



What explains childhood violence? Micro correlates from VACS surveys

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ABSTRACT

Violence in childhood is a serious health, social and human rights concern globally, there is, however, little understanding about the factors that explain the various forms of violence in childhood. This paper uses data on childhood violence for 10,042 individuals from four countries. We report Odds Ratios from pooled logit regression analysis with country fixed effects model. There is no gender difference in the overall incidence of childhood violence. The data shows that 78% of girls and 79% of boys have suffered some form of violence before the age of 18 years. Odds of violence are higher among richer households, among individuals who have attended school and among individuals who have been married or in marriage-like arrangements. Individuals who justify wife beating have significantly higher likelihood of having faced violence themselves. Most perpetrators of violence against children – physical, emotional and sexual – are people known to them in their homes and community, and not strangers. There is limited understanding of the factors that explain violence in childhood. This study highlights some key factors that can explain this phenomenon.

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Introduction

Violence in childhood is a serious health, social and human rights concern globally. Recognising the significance of this problem, the United Nation's Sustainable Development Goals include an agenda to end all forms of violence against children. Recent literature has documented the magnitude of violence against children at country levels by synthesising available evidence across countries. A recent study finds that over 1 billion children in the age group of 2–17 years have experienced violence in the past year.¹ There is, however, little understanding about the factors that explain the various forms of violence in childhood. This paper uses individual level data from four countries on childhood violence to highlight some of the key factors that can explain these disturbing phenomena globally.

Experience of violence in childhood is widespread, as highlighted by the recent literature. A statistical analysis carried out by the United Nations Children's Fund, (UNICEF, 2014),

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reports that 60% of children experience physical punishment on a regular basis, and worldwide, nearly one in three adolescents face bullying on a regular basis. Using self-reported data, the prevalence, incidence, perpetrators and locations of physical, emotional and sexual adolescent abuse victimisation was documented for South Africa (Meinck, Cluver, Boyes, & Loening-Voysey, 2016). Research has also established risk and protective factors for severe physical and emotional abuse among South African youth (Meinck, Cluver, Boyes, & Ndhlovu, 2015). In a survey in the U.S. (Finkelhor, Ormrod, Turner, & Hamby, 2005) report that nearly one half of American children were assaulted at least once in the previous year. Finkelhor et al. (2005) also reported that more than 1 in 4 (273 per 1000) of the children and youth had experienced a property offense in the study year, more than 1 in 8 (136 per 1000) a form of child maltreatment, 1 in 12 (82 per 1000) a sexual victimization, and more than 1 in 3 (357 per 1000) had been a witness to violence or experienced another form of indirect victimization. A recent study has shown that children and youth are exposed to violence, abuse and crime in varied and extensive ways, which justifies continued monitoring and prevention efforts (Finkelhor, Turner, Shattuck, & Hamby, 2015). There is effort to identify the location of abuse, such that policy interventions can be appropriately designed. Assessment of at-school victimization and violence exposure was done through a national household survey of children and youth (Finkelhor, Vanderminden, Turner, Shattuck, & Hamby, 2016). As a widespread problem with enduring impact on the lives of people, this is a topic that requires more attention from public agencies.

There is extensive literature which highlights that childhood violence has negative effects on an individual's well-being and can persist into adulthood. Research has also shown that exposure to violence predicts poor educational outcomes in young children using data from South Africa and Malawai (Sherr et al., 2015). Using data from East Asia and Pacific region, research has established the consequences of maltreatment on children's lives. Children in the region experiencing maltreatment are at increased risk of experiencing mental health consequences, physical health sequelae, high-risk sexual behaviours, and increased exposure to future violence including intimate partner violence as an adult (Fry, McCoy, & Swales, 2012). Gilbert et al. (2009) report that child maltreatment has long lasting effects on mental health, drug and alcohol abuse, risky sexual behaviour, obesity and criminal behaviour. Anda et al. (2006) show through an epidemiological study that adverse childhood experiences are related with poor outcomes in a broad spectrum of areas. DuRant, Getts, Cadenhead, Emans, and Woods (1995) examined the relationships between exposure to violence and depression, hopelessness and purpose in life among black adolescents living in or around public housing developments. The World report on violence and health (Krug, Mercy, Dahlberg, & Zwi, 2002) shows that the victims of child abuse have an above average chance of becoming involved in aggressive and violent behaviour as adolescents and adults and sexual abuse during childhood or adolescence has been linked to suicidal behaviour.

In an early estimate of the economic costs of violence against children, Fromme (2001) reviewed a variety of sources and calculated a total of \$94 billion in annual costs to the US economy from child abuse which is a significant 1.0% of the gross domestic product. Fang, Brown, Florence, and Mercy (2012) did a similar analysis and placed this number at \$124 billion in 2008. In another study, Fang et al. (2015) scrutinise the effects of child maltreatment in the East Asia and Pacific region and conclude that the estimated economic value of Disability Adjusted Life Years lost due to child maltreatment is equivalent to nearly 2% of the region's GDP. The literature and show that there are linkages between different

forms of violence. It is therefore not surprising that in some instances different forms of violence share the same risk factors (Dartnall and Gevers (2015).

Research has also tested the effectiveness of child abuse prevention programmes for adolescents in low- or middle-income countries using pre- and post methodology (Cluver et al., 2016). The study highlights the need for more rigorous testing using randomized controlled trials. Longitudinal study has also tested the effectiveness of Community-Based Organisation Support for children, showing that these are associated with behavioural and mental health benefits for children over time (Sherr et al., 2016). Recent study has identified the pathways from family disadvantages in the form of abusive parenting and mental health of caregiver to health risks for adolescents in South Africa (Meinck et al., 2017). Some researchers have proposed a call for action using public health approach to preventing child abuse in low- and middle-income countries by Skeen and Tomlinson (2013); while others have proposed a new research agenda to address violence in childhood (Ward et al., 2012).

We aim to extend the literature on childhood violence by highlighting the factors that significantly explain these different forms of childhood violence. This study looks to contribute through an empirical analysis using individual level data from four countries collected through the Violence Against Children Surveys (VACS). We have more than 10,000 observations from four countries – Tanzania, Cambodia, Kenya and Swaziland. The data covers details of physical, emotional and sexual violence faced by individuals in the age group of 13–24 years of age in these four countries.

Methods

Our paper studies micro correlates of violence in childhood, where we use individual level data from VACS carried out by the Centers for Disease Control and Prevention in VACS Cambodia (2014), VACS Kenya (2012), VACS Tanzania (2011) and VACS Swaziland (2007). In Cambodia 1121 females and 1255 males completed the questionnaire (2376 in total), giving individual response rates for females of 93.7% and for males of 92.1%. In Kenya a total of 1227 females and 1456 males completed the individual survey. The individual response rates were 94.0% for females and 89.8% for males. In Tanzania 3739 interviews were conducted and were divided in the following manner: 1968 females, and 1771 males with individual response rates of 93.5% and 92.6% respectively. In Swaziland information was collected from 1244 of the 1292 eligible females, for a response rate of 96.3%. In all countries, the sampling frame was the one used for the national population census, and sample sizes were selected to be nationally representative.

The surveys measure physical, emotional and sexual violence against girls and boys among respondents aged 13–24 years. The basic structure of the questionnaires is similar, but there are differences from country to country so we pool the similar elements of data from these countries and construct measures of experience of physical, emotional and sexual violence. Details of each of the variables has been explained in Appendix 1 and 2. Emotional violence includes, when the respondent was a child, the threat of abandonment, name calling or being made to feel unwanted. Sexual violence includes unwanted sexual touching, unwanted attempted sex, pressured/coerced sex, or forced sex. Physical violence includes slapping, beating with object, kicking, threatening and attacking with weapons and violent disciplining.

Table 1. Prevalence of violence against children.

Experience of violence	Percentage of girls	Percentage of boys
Any violence	77.9	78.8
Physical violence	72.1	73.2
Sexual violence	20.3	11.1
Emotional violence	27.8	32.0
More than one form (physical/sexual/emotional) of violence	34.3	33.3
Total observations	5560	4482

Note: Author's calculations from VACS data.

We estimate the Odds Ratio (OR) from logit regressions using individual country level data as well as the pooled data for all the 10,042 individuals in the age group of 13–24 years from four countries. The analysis is done using country fixed effects, so the ORs picks up statistically significant relationship over and above the country level variations. As a critical explanatory factor, we also construct an asset index using multiple correspondence analysis on assets common to the four countries. So we combine availability of a toilet, bicycle, car, radio, TV, phone, fridge and availability of electricity. For any form of violence, the VACS questionnaires ask the respondent their age and when they first experienced it. We use this question to create a common variable across countries on the age of first experience of violence – whether physical, emotional or sexual. Because of response coding in Cambodia and Kenya, we are limited to age groups instead of actual ages for the pooled data. For our main analysis we pool the country data to account for the variations in the availability of data for all four countries. These are reported as different specifications in the results tables.

Results

We begin the analysis by first looking at the prevalence of violence. Table 1 shows that 78% of girls and 79% of boys have suffered some form of violence before the age of 18. Further disaggregated data shows that physical violence is the predominant form of abuse and it includes being slapped, punched, pushed, kicked, beaten with object and attacked with a weapon. The other two forms of violence reported in the data are emotional violence which includes humiliation and threatened with abandonment; and sexual violence which includes unwanted sexual touching, unwanted attempted sex, pressured sex and physically forced sex.

Sexual violence is twice as likely for girls than boys. Nearly 20.3% of girls have reported some form of sexual violence while for boys this figure is 11%. Emotional violence, however, is higher among boys (32%) than girls (27.8%). More than one third of all individuals surveyed have reported poly-victimization. Here poly-victimization is defined as abuse from many different levels of the ecological framework. This means that they have suffered more than one form of violence including physical, emotional and sexual in their childhood. Poly-victimization seems to be equally prevalent among girls and boys in the population.

We have further disaggregated the data by age groups in Table 2, and find that childhood violence is distributed across all age groups of children. The distribution of violence across age groups is also quite symmetric for both boys and girls. So while approximately 12% of both boys and girls in the age group of 0–5 years report abuse, it is significantly higher in the age group of 6–11 years for both boys and girls. More than 40% of boys and girls in the age group of 6–11 years have faced some form of childhood abuse. There is a decline in reported violence from age 12–17 but it still remains significant at approximately 20% for

Table 2. Prevalence of violence against children by age groups.

Age group(years) at first experience of any violence (physical/ sexual/emotional)	Percentage of girls	Percentage of boys
0–5	11.9	12.4
6–11	40.8	43.7
12–17	19.9	16.6
18 or older	3.2	2.8
Total	75.9	75.6
Did not experience violence/reveal age	24.1	24.4
Total observations	5560	4482

Note: Author's calculations from VACS data.

Table 3. Perpetrators of violence against children.

Perpetrators	Percentage of girls	Percentage of boys
<i>Sexual violence</i>		
Boyfriend/girlfriend/partner	32.8	32.6
Neighbour	27.9	21.8
Family member	9.6	20.8
Friend/classmate	15.6	14.2
Stranger	19.0	20.1
Authority	11.3	2.3
Other	11.5	4.4
<i>Physical violence</i>		
Parent or adult relative	53.1	57.1
Authority	14.5	19.6
Teacher	52.6	50.8
Partner	14.5	2.2
Other	27.6	
<i>Emotional violence</i>		
Relative	68.9	65.4
Authority	9.0	8.9
Neighbour	19.1	34.0
Partner	12.4	7.3
Total observations	5560	4482

Notes: Author's calculations from VACS data; Percentages can total more than 100 because one person can report multiple perpetrators.

girls and 17% for boys. After 18 years, there is a tremendous decline where approximately 3% of boys and girls report any abuse. The data, thus, shows that prevalence of childhood violence is very high in the population and 3 out of 4 children, both boys and girls, face some form of violence.

Another cut of the data is by perpetrators of violence against children. The results are presented in Table 3. An overall look at the disaggregated data reveals that most forms of violence against children – physical, emotional and sexual – are perpetrated by people known to them in their homes and community, and not strangers. Perpetrators of violence vary by the nature of violence and this is reflected by the distribution for each of the three types of violence – sexual, physical and emotional.

Sexual violence is often perpetrated by partners (boyfriend/girlfriend) for both boys and girls. But while the data shows that partners are the largest single perpetrator category reported for sexual violence, approximately 40% of boys and girls report that neighbours and family members have been their sexual offenders. The likelihood of strangers sexually assaulting children is lower than that, and equal for both boys and girls at approximately 20%. But where the distinctions become stark is the role of family members in sexually

Table 4. What explains violence against children? Country level analysis.

	(1)	(2)	(3)	(4)
	Tanzania	Cambodia	Kenya	Swaziland
Justifiable to beat wife	1.91*** (.29)	.94 (.10)	1.60*** (.22)	
Asset index	1.03 (.09)	1.05 (.06)	1.20 (.15)	.91 (.06)
Lives with mother	1.20 (.20)	.67*** (.10)	.71* (.13)	.54*** (.08)
Ever attended school	5.56*** (2.66)	1.84** (.50)	5.85*** (1.83)	1.03 (.38)
Female	1.00 (.16)	.91 (.09)	.71 (.29)	1.00 (.)
Ever married or lived with someone as if married	1.74** (.41)	1.00 (.17)	.95 (.22)	1.25 (.34)
Age	.91*** (.02)	1.02 (.02)	.99 (.03)	1.00 (.)
Muslim	.73 (.24)		.25*** (.11)	1.00 (.)
Traditional	1.26 (.91)		6.23 (7.06)	
Catholic	.81 (.27)		.77 (.34)	.98 (.32)
Protestant	.56* (.19)		.75 (.32)	.88 (.14)
No religion	.66 (.27)		.57 (.46)	1.28 (1.07)
Primary education	.55 (.24)	1.01 (.14)	1.20 (.21)	.00 (.00)
Secondary education	.71 (.32)	.76 (.15)		.00 (.00)
University education	.28 (.37)	.73 (.27)		.00 (.00)
Observations	3739	2376	2683	1242
Pseudo R ²	.057	.008	.059	.043

Notes: Dependent variable is 'Experienced Violence'. This equals 1 if individual reported some form of violence, 0 otherwise. Exponentiated coefficients; Standard errors in parentheses.

* $p < .10$; ** $p < .05$; *** $p < .01$.

assaulting boys and the role of 'authority' in sexually assaulting girls. Authority could be teachers, employers, religious leaders, community leaders, police and soldiers. Physical violence is perpetrated largely by parents and teachers – for both boys and girls. It is interesting that the summary statistics from the individual level micro data is consistent with cross country data collected from UNICEF's Hidden in Plain Sight report where violent discipline at home was faced by a significant 78% of children globally. It is important to remember the differences in the data here. UNICEF's data from 62 countries on discipline at home indicates that 78% of children face violence and parents are likely to be the most common perpetrators. Yet, it is useful to understand that this data on prevalence was based on sample surveys of parents who actually report on parental practices, that is, parents are asked how frequently they had hit their children in the past month if they had committed a particular offence. Thus, they need to be read as parental reports of accounts of violence.

In the micro data, individuals aged 13–24 years were surveyed and asked for accounts of violence they faced in the past. They report parents (followed by teachers) as the main perpetrators of violence. So parents (surveyed for macro data) and children (surveyed for micro data) reveal consistent accounts of violence at home. The data also reveals that girls

Table 5. What explains violence against children? Pooled regression analysis.

	(1)	(2)	(3)	(4)
	Without Swaziland	Without Cambodia	All countries	All countries
Justifiable to beat wife	1.44*** (.15)	1.90*** (.29)		
Asset index	1.05* (.03)	1.03* (.02)	1.05* (.04)	1.11* (.06)
Lives with mother	1.05 (.14)	1.20 (.20)	1.17 (.19)	.89 (.09)
Ever attended school	2.80*** (.59)	5.55*** (2.66)	5.28*** (2.53)	4.12*** (.68)
Female	.97 (.10)	1.00 (.16)	1.03 (.16)	1.00 (.09)
Ever married or lived with someone as if married	1.40** (.22)	1.75** (.41)	1.79** (.41)	1.20** (.05)
Age	.96** (.02)	.91*** (.03)	.91*** (.02)	.98 (.01)
Primary education	1.06 (.13)	.55 (.24)	.60 (.26)	
Secondary education	1.14 (.18)	.71 (.32)	.74 (.33)	
University education	.76 (.33)	.28 (.37)	.25 (.30)	
Muslim		.71 (.23)	.72 (.21)	
Catholic		.78 (.26)	.79 (.23)	
Protestant		.55** (.15)	.56** (.16)	
No religion		.64 (.25)	.68 (.26)	
Country FE	Yes	Yes	Yes	Yes
Observations	6115	3739	4983	10,042
Pseudo R ²	.044	.057	.041	.037

Notes: Dependent variable is 'Experienced Violence'. This equals 1 if individual reported some form of violence, 0 otherwise. Exponentiated coefficients; Standard errors in parentheses.

* $p < .10$; ** $p < .05$; *** $p < .01$.

are facing physical violence from their partners which is rare for boys. Emotional violence is largely inflicted by relatives for both boys and girls. Boys also report facing emotional violence from neighbours while girls are less likely to report this. Once again, partners are more likely to inflict emotional violence on girls than on boys.

The next step is to do regression analysis using the VACS data to understand what micro factors can potentially explain childhood violence at the individual level. For this analysis, we have combined all forms of violence together, so the dependent variable in our regression is whether the individual experienced any form of violence or not. The regressions are logit regressions and we report the OR against each explanatory variable in the Tables 4 and 5. For this analysis, we also construct an asset index using multiple correspondence analysis on assets common to the four countries – availability of a toilet, bicycle, car, radio, TV, phone, fridge and availability of electricity.

Table 4 reports the results for each country in the VACS data – Tanzania, Cambodia, Kenya and Swaziland. The sample sizes are large but the pseudo R^2 are low as would be expected for individual level analysis. This means that there are many other unobservable and observable variables that can potentially explain whether an individual has experienced

any childhood violence. We look at explanations in people's attitudes, asset ownership, age, gender, living arrangements, religion and education among several other observable factors. The different explanatory variables in the regression analysis therefore include measures of attitude (whether justifiable to beat wife), asset ownership which is a good proxy for wealth of the individual, age, gender, religion and level of education. Besides the explanatory variables described above, we have included three more interesting variables in our regression analysis. These include (i) whether the individual lives with her/his own biological mother, (ii) if the individual has ever attended school and (iii) if the individual has ever been married or lived with someone as if married. The hypothesis for the first is that children who live with their biological mothers are less likely to face violence. The hypothesis for the second variable is that children who attend school are more prone to peer violence and physical violence from teachers and figures of authority, as the summary statistics highlighted in Table 3. The hypothesis for the third variable is that children who are either married or living in a marriage-like arrangement are more prone to sexual, emotional and physical violence from their partners, as highlighted by Table 3.

The results show that there is no significant relationship between likelihood of facing violence and gender. Boys and girls are both equally likely to have faced violence, as per the VACS data. In two out of the four countries, we see that when individuals support and justify wife beating, they are more likely to have faced violence themselves. Once again, actual incidence of violence reinforces and in turn is reinforced by individual's attitude and values. The OR tell us that individuals who justify wife beating have 1.9 and 1.6 times higher likelihood of having faced violence themselves, compared to their peers in Tanzania and Kenya respectively. The results show that individuals who live with their biological mothers are less likely to have faced some form of violence, and it is consistently a strong result in three out of the four countries we analysed. The OR show that individuals who live with their mothers are .67, .71 and .54 times less likely to have faced violence than their peers who do not live with their mothers, in Cambodia, Kenya and Swaziland respectively. Similarly individuals who reported to have 'ever attended school' are significantly more at 5.56, 1.84 and 5.85 times more likely to have faced some form of violence than their peers who have never attended school in Tanzania, Cambodia and Kenya respectively. This can be understood by the fact that teachers and 'authority figures' are common perpetrators of different forms of childhood violence as reported in Table 3. Peer violence from classmates and 'friends' is also common and likely to arise more when children attend school, compared with when they do not. Here the individual level data is analysed at the country level, so the results must be understood in that context. So while Muslim children in Kenya have 25% higher odds of facing violence compared to their peers from other religions, Protestants in Tanzania report 56% higher odds of facing violence compared to their peers from other religious groups.

We sharpen the analysis by incorporating country fixed effects into our regression methodology. The results from this are reported in Table 5. These are the OR from logit regressions using the pooled data for all the 10,042 individuals in the age group of 13–24 years from four countries. The analysis is done using country fixed effects, so the ORs must pick up a statistically significant relationship over and above the country level variations. Since all the countries do not have all the explanatory variables that we are interested in analysing, we report results from pooled regressions using four specifications, as reported in the four columns in Table 5.

The first regression is without Swaziland because it only has women respondents in the survey and the survey does not have attitudinal information. The second regression is

without Cambodia because there is no information on religion for Cambodia. The third regression specification involves all the four countries and adds all relevant explanatory variables including education and religion as controls in the analysis. The last column reports the results from a pooled regression using a sparse specification such that no observations are dropped, we therefore have all 10,042 individuals in the final specification. In this sparse specification, however, we have to drop controls such as attitude, religion and education. As one can see, the main results, however are consistent across most specifications.

People's attitude to wife-beating is a strong predictor for whether they have faced violence themselves. As our main results show, individuals who justify wife-beating have 1.44 (and 1.9) times the odds of facing violence than those who do not support wife beating. This is statistically and economically a strong result. It is also consistent with the country level analysis using VACS data in Table 4. Contrary to popular belief, wealth seems to be positively correlated with incidence of childhood violence. As the results on the asset index show, consistency, for all specifications, people from richer households report higher incidence of childhood violence. This is a consistent result across all four columns. Though statistically these results are significant only at the 90 confidence interval, the economic significance as shown by the magnitude of the OR is worth noting. Individuals with higher asset ownership are more likely to have faced violence of some form in their childhood.

Once again, and not surprisingly, gender doesn't seem to affect odds of facing violence in childhood. Both boys and girls report high incidence of childhood violence and there is no statistically significant difference between the two genders in likelihood of abuse. The results on 'age' show that older the individual, the higher the odds of him/her having faced some form of violence. The two factors, beside individual attitude and asset ownership, which significantly explain childhood violence in this data are 'ever attended school' and 'ever been married or lived as if married'. Once again, these are consistent with previous findings from country level analysis for each of the four countries in Table 4. Every specification in the pooled regressions of Table 5 shows a significant OR for 'ever attended school'. Column 4 results show that individuals who have ever attended school have more than 4 times the odds of facing some violence than those who have not attended school. This is consistent with teachers and authority figures being significant perpetrators of physical violence and classmates being involved in peer violence.

In terms of married youth being at higher risk of facing violence, the pooled regressions are once again consistent with the country level results. Each of the four specifications show that being married or in a marriage like arrangement significantly increases the odds of facing violence. Column 4 specifically shows that individuals who are married have a 1.2 times higher odds of facing violence than those who are not married. Since partners are the main perpetrators of sexual violence and also significant afflictors of physical and emotional violence, this result is in line with our summary statistics in Table 3. The pooled regressions also show that Protestants in the population have .5 times lower odds of facing violence than people from other religions. This is a consistent result across specifications.

Discussion

We conduct econometric analysis using data from four countries collected through the VACS. We have more than 10,000 observations from four countries – Tanzania, Cambodia, Kenya and Swaziland. The data covers details of physical, emotional and sexual violence faced by individuals in the age group of 13–24 years of age. The data reveals evidence on

violence faced by children worldwide, and our findings are broadly consistent with the existing literature. There is no gender difference in the overall incidence of childhood violence. Boys and girls are equally likely to face violence. The data shows that 78% of girls and 79% of boys have suffered some form of violence before the age of 18 years.

The analysis reveals that the odds of childhood violence are higher among richer households, among individuals who have attended school and among individuals who have been married or in marriage-like arrangements. The data also reveals that most forms of violence against children – physical, emotional and sexual – are perpetrated by people known to them in their homes and community, and not strangers. Teachers and parents are the highest perpetrators of physical violence while relatives are the most common inflictors of emotional violence. Data on sexual violence shows that while partners are the most commonly reported perpetrators of sexual violence, approximately 40% of boys and girls report that neighbours and family members have been their sexual offenders. Authority figures in the community, who could be employers, religious leaders, community leaders, police and soldiers, have also been reported to be perpetrators of all three forms of violence against children.

We find that there is no gender difference in the overall incidence of childhood violence, which is faced by approximately three-fourths of all children. Boys and girls are equally likely to face violence. There are, however, variations in the nature of violence between girls and boys where girls face more sexual violence while boys report higher emotional violence, and both are equally likely to report physical violence. The age distributions of childhood violence for boys and girls also look very similar, with the highest likelihood of violence in the age group of 6–11 years of age. Our results reveal another consistent finding regarding people's attitude to violence. Attitudes are correlated with actual incidence of childhood violence faced by individuals. We find that individuals who justify wife beating are significantly more likely to have faced childhood violence themselves. Given the nature of the data, it is difficult to establish the direction of the causality in the relationship between actual violence and attitude towards violence. However, these results indicate the potential significance of changing mind-sets as a policy priority to tackle violence against children across the world. The individual level data analysis reveals that possibility of childhood violence is higher among richer households, among individuals who have ever attended school, who don't live with their biological mother, and among individuals who have been married or in marriage-like arrangements.

The data also reveals a disturbing fact that most forms of violence against children – physical, emotional and sexual – are perpetrated by people known to them in their homes and community. Strangers account for a much smaller proportion of childhood violence. Teachers and parents are the most common perpetrators of physical violence while relatives are the most common inflictors of emotional violence. Data on sexual violence shows that while partners are the most commonly reported perpetrators of sexual violence, approximately 40% of boys and girls report that neighbours and family members have been their sexual offenders. Authority figures in the community, who could be employers, religious leaders, community leaders, police and soldiers, have also been reported to be perpetrators of all three forms of violence against children.

Limitations

The main concern with empirical estimates like this paper, is the lack of complete and consistent data availability. Our estimates, similar to the remaining literature, relies on data

for few forms of violence across select countries. Given this broad limitation, our main results are consistent internally, across various data and specifications.

Conclusion

Recognizing the seriousness of childhood violence as a health, social and human rights concern globally, the United Nation's Sustainable Development Goals expanded its scope to include an agenda to end all forms of violence against children globally. Recent literature has documented the magnitude of violence against children and the results are overwhelming. A statistical analysis carried out by the United Nations Children's Fund, (UNICEF 2014), reports that 60% of children experience physical punishment on a regular basis, and world-wide, nearly one in three adolescents face bullying on a regular basis. There is, however, little understanding about the factors that explains the various forms of violence in childhood. This paper uses individual level data for four countries and our analysis highlights some of the key factors that can explain the phenomenon of childhood violence globally.

Note

1. Hillis, Mercy et al. (2016).

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Appendix 1. Definitions of variables used in analysis

Justifiable to beat wife	If the respondent thinks that a man has the right to beat his wife
Lives with mother	Whether the biological mother of the respondent stays in the house with the respondent
Ever attended school	If the respondent has ever attended any form of schooling
Female	If the respondent is female
Ever married or lived with someone as if married	If the respondent has ever been married or has ever lived with a partner as if married
Age	Age of the respondent
Muslim	If the respondent follows the religion of Islam
Traditional	If the respondent follows traditional beliefs and practices of African people
Catholic	If the respondent is a Catholic Christian
Protestant	If the respondent is a Protestant Christian
No religion	If the respondent does not practice any religion
Primary education	Standard 1–7 (Tanzania) Grade 1–7 (Swaziland) Grade 1–6 (Cambodia) Standard 1–8 (Kenya)
Secondary education	Form 1–6 (Tanzania) Grade 8–12 (Swaziland) Grade 7–12 (Cambodia) Standard 9–12 (Kenya)
University education	Education for 3 years or more after advanced secondary education (Tanzania) Post – secondary level of education from age 19 (Swaziland) Education after upper secondary (Cambodia) 4 years of post-secondary education (Kenya)
Emotional violence	If the respondent has ever experienced being called bad names, made to feel unwanted or threatened with abandonment
Physical violence	If ever any parent, current or previous partner or any other person has kicked, punched, whipped, slapped, pushed, threatened to use knife or any other weapon to harm the respondent
Sexual violence	If ever anyone tried to touch the respondent sexually without consent, attempted forced sex with or without success or pressured the respondent to have sex
Any violence	If the respondent has suffered any emotional, physical or sexual violence

Note: All variables except age are dummy variables where Yes = 1 and No = 0.

Appendix 2. Definitions in VACS

Attempted unwanted intercourse	Act in which perpetrator tried to make the respondent have sexual intercourse when he or she did not want to, but the assailant did not succeed in doing so
Child	Any person under the age of 18
Child sexual exploitation	Children receiving money or goods in exchange for sex: any person under 18 who received money or goods in exchange for sex
Coerced intercourse (Tanzania)	Act when a perpetrator pressured or non-physically forced the respondent to have sexual intercourse against his or her will
Coerced intercourse (Swaziland)	Act in which a man or boy persuaded or pressured the respondent to have sexual intercourse against her will
Female genital mutilation/cutting	Procedures involving the partial or total removal of the external female genitalia or other injury to the female genital organs for non-medical reasons
Physically forced intercourse (Cambodia)	If anyone ever physically forced the respondent to have sexual intercourse of any kind regardless of whether the respondent did or did not fight back
Physically Forced Intercourse (Tanzania/Swaziland)	Act in which a perpetrator physically forced the respondent to have sexual intercourse against his or her will

(continued)

Appendix 2. (Continued).

Pressured Intercourse (Cambodia)	If anyone ever pressured the respondent in a non-physical way, to have sexual intercourse of any kind when they did not want to and sex happened
Sexual intercourse	Sexual Intercourse refers to anytime a male's penis enters someone else's vagina or anus, however slight
Sexual intercourse for females	Includes someone penetrating a female's vagina or anus with their penis, hands, fingers, mouth, or other objects, or penetrating her mouth with their penis
Sexual intercourse for males	Includes someone penetrating a male's anus with their penis, hands, fingers, mouth, or other objects, or penetrating his mouth with their penis; this can also include someone forcing the male's penis into their mouth, vagina, or anus
Unwanted completed sex (Cambodia/Kenya)	A combination of physically forced and pressured sex as defined above
Unwanted touching (Cambodia)	If anyone, male or female, ever touched the respondent in a sexual way without their permission, but did not try and force the respondent to have sex of any kind
Unwanted touching (Swaziland)	Act of perpetrator in which a man or boy forced the respondent to touch his private parts against her will, but he did not force her to have sexual intercourse
Unwanted touching (Tanzania)	Act when a perpetrator touched the respondent against his or her will in a sexual way, such as unwanted touching, kissing, grabbing, or fondling, but did not try to force him or her to have sexual intercourse
Unwilling first sex	First sexual intercourse was pressured, lured, tricked, or physically forced
