exposure to physical abuse was associated with reporting higher rates of depression and bullying perpetration, but not with gender-based violent attitudes.

While physical violence in schools is often used as a form of discipline, corporal punishment of children is a violation of their rights according to the UN Convention on the Rights of the Child, which also requires states to prohibit this type of punishment of children in all settings of their lives. In Malawi, corporal punishment of children in state schools is unlawful, however other reports confirm the prevalent use of this practice (Newell, 2013). The findings of this study substantiate the

prevalence of physical punishment in schools, and highlight the associations with harmful attitude formation, adoption of negative behaviors, and poor mental health among adolescents exposed to physical abuse in Malawian schools.

This corresponds with results from a previous study in Malawi which found that one fifth of students had experienced corporal punishment in the school environment which made them afraid to go to school. Teachers reported the use of corporal punishment as the most common form of discipline (Burton, 2005). Further evidence suggests that the abuse and violence in schools has gender-based differential impacts (Bisika, Ntata, & Konyani, 2009). For example, drop-out rates have generally been higher for girls than boys despite there having been a number of attempts over the past decade to increase the participation of girls in education (Ministry of Finance Economic Planning and Development, 2014). While other factors also play a role in school non-attendance, evidence from Ghana, Malawi and Zimbabwe shows that the prevalence of high levels of bullying perpetration and aggressive behavior by boys towards girls, and excessive punishment of girls, all act as barriers to education for girls (Leach, Fiscian, Kadzamira, Lemani, & Machakanja, 2009). This clearly demonstrates that gender-based violence is a common experience for many adolescent girls in schools and is a major public health concern.

Briere and Jordan identify violence against girls as a mechanism for the perpetuation of violence against women – in addition to sociocultural factors such as poverty, social inequality, and inadequate social support (Briere, 2004). This suggestion is in line with Albert Bandura's theory of social learning, which suggests that individuals learn behaviors by adopting what is modeled by their social network (Albert Bandura, 1976). In other words, adolescents who witness violence in the home or school environment are more likely to endorse violent attitudes and accept those behaviors as the norm. Thus, the current study echoes these suggestions by showing that among girls, attitudes, which condone rape and violence against women, are strongly associated with physical abuse at school. This could mean that girls will learn to be more accepting of violent attitudes towards women. Thus, the high level of exposure to violence in Malawian schools impacts the magnitude and perpetuation of the cycle of violence towards women not only by reinforcing harmful gender-based attitudes and social norms, but also through impeding girls' educational attainments, which limits upward sociodemographic mobility.

Moreover, among boys, exposure to physical violence in school, along with being a victim of bullying, is strongly linked to increasing the reported rates of initiating or perpetrating bullying. In other words, bullying perpetration is a manifestation of learnt violent behavior through exposure to violent acts as the norm within one's social network. These findings, are also in-line with previous findings in Sub-Saharan Africa which show that bullying victimization leads to further externalizing and conduct problems (Boyes, Bowes, Cluver, Ward, & Badcock, 2014a).

Another common adverse experience among study participants was emotional abuse at home, which was strongly associated with depression and bullying victimization – corroborating prior findings of the outcomes associated with exposure to emotional abuse in Sub-Saharan Africa (Jewkes, Dunkle, Nduna, Jama et al., 2010). Among girls, emotional abuse is also associated with attitudes condoning rape and violence against women. Thus, emotional abuse at home – just as with physical abuse at school – is differentially linked to beliefs on violence and rape among girls and boys.

These findings are particularly novel as they found no difference between girls and boys in attitudes towards acceptance of violence against women and rape. Such attitudes towards gender-based violence increase the rate of violence perpetration, which has been shown to lead to higher rates of sexual violence and HIV transmission among adolescents (Andersson et al., 2008). The finding that among girls but not boys the acceptance of violence and rape is associated with emotional and physical abuse in homes and in schools could help inform and improve policy and programming measures. It also emphasizes the need for holistic programming that includes both boys and girls.

5. Limitations

The findings from this study are subject to some limitations. Most importantly, the cross-sectional nature of this analysis does not show temporality in the order of hypothesized outcomes and risks, thus the directionality of the association cannot be established. Second, the design does not allow for inference of causality. However, research on abuse victimization in Malawi is still in its infancy and this study extends the current evidence base by also measuring factors associated with violence. Third, chosen schools were not selected randomly and moreover the sampling of the study may be subject to volunteer-bias since participants from each school joined the study voluntarily. Participants may therefore have been less reluctant than the average student to disclose adverse childhood experiences. As a result, the sample population could be different from the normal population in their rate of experiencing abuse, or the adverse internalizing or externalizing behaviors. However, socio-demographic analyses revealed that participants represented a variety of backgrounds and socio-economic statuses. Fourth, the reporting could be subject to social-desirability bias as a consequence of participants' unwillingness to report what they may consider socially unacceptable or undesirable. However, official records on abuse victimization are not available in Malawi and have been shown to notoriously under-report in studies across the world (Maier, Mohler-Kuo, Landolt, Schnyder, & Jud, 2013; Meinck, Steinert et al., 2016), therefore self-report was the most suitable way of measuring these experiences. Fifth, some of the measures used were not validated for this particular population or context, as no such measures exist. To mitigate this, measures validated or used among similar populations were adapted for use in this survey. Additionally, many of the constructs were measured through one or two items with a binary outcome. This could drastically impact the variability of responses and the ability to understand frequency and duration. However, this approach is commonly utilized in epidemiological and public health studies, where there is lack of validated measures for the constructs under study and limited amounts of space. The Violence Against Children Study (VACS) uses the same approach to measure exposures to physical and emotional violence, and more complex constructs such as depression (CDC, 2015). To that effect,

the findings in the current study from Malawi are a valuable addition to the evidence-base. However, future research on measurements and validity of measurements is sorely needed in order to check if single item measures are comparable to multi-item ones. Finally, the findings may be limited due to residual confounding, such as exposure to violence through the community and other sociodemographic characteristics of households, which were not assessed by the employed survey and could not be accounted for through the analysis.

6. Conclusions

Despite these limitations, findings from this study point to the important implications of exposure to violence encountered by students in their primary school years, and explain the nature and prevalence of this public health concern in Malawi.

Government and community stakeholders, in addition to families, need to be engaged in violence prevention efforts in order to build successful interventions. As a first step, the laws against corporal punishment in schools should be strictly enforced. Bullying prevention programs would also be invaluable in limiting exposure and engagement in violent behavior (Boyes, Bowes, Cluver, Ward, & Badcock, 2014b). School-based violence-reduction interventions could be alternative and effective approaches. The Good School Kit Intervention in Uganda successfully halved victimization by teachers and staff. (Devries et al., 2015). Other successful school-based interventions could effectively reduce childhood sexual abuse, bullying, and other violence between students (Botvin, Griffin, & Nichols, 2006; Sinclair et al., 2013; Walsh, Zwi, Woolfenden, & Shlonsky, 2015).

Preventing childhood emotional abuse could be addressed through promoting safe, stable, and nurturing relationships between children and their caregivers. Parenting interventions have been shown to be effective in reducing harsh discipline and improving positive-parenting skills also in low and middle income countries (Chen & Chan, 2015; Knerr, Gardner, & Cluver, 2013) and early evidence is available for parenting interventions with adolescents and younger children in South Africa (Cluver, Lachman et al., 2016; Cluver, Meinck et al., 2016). Furthermore, gender-transformative approaches could be used to reduce intimate partner violence in homes and result in reduction of children's exposure to domestic violence, along with increasing knowledge of men about GBV, which could hamper the cycle of violence and lead to reduction in chances of HIV transmission (Abramsky et al., 2014; Hossain et al., 2014; Pulerwitz et al., 2015; Wagman et al., 2015). Stepping Stones program is one example of this type of gender-transformative approach that has shown to be effective in South Africa (Jewkes et al., 2008). Other programs that have been successful in reducing younger girls' risk of violence victimization and HIV infections are microfinance loans that empower women and reduce their chance of engagement in risky sexual behaviors (Pronyk et al., 2016). These interventions could be particularly successful in the context of findings from this study showing the association of gender-based violent attitude with violence exposure among girls.

Declaration of interests

The authors declare no conflicts of interest.

Funding

Funding for this study was provided by Novartis Foundation for Sustainable Development.Ädditional writing support for Franziska Meinck was provided by the European Research Council (ERC) under the European Union's Seventh Framework Programme (FP7/2007-2013)/ERC grant agreement n° 313421 and the Philip Leverhulme Trust (PLP-2014-095).

References

Abramsky, T., Devries, K., Kiss, L., Nakuti, J., Kyegombe, N., Starmann, E., . . . & Watts, C. (2014). Findings from the SASA! Study: A cluster randomized controlled trial to assess the impact of a community mobilization intervention to prevent violence against women and reduce HIV risk in Kampala. *Uganda*, 1–17. http://dx.doi.org/10.1186/s12916-014-0122-5

Akmatov, M. (2011). Child abuse in 28 developing and transitional countries—results from the Multiple Indicator Cluster Surveys. *International Journal of Epidemiology*, *40*, 219–227. http://dx.doi.org/10.1093/ije/dyq168

Albert Bandura. (1976). *Social learning theory*.

Andersson, N., Cockcroft, A., & Shea, B. (2008). Gender-based violence and HIV: Relevance for HIV prevention in hyperendemic countries of southern Africa. *AIDS (London, England)*, *22*(Suppl. 4), S73–S86. http://dx.doi.org/10.1097/01.aids.0000341778.73038.86

Baker, G., Verma, R., & Contreras, M. (2011). *International men and gender equality survey (IMAGES)*.

Bensley, L., Van Eenwyk, J., & Simmons, K. W. (2003). Childhood family violence history and women's risk for intimate partner violence and poor health. *American Journal of Preventive Medicine*, *25*(1), 38–44. http://dx.doi.org/10.1016/S0749-3797(03)00094-1

Bisika, T., Ntata, P., & Konyani, S. (2009). Gender-violence and education in Malawi: a study of violence against girls as an obstruction to universal primary school education. *Journal of Gender Studies*, *18*(3), 287–294. http://dx.doi.org/10.1080/09589230903057183

Bloom, S. (2008). Domestic violence. In J. O'Brien (Ed.), *Encyclopedia of gender and society* (p. 14). New York: Sage.

Botvin, G. J., Griffin, K. W., & Nichols, T. D. (2006). Preventing youth violence and delinquency through a universal school-based prevention approach. *Prevention Science*, 403–408. http://dx.doi.org/10.1007/s11121-006-0057-y

Boyes, M. E., Bowes, L., Cluver, L. D., Ward, C. L., & Badcock, N. A. (2014a). Bullying victimisation, internalising symptoms, and conduct problems in south african children and adolescents: A longitudinal investigation. *Journal of Abnormal Child Psychology*, *42*(8), 1313–1324. http://dx.doi.org/10.1007/s10802-014-9888-3

Boyes, M. E., Bowes, L., Cluver, L. D., Ward, C. L., & Badcock, N. A. (2014b). Bullying victimisation, internalising symptoms, and conduct problems in south african children and adolescents: A longitudinal investigation. *Journal of Abnormal Child Psychology*, *42*(8), 1313–1324. http://dx.doi.org/10.1007/s10802-014-9888-3

Breiding, M. J., Mercy, J. A., Gulaid, J., Reza, A., & Hleta-Nkambule, N. (2013). A national survey of childhood physical abuse among females in Swaziland. *Journal of Epidemiology and Global Health*, *3*(2), 73–81. http://dx.doi.org/10.1016/j.jegh.2013.02.006
Briere, J. (2004). Violence against women: outcome complexity and implications for assessment and treatment. *Journal of Interpersonal Violence*, *19*(11), 1252–1276. http://dx.doi.org/10.1177/0886260504269682
Brown, L., Thurman, T., Bloem, J., & Kendall, C. (2006). Sexual Violence in Lesotho. *Studies in Family Planning*, *37*(4), 269–280.
Burton, P. (2005). *Suffering at School: the results of the Malawi Gender-based Violence in Schools survey*.
CDC. (2015). *Towards a violence-free generation using science to fuel action and end violence against children*. [Retrieved December 1, 2015, from]. http://www.cdc.gov/violenceprevention/vacs/index.html
Chen, M., & Chan, K. L. (2015). Effects of parenting programs on child maltreatment prevention: A meta-Analysis. *Trauma Violence & Abuse*, http://dx.doi.org/10.1177/1524838014566718
Chisamya, G., Dejaeghere, J., Kendall, N., & Khan, M. A. (2011). *Gender and Education for All: Progress and problems in achieving gender equity*. http://dx.doi.org/10.1016/j.ijedudev.2011.10.004
Cluver, L., Lachman, J., Ward, C., Gardner, F., Peterson, T., Redferns, A., . . . & Redfern, J. (2016). Development of a parenting support program to prevent abuse of adolescents in South Africa: Findings from a pilot pre-post study. *Research on Social Work Practice*, 1–9. http://dx.doi.org/10.1177/1049731516628647
Cluver, L., Meinck, F., Yakubovich, A., Doubt, J., Redfern, A., Ward, C., . . . & Gardner, F. (2016). Reducing child abuse amongst adolescents in low- and middle-income countries: A pre-post trial in South Africa. *BMC Public Health*, *16*(1), 567. http://dx.doi.org/10.1186/s12889-016-3262-z
Cluver, L., Orkin, M., Boyes, M. E., & Sherr, L. (2016). Child and adolescent suicide attempts, suicidal behavior, and adverse childhood experiences in South Africa: A prospective study. *Journal of Adolescent Health*, *57*(1), 52–59. http://dx.doi.org/10.1016/j.jadohealth.2015.03.001
Danese, A., Moffitt, T. E., Harrington, H., Milne, B. J., Polanczyk, G., Pariante, C. M., . . . & Caspi, A. (2013). Adverse childhood experiences and adult risk factors for age- related disease: Depression, inflammation, and clustering of metabolic risk markers. *Archives of Pediatrics and Adolescent Medicine*, *163*(12), 1135–1143. http://dx.doi.org/10.1001/archpediatrics.2009.214.Adverse
Devries, K., Knight, L., Child, J. C., Mirembe, A., Nakuti, J., Jones, R., . . . & Naker, D. (2015). The Good School Toolkit for reducing physical violence from school staff to primary school students: A cluster-randomised controlled trial in Uganda. *The Lancet Global Health*, *3*(7), e378–e386. http://dx.doi.org/10.1016/S2214-109X(15)00060-1
Dufour, M.-S. (2011). *Mental health status and participation in an economic livelihoods intervention: A case study of the SHAZ! Project for adolescent orphan girls in Zimbabwe*.
Felitti, V. J., Anda, R. F., Nordenberg, D., Williamson, D. F., Spitz, A. M., . . . Edwards, V., . . . & Marks, J. S. (1998). Relationship of childhood abuse and household dysfunction to many of the leading causes of death in adults: The adverse childhood experiences (ACE) study. *American Journal of Preventive Medicine*, *14*(4), 245–258. http://dx.doi.org/10.1016/S0749-3797(98)00017-8
Finkelhor, D., Turner, H., a Shattuck, A., & Hamby, S. L. (2013). Violence, crime, and abuse exposure in a national sample of children and youth: An update. *JAMA Pediatrics*, *167*(7), 614–621. http://dx.doi.org/10.1001/jamapediatrics.2013.42
Haney, E., Singh, K., Nyamukapa, C., Gregson, S., Robertson, L., Sherr, L., & Halpern, C. (2014). One size does not fit all: Psychometric properties of the Shona Symptom Questionnaire (SSQ) among adolescents and young adults in Zimbabwe. *Journal of Affective Disorders*, *167*, 358–367. http://dx.doi.org/10.1016/j.jad.2014.05.041
Hillis, S., Mercy, J., Amobi, A., & Kress, H. (2016). Global prevalence of past-year violence against children: a systematic review and minimum estimates. *Pediatrics*, *137*(3) http://dx.doi.org/10.1542/peds.2015-4079
Hosmer, D. W., Lemeshow, S., & Sturdivant, R. X. (2013). *Applied logistic regression* (3rd ed.). Wiley.
Hossain, M., Zimmerman, C., Kiss, L., Abramsky, T., Kone, D., . . . Bakayoko-topolska, M., . . . & Watts, C. (2014). *Working with men to prevent intimate partner violence in a conflict-affected setting: a pilot cluster randomized controlled trial in rural Côte d ' Ivoire*. pp. 1–13.
Jewekes, R., Levin, J., Mbananga, N., & Bradshaw, D. (2002). Rape of girls in South Africa Chromosomal congenital anomalies and residence near hazardous waste landfill sites For personal use. *Lancet*, *359*, 319–320 [Only reproduce with permission from The Lancet Publishing Group].
Jewkes, R., Nduna, M., Levin, J., Jama, N., Dunkle, K., Puren, A., & Duvvury, N. (2008). Impact of stepping stones on incidence of HIV and HSV-2 and sexual behaviour in rural South Africa: Cluster randomised controlled trial. *BMJ (Clinical Research Ed.)*, *337* http://dx.doi.org/10.1136/bmj.a506 [(aug07_1), a506]
Jewkes, Nduna, M., Jama Shai, N., & Dunkle, K. (2012). Prospective study of rape perpetration by young south african men: Incidence &; risk factors. *Public Library Of Science*, *7*(5), e38210. http://dx.doi.org/10.1371/journal.pone.0038210
Jewkes. (2014). (How) can we reduce violence against women by 50% over the next 30 years? *PLoS Medicine*, *11*(11), e1001761. http://dx.doi.org/10.1371/journal.pmed.1001761
Jewkes, Dunkle, K., Nduna, M., Jama, P. N., & Puren, A. (2010). Associations between childhood adversity and depression, substance abuse and HIV and HSV2 incident infections in rural South African youth. *Child Abuse & Neglect*, *34*(11), 833–841. http://dx.doi.org/10.1016/j.chiabu.2010.05.002
Jewkes, Dunkle, K., Nduna, M., & Shai, N. (2010). Intimate partner violence, relationship power inequity, and incidence of HIV infection in young women in South Africa: A cohort study. *Lancet*, *376*(9734), 41–48.
Kaljee, L., Zhang, L., Langhaug, L., Munjile, K., Tembo, S., Menon, A., . . . & Malungo, J. (2017). A randomized-control trial for the teachers' diploma programme on psychosocial care, support and protection in Zambian government primary schools. *Psychology Health & Medicine*, *22*(4), 381–392. http://dx.doi.org/10.1080/13548506.2016.1153682
Knerr, W., Gardner, F., & Cluver, L. (2013). Improving positive parenting skills and reducing harsh and abusive parenting in low-and middle-income countries: A systematic review. *Prevention Science*, *14*(4), 352–363. http://dx.doi.org/10.1007/s11121-012-0314-1
Krug, E. G., Mercy, J. A., Dahlberg, L. L., & Zwi, A. B. (2002). . [(Suppl 2). Retrieved from http://www.ncbi.nlm.nih.gov/pubmed/15298158\n http://www.ncbi.nlm.nih.gov/pubmed/12384003\n http://www.ncbi.nlm.nih.gov/pubmed/12596453.
Lachman, J. M., Sherr, L. T., Cluver, L., Ward, C. L., Hutchings, J., & Gardner, F. (2016). Integrating evidence and context to develop a parenting program for low-income families in South Africa. *Journal of Child and Family Studies*, http://dx.doi.org/10.1007/s10826-016-0389-6
Langhaug, L. F., Pascoe, S. J., Mavhu, W., Woelk, G., Sherr, L., Hayes, R. J., & Cowan, F. M. (2010). High prevalence of affective disorders among adolescents living in rural Zimbabwe. *Journal of Community Health*, *35*(4), 355–364. http://dx.doi.org/10.1007/s10900-010-9261-6
Langhaugh, L., Cheung, Y., Pascoe, S., Hayes, R., & Cowan, F. (2009). Difference in prevalence of common mental disorder as measured using four questionnaire delivery methods among young people in rural Zimbabwe. *Journal of Affective Disorders*, *Nov(118*, 1–3.
Leach, F., Fiscian, V., Kadzamira, E., Lemani, E., & Machakanja, P. (2009). *An investigative study of the abuse of girls in african schools*.
Maier, T., Mohler-Kuo, M., Landolt, M. A., Schnyder, U., & Jud, A. (2013). The tip of the iceberg. Incidence of disclosed cases of child sexual abuse in Switzerland: results from a nationwide agency survey Incidence of disclosed cases of child sexual abuse in Switzerland 1. *International Journal of Public Health*, *58*(6), 875–883. http://dx.doi.org/10.1007/s00038-013-0498-6
Malawi. (2014). *National plan of action to combat gender-based violence in Malawi*.
Mavhu, W., Berwick, J., Chirawu, P., Makamba, M., Copas, A., Dirawo, J., . . . & Edstrom, J. (2013). Enhancing psychosocial support for HIV positive adolescents in harare, Zimbabwe. *Public Library Of Science*, *8*(7), e70254. http://dx.doi.org/10.1371/journal.pone.0070254
Meinck, F., Cluver, L. D., Boyes, M. E., & Mhlongo, E. L. (2015). Risk and protective factors for physical and sexual abuse of children and adolescents in africa a review and implications for practice. *Trauma Violence & Abuse*, *16*(1), 81–107.
Meinck, F., Cluver, L. D., Orkin, F. M., Kuo, C., Sharma, A. D., Hensels, I. S., & Sherr, L. (2017). Pathways from family disadvantage via abusive parenting and caregiver mental health to adolescent health risks in South Africa. *Journal of Adolescent Health*, *60*(1), 57–64. http://dx.doi.org/10.1016/j.jadohealth.2016.08.016

Meinck, F., Cluver, L. D., Boyes, M. E., & Loening-voysey, H. (2016). Physical, emotional and sexual adolescent abuse victimisation in South Africa: prevalence, incidence, perpetrators and locations. *BMJ Journal*, 1–7. http://dx.doi.org/10.1136/jech-2015-205860
Meinck, F., Steinert, J. I., Sethi, D., Gilbert, R., Bellis, M. A., Mikton, C., . . . & Baban, A. (2016). *Measuring and monitoring national prevalence of child maltreatment: a practical handbook.*
Ministry of Finance Economic Planning and Development. (2014). *2014 millennium development goal report for Malawi.*
Naker, D. (2005). *Violence against children: The voices of ugandan children and adults.* pp. 1–101. [http://doi.org/ISBN: 9970-893-07-1].
Newell, P. (2013). *Briefing on malawi for the human rights committee country report task force –July 2013.*
Patel, V., Simunyu, E., Gwanzura, F., Lewis, G., & Mann, A. (1997). The Shona Symptom Questionnaire: The development of an indigenous measure of common mental disorders in Harare. *Acta Psychiatrica Scandinavica*, *95*(6), 469–475. http://dx.doi.org/10.1111/j.1600-0447.1997.tb10134.x
Peacock, D., & Barker, G. (2014). Working with men and boys to prevent gender-based violence: Principles, lessons learned, and ways forward. *Men and Masculinities*, *17*(5), 578–599. http://dx.doi.org/10.1177/1097184X14558240
Perry, B. D. (2001). The neurodevelopmental impact of violence in childhood. In D. Schetky, & E. P. Benedek (Eds.), *Chapter 18: In Textbook of Child and Adolescent Forensic Psychiatry* (pp. 221–238). Washington, D.C: American Psychiatric Press, Inc.
Prah, M. (2013). *Insights into gender equity, equality and power relations in sub-saharan africa – google books*. [Retrieved February 7, 2017, from]. https://books.google.co.uk/books?id=P9SxV5D4QXIC&pg=PA224&lpg=PA224&dq=patriarchy+Gender+inequality+culture+malawi&source=bl&ots=x7FaqF1ezL&sig=_5YZsL0aHYMFrnqCllYgb88NIbU&hl=en&sa=X&ved=0ahUKEwiX94ehpf7RAhWkC8AKHfdUBlkQ6AEISDAF#v=onepage&q=patriarchyG
Pronyk, P. M., Hargreaves, J. R., Kim, J. C., Morison, L. A., Phetla, G., Watts, C., . . . & Porter, J. D. H. (2016). Effect of a structural intervention for the prevention of intimate-partner violence and HIV in rural South Africa: A cluster randomised trial. *The Lancet*, *368*(9551), 1973–1983. http://dx.doi.org/10.1016/S0140-6736(06)69744-4
Pulerwitz, J., & Baker, G. (2016). Measuring attitudes toward gender norms among young men in Brazil: Development and psychometric evaluation of the GEM scale. *Men and Masculinities*, *10*(3), 322–338.
Pulerwitz, J., Hughes, L., Mehta, M., Kidanu, A., Verani, F., & Tewolde, S. (2015). Changing gender norms and reducing intimate partner violence: Results from a quasi-Experimental intervention study with young men in Ethiopia. *American Journal of Public Health*, *105*(1), 132–137. http://dx.doi.org/10.2105/ajph.2014.302214
Sachs-Ericsson, N., Gayman, M. D., Kendall-Tackett, K., Lloyd, D. A., Medley, A., Collins, N., & Sawyer, K. (2010). The long-term impact of childhood abuse on internalizing disorders among older adults: The moderating role of self-esteem. *Aging & Mental Health*, *14*(4), 489–501. http://dx.doi.org/10.1080/13607860903191382
Sharma, M. P. (2006). Orphanhood and schooling outcomes in Malawi. *American Journal of Agricultural Economics*, *88*(5), 1273–1278. http://dx.doi.org/10.1111/j.1467-8276.2006.00944.x
Shonkoff, J. P., Boyce, W. T., & McEwen, B. S. (2009). Neuroscience, molecular biology, and the childhood roots of health disparities: Building a new framework for health promotion and disease prevention. *JAMA*, *301*(21), 2252–2259. http://dx.doi.org/10.1001/jama.2009.754
Sinclair, J., Sinclair, L., Otieno, E., Mulinge, M., Kapphahn, C., & Golden, N. (2013). A self-defense program reduces the incidence of sexual assault in kenyan adolescent girls. *Journal of Adolescent Health*, http://dx.doi.org/10.1016/j.jadohealth.2013.04.008
Slonim-Nevo, V., & Mukuka, L. (2007). Child abuse and AIDS-related knowledge, attitudes and behavior among adolescents in Zambia. *Child Abuse & Neglect*, *31*(2), 143–159. http://dx.doi.org/10.1016/j.chiabu.2006.08.006
Stöckl, H., Devries, K., Rotstein, A., Abrahams, N., Campbell, J., Watts, C., & Moreno, C. G. (2010). The global prevalence of intimate partner homicide: A systematic review. *The Lancet*, 859–865. http://dx.doi.org/10.1016/s0140-6736(13)61030-2
Stoltenborgh, M., van IJzendoorn, M. H., Euser, E. M., & Bakermans-Kranenburg, M. J. (2011). A global perspective on child sexual abuse: Meta-analysis of prevalence around the world. *Child Maltreatment*, *16*, 79–101. http://dx.doi.org/10.1177/1077559511403920
Sunny, B. S., Elze, M., Chihana, M., Gondwe, L., Crampin, A. C., Munkhondya, M., . . . & Glynn, J. R. (2017). Failing to progress or progressing to fail? Age-for-grade heterogeneity and grade repetition in primary schools in Karonga district, northern Malawi. *International Journal of Educational Development*, *52*, 68–80. http://dx.doi.org/10.1016/j.ijedudev.2016.10.004
Turner, H. A., Finkelhor, D., & Ormrod, R. (2006). The effect of lifetime victimization on the mental health of children and adolescents. *Social Science & Medicine*, *62*(1), 13–27. http://dx.doi.org/10.1016/j.socscimed.2005.05.030
UNICEF, & CDC. (2014). *Violence against children and young women in Malawi: findings from a national survey 2013.* [Retrieved from]. http://www.togetherforgirls.org/wp-content/uploads/MLW_resources_violencereport_final.pdf
United Nations. (1992). *Convention on the elimination of all forms of discrimination against women – general recommendation No. 19.*
Wagman, J. A., Gray, R. H., Campbell, J. C., Thoma, M., Ndyanabo, A., Ssekasanvu, J., . . . & Brahmbhatt, H. (2015). Effectiveness of an integrated intimate partner violence and HIV prevention intervention in Rakai, Uganda: analysis of an intervention in an existing cluster randomised cohort. *The Lancet Global Health*, *3*(1), e23–33. http://dx.doi.org/10.1016/S2214-109X(14)70344-4
Walsh, K., Zwi, K., Woolfenden, S., & Shlonsky, A. (2015). School-based education programmes for the prevention of child sexual abuse. *Review*, *4*.

Appendix A. Supplementary data

Supplementary data associated with this article can be found, in the online version, at http://dx.doi.org/10.1016/j.chiabu.2017.02.027.