Original Research

Effects of Parental Attitudes Toward Spousal Violence on Early Childhood Development and Learning Support Among Ghanaian Children

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Abstract
The prevalence of condoning attitudes toward spousal violence (SV) is high in Ghana, yet much is not known about how the development of children is compromised in households where attitudes toward SV are tolerated. This study is premised on two objectives: (a) examination of the effect of parents condoning attitudes toward SV on early childhood development; and (b) investigation of the effect of parents condoning attitudes toward SV on the amount of learning support children receive from household members. Data on 2,740 children aged between 36 and 59 months were drawn from the 2011 Ghana Multiple Indicator Cluster Survey for the first objective and 1,595 households with children aged between 4 and 15 years were sourced from the 2014 Ghana Demographic and Health Survey for the second. Analytical methods employed are descriptive statistics, instrumental variable (IV), and ordinary least squares (OLS) micro-econometric estimation

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techniques. The findings suggest that parents who condone attitudes toward SV reduce early childhood development by 3.269 units. Compared with the physical and socioemotional domains, parents tolerating attitudes toward SV have the highest adverse effect on the literacy, numeracy, and learning development domain of early childhood development (2.916 units). In addition, households that accept attitudes toward SV reduce the amount of learning support offered to children by 0.261 units, and every additional attitude toward SV acceptance reduces child learning support by 0.079 units. Attitudes of parents toward condoning SV retard the early development of children, impair children's cognitive development, and compromise the amount of learning support children receive from household members. This study reinforces the evidence that parental attitudes are related to child outcomes in Ghana. The evidence calls for strengthening healthy family environments and child protection systems through behavioral change communication interventions and awareness creation among parents.

Keywords
child abuse, children exposed to domestic violence, domestic violence, developmentally delayed, battered women

Introduction

Spousal violence (SV) has gained prominence as a critical challenge facing the international development community, given that about 35% of women worldwide have experienced SV (World Health Organization [WHO], 2013). Evidence suggests that children who are exposed to attitudes of SV from their parents suffer consequences which can be harmful to their overall well-being and development (Holt et al., 2008; Moylan et al., 2010; Pinheiro, 2006/2008; Vu et al., 2016). Consequently, the United Nation's Sustainable Development Goal (SDG) target 16.2 advocates for the eradication of all forms of abuse and the promotion of a violent-free environment for children to thrive and develop. Target 4a also seeks to provide a safe, nonviolent, inclusive, and effective learning environment for all including children (United Nations, 2016).

In Ghana, attitudes toward SV occur within the nuclear family setting where tightly knit kinship provides incentives for nondisclosure. Hence, there is a "communal repression syndrome" which leads to high tolerance levels (Ghana Statistical Service [GSS], Ghana Health Service [GHS], & ICF International, 2015). Unsurprisingly, more than a quarter (28%) of women in Ghana condone wife-beating attitudes from their husbands while the same

report also suggests about 12.5% of men also justify wife-beating (GSS, GHS, & ICF International, 2015). Notably, evidence reported from Domestic Violence and Victims Support Unit (DOVVSU) statistics suggests that wife battery constitutes a third of reported cases of domestic violence in the country (Ministry of Gender, Children and Social Protection, 2014).

However, there is lack of evidence on how the development of children is influenced in households with parental attitudes toward violence acquiescence. Equally overlooked issues are the effects on the specific domains of early childhood development (ECD), and the extent to which parental attitude toward SV compromises the learning support that family members provide to children. In this article, we address these gaps by setting out two broad objectives: (a) an examination of the effect of parents condoning attitudes toward SV on ECD; and (b) investigation of the effect of parents condoning attitudes toward SV on the amount of learning support children receive from adult household members.

Underlying the essence of women empowerment is their freedom from an abusive home environment and violence of all forms. Parental responses which suggest that attitudes toward wife-beating by husbands are justified reflect poor empowerment of women. Tolerating attitudes toward wife-beating signify unfortunate acceptance of norms that give men the right to use force against women, which violates their human rights. Unfortunately, such unhealthy tolerating tendencies disempower women and compromise the quality of parenting; especially, both parents' ability to meet the physical, cognitive, and emotional needs of their children, including offering support for their learning outcomes.

Data, Measurement of Key Variables, and Econometric Analyses

Data

Two main data sets were used for the study, namely, the 2011 Multiple Indicator Cluster Survey (MICS) and the 2014 Ghana Demographic and Health Survey (GDHS). The former has indicators that measure Early Childhood Development Index (ECDI), the latter has specific indicators on household learning support for children between 4 and 15 years. The two data sets used two-stage sampling procedure: the first stage focused on the selection of Primary Sampling Units (PSUs) from a sampling frame which constitutes the list of the 2010 Census Enumeration Areas (EA). The final stage dealt with the selection of the Secondary Sampling Units (SSUs) from each selected EA in the first stage.

The MICS is a nationally representative survey of 12,150 households. The sample of children aged under 5 years in 2011 MICS is 7,626; however, the focus of the study is on children aged between 36 and 59 months. Four main data files were used for the analyses, namely, children, women, men, and household files. After merging the data files and accounting for missing values, the total sample used for the causal relationship between parental attitude toward condoning SV and ECD is 2,740 children. The 2014 GDHS is also a nationally representative data set that collects information on households, women, men, and children. For this analysis, the focus is on households having children aged 4 to 15 years. After merging the households, women, and men data files, and accounting for missing values, the total number of households used for analyzing the effect of parental attitudes toward condoning SV on household learning support for children aged between 4 and 15 years amounted to 1,595. For both data sets, attrition analyses are done using the regional groupings across gender distribution to adjudge the degree of representativeness of our final samples. The attrition analyses are presented in Supplemental Appendices A and B for the data files in the MICS and GDHS, respectively.

Measurement of Key Variables

ECDI. The ECDI is the first dependent variable of the study. Principal component analyses (PCA) were used to create a continuum from the four components of ECD: literacy–numeracy, physical, socioemotional, and learning domains. The PCA was performed on the 10 indicators listed in the four domains, as shown in Table 1.

Child Learning Support Index. The second dependent variable of the study is the Child Learning Support Index (CLSI) which is also measured as a continuous variable using the PCA. This index shows the extent of parental involvement in children's learning activities at home. Ten sets of indicators were used: (a) assisting children with homework, (b) buying or borrowing books to read, (c) taking the child to the library, (d) taking the child to a reading event, (e) talking to the child's teacher about learning progress, (f) participating in parent-teacher association and management committee activities, (g) regularly reading to the child, (h) encouraging child to read, (i) communicating high expectations to the child, and (j) relieving the child of some household chores or other activities to provide time for learning.

Spousal violence. Parental attitudes toward condoning SV is the focal independent variable of the study. It measures the attitudes of wives and husbands/partners toward wife-beating. Whenever the husband is justified for beating the wife in any of the indicators in Table 2, it is counted as 1. Parental

Table 1. Variables Used in Constructing the Early Childhood Development Index.

Domains of ECD		Indicators	No. of Indicators
Literacy–numeracy	(a)	Can (name) identify or name at least 10 letters of the alphabet?	3
	(b)	Can (name) read at least four simple, popular words?	
	(c)	Know the name and recognize the symbol of all numbers from 1 to 10?	
Physical	(a)	Can Pick up a small object with two fingers, like a stick or a rock (stone) from the ground?	2
	(b)	Is (name) often too sick to play?	
Socioemotional domain	(a)	When given something to do, is (name) able to do it independently?	3
	(b)	Does (name) get along well with other children?	
	(c)	Does (name) kick, bite, or hit other children or adults?	
Learning	(a)	If the child does not get distracted easily	2
	(b)	Does (name) follow simple directions on how to do something correctly?	

Source. 2011 MICS 4.

Table 2. Attitude of Husbands and Wives Toward Wife Beating.

Number of SV	Indicators
1	If wife goes out without telling him?
2	If wife neglects the children?
3	If wife argues with him?
4	If wife refuses to have sex with him?
5	If wife burns the food?
6	If wife insults him?
7	If wife refuses to give him food?
8	If wife has another partner?
9	If wife steals?
10	If wife gossips?

Source. 2011 MICS 4 and 2014 GDHS.

attitudes toward condoning SV was eventually dichotomized into a dummy variable, with 1 signaling at least one of the attitudes toward wife-beating and 0 otherwise.

Econometric Analyses

The instrumental variable (IV) estimation technique. This study argues for a bidirectional relationship between ECD and parental attitude toward condoning SV. Although most studies in the literature hold that attitudes of parents toward SV affect ECD, the reverse can also be the case where poor development of children can incite behavior disorders, trauma, and blame-games among parents, which can breed unhealthy attitudes as tolerating wife-beating. The first stage reduced form equation for the IV models is specified as:

$$
\begin{aligned}
\hat{SV} = {} & \varphi_0 + \varphi_1 MotFGM_m + \varphi_2 CompI_h + \varphi_3 Childage_i \\
& + \varphi_4 Childsex_i + \varphi_5 Childvac_i + \varphi_6 Childbc_i + \varphi_7 Childece_i \\
& + \varphi_8 hhpov_h + \varphi_9 Motsocst_m + \varphi_{10} Motsocst_m \# hhpov_h \\
& + \varphi_{11} hpun_h + \varphi_{12} hecg_h + \varphi_{13} hsize_h + \varphi_{14} hhsex_h \\
& + \varphi_{15} hfloor_h + \varphi_{16} hheth_h + \varphi_{17} hhage_h + \varphi_{18} hhage_h^2 + \cap_i.
\end{aligned}
\tag{1a}
$$

For the second stage, we estimate the impact of SV on ECD as:

$$
\begin{aligned}
ECD_i = {} & \varphi_0 + \varphi_1 \hat{SV}_h + \varphi_2 Childage_i + \varphi_3 Childsex_i + \varphi_4 Childvac_i \\
& + \varphi_5 Childbc_i + \varphi_6 Childece_i + \varphi_7 hhpov_h + \varphi_8 Motsocst_m \\
& + \varphi_9 Motsocst_m \# hhpov_h + \varphi_{10} hpun_h + \varphi_{11} hecg_h \\
& + \varphi_{12} hsize_h + \varphi_{13} hhsex_h + \varphi_{14} hfloor_h + \varphi_{15} hheth_h \\
& + \varphi_{16} hhage_h + \varphi_{17} hhage_h^2 + \cap_i,
\end{aligned}
\tag{1b}
$$

Where $Cov(SV_h, MotFGM_m) \neq 0$, $Cov(SV_h, CompI_h) \neq 0$, and $Cov(ECD_i, MotFGM_m) = 0$ and $Cov(ECD_i, CompI_h) = 0$. Also, the subscripts i, m, and h denote child, mother, and household characteristics, respectively. Here, $\hat{SV}_h$ is the parental attitude toward SV, and ECD_i is the Early Childhood Development Index. The two instruments are $MotFGM_m$, representing mothers who experienced Female Genital Mutilation (FGM), and $CompI_h$, denoting whether parents have ever used information technology (computer or internet). The measurement and a priori expectation of the control variables are provided in Supplemental Appendix C. The stochastic term is represented by $\cap_i$.

Justification of the instruments for parental attitude toward condoning SV. Two variables were used to instrument the endogenous regressor, parental attitude toward condoning SV, namely, mothers who were victims of FGM, and

parents who have ever used information technology (either a computer or an internet). The intuitive argument for the validity of the two instruments is that they should have a nontrivial effect on parental attitude toward condoning SV, but not a direct relationship with ECD. Thus, a mother's experience of FGM in her childhood before the age of 15 years does not have a direct effect on her child's development. Similarly, a parent's usage of information technology (computers or internet) does not have a direct bearing on their children. However, the two instruments entail personal experiences (mother's experience of FGM) and interaction (parental usage of information technology) that can influence parents' attitude toward SV. Statistically, the instruments were further subjected to the Hausman, overidentification, and the weak instrument tests to assert their validity and robustness.

The OLS estimation technique. The OLS estimation technique is used to examine the second objective:

$$
\begin{aligned}
\text{CLSI} = {} & \beta_0 + \beta_1 \text{SV} + \beta_2 \text{Childnum} + \beta_3 \text{Sexhead} \\
& + \beta_4 \text{Agehead} + \beta_5 \text{hhpov} + \beta_6 \text{hhrel} + \beta_7 \text{hhfloor} \\
& + \beta_8 \text{hhpipe} + \beta_9 \text{hhethni} + \beta_{10} \text{husoc} + \beta_{11} \text{hhecg} \\
& + \beta_{12} \text{region} + \beta_{13} \text{res} + \beta_{14} \text{hheduc} + \beta_{15} \text{hheduc\#hhpov} + \varepsilon,
\end{aligned} \tag{2a}
$$

$$
\begin{aligned}
\text{CLSI} = {} & \beta_0 + \beta_1 \text{SVcounts} + \beta_2 \text{Childnum} + \beta_3 \text{Sexhead} \\
& + \beta_4 \text{Agehead} + \beta_5 \text{hhpov} + \beta_6 \text{hhrel} + \beta_7 \text{hhfloor} + \beta_8 \text{hhpipe} \\
& + \beta_9 \text{hhethni} + \beta_{10} \text{husoc} + \beta_{11} \text{hhecg} + \beta_{12} \text{region} \\
& + \beta_{13} \text{res} + \beta_{14} \text{hheduc} + \beta_{15} \text{hheduc\#hhpov} + \varepsilon,
\end{aligned} \tag{2b}
$$

where CLSI represents household Child Learning Support Index. SV is the main independent variable showing whether a household condones attitudes toward SV or otherwise, and SVcounts is the number of the types of wife-beating that parents condone in Equation 2b. The measurement and a priori expectations of the control variables are presented in Supplemental Appendix D. The stochastic term is represented by ε. In contrast, the β_0 to β_{15} are the coefficients of the model.

IV results of the effects of parental attitudes toward SV on ECD. The IV results are motivated by a graphical comparison of ECDI by parental acceptance of violent attitudes across the geographical groupings of the country in Figure 1. The summary statistics of key variables are depicted in Table 3. Supplemental Appendix E, however, shows the entire summary
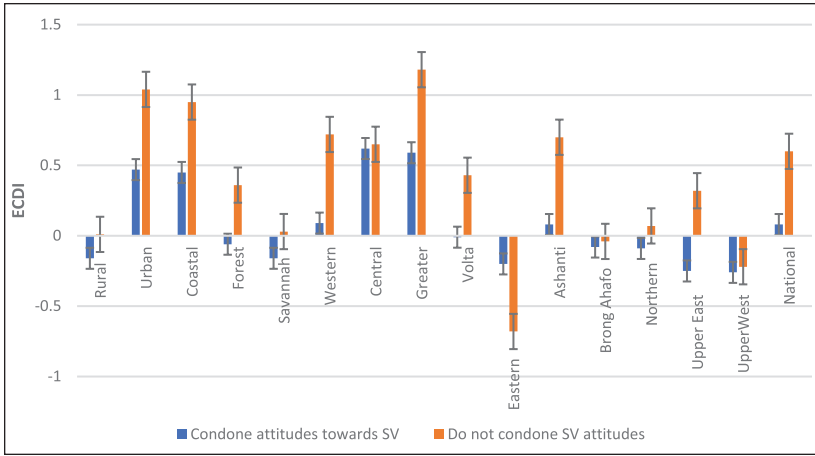
Figure 1. Average ECDI across area aggregates.
Note. ECDI = Early Childhood Development Index; SV = spousal violence.

Table 3. Summary Statistics of Key Variables for Effect of SV on ECDI.

Variables	Observation	M	SD	Minimum	Maximum
ECDI	2,740	0.236	1.579	−2.663	3.711
Literacy, numeracy, and learning development domain	2,740	0.226	1.557	−1.651	3.557
Physical development domain	2,740	0.032	0.992	−3.512	0.618
Socioemotional development domain	2,740	−0.033	1.089	−1.602	1.377

	Observation	Frequency (%)			
Condone attitudes toward SV					
No	833	30.39			
Yes	1,907	69.61			
	2,740	100			

Note. SV = spousal violence; ECDI = Early Childhood Development Index.

statistics of all the variables. The findings from Figure 1 mainly indicate that children whose parents condone attitudes toward SV had a lower ECDI compared with their counterparts whose parents do not tolerate such attitudes. The differences are statistically significant across all the

Table 4. Econometrics Results of Key Variables: Effects of SV on ECD.

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
	OLS1	OLS2	OLS3	OLS4	IV1	IV2	IV3	IV4
Condone attitudes toward SV (base: No)								
Yes	−0.460***	−0.296***	−0.176**	−0.003	−4.411***	−3.591***	−3.395***	−3.366***
	(0.079)	(0.071)	(0.069)	(0.069)	(0.856)	(0.814)	(0.910)	(1.292)

Note. Robust standard errors in bracket; (1) bivariate OLS model; (2) and (3) multivariate OLS models for selected control variables from Supplemental Appendix F; (4) multivariate OLS model for all control variables from Supplemental Appendix F; (5) bivariate IV model; (6) and (7) multivariate IV models for selected control variables from Supplemental Appendix F; and (8) multivariate IV model for all control variables from Supplemental Appendix F. SV = spousal violence; ECDI = Early Childhood Development Index; OLS = Ordinary Least Square; IV = instrumental variable.
*$p < .10$. **$p < .05$. ***$p < .01$.

geographical groupings as depicted by the error bars. This provides early support to the claim that condoning attitudes toward SV is detrimental to ECD among Ghanaian children.

The OLS and the IV estimation techniques are used to test the hypothesis that children living with parents that condone attitudes toward SV have a lower ECDI compared with their counterparts whose parents do not tolerate such attitudes. To test the hypothesis, eight variants of econometric models are applied based on four OLS and four IV estimations. Table 4 presents the results of the key variable. The results for the entire variables are presented in Supplemental Appendix F. Table 4 and Supplemental Appendix F present results of the key variable (condone attitude toward SV) and the independent variables, respectively. From the eight models shown in Table 4, the hypothesis that children whose parents condone attitudes toward SV have a lower ECDI compared with those who do not tolerate such attitude is upheld except for the fourth model which is the full model for the OLS estimation technique.

The plausible reason is the downward bias associated with the failure of the OLS in capturing the bi-directional effect between parents condoning attitudes toward SV and ECDI and the potential measurement errors associated with measuring ECDI as a continuum using the PCA. To correct for the mentioned potential biases, the study deployed the IV estimation techniques from Models 5 to 8. In Model 8, which is our final IV model, the results show that parental tolerance of attitudes toward SV reduced ECDI by 3.366 units when compared with the children living with parents who do not condone attitudes toward SV. The findings from the remaining three IV models are consistent with that of the final model.

Table 5. Econometric Results of Key Variable: Effects of SV on Three Domains of ECD.

	(1)	(2)	(3)
	Case A	Case B	Case C
Condone attitudes toward SV (base: No)			
Yes	−3.021**	−0.922	−1.133
	(1.220)	(0.642)	(0.746)

Note. Robust standard errors in bracket; Case A: literacy, numeracy, and learning development; Case B: physical development: Case C: socioemotional development; (1) multivariate IV model from Supplemental Appendix G; (2) multivariate IV model from Supplemental Appendix G; and (3) multivariate IV model from Supplemental Appendix G. SV = spousal violence; ECD = Early Childhood Development.
*$p < .10$. **$p < .05$. ***$p < .01$.

From Supplemental Appendix F, Model 8 suggests that the outcomes of the control variables are generally intuitive in the case of the final IV model. The results show that older children (49–59 months) have 0.487 ECDI higher than younger children (36–48 months). This pattern is also consistent across all the models alluding to the claim that age has a positive relationship with biological development. In the same vein, the vaccination status of the child also produced mostly intuitive results, as it revealed that children who are not vaccinated have ECDI of 0.436 lower than children who are vaccinated. This pattern is also consistent across all the models. The results also suggest that children who are not attending early childhood education have 0.686 ECDI lower than children who are attending early childhood education. The outcome is consistent across all the models. As suggested intuitively by the results, children in poor households have a 0.073 ECDI lower than their counterparts living in nonpoor households. This pattern is also consistent across all the models. Another intuitive finding is the suggestion that children living with parents who subscribe to physical discipline for nurturing children's upbringing have 0.169 ECDI higher than those who do not subscribe. A striking result depicted that male children have 0.154 ECDI lower than female children. This pattern is repeated across all the models.

The effects of parental attitude toward condoning SV on the domains of ECD. The hypothesis that parental attitude toward condoning SV has different effects on three domains of ECD: (a) literacy, numeracy, and learning development; (b) physical development; and (c) socioemotional development are tested using the IV estimation results in Table 5. The table presented the results of the key variable, whereas Supplemental Appendix G presents the results for the entire

Table 6. Summary Statistics of Key Variables for Effect of SV on CLSI.

Variables	Observation	M	SD	Minimum	Maximum
CLSI	1,595	−0.269	1.629	−2.950	2.998
Number of SV attitudes	1,595	0.956	1.540	0	5

	Observation	Frequency (%)
Condone attitudes toward SV		
No	1,029	64.51
Yes	566	35.49
Total	1,595	100.00

Note. SV = spousal violence; CLSI = Child Learning Support Index.

variables. The method used the same instruments as in the case of the overall ECD model in Table 3, namely, mothers who experienced FGM, and parents who ever used information technology. From all three econometric models, the hypothesis that parental attitude toward condoning SV has different effects on each of the components of ECD is upheld. From the estimation results in Table 5, "Case A" corresponds to literacy, numeracy, and learning development (cognitive-language and learning), whereas "Cases B and C" correspond to physical and socioemotional development, respectively.

The results indicate a statistically significant effect of parental attitude toward condoning SV only in "Case A" showing that parental attitude toward condoning SV reduces literacy, numeracy, and learning development of children by 3.021 units compared with children whose parents do not tolerate attitudes toward SV. Also, comparing the magnitude of the effects in absolute terms revealed that effects are highest in the literacy, numeracy, and learning development domain compared with the remaining two domains.

The effects of parental attitude toward condoning SV on child learning support. The econometric (OLS) results are motivated by the summary statistics of key variables in Table 6 and graphical comparison of household CLSI across parental attitude toward condoning SV (Figure 2). Summary statistics for the entire variables are presented in Supplemental Appendix H. Figure 2 mainly illustrates that households whose parents condone attitudes toward SV have lower CLSI compared with those who do not tolerate such attitudes. This outcome is depicted across all geographical groupings of the country. This finding provides early support to our claim that households that condone attitudes toward SV provide lower learning
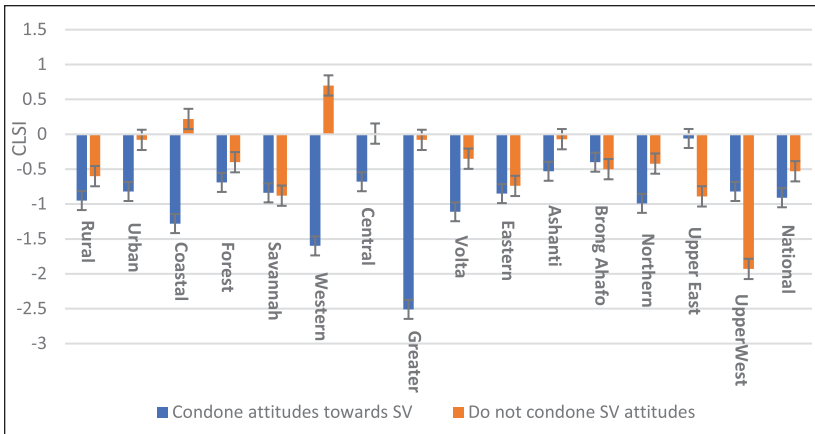
Figure 2. Average CLSI by area aggregates.
Note. CLSI = Child Learning Support Index; SV = spousal violence.

support for their children compared with those who do not tolerate such attitudes. The OLS estimation technique is used to test the following hypotheses: (a) households that condone attitudes toward SV offer their children lower learning support compared with the households who do not, and (b) households with a higher number of attitudes toward tolerating SV decrease the learning support offered to their children. The results of the key variables are presented using Table 7. The entire results are presented in Supplemental Appendix I.

From the four OLS models, the hypothesis that parents condoning attitudes toward SV reduces household Child Learning Support (CLS) is upheld. The results reveal that households that condone attitudes toward SV have 0.261 units of CLSI lower than households who do not. This finding is also consistent in the case of the bivariate model. This suggests that households with tolerance attitudes toward SV are relatively worse off in providing learning support for their children. The results from the table also show that as the number of attitudes toward condoning SV increases by one in the household, CLSI decreases by 0.079 units. This finding is consistent in the case of the corresponding bivariate model. These consistent results across the four models provide evidence of CLSI reducing the effect of parental tolerance of attitudes toward SV.

The results of the control variables, as shown in Supplemental Appendix I, are generally intuitive in the case of the two final models (Models 2 and 4). From Model 2, the results reveal that male-headed households have

Table 7. OLS Results of Key Variables: Effect of Spousal Violence on CLSI.

	(1)	(2)	(3)	(4)
Explanatory variables	OLS1	OLS2	OLS3	OLS4
Condone attitudes toward SV (base: No)				
Yes	−0.417***	−0.261***		
	(0.083)	(0.088)		
Number of SV attitudes			−0.128***	−0.079***
			(0.025)	(0.028)

Note. Robust standard errors in bracket; (1) bivariate OLS model of SV as a dummy variable; (2) multivariate OLS model of SV as a dummy variable from Supplemental Appendix I; (3) bivariate OLS model of SV as a count variable; and (4) multivariate OLS model of SV as a count variable from Supplemental Appendix I. OLS = ordinary least square; CLSI: Child Learning Support Index; SV = spousal violence.
*$p < .10$. **$p < .05$. ***$p < .01$.

0.186 units of CLSI higher than their female counterparts. This is also consistent in the case of Model 4. The results show that poor households have 0.294 units of CLSI lower than nonpoor households. The finding is consistent across the four models alluding to the observation that poor households have limited resources and capacity to provide the necessary learning support for their children. Similarly, the household electricity connection variable also produced largely intuitive results, as it indicates that households not connected to the national electricity grid have 0.245 units of CLSI lower than households connected to the national electricity grid. The result is consistent across the two samples, suggesting that reliable and affordable lighting engender CLS.

Using the area of residence dummy, households in the rural area have 0.212 units of CLSI lower than their counterparts in urban areas. This finding is intuitive, given that rural households are generally worse off in terms of literacy. The level of education of the household head depicts that reference persons whose education falls below secondary level offer lower learning support toward their children's development compared with those with at least a secondary school education. The religion variable indicates that household heads who are affiliated to the Christian religion have 0.476 units of CLSI higher than heads who have no religion and is consistent across the two models. The occupation variable suggests that compared with household heads in a skilled occupation, those engaged in unskilled labor, sales, and agriculture have a lower CLSI of 0.661, 0.245, and 0.247 units, respectively.

Discussion of Results and Findings

The study produced three main findings: (a) Substantial evidence showing that children living with parents who condone attitudes toward SV have a lower ECD compared with their counterparts whose parents do not condone such attitudinal tendencies; and (b) Statistically significant evidence that children living with parents who condone attitudes toward SV have the most substantial effect on their literacy, numeracy and learning development domain of ECD; and (b) Households where parents tolerate attitude toward SV offer their children lower learning support compared with households where parents do not accept attitudes toward SV.

The first main finding is supported by the conceptual framework of UNICEF's Programme Division (2017) on ECD. The framework postulates that parental attitude toward condoning SV creates a toxic environment for children, and children exposed to such an environment develop post-traumatic stress symptoms, more reduced self-esteem, depression, sadness, and aggressive tendencies which adversely affect their ECD compared with children who are not exposed to such environments. Whereas the short-term consequences of toxic environment can hinder children's physical, socioeconomic, and cognitive-language and learning development, the long-term consequences and implications can result in lowered economic productivity and higher crime rates.

Existing evidence corroborate the study's findings on ECD. Rossman and Rosenberg (1998) explore the relationship between cognitive and emotional development for 400 children exposed to severe and repetitive parental violence in the home environment, and the results revealed that children living in such environments showed higher levels of traumatic response and poorer cognitive functioning relative to those living in SV environment. Huth-Bocks et al. (2001) examined the direct and indirect effects of domestic violence on 100 preschoolers' intellectual functioning. They also found that children who had witnessed domestic violence had less developed verbal abilities compared with their counterparts who were not exposed to domestic violence. Martin's (2002) review of the psychological impact of exposure to domestic violence on child development revealed that children who grew up in an abusive home environment had retarded developmental progress and personal abilities. Other complementary studies include McIntosh (2002), Jaffe et al. (2004), Lundy and Grossman (2005), Bogat et al. (2006), Bauer et al. (2006), and Shonkoff et al. (2012).

The second main finding revealed that parental tolerance of attitudes toward SV has the largest and significant effect on literacy, numeracy, and learning development domain compared with the remaining components of ECD (physical and socioemotional development). This finding aligns with the prevailing observation from neuroscience that brain development is rapid at

the early years of life where neurons form a connection at the rate of up to 1,000 per second. They further argued that whereas genes provide the biological template of the brain in early years of child development, it is the environment that influences brain development (Center on the Developing Child, Harvard University, 2017; Shonkoff et al., 2012). It can also be argued that compared with the effort required to ensure children's physical development, numeracy, and literacy attainment require more parental effort and attention.

The third main finding suggests that households, where parents condone attitudes toward SV, offer lower learning support to their children compared with homes where parents do not tolerate SV attitudes. This observation is not far-fetched given that in households where parents condone attitudes toward wife-beating, family cohesion weakens and support toward children wanes as wives tend to be disempowered and become overly fixated on their circumstances to the neglect of the needs of their children. Disempowered mothers develop devastating coping strategies such as withdrawal, which compromises the quality of parenting, learning support, and essential nurturing care required for children to thrive. The findings may also suggest that parents who condone SV are less motivated to assist in child learning.

Discussion on Diversity

The following traits underscore the diversities in our samples. From the total sample of 2,740 children aged between 36 and 59 months, 50.55% are girls, and 49.45% are boys; 24.18% reside in poor households of which 20% are in the bottom wealth quintile. On the level of education, 47.55% have uneducated mothers in the rural areas, 9.23% uneducated mothers in urban areas, 23.76 have educated mothers in rural areas, and 19.45% have educated mothers educated in urban areas of the country. On ethnicity, 39.69% are Akans, followed by Mole Dagbani (19.57%), Ewe (13.85%), Ga/Dangme (7.50%), Gruma (5.99%), Grusi (4.62%), Guan (3.64%), and Mande (1.83%). The distribution of religious affiliation indicates that 63.16% reside in households headed by a Christian, 21.80% in households headed by Moslems, 8.28% in households headed by traditionalists and spiritualists, and 6.76% have no religious affiliation. The 1,595 households also recorded similar differences in the sample.

The preceding suggests that the nature of our sample allowed for differences such as sex, socioeconomic status, ethnicity (culture), and geographical location and education to ensure the inclusiveness of all categories of children and households across the country.

It is worth mentioning that the measures used to analyze the data in our study has many strengths; however, we acknowledge some limitations that should be considered when interpreting our results. First, the findings are

only generalizable to children and households with an indication of parents' attitude toward condoning SV and not the incidence of the actual violence. Second, from a methodological perspective, the IV quasi-experimental approach suggests that the results are sensitive to the selection of explanatory variables and the choice of the instrument(s). Future studies should consider the incidence of actual SV in the Ghanaian setting, and the scope of surveys should be broadened to include attitudes toward husband beating and the incidence of actual SV.

Conclusion and Policy Recommendation

Based on the two Ghanaian nationally representative surveys, the 2011 MICS and 2014 DHS, the findings indicate that parental attitude toward SV does not only impair ECD among children in their early years but also compromise the amount of learning support offered to children in affected families. The study also indicated that parental tolerance of SV had the most significant adverse effect on literacy, numeracy, and learning domain of ECD, implying that such attitudes impair brain development among Ghanaian children.

In terms of the policy, this study broadly satisfies the need for high-quality evidence and data for facilitating strong decision-making within the systems for promoting a healthy family environment and strengthening child protection in Ghana. The Ministry of Information should spearhead attitudinal change campaigns by focusing on communication and awareness interventions, which emphasize behavioral change to improve healthy spousal relations and positive ECD.

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Supplemental Material

Supplemental material for this article is available online.

References

Bauer, N. S., Herrenkohl, T. I., Lozano, P., Rivara, F. P., Hill, K. G., & Hawkins, J. D. (2006). Childhood bullying involvement and exposure to intimate partner violence. *Pediatrics*, *118*(2), e235–e242.

Bogat, G. A., DeJonghe, E., Levendosky, A. A., Davidson, W. S., & von Eye, A. (2006). Trauma symptoms among infants exposed to intimate partner violence. *Child Abuse & Neglect*, *30*(2), 109–125.

Center on the Developing Child, Harvard University. (2017). *The science of early childhood development*. https://developingchild.harvard.edu/wp-content/uploads/2015/05/Science_Early_Childhood_Development.pdf

Ghana Statistical Service, Ghana Health Service, & ICF International. (2015). *Ghana Demographic and Health Survey 2014*.

Holt, S., Buckley, H., & Whelan, S. (2008). The impact of exposure to domestic violence on children and young people: A review of the literature. *Child Abuse & Neglect*, *32*(8), 797–810. https://doi.org/10.1016/j.chiabu.2008.02.004

Huth-Bocks, A. C., Levendosky, A. A., & Semel, M. A. (2001). The direct and indirect effects of domestic violence on young children's intellectual functioning. *Journal of Family Violence*, *16*(3), 269–290.

Jaffe, P. G., Baker, L. L., & Alison, J. C. (Eds.). (2004). *Protecting children from domestic violence: Strategies for community intervention*. Guilford Press.

Lundy, M., & Grossman, S. F. (2005). The mental health and service needs of young children exposed to domestic violence: Supportive data. *Families in Society*, *86*(1), 17–29.

Martin, S. G. (2002). Children exposed to domestic violence: Psychological considerations for health care practitioners. *Holistic Nursing Practice*, *16*(3), 7–15.

McIntosh, J. E. (2002). Thought in the face of violence: A child's need. *Child Abuse & Neglect*, *26*(3), 229–241.

Ministry of Gender, Children and Social Protection. (2014). *Child and family welfare policy*. http://mogcsp.gov.gh/index.php/mdocs-posts/child-and-family-welfare-policy

Moylan, C. A., Herrenkohl, T. I., Sousa, C., Tajima, E. A., Herrenkohl, R. C., & Russo, M. J. (2010). The effects of child abuse and exposure to domestic violence on adolescent internalising and externalising behaviour problems. *Journal of Family Violence*, *25*(1), 53–63. https://doi.org/10.1007/s10896-009-9269-9

Pinheiro, P. (2008). *World report on violence against children*. https://www.thinkchildsafe.org/thinkbeforedonating/wp-content/uploads/World-Report-On-Violence-Against-Children-UN.pdf (Original work published 2006)

Rossman, B. R., & Rosenberg, M. S. (1998). *Multiple victimisation of children: Conceptual, developmental, research, and treatment issues*. Haworth Maltreatment & Trauma Press.

Shonkoff, J. P., Garner, A. S., Siegel, B. S., Dobbins, M. I., Earls, M. F., & McGuinn, L., . . . Committee on Early Childhood, Adoption, and Dependent Care. (2012). The lifelong effects of early childhood adversity and toxic stress. *Pediatrics*, *129*(1), e232–e246.

UNICEF Programme Division. (2017). *UNICEF program guidance for early childhood development*. UNICEF.

United Nations. (2016). *The sustainable development goals report 2016*. https://unstats.un.org/sdgs/indicators/regional-groups

Vu, N. L., Jouriles, E. N., McDonald, R., & Rosenfield, D. (2016). Children's exposure to intimate partner violence: A meta-analysis of longitudinal associations with child adjustment problems. *Clinical Psychology Review*, *46*, 25–33. https://doi.org/10.1016/j.cpr.2016.04.003

World Health Organization. (2013). *Global and regional estimates of violence against women: prevalence and health effects of intimate partner violence and non-partner sexual violence*.

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