

# Predictors of Attitudes Toward Intimate Partner Violence

## A Comparative Study of Men in Zambia and Kenya

Stephen Lawoko  
*Karolinska Institute*

Attitudes toward intimate partner violence (IPV) were compared between Zambian and Kenyan men on sociodemographic, attitudinal, and structural predictors of such attitudes. Data were retrieved from the latest Demographic and Health Surveys in each country. The results showed that many men in Zambia (71%) and Kenya (68%) justified IPV to punish a woman for transgression from normative domestic roles. In priority order, sociodemographic, autonomy, and access-to-information indicators predicted attitudes toward IPV in both countries. Whereas in Kenya, education reduced the likelihood of justifying IPV, the reverse was observed in Zambia. Access to information reduced the likelihood of justifying IPV among men in Zambia but not in Kenya. Men's positive attitudes toward women's autonomy reduced the likelihood of justifying IPV in Kenya but not in Zambia. Differences in specific predictors between the countries demonstrate the significance of capitalizing on need-adapted interventions tailored to fit conditions in each country.

**Keywords:** *attitudes toward violence; men; predictors; Zambia; Kenya*

There has been a call for a concerted awareness campaign in the general public about the extent, nature, and diverse consequences of intimate partner violence (IPV) in a bid to change distorted public opinion on the subject (Lawoko, 2006). Despite the inaction of domestic violence bills and other measures to protect women from abuse in several developing countries (Khasakhala-Mwenesi, Buluma, Kong'ani, & Nyarunda, 2004; Kwaramba, 2001), evidence of changes in conventional ideas about IPV across generations is lacking (Hindin, 2003; Lawoko, 2006), suggesting that perhaps awareness raising alongside legislative initiatives is warranted to influence public attitudes toward IPV.

The belief that IPV is justified has been suggested as one of the utmost predictors of IPV itself (Hanson, Cadsky, Harris, & Lalonde, 1997), above the significance of other important predictors, such as poverty and education (Faramarzi, Esmailzadeh, & Mosavi, 2005). The justification of wife abuse occurs in every society, with significant variations depending on the sociocultural context. In all societies, however, gender-role control seems significant in attitudes toward IPV. A recent study of 15 European countries suggested that contextual factors, such as gender empowerment at the country level, were significant for differences in men's and women's acceptability of violence between the studied countries (Gracia & Herrero, 2006). Data from America indicate that men's need to enact general control over their partners (Johnson, 1995), sexual infidelity, and the unfaithfulness of women (Arias & Johnson, 1989; Gentemann, 1984; Greenblat, 1985) are significant motivational factors for wife abuse. In developing countries, significant proportions of both men and women justify IPV to punish a woman's transgression from her normative roles in society (Hindin, 2003; Kazungu & Chew, 2003; Khasakhala-Mwenesi et al., 2004; Koenig et al., 2003; Rani, Bonu, & Diop-Sidibe, 2004), disobedience, adultery, and disrespect of her husband's relatives (Haj-Yahia, 2003). Moreover, many of women appear to reinforce IPV, as they more often than men justify such abuse (Fawole, Aderonmu, & Fawole 2005; Koenig et al., 2003) and tend to oppose punishment for IPV-related aggression (Haj-Yahia, 2002). The reasons why potential victims of IPV (i.e., women) justify it remain elusive, but factors such as their disempowered position may offer a plausible explanation. Much as women in general (victims as well as nonvictims) appear to justify IPV, further scrutiny of only abused women suggests that they opt to remain in abusive relationships to avoid hardships for their children (Fawole et al., 2005), indicating some form of dependence (e.g., economic) on their abusive husbands. Others have argued that repeated abuse may diminish a woman's motivation to respond and increase her feelings of hopelessness in the future (Walker, 1979).

A number of studies have been undertaken to understand demographic, social, and structural factors possibly explaining inequalities in attitudes toward violence among women. The findings suggest a social gradient in women's attitudes toward IPV: Low educational and occupational status, poverty, and rural residency (González-Brenes, 2004; Lawoko, 2006) are associated with a higher likelihood of tolerating IPV among women in developing countries. Likewise, structural factors such as limited access to information and a low grade of autonomy are associated with an increased likelihood of tolerating IPV among women (González-Brenes, 2004; Lawoko, 2006). These findings are in line with theories linking intimate partner abuse to social disadvantage among women (Yllo, 1983).

Men's abuse of women has often been placed in a theoretical framework in which gender-role control is central (Johnson; 1995; Yllo & Bograd, 1988), and some findings indicating that significant proportions of men justify IPV as a means to punish transgression from gender roles corroborate this theory (Arias & Johnson 1989; Gentemann, 1984; Greenblat, 1985; Hindin, 2003; Kazungu & Chewe, 2003; Khasakhala-Mwenesi et al., 2004; Koenig et al., 2003; Rani et al., 2004). However, not all men hold such attitudes. Studies suggest that men's attitudes toward IPV differ significantly across heterogeneous societies (Nayak, Byrne, Martin, & Abraham, 2003). Factors accounting for inequalities in men's attitudes toward IPV have not received equal attention in the research. And only a few studies have contrasted different societies on determinants of attitudes toward IPV. The rationale for making such a contrast is twofold. On one hand, given that societies may differ regarding political, cultural, social, and empowerment factors, it follows that the impact of these variables on attitudes toward IPV is also likely to vary and with it prevention priorities. In other words, each society may require a unique set of need-adapted interventions. On the other hand, the identification of common factors associated with attitudes toward IPV across dissimilar societies is important to avoid the duplication of global efforts to modify attitudes toward violence.

In the current work, it was sought to identify, quantify, and compare socio-demographic, structural, and attitudinal factors associated with Zambian and Kenyan men's attitudes toward IPV. On the basis of a literature review, it was hypothesized that (a) men's attitudes toward violence would be associated with sociodemographic, structural, and attitudinal factors in both countries and (b) the impact of these variables on attitudes toward violence would likely differ between the two countries.

## **Domestic Violence in Zambia and Kenya**

Although both Zambia and Kenya remain developing countries, Kenya has more favorable economic, social, and health conditions on average according to comparable vital statistics. Compared with Kenya, Zambia has a lower gross domestic product per capita (\$900 vs. \$1,100) and a higher inflation rate (18.3% vs. 10.3%). The prevalence of HIV/AIDS is higher (16.5% vs. 6.7%, according to 2003 statistics), life expectancy is lower (40.03 years vs. 48.93 years), infant mortality is higher (86.84 vs. 59.26 per 1,000 live births), and the literacy level is lower (80.6% vs. 85.1%) in Zambia than in Kenya (Central Intelligence Agency, 2006).

Zambia and Kenya have during the postcolonial era seen relative peace, unlike most countries in their neighborhood with recent experiences of political turmoil and military insurgencies. Although it has been claimed that societies with recent or long-standing experiences of war may be more prone to violence even in the domestic arena (Jewkes, 2002), the prevalence of physical assault against women by intimate partners in Zambia (24%) and Kenya (25%) seems comparable with that observed in countries with recent experiences of war and political instability in the sub-Saharan African region, such as Uganda (30%) and Nigeria (31%) (Fawole et al., 2005; Koenig et al., 2003). This discrepancy suggests that perhaps other societal factors (e.g., attitudes toward IPV) rather than spinoff effects from political violence or insurgencies may account for the high prevalence of IPV in developing countries.

Recent nationally representative surveys suggest that 80% and 66% of women in Zambia and Kenya, respectively, would justify IPV for at least one of several reasons pertaining to transgressions from their normative roles in society (Kazungu & Chewe, 2003; Khasakhala-Mwenesi et al., 2004). The factors associated with this trend have been investigated among women in Zambia but not Kenya. In Zambia, women in the lower bracket of the socio-economic hierarchy seem more tolerant of violence when contrasted with their more privileged peers (Lawoko, 2006). However, studies on the determinants of men's attitudes toward IPV together with cross-country comparisons of such determinants are lacking. The current study was conducted to fill this gap by comparing Kenya and Zambia in these respects.

## Methods

### Demographic and Health Surveys (DHS)

The DHS are carried out in several developing countries and receive main funding from the U.S. Agency for International Development. The key objective of the DHS is to monitor the demographic and health situations in the various countries on a 5-year basis. Separate surveys are run for women and for men. At a broad level, the surveys provide detailed data on demographic, social, and empowerment indicators as well as sexual and reproductive health. The survey procedure (e.g., its organizational and sampling methods) and the instruments used have received ethical approval from the institutional review board of the opinion research corporation Macro International.

The Zambian DHS for 2001 to 2002 was a comprehensive, nationally representative survey implemented by Zambia's Central Statistics Office in partnership with its Central Board of Health. The Kenyan DHS for 2003 was implemented by Kenya's Central Bureau of Statistics in collaboration with its Ministry of Health and the Kenyan Medical Research Institute.

## Sample Design

Both the Zambian DHS and the Kenyan DHS used a two-stage cluster sampling design. The Zambian DHS used the list of standard enumeration areas prepared for the population census of 2000 in Zambia as a frame for data sampling. Three hundred twenty clusters (100 in urban areas and 220 in rural areas) were selected from Zambia's nine provinces. In each urban and rural area, the systematic sampling of households was conducted, resulting in a sample of 8,050 households. A more detailed description of the sampling procedure is reported elsewhere (Dzekedzeke & Mulenga, 2003).

The Kenyan DHS used the list of the enumeration areas covered in the 1999 census as a frame for data sampling. Four hundred clusters (129 urban and 271 rural) were selected in the first phase. The second phase involved the systematic sampling of households in the urban and rural areas, resulting in a probability sample of 9,865 households. A more detailed description of the sampling procedure is reported in the Kenyan DHS final report (Otieno & Opiyo, 2003).

## Participants

In a subsample of one third of all the selected households in Zambia, all men aged 15 to 59 years were eligible for participation ( $N = 2,418$ ), of whom 88.7% were interviewed ( $n = 2,145$ ). In Kenya, a subsample of men aged 15 to 55 years in every second selected household were eligible for participation ( $N = 4,183$ ), of whom 85.5% were interviewed ( $n = 3,578$ ). This study was based on the interviewed men's responses in both countries.

## Questionnaire

A comprehensive questionnaire covering demographic and health issues was administered to the participating men. The questionnaire was developed by the MEASURE DHS program, which is implemented by Macro International (Rutstein & Rojas, 2003). In Kenya, the questionnaire was translated from English to 12 of the major local languages and refined following a pretest. In

Zambia, translation was made from English to 7 of the major local languages, and the instrument was modified following a pretest. More details regarding the questionnaires used in the two countries are reported elsewhere (Dzekedzeke & Mulenga, 2003; Otieno & Opiyo, 2003). In general, the DHS questionnaires cover social status (e.g., occupation, education), empowerment indicators (e.g., access to information and power in the domestic arena), attitudes toward wife beating, fertility preferences, awareness of and attitudes toward family planning methods, marriage history, sexual activity, and awareness of sexually transmitted illnesses, including HIV. For the current study, the questions concerning attitudes toward wife beating, social status, and empowerment indicators were of primary interest.

## Measures

Attitudes toward IPV were assessed using responses to hypothetical situations involving punishing a woman for transgression in her normative domestic roles. Specifically, men were asked if they would justify partner abuse for the following reasons: if she burns the food, if she argues with her husband, if she goes out without telling her husband, if she neglects the children, and if she denies her husband sexual relations. The possible responses to these questions were “yes,” “no,” and “don’t know.” In the logistic regression, attitudes toward violence were transformed into a dichotomous variable and used as the dependent variable. Respondents answering “no” to all of the attitude questions (i.e., those with firm negative attitudes) formed one group of the dichotomy, and those who responded in the affirmative on one or several of the attitude questions were considered to be the risk group of the dichotomy. The rationale for this distinction was to allow meaningful interpretation using odds ratios (i.e., estimating the risk factors for tolerant attitudes toward IPV).

Demographic and social status was assessed using the following indicators: age, urban or rural residency, marital status, educational achievement, and occupational status. The occupational status variables were transformed to include three categories (from the original eight) to allow meaningful statistical analysis (because many of the original eight categories included too few participants). The following categories were adopted: “not working,” “agricultural employee,” and “other” (comprising professionals, technicians, managers, clerical, sales, and service and manual workers).

Access to information was measured using questions on the frequency of watching television, listening to the radio, and reading newspapers or

magazines. The responses “less than once a week,” “at least once a week,” and “almost every day” were grouped together, and the response “not at all” formed the other group of the dichotomy. In addition, literacy level was considered as a factor affecting access to information and measured as the ability to read. For this variable, being “able to read a whole sentence” formed one group of the dichotomy, and being “able to read part of a sentence” and being “unable to read” were considered to represent illiteracy and formed the other group of the dichotomy.

Attitudes toward women’s autonomy were assessed by inquiring of the men who in their opinion bore the responsibility of making decisions on household purchases, visiting relatives and friends, spending the wife’s earnings, and the number of children to have. For these variables, response options were “husband,” “wife,” or “both husband and wife.”

Demographic, social status, access to information, and attitudes toward women’s autonomy were used as independent variables in the logistic regressions model.

## Statistical Analysis

Many of the independent variables were transformed to reduce the number of categories and increase statistical power, because some of the categories had too few respondents to allow meaningful statistical analysis. The transformations, however, remained logical. Differences between the two countries regarding the independent and dependent variables were assessed using  $\chi^2$  and  $t$  tests. Hierarchical logistic regression was run to determine the best predictors of attitudes toward IPV for all participants and separately for individual countries. The dependent variables were entered into the regression model block by block. The magnitudes and directions of associations are expressed as adjusted odds ratios and the contribution of each block reported as change in  $r^2$  value. The statistical significance of  $r^2$  changes was tested using  $\chi^2$  tests. Overall, statistical significance was assumed at  $p < .05$ . SPSS Version 13.0 was used for all analyses.

To account for differences in probability due to clustering in the sampling design of DHS surveys in general, sample weights are provided for individual countries. However, the weighted and unweighted results differed only marginally and were similar with regard to statistical significance. In addition, it is argued by DHS experts that when investigating associations between variables (e.g., in regression analyses), weighted data are inappropriate (Rutstein & Rojas, 2003). Thus, the results presented here are based on the actual observations.

## Results

### Comparison Between Zambian and Kenyan Men Regarding Demographic and Social Indicators, Access to Information, and Attitudes Toward Women's Autonomy

As indicated in Table 1, Zambian participants differed from their Kenyan peers on age,  $t(5,721) = 2.44, p < .05$ ; marital status,  $\chi^2(2) = 33.11, p < .001$ ; education,  $\chi^2(3) = 89.45, p < .001$ ; occupation,  $\chi^2(2) = 167.12, p < .001$ ; literacy level,  $\chi^2(1) = 134.77, p < .001$ ; access to newspapers,  $\chi^2(1) = 264.43, p < .001$ ; access to television,  $\chi^2(1) = 260.76, p < .001$ ; and access to radio,  $\chi^2(1) = 486.76, p < .001$ . In addition, men in the two countries differed on attitudes toward women's autonomy in decisions on household purchases,  $\chi^2(2) = 75.13, p < .001$ ; spending their earnings,  $\chi^2(2) = 82.41, p < .001$ ; visiting relatives and friends,  $\chi^2(2) = 33.49, p < .001$ ; and the number of children to have,  $\chi^2(2) = 183.07, p < .001$ . In general, compared with Kenyan men, Zambian men were on average older, more likely to be or have been married, less likely to have postsecondary education, less literate, and more likely to be employed within the agricultural sector. In addition, Zambian men were less likely to have access to information and were more conservative toward shared partner decision making than their Kenyan peers.

### Comparison Between Zambian and Kenyan Men Regarding Attitudes Toward IPV

As shown in Table 2, Zambian men differed from their Kenyan peers in justification of wife beating she went out without telling her husband,  $\chi^2(1) = 234.07, p < .001$ ; neglected the children,  $\chi^2(1) = 6.49, p < .05$ ; argued with her husband,  $\chi^2(1) = 4.37, p < .05$ ; burned the food,  $\chi^2(1) = 118.55, p < .001$ ; or at least one of these reasons,  $\chi^2(1) = 7.29, p < .01$ ). Compared to their Kenyan peers, Zambian men were more likely to justify wife beating if she went out without telling her husband or burned the food. Kenyan men, on the other hand, were more likely than their Zambian peers to justify wife beating if she neglected the children or argued with her husband. Overall, Zambian men were more likely to justify IPV than Kenyan peers for at least one of the given reasons.

### Predictors of Attitudes Toward IPV Among All Participants

*Block 1.* As shown in Table 3, demographic and social indicators contributed significantly to the regression model explaining attitudes toward

**Table 1**  
**Comparison Between Zambian and Kenyan**  
**Men Regarding Demographic and Social Indicators**  
**and Attitudes Toward Women's Autonomy**

Variable	Zambia, <i>n</i> (%)	Kenya, <i>n</i> (%)
Marital status***		
Never married	787 (36.7)	1,584 (44.3)
Currently married	1,249 (58.2)	1,855 (51.8)
Formerly married	109 (5.1)	139 (3.9)
Residential area		
Urban	689 (32.1)	1,150 (32.1)
Rural	1,456 (67.9)	2,428 (67.9)
Education***		
No education	116 (5.4)	296 (8.3)
Primary education	1,161 (54.1)	1,923 (53.7)
Secondary education	754 (35.2)	973 (27.2)
Postsecondary education	114 (5.3)	386 (10.8)
Occupational status***		
Not working	479 (22.5)	885 (24.8)
Agriculture	976 (45.8)	1,050 (29.4)
Other	678 (31.8)	1,631 (45.7)
Read newspapers/magazines***		
Not at all	441 (20.6)	226 (6.3)
Yes	1,702 (79.4)	3,350 (93.7)
Listen to the radio***		
Not at all	1,301 (60.7)	1,108 (31.0)
Yes	841 (39.3)	2,469 (69.0)
Watch TV***		
Not at all	1,276 (59.5)	1,342 (37.5)
Yes	869 (40.5)	2,235 (62.5)
Literacy level***		
Cannot read/cannot read fully	683 (31.9)	666 (18.5)
Can read fully	1,456 (68.1)	2,913 (81.5)
Final say on visiting relatives and friends***		
Husband	1,194 (57.1)	1,835 (53.0)
Husband and wife	822 (39.3)	1,376 (39.8)
Wife	75 (3.6)	250 (7.2)
Final say on purchases***		
Husband	1,226 (58.0)	2,135 (60.9)
Husband and wife	809 (38.3)	1,068 (30.5)
Wife	77 (3.6)	304 (8.7)
Final say on number of children***		
Husband	938 (45.0)	1,121 (32.7)
Husband and wife	993 (47.6)	2,215 (64.7)
Wife	154 (7.4)	90 (2.6)
Final say on what to do with wife's earnings***		
Husband	1,021 (48.9)	1,339 (38.5)
Husband and wife	708 (33.9)	1,218 (35.0)
Wife	359 (17.2)	920 (26.5)
Age (years), <i>M</i> ( <i>SE</i> )*	29.3 (0.18)	30.1 (0.24)

\* $p < .05$ . \*\*\* $p < .001$ .

**Table 2**  
**Proportions of Zambian and Kenyan Participants**  
**Justifying Wife Beating**

Variable	Zambia		Kenya	
	Number of Respondents <sup>a</sup>	% Justifying Wife beating	Number of Respondents <sup>a</sup>	% Justifying Wife beating
Wife beating justified if she:				
Goes out without telling him***	2123	59.9	3302	38.7
Neglects the children*	2124	48.5	3393	52.0
Argues with him*	2119	41.7	3282	44.6
Refuses to have sex with him	2101	26.5	3176	28.1
Burns the food***	2124	25.8	3375	14.1
Justified for at least one of the above**	2125	71.1	3309	67.6

<sup>a</sup>Actual number of those with a "yes" or "no" response on the attitudes questions. \* $p < 0.05$ , \*\* $p < 0.01$ , \*\*\* $p < 0.001$ .

**Table 3**  
**Hierarchical Logistic Regressions Demonstrating Determinants of**  
**Attitudes Toward Intimate Partner Violence Among All Respondents**

Independent Variable	Odds Ratio (confidence interval)	Block $r^2$
Block 1 (demographic/social indicators)***		.11***
Age	0.99 (0.98 to 0.99)*	
Country of residence		
Kenya	1.00	
Zambia	1.07 (0.92 to 1.25)	
Marital status		
Never married	1.00	
Currently married	0.91 (0.74 to 1.11)	
Formerly married	1.14 (0.80 to 1.62)	
Residential area		
Urban	1.00	
Rural	1.27 (1.08 to 1.49)**	
Education		
No education	1.00	
Primary education	1.30 (0.95 to 1.79)	
Secondary education	0.84 (0.58 to 1.20)	
Postsecondary education	0.46 (0.31 to 0.69)***	
Occupational status		
Not working	1.00	
Agriculture	0.92 (0.75 to 1.14)	
Other	1.04 (0.85 to 1.27)	

**Table 3 (continued)**

Independent Variable	Odds Ratio (confidence interval)	Block $r^2$
Block 2 (access to information)		.008***
Read newspapers/magazines		
Not at all	1.00	
Yes	0.71 (0.55 to 0.90)**	
Listen to the radio		
Not at all	1.00	
Yes	0.87 (0.73 to 1.05)	
Watch TV		
Not at all	1.00	
Yes	0.98 (0.84 to 1.15)	
Literacy level		
Cannot read/cannot read fully	1.00	
Can read fully	0.83 (0.67 to 1.04)	
Block 3 (attitudes towards women's autonomy)		.046***
Final say on purchases		
Husband	1.00	
Husband and wife	0.66 (0.56 to 0.76)***	
Wife	0.91 (0.69 to 1.18)	
Final say on visiting relatives and friends		
Husband	1.00	
Husband and wife	0.64 (0.55 to 0.75)***	
Wife	0.96 (0.71 to 1.30)	
Final say on what to do with wife's earnings		
Husband	1.00	
Husband and wife	0.81 (0.68 to 0.98)*	
Wife	0.91 (0.76 to 1.09)	
Final say on number of children to have		
Husband	1.00	
Husband and wife	0.82 (0.69 to 0.97)**	
Wife	0.91 (0.76 to 1.09)	

\* $p < .05$ . \*\* $p < .01$ . \*\*\* $p < .001$ .

IPV (block  $r^2 = .11$ ). Among these variables, lower age, rural residency, and the lack of an education were independently associated with a higher likelihood of justifying IPV. Country of residence was not independently associated with attitudes toward IPV.

*Block 2.* Access-to-information variables contributed only marginally to the model explaining attitudes toward IPV (block  $r^2 = .008$ ), although statistically significantly. Among variables in this block, only having access to newspapers was independently associated with attitudes toward IPV (i.e., men with access to newspapers had a lower likelihood of justifying wife abuse).

**Table 4**  
**Hierarchical Logistic Regressions Comparing**  
**Determinants of Attitudes Toward Intimate Partner**  
**Violence Between Zambian and Kenyan Respondents**

Independent Variable	Zambia: Odds Ratio (confidence interval)	Kenya: Odds Ratio (confidence interval)
Block 1 (demographic/social indicators)	Block $r^2 = .08^{***}$	Block $r^2 = .154^{***}$
Age	0.98 (0.97 to 1.00)	0.98 (0.97 to 0.99)*
Marital status		
Never married	1.00	1.00
Currently married	0.76 (0.54 to 1.05)	1.02 (0.78 to 1.33)
Formerly married	1.23 (0.71 to 2.14)	1.06 (0.66 to 1.69)
Residential area		
Urban	1.00	1.00
Rural	1.21 (0.89 to 1.62)	1.37 (1.12 to 1.67)**
Education		
No education	1.00	1.00
Primary education	2.97 (1.88 to 4.71)***	0.86 (0.53 to 1.40)
Secondary education	2.67 (1.55 to 4.62)***	0.44 (0.26 to 0.74)**
Postsecondary education	1.37 (0.69 to 2.71)	0.31 (0.18 to 0.54)***
Occupational status		
Not working	1.00	1.00
Agriculture	0.78 (0.54 to 1.13)	1.22 (0.93 to 1.60)
Other	0.87 (0.61 to 1.24)	1.24 (0.96 to 1.61)
Block 2 (access to information)	Block $r^2 = .015^{***}$	Block $r^2 = .007^{**}$
Read newspapers/magazines		
Not at all	1.00	1.00
Yes	0.71 (0.53 to 0.95)*	0.74 (0.46 to 1.18)
Listen to the radio		
Not at all	1.00	1.00
Yes	0.73 (0.56 to 0.96)*	1.11 (0.86 to 1.43)
Watch TV		
Not at all	1.00	1.00
Yes	0.93 (0.71 to 1.22)	0.98 (0.80 to 1.20)
Literacy level		
Cannot read fully	1.00	1.00
Can read fully	0.92 (0.68 to 1.26)	0.61 (0.43 to 0.87)**
Block 3 (women's autonomy)	Block $r^2 = .03^{***}$	Block $r^2 = .07^{***}$
Final say on purchases		
Husband	1.00	1.00
Husband and wife	0.85 (0.66 to 1.09)	0.55 (0.45 to 0.67)***
Wife	1.89 (0.97 to 3.68)	0.74 (0.55 to 1.00)
Final say on visiting friends and relatives		
Husband	1.00	1.00
Husband and wife	0.82 (0.63 to 1.06)	0.56 (0.46 to 0.68)***
Wife	1.38 (0.69 to 2.74)	0.85 (0.60 to 1.20)

**Table 4 (continued)**

Independent Variable	Zambia: Odds Ratio (confidence interval)	Kenya: Odds Ratio (confidence interval)
Final say on what to do with wife's earnings		
Husband	1.00	1.00
Husband and wife	0.84 (0.63 to 1.14)	0.75 (0.59 to 0.95)*
Wife	1.20 (0.87 to 1.65)	0.78 (0.62 to 0.98)*
Final say on number of children to have		
Husband	1.00	1.00
Husband and wife	0.79 (0.60 to 1.04)	0.78 (0.62 to 0.97)*
Wife	1.33 (0.83 to 2.13)	1.34 (0.72 to 2.50)

\* $p < .05$ . \*\* $p < .01$ . \*\*\* $p < .001$ .

*Block 3.* Attitudes toward women's autonomy contributed significantly to the model explaining attitudes toward IPV (block  $r^2 = .046$ ). Among variables in this block, men of the opinion that wives and husbands should share autonomy on decisions regarding household purchases, visiting relatives and friends, the expenditure of wife's money, and the number of children to have exhibited a lower likelihood of justifying IPV when contrasted with peers who felt that such decisions should be made entirely by husbands.

Demographic and social status variables were the strongest contributors to the model, followed by attitudes toward women's autonomy and access to information.

### **Predictors of Attitudes Toward IPV: Comparison Between Zambian and Kenyan Men**

*Block 1.* As shown in Table 4, demographic and social indicators contributed significantly to the regression models explaining attitudes toward IPV for Zambia (block  $r^2 = .08$ ) and Kenya (block  $r^2 = .154$ ). Among these variables, however, lower age and rural residency were independently associated with a higher likelihood of justifying wife beating in Kenya but not Zambia. The lack of an education, on the other hand, was independently associated with a higher likelihood of justifying wife beating in Kenya but a lower likelihood in Zambia.

*Block 2.* As shown in Table 4, access-to-information variables contributed modestly, although statistically significantly, to the regression models explaining attitudes toward IPV in Zambia (block  $r^2 = .015$ ) and Kenya (block  $r^2 = .007$ ). Among variables in this block, access to newspapers and radio were

independently associated with a lower likelihood of justifying wife abuse in Zambia but not Kenya, and literacy was independently associated with a lower likelihood of justifying wife abuse in Kenya but not Zambia.

*Block 3.* As shown in Table 4, attitudes toward women's autonomy significantly affected the regression models explaining attitudes toward IPV in Zambia (block  $r^2 = .03$ ) and Kenya (block  $r^2 = .07$ ). Only in Kenya, however, men who felt that women and men had equal autonomy on decisions regarding household purchases, visiting relatives and friends, the expenditure of wife's money, and the number of children to have exhibited a lower likelihood of justifying wife beating when contrasted with peers who felt that such decisions should be entirely made by men.

For both Zambia and Kenya, demographic and social status variables were the strongest contributors to the model, followed by attitudes toward women's autonomy and access to information.

## Discussion

In the current work, factors associated with men's attitudes toward IPV in Zambia and Kenya were identified and comparisons made between the two countries regarding such factors. The findings suggest some differences and similarities between the two countries regarding predictors of attitudes toward IPV, with important implications for interventions to manage IPV.

The justification of IPV was common in both countries, with the main reasons for justification differing only relatively, although statistically significantly, between the two societies. In both countries, the most common reasons for justifying IPV were associated with issues of challenging a husband's authority and women's transgression from normative domestic roles. The motivation for wife beating of a refusal to have sex, although significant, was less common. These observations are similar to those among women in sub-Saharan Africa (Hindin, 2003; Kazungu & Chewe, 2003; Khasakhala-Mwenesi et al., 2004; Koenig et al., 2003) and suggest that interventions to sensitize both men and women on gender-based violence may need to address similar attitudes toward IPV in the region.

Overall, Zambian men appeared to justify IPV to a higher degree than their Kenyan peers. However, when sociodemographics (e.g., educational level), structural (e.g., access to information), and attitudinal (e.g., attitudes to women's participation in decision making) factors were adjusted for in the regression, country of residence per se did not account for differences in attitudes toward IPV, indicating a possible confounding effect. Zambian

men exhibited more unfavorable conditions with regard to demographic, structural, and attitudinal factors, and this could explain the higher tolerance of IPV among them when contrasted with their Kenyan peers. Indeed, the results show that these variables other than country of residence significantly affected attitudes toward IPV. Previous research, among women notwithstanding, showing an association between attitudes toward IPV and demographic, structural, and attitudinal factors seems to support this view (González-Brenes, 2004; Lawoko, 2006).

Demographic variables (e.g., education and employment status) emerged as the strongest predictors of attitudes toward IPV, above the significance of variables such as access to information and attitudes toward women's participation in decision making. These findings underscore the significance of a comprehensive approach in the management of IPV. Gender-based interventions to change societal attitudes toward women (e.g., changing men's attitudes about women's participation) should not undermine the higher developmental goals of eradication of poverty and universal primary education in developing countries, as proposed in the United Nations (2005) report *Millennium Development Goals*. Rather, such gender-based initiatives should be coordinated with the higher national developmental goals in each country, because these may prove prerequisite in the successful change of attitudes toward IPV.

Despite similarities between the two countries in the order of importance of demographic, social, and empowerment factors for attitudes toward IPV, the importance of and associations between specific variables and attitudes toward IPV varied. Lower age and rural residency were independently associated with tolerant attitudes toward wife beating in Kenya but not Zambia. These findings stress the need for interventions tailored to meet specific needs and directed to specific groups in each society. Although in Kenya, young and rural men may be the targets of interventions, it seems that for Zambian men, the entire age span in both rural and urban settings may be subject to interventions.

Education was a significant predictor of attitudes toward IPV among men in both societies, though a discrepancy regarding the direction of association was evident (i.e., the lack of an education was independently associated with higher tolerance of wife beating in Kenya but lower tolerance in Zambia). This discrepancy could be reflecting differences between the two societies in the general character and content of the education package. It is plausible that some elements of the educational package in Kenya may be fundamental in modifying patriarchal attitudes, whereas elements in the Zambian general education may only reinforce such attitudes. Further

scrutiny of the educational package, with reference to gender equality, is warranted in both countries to gain deeper insight on this issue.

Access to information (i.e., newspapers and radio) was independently associated with a lower likelihood of justifying IPV among Zambian men but not their Kenyan peers. This discrepancy may reflect differences between the two countries in information dissemination on issues of empowering women and/or differences in the quality of such information. Whatever the case, further research is warranted to assess the quality and coverage of information disseminated via media in both countries. The findings are nonetheless consistent with recent work indicating a lower likelihood of tolerating IPV among Zambian women with access to information (Lawoko, 2006).

Men's attitudes toward women's autonomy in domestic decisions predicted attitudes toward IPV in Kenya but not Zambia (i.e., Kenyan men in support of shared autonomy were less likely to endorse IPV than peers in favor of total male autonomy, an observation not evident among Zambian men). These findings indicate that shared autonomy in the domestic domain does not guarantee women's safety from abuse in all societies, strengthening further the significance for need-adapted interventions tailored to meet conditions in each specific society.

In conclusion, the results show a similar pattern regarding reasons for which men in Kenya and Zambia justify IPV. In addition, the results signify the importance of demographic, social, and empowerment factors in forming men's attitudes toward IPV in Zambia and Kenya, calling for a comprehensive and coordinated approach in interventions to change men's attitudes toward IPV. On the basis of predictors of attitudes toward IPV in each country, however, the content of and targets groups for such interventions may vary. With regard to Zambia, structural interventions focusing on improving the coverage and dissemination of information to the general public may be beneficial in changing men's attitudes toward IPV, alongside a review of the educational system, which may seem to reinforce gender inequity. In the case of Kenya, gender-based interventions building on advocacy for shared autonomy in the domestic domain and the provision of basal education for all may prove paramount in changing men's distorted attitudes about wife beating, particularly among younger men and in rural settings. Thus, decision makers should capitalize on need-adapted interventions tailored to meet societal conditions in a bid to change men's distorted attitudes toward IPV.

The results reported here have some implications for theory and research as well. Although these results suggest similarities between the two countries regarding determinants, some differences have been identified regarding their

predictive power. This may have implications for modeling attitudes toward violence in a cross-cultural context. However, the current results need to be replicated and the study weaknesses addressed before firm conclusions can be drawn with regard to theory building. Therefore, implications for further research seem apparent in this regard.

Although the DHS have several admirable qualities, such as large sample sizes, a sound sampling methodology, and adherence to stringent ethical rules in the collection of domestic violence data, a prudent limitation of the measure of the key variable in this study (i.e., attitudes toward IPV) has previously been acknowledged. Lawoko (2006) challenged the validity of attitudes toward IPV as being limited in scope to capture women's normative roles in the domestic arena. Other issues, such as motivations for partner abuse because of nondomestic factors such as women's financial status, employment position, education, husband's drunkenness, and so on, are not included in the measure of attitudes toward IPV. Yet, the significance of such variables in explaining IPV has been demonstrated (Hoffman, Demo, & Edwards, 1994; Krishnan, 2005; Malcoe, Duran, & Montgomery, 2004). Thus, broader measures of attitudes toward IPV are warranted in future work. In addition, the psychometric properties of most DHS measures remain to be tested. Second, the validity of the measure of occupational category adopted for this study can be questioned (i.e., the category "other" is heterogeneous). However, the few numbers of participants in specific employment categories could not guarantee enough power for meaningful statistical analysis.

Apart from instrumental validity, the potential limitations of face-to-face interviews need to be acknowledged. For example, when contrasted with self-administered questionnaires, participants may tend to underreport their attitudes toward IPV in the presence of their interviewers. However, ethical measure such as guarantees of anonymity and administering the interviews by trained personal (Rutstein & Rojas, 2003) may have improved such reporting.

Finally, though attempts were made to control for possible confounding in the regressions analyses, residual confounding could not be accounted for, because all potential confounders were not included in the questionnaire. Future research should consider the contribution of individual factors such as social desirability and contextual factors such as national gender empowerment policy among others in explaining men's attitudes toward IPV.

## References

- Arias, I., & Johnson, P. (1989). Evaluation of physical aggression among intimate dyads. *Journal of Interpersonal Violence, 4*, 298-307.
- Central Intelligence Agency. (2006). *The world factbook*. Washington, DC: Author.

- Dzekedzeke, K., & Mulenga, C. (2003). Introduction. In Central Statistical Office, Central Board of Health, and ORC Macro (Eds.), *Zambia Demographic and Health Survey 2001-2002* (pp. 1-11). Available at <http://www.measuredhs.com/pubs/pdf/FR136/01Chapter01.pdf>
- Faramarzi, M., Esmailzadeh, S., & Mosavi, S. (2005). A comparison of abused and non-abused women's definitions of domestic violence and attitudes to acceptance of male dominance. *Obstetrics and Gynecology, 121*, 225-231.
- Fawole, O., Aderonmu, A. L., & Fawole, A. O. (2005). Intimate partner abuse: Wife beating among civil servants in Ibadan Nigeria. *African Journal of Reproductive Health, 9*, 54-64.
- Gentemann, K. M. (1984). Wife-beating: Attitudes of a non-clinical population. *Victimology, 9*, 109-119.
- González-Brenes, M. (2004). *Domestic violence and household decision-making: Evidence from East Africa*. Available at [http://www.sscnet.ucla.edu/polisci/wgape/papers/7\\_Gonzalez.pdf](http://www.sscnet.ucla.edu/polisci/wgape/papers/7_Gonzalez.pdf)
- Gracia, E., & Herrero, J. (2006). Acceptability of domestic violence against women in the European Union: A multilevel analysis. *Journal of Epidemiology and Community Health, 60*, 123-129.
- Greenblat, C. S. (1985). "Don't hit your wife . . . unless . . .": Preliminary findings on normative support for the use of physical force by husbands. *Victimology, 10*, 221-241.
- Haj-Yahia, M. M. (2002). Beliefs of Jordanian women about wife-beating. *Psychology of Women Quarterly, 26*, 282-291.
- Haj-Yahia, M. M. (2003). Beliefs about wife-beating among Arab men from Israel: The influence of patriarchal ideology. *Journal of Family Violence, 18*, 193-206.
- Hanson, R. K., Cadsky, O., Harris, A., & Lalonde, C. (1997). Correlates of battering among 997 men: Family, history adjustment, and attitudinal differences. *Violence and Victims, 12*, 191-208.
- Hindin, M. J. (2003). Understanding women's attitudes towards wife beating in Zimbabwe. *Bulletin of the World Health Organization, 81*, 501-508.
- Hoffman, K. L., Demo, D. H., & Edwards, J. N. (1994). Physical wife abuse in a non-Western society: An integrated theoretical approach. *Journal of Marriage and Family, 56*, 131-146.
- Jewkes, R. (2002). Intimate partner violence: Causes and prevention. *The Lancet, 359*, 1423-1429.
- Johnson, M. P. (1995). Patriarchal terrorism and common couple violence: Two forms of violence against women. *Journal of Marriage and Family, 57*, 283-294.
- Kazungu, M., & Chewe, P. M. (2003). Violence against women. In Central Statistical Office, Central Board of Health, and ORC Macro (Eds.), *Zambia Demographic and Health Survey 2001-2002* (pp. 185-194). Available at <http://www.measuredhs.com/pubs/pdf/FR136/12Chapter12.pdf>
- Khasakhala-Mwenesi, B., Buluma, R.C.B., Kong'ani, R. U., & Nyarunda, V. M. (2004). Gender violence. In Central Bureau of Statistics, Ministry of Health, Kenya Medical Research Institute, ORC Macro, & Centers for Disease Control and Prevention (Eds.), *Kenya Demographic and Health Survey 2003* (pp. 239-251). Available at <http://www.measuredhs.com/pubs/pdf/FR151/15Chapter15.pdf>
- Koenig, M. A., Lutalo, T., Zhao, F., Nalugoda, F., Wabwire-Mangen, F., Kiwanuka, N., et al. (2003). Domestic violence in rural Uganda: Evidence from a community-based study. *Bulletin of the World Health Organization, 81*, 53-60.
- Krishnan, S. (2005). Gender, caste and economic inequalities and marital violence in rural south India. *Health Care for Women International, 26*, 87-99.
- Kwaramba, A. (2001). Integrated approach needed in fight against gender violence. *SADC Today, 4*, 7.
- Lawoko, S. (2006). Factors associated with intimate partner violence: A study of women in Zambia. *Violence and Victims, 21*, 645-656.

- Malcoe, L. H., Duran, B. M., & Montgomery, J. M. (2004). Socioeconomic disparities in intimate partner violence against native American women: A cross-sectional study. *BMC Medicine*, 2, 1-14.
- Nayak, M. B., Byrne, C. A., Martin, M. K., & Abraham, A. G. (2003). Attitudes toward violence against women: A cross-nation study. *Sex Roles*, 49, 333-342.
- Otieno, F., & Opiyo, S. (2003). Introduction. In Central Bureau of Statistics, Ministry of Health, Kenya Medical Research Institute, ORC Macro, & Centers for Disease Control and Prevention (Eds.), *Kenya Demographic and Health Survey 2003* (pp. 1-12). Available at <http://www.measuredhs.com/pubs/pdf/FR151/01Chapter01.pdf>
- Rani, M., Bonu, S., & Diop-Sidibe, N. (2004). An empirical investigation of attitudes towards wife-beating among men and women in seven sub-Saharan African countries. *African Journal of Reproductive Health*, 8, 116-136.
- Rutstein, S. O., & Rojas, G. (2003). *Guide to DHS statistics*. Calverton, MD: ORC Macro.
- United Nations. (2005). *Millennium development goals*. New York: Author.
- Walker, L. E. (1979). *The battered woman*. New York: Harper & Row.
- Yllo, K. (1983). Sexual inequality and violence against wives in American states. *Journal of Comparative Family Studies*, 14, 67-86.
- Yllo, K., & Bograd, M. (Eds.). (1988). *Feminist perspectives on wife abuse*. Newbury Park, CA: Sage.

**Stephen Lawoko** holds a PhD degree in public health sciences from the Karolinska Institute and a master's degree in statistics. He is currently conducting research in the field of domestic violence, particularly in the context of developing countries. He is employed as a senior lecturer at the Karolinska Institute, Department of Public Health Science.