


# Intimate Partner Violence Against Women in Northwestern Botswana: The Maun Women's Study

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## Abstract

Factors characterizing intimate partner violence (IPV) against women vary according to setting and must be understood in localized environments if effective interventions are to be identified. This 2009–2010 exploratory study in Maun, Botswana, used semistructured interviews to elicit information from 469 women about their experiences with IPV. Characteristics found to be important included suicide attempts, childhood exposure to familial violence, access to and control over certain tangible assets, number of children, household location and monthly income, controlling behavior by a partner, and alcohol consumption. Controlling behavior by a partner was the single greatest predictor of physical or psychological IPV.

## Keywords

Botswana, intimate partner violence, women's health, gender-based violence

Intimate partner violence (IPV) is increasingly recognized as a widespread public health and human rights issue, affecting the lives of 15–75% of women worldwide (Garcia-Moreno, Jansen, Ellsberg, Heise, & Watts, 2006). Over the past several decades, researchers have identified an extensive catalog of the potential risk and protective factors associated with IPV (Abramsky et al., 2011; Stöckl, Devries, & Watts,

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2014). Some of these factors seem to be important across a wide range of countries and settings, whereas others are context-specific, suggesting an ongoing need for studies exploring the risk and protective factors of IPV in localized environments.

### **Factors Associated With IPV**

The majority of studies that focus on correlates of IPV use an ecological approach to help organize and understand potential risk and protective factors (Heise, 1998). Ecological theory suggests that IPV is a complex, multifaceted phenomenon that is influenced by individual-, household-, community-, and society-level factors. Age, education, and employment are the most common demographic factors associated with IPV in the literature (Stöckl et al., 2014; Wolf, Gray, & Fazel, 2014). Other individual-level factors frequently examined include access to and control of social and economic resources, alcohol consumption, mental and physical health status, and exposure to and/or experience of family or nonpartner violence (Burgos-Soto et al., 2014; Vyas & Watts, 2009; Winter & Barchi, 2016). At the household level, relationship status and duration, as well as attributes such as family size and socio-economic status that can be stressors on a relationship, have also been identified as correlates of IPV (Flake, 2005; Wolf et al., 2014). Relationship quality and/or relationship dynamics are a less studied, but seemingly important, set of factors associated with IPV. Relationship dissatisfaction and relationship discord, as well as partner behaviors such as violence toward others, polygamy, and controlling tendencies, have been strongly associated with reports of IPV.

### **Violence Against Women (VAW) in Sub-Saharan Africa**

Studies examining the nature and extent of VAW in Sub-Saharan Africa have reported prevalence rates ranging from 20-45%, including Rwanda (20%), South Africa (25%), Uganda (30%), and Zambia (45%) (Jewkes, Penn-Kekana, Levin, Ratsaka, & Schriber, 2001; Koenig et al., 2003; Van der Straten et al., 1998). A recent study of gender-based violence (GBV) in five countries in southern Africa, which included cross-sectional data from Botswana, Mauritius, South Africa, Zambia, and Zimbabwe, reported findings of GBV prevalence ranging from 24% in Mauritius to 89% in Zambia (Gender Links, 2012). The most common form of violence reported was verbal abuse from a current partner, followed by physical threats or violence, including pushing, slapping, or holding down (Koenig et al., 2003). In a study of IPV in three South African provinces, the percentage of abused women who reported that they had been injured by their partners ranged from 34.5-60% (Jewkes et al., 2001). Several studies, the majority of them in South Africa, have also begun to explore the role that societal norms and attitudes regarding feminine and masculine roles may play in creating environments that increase, or even condone, VAW (Dworkin, Treves-Kagan, & Lippman, 2013; Jewkes, Dunkle, Nduna, & Shai, 2010; Jewkes et al., 2008).

## **VAW in Botswana**

Recent studies in Botswana also identify VAW as a significant human rights challenge. The Gender-Based Violence Indicators Study, conducted in 2012 by Gender Links and the Botswana Women's Affairs Department (WAD), found that 67% of women surveyed in Botswana had experienced some form of violence in their lifetimes, including partner and nonpartner violence (Gender Links, Republic of Botswana, & Ministry of Labor and Home Affairs-Women's Affairs Department, 2012). Almost one third of the women interviewed had experienced some form of IPV within the past 12 months. An earlier population-based study by Botswana's WAD reported that three out of five women reported being a victim of violence within the past 5 years (Republic of Botswana, Ministry of Labor and Home Affairs, 1999).

Although studies such as these have made progress toward documenting prevalence rates and some risk factors for IPV in Botswana, there remains a paucity of research that rigorously investigates associations between a wide range of potential factors and IPV in this setting. One might be tempted to assume that the risk factors associated with IPV in Botswana would closely resemble those found in neighboring South Africa, where large communities of Tswana people, the dominant cultural group in Botswana, also reside. However, structural differences between the two countries—Botswana, which enjoyed a peaceful transition from a British protectorate to a democratic republic with equal rights for all its citizens in 1966, and South Africa, which did not emerge easily from an apartheid regime under which its majority non-White population was repressed, until the early 1990s—may create a different social ecology in which IPV occurs absent a history of underlying political violence.

The purpose of this current study was to explore women's individual- and household-level characteristics that are associated with IPV against women in Botswana and to identify those risk factors that may be structural in nature. The research uses data collected in 2009 and 2010 as part of an ongoing collaborative research project with Women Against Rape (WAR), a nongovernmental organization (NGO) in Maun, Botswana, that provides counseling and support services for men, women, and families that have experienced or are at risk of domestic violence. As this study relied on cross-sectional data, it did not permit an examination of the temporal or causal relationship between various factors and IPV. As an exploratory study, however, it does identify specific targets for further investigation and suggests certain aspects of women's lives which WAR and other NGOs in Botswana may wish to examine as part of their counseling services with victims of IPV.

## **Method**

### *Research Setting*

Maun is the administrative seat of Ngamiland-East District in northwestern Botswana, a land-locked country situated in southern Africa. Often referred to as the "gateway" for safaris to the famous Okavanga Delta, Maun is the fifth largest town in the country. At

the time of the last population and housing census in 2001, Maun and its associated localities had a population of 49,822, of which more than half were female (Republic of Botswana, Central Statistics Office, 2006). Of the adult population, 48.4% have completed some secondary schooling. In all, 47% of the households were female-headed, and the average household size was 4.8 persons. Despite robust tourist and cattle industries, most of Maun's residents are poor and unable to find steady wage employment. Many villagers maintain small herds of goats or cattle, depend on seasonal crop yields that are unpredictable due to floods and rain, or subsist on monetary remittances from relatives who work as migrant laborers in other parts of the country.

### *Study Sample*

Prospective participants were identified using multistage random sampling, first by wards (administrative units within Maun, of which there are 17), then by households within selected wards, and finally by females 18 years and older within selected households. One ward, Boseja, was purposefully included in the final sample of five wards at the request of the collaborating NGO to explore the seemingly disproportionate number of cases that originated in that neighborhood. Although such purposive inclusion risked the introduction of selection bias, it was seen in this instance as an asset; Boseja ward is substantially larger than other wards in Maun, and its inclusion was likely to contribute to, rather than detract from, the study sample being representative of the population.

Household-level sampling was carried out using a "wheel and spoke" procedure developed by Afrobarometer Network to enable systematic sampling in rural locations (Afrobarometer Network, 2007). Wards in Maun are not clearly demarcated, even by map; there are no street signs or numbers; and many dwellings are located along paths and walkways that do not conform to any identifiable grid or pattern. For study eligibility, compounds containing several family-related dwellings whose occupants shared a common cook-fire were treated as a single "household"; dwellings within a compound belonging to individuals who were not from the same family or kinship group and who prepared their food separately were treated as individual households. Only one woman meeting the eligibility criteria, selected by means of a Kish Grid, was interviewed in each household to assure independence of data (Kish, 1965).

To be eligible to participate, a woman had to be 18 years or older, speak either Setswana or English, and understand the purpose of the study and give verbal consent. To address ambiguities in the Botswana legal system relating to the definition of a child, permission to invite unmarried women aged 18-21 years to participate in the study was also requested from their parents or legal guardians. A local staff of eight women, fluent in both English and Setswana, hired and trained at the WAR offices for this study, were responsible for conducting the interviews under a field supervisor (D.D.).

### *Study Instrument*

The Maun Women's Study interview instrument included 82 semistructured questions relating to sociodemographic characteristics, autonomy, health, and domestic violence.

The interview instrument and consent scripts used in this study were translated into Setswana (the predominant “local” language of Botswana) by a faculty member in the Department of African Languages at the University of Botswana in Gaborone, and then back-translated by one of the staff members at WAR. The study protocol underwent ethics review and received research permits from the Ministry of Labor and Home Affairs in Botswana and the Institutional Review Boards (IRBs) at the University of Pennsylvania and Rutgers University–New Brunswick.

## Measures

**IPV.** The IPV module used in this study examined subscales for three types of violence: psychological, sexual, and physical. IPV scores were based on women’s reports of their partner’s behavior within the past 12 months. IPV variables were derived from questions used in the domestic violence module developed by the World Health Organization (WHO; 2005). Scales for psychological, sexual, and physical IPV were developed following the guidelines laid out in the 2001 guide to researching domestic VAW (Ellsberg, Heise, Pena, Agurto, & Winkvist, 2001). Each of the scales was then collapsed into a dichotomous variable. A score of “1” on a subscale of violence reflected at least one affirmative response to questions within that subscale; a score of “0” reflected the absence of any affirmative response to questions within that subscale.

**Individual-level variables.** A number of individual-level factors were included in this analysis. Individual demographic variables included age, educational attainment, and employment. A variable for women’s experience of nonpartner and/or former partner violence was also included in the models. This variable includes women’s experiences of violence at the hands of family members, previous boyfriends/spouses, community members, and/or strangers. To include more information about family abuse in the model, women were also asked the question, “As far as you know, did your father beat your mother?” Answers to this question were binary and are represented by the dichotomous variable “father beat mother” in the statistical models.

Three health-related variables were also included in the statistical models: symptomatology of major depressive disorder (MDD), attempted suicide, and living with a chronic disease. The nine-item MDD module (Patient Health Questionnaire–9 [PHQ-9]) is a subset of the full PHQ and uses criteria for depression based on those of the *Diagnostic and Statistical Manual of Mental Disorders (DSM-IV-TR)* (American Psychiatric Association, 2000; Kroenke, Spitzer, & Williams, 2001). The PHQ-9 has been shown to have good reliability and validity in U.S. populations and had been previously used successfully in both English and Setswana to screen for depression in Botswana (Lawler et al., 2011; Loretz, 2005). The Cronbach’s standardized coefficient alpha for the PHQ-9 module in this study was  $\alpha = .88$ . Attempted suicide was measured by asking each participant whether she had ever in her lifetime tried to take her own life. A dichotomous variable was also created to reflect a woman’s chronic disease status. This variable was based on responses to a question in the interview instrument asking women to report the number of times she visited the clinic in the past 12

months. In Botswana, it is highly unlikely that a woman would report 10 or more medical visits per year unless she herself lived with a chronic condition such as hypertension, diabetes, or HIV/AIDS (D. Ramagola-Masire, personal communication, June 19, 2010); women who reported visiting the clinic at least 10 times in the past year were categorized as “living with a chronic disease.”

A number of variables reflecting women’s access to various economic and social resources were included in the models. Awareness of household finances was recorded as a dichotomous variable based on women’s ability to estimate their household’s average monthly income. In addition, women were asked a series of questions about whether they owned land, a house, jewelry, or livestock, and if so, whether they owned that asset alone or jointly with someone else. Two additional binary, resource-related variables were included in the model to indicate whether a woman owned a bank account independently from her partner and whether she controlled her own money.

Three variables were included in the model to reflect women’s access to social resources. Women’s participation in a group was coded as a categorical variable with four levels (none, religious, political/labor-oriented, or other). Two dichotomous variables were included to reflect whether a woman had access to temporary shelter or financial support, if either were needed.

*Household-level variables.* Household-level variables were included in the analysis to reflect number of children, relationship status, household location and headship, monthly household income, partner’s employment, and alcohol use by a woman and/or her partner. In addition, a dichotomous variable was included in the models to indicate whether a woman reported that her partner, in the last 12 months, had exhibited any one or more of the following controlling behaviors: been jealous or angry with her if she talked to other men, frequently accused her of being unfaithful, did not permit her to meet her female friends, limited her contact with her family, insisted on knowing where she was at all times, and/or did not trust her with any money.

### *Ethics and Consent*

The study protocol underwent ethics review and received research permits from the Ministry of Labor and Home Affairs in Botswana and the IRBs at the University of Pennsylvania and Rutgers University–New Brunswick. All participants gave their verbal consent to be interviewed for this study in accordance with IRB requirements.

### *Analysis*

All data analyses were conducted using Stata/MP 14.1 statistical software. Three separate two-level, mixed-effects, binary-logistic regressions were run to identify the factors associated with women’s recent experiences of physical (Model 1), sexual (Model 2), and psychological (Model 3) IPV in this setting. To account for the stratification of the study sample, intercepts of each model were allowed to vary by ward.

## Results

### *Characteristics of Study Participants*

A total of 469 surveys were collected as part of the Maun Women's Study. Item non-response was less than 6% on all variables used in the models; however, list-wise deletion would have resulted in a loss of close to 30% of surveyed respondents in the analysis. Therefore, all demographic predictor variables were imputed using multiple imputation with chained equations. (Spratt, et al., 2010) The primary dependent variables—women's recent experiences of physical, sexual, and psychological violence—were not imputed, resulting in a final analytic sample of 437. Descriptive statistics for the analytic sample appear in Table 1.

### *Individual-Level Characteristics*

The age of respondents ranged from 18-72 years, with a mean age of 31.3 years ( $SD = 10.47$ ). Most had completed some secondary-level education and were not employed. Except for houses (44.6%), substantially less than one third of respondents controlled tangible economic resources over which they had control, such as land (29.3%), jewelry (28.2%), and livestock (20.7%).

Women's access to social resources was higher. More than three quarters of the women in the sample reported that if a problem should arise, they would have access to shelter from others for a few days and almost 60% reported having access to some financial support from others if needed. More than 90% of respondents participated in some form of associational life, with more than half being members of religious groups or "healing" churches.

In all, 31% of respondents met the study definition of living with a chronic disease based on the number of clinic visits made each month. An almost equal percentage of women met the symptomatic criteria for MDD and 6% reported having attempted suicide at least once in their lifetime. Women's experiences of violence support previous findings, with reported psychological (23.3%), physical (35.9%), and sexual (9.6%) violence by an intimate partner within the past 12 months. In all, 27% and 6% of women had experienced physical and sexual violence, respectively, by a nonpartner at least once in their lifetime. One fifth reported that their fathers had beaten their mothers.

### *Household-Level Characteristics*

Most women in this study lived in union with partners to whom they were not married; children born out of wedlock were common, with most women reporting two children on average ( $SD = 2.01$ ). One quarter of women reported that they headed their own households, with the majority of women living in poor households. Fewer than 29% reported monthly household income of more than 400 pula (roughly US\$50 at the time of the study). Most partners were employed for wages.

**Table 1.** Descriptive Statistics ( $n = 437$ ).

Sample Characteristics	%
Individual-level characteristics	
Age ( $M = 31.3$ ; $SD = 10.47$ )	
Employed	17.6
Highest education	
None	6.9
Primary	20.4
Secondary	61.3
Higher	11.4
Aware of household finances <sup>a</sup>	67.7
Has money independently of others <sup>a</sup>	42.3
Has bank account independently of others <sup>a</sup>	26.2
Owens land independently of others <sup>a</sup>	29.3
Owens a house independently of others <sup>a</sup>	44.6
Owens jewelry independently of others <sup>a</sup>	28.2
Owens livestock independently of others <sup>a</sup>	20.7
Has access to shelter from others if she needs help <sup>a</sup>	75.2
Has access to financial support from others if she needs help <sup>a</sup>	58.1
Associational life <sup>a</sup>	
None	29.2
Religious groups/healing churches	53.0
Political/labor-oriented groups	10.2
Other	7.5
Symptoms of MDD <sup>a</sup>	31.1
Has attempted suicide at least once <sup>a</sup>	6.0
Lives with chronic illness <sup>a</sup>	30.9
Experiences of violence by current partner (past 12 months)	
Physical	35.9
Sexual	9.6
Psychological	23.3
Experiences of nonpartner violence <sup>a</sup>	
Physical	27.2
Sexual	6.0
Reports that father beat mother <sup>a</sup>	20.2
Household-level characteristics	
Relationship status	
Married	6.9
Divorced/separated	7.3
Widowed	4.4
In union but not married	51.3
Single	30.2

(continued)



**Table 1. (continued)**

Sample Characteristics	%
Number of children ( $M = 2.2, SD = 2.01$ )	
Location of household	
Moeti	18.1
Thito	20.6
Bombadi	11.0
Xabara	18.1
Boseja	32.3
Self-headed household <sup>a</sup>	25.4
Household poverty <sup>a</sup>	
Less than 250 pula/month	46.9
Between 250-400 pula/month	24.4
More than 400 pula/month	28.7
Partner is employed <sup>a</sup>	71.7
Partner exhibits controlling behavior <sup>a</sup>	60.4
Alcohol consumption <sup>a</sup>	
Neither	49.4
Respondent only	8.7
Partner only	26.1
Both	15.8

Note. MDD = major depressive disorder.

<sup>a</sup>Indicates imputed values.

Roughly 60% of women in this study reported that their partners exhibited controlling behavior toward them in the past year. Although alcohol use in households was common with more than half of women reporting that they and/or their partner consumed alcohol, households in which women alone consumed alcohol were few (8.7%). Men were the sole consumers of alcohol in approximately one quarter of all households, and both partners drank in approximately 16% of them.

### *Correlates of Recent Physical IPV*

Results from the analysis of potential factors associated with recent physical IPV are summarized in Table 2. Individual-level findings suggest that women who reported having attempted suicide had just under 4 times the odds of also having experienced physical IPV in the past 12 months ( $p < .05$ ). In addition, women who reported that their father beat their mother had over twice the odds of reporting recent physical IPV ( $p < .05$ ). Several access-to-resource variables were also significantly associated with recent physical IPV. Women who owned and controlled jewelry or livestock had decreased odds of recent physical IPV, whereas ownership and control of land increased a woman's odds twofold.

**Table 2.** Results From Logistic Regressions of Violence on Individual- and Household-Level Characteristics.

	Model 1		Model 2		Model 3	
	Physical violence		Sexual violence		Psychological violence	
	OR	95% CI	OR	95% CI	OR	95% CI
<b>Individual-level characteristics</b>						
Age (continuous)	0.98	[0.932, 1.028]	0.99	[0.926, 1.055]	1.03	[0.979, 1.077]
Employed	2.57	[0.953, 6.946]	1.51	[0.397, 5.780]	2.15	[0.801, 5.755]
Highest education (Ref: No schooling)						
Primary	1.99	[0.559, 7.069]	3.51	[0.534, 23.094]	1.66	[0.499, 5.493]
Secondary	2.18	[0.646, 7.370]	2.24	[0.354, 14.132]	1.35	[0.423, 4.340]
Higher	1.81	[0.382, 8.539]	1.55	[0.159, 15.116]	1.07	[0.227, 5.000]
Aware of household finances	1.42	[0.756, 2.664]	1.02	[0.412, 2.523]	0.80	[0.421, 1.510]
Has money independently of others	1.08	[0.533, 2.186]	0.98	[0.348, 2.763]	1.25	[0.605, 2.575]
Has bank account independently of others	0.63	[0.291, 1.379]	0.5	[0.152, 1.656]	0.87	[0.389, 1.966]
Owens land independently of others	2.16*	[1.050, 4.444]	1.39	[0.490, 3.935]	2.36*	[1.141, 4.880]
Owens a house independently of others	1.34	[0.693, 2.600]	1.05	[0.414, 2.685]	0.77	[0.389, 1.536]
Owens jewelry independently of others	0.21***	[0.099, 0.462]	0.58	[0.216, 1.540]	0.96	[0.479, 1.905]
Owens livestock independently of others	0.42*	[0.191, 0.905]	0.50	[0.142, 1.762]	0.38*	[0.158, 0.915]
Has access to shelter by others if needed	0.95	[0.422, 2.153]	0.65	[0.200, 2.117]	0.95	[0.406, 2.227]
Has access to financial support from others	1.07	[0.530, 2.143]	1.44	[0.473, 4.411]	1.65	[0.781, 3.484]
<b>Associational life (Ref: None)</b>						
Religious groups/healing churches	0.96	[0.487, 1.897]	0.42	[0.165, 1.079]	1.20	[0.593, 2.442]
Political/labor-oriented group	1.55	[0.557, 4.322]	0.10	[0.009, 1.170]	1.43	[0.510, 4.001]
Other	0.80	[0.258, 2.480]	1.20	[0.297, 4.870]	0.68	[0.205, 2.281]
Symptoms of MDD	1.44	[0.765, 2.719]	1.17	[0.453, 3.036]	1.62	[0.844, 3.122]
Lives with a chronic illness	0.86	[0.455, 1.629]	0.73	[0.279, 1.911]	1.31	[0.693, 2.458]
Has attempted suicide at least once	4.37*	[1.194, 15.992]	3.21	[0.935, 11.022]	1.77	[0.586, 5.319]
Reports that father beat mother	2.16*	[1.064, 4.396]	2.64*	[1.036, 6.737]	0.75	[0.365, 1.561]
Experiences of nonpartner violence						

(continued)

**Table 2. (continued)**

	Model 1		Model 2		Model 3	
	Physical violence		Sexual violence		Psychological violence	
	OR	95% CI	OR	95% CI	OR	95% CI
Physical	0.96	[0.491, 1.870]	1.16	[0.454, 2.946]	1.60	[0.806, 3.178]
Sexual	2.14	[0.589, 7.742]	6.10**	[1.701, 21.909]	1.26	[0.377, 4.215]
Household-level characteristics						
Relationship status (Ref.: Married)						
Divorced/separated	1.54	[0.290, 8.140]	1.41	[0.150, 13.185]	1.80	[0.364, 8.878]
Widowed	0.29	[0.018, 4.562]	1.56	[0.078, 31.191]	0.20	[0.015, 2.761]
Living in union	1	[0.272, 3.676]	0.51	[0.074, 3.458]	0.81	[0.226, 2.917]
Single	3.66	[0.842, 15.883]	0.53	[0.069, 4.147]	3.01	[0.725, 12.472]
Number of children (continuous)	1.28*	[1.034, 1.59]	0.93	[0.672, 1.286]	1.28*	[1.040, 1.574]
Location of household (Ref.: Moeti)						
Thito	2.37	[0.877, 6.409]	1.67	[0.436, 6.432]	0.99	[0.387, 2.542]
Bombadi	1.77	[0.609, 5.147]	3.55	[0.798, 15.804]	1.48	[0.50, 4.392]
Xabara	0.88	[0.333, 2.343]	0.71	[0.147, 3.458]	0.82	[0.320, 2.107]
Boseja	2.98*	[1.191, 7.439]	2.23	[0.614, 8.077]	0.97	[0.403, 2.336]
Self-headed household	0.87	[0.393, 1.935]	1.81	[0.602, 5.427]	0.84	[0.387, 1.826]
Household poverty (Ref.: ≤250 pula/month)						
Between 250-400 pula/month	0.97	[0.439, 2.142]	1.21	[0.311, 4.714]	0.62	[0.250, 1.547]
More than 400 pula/month	0.35*	[0.144, 0.836]	1.04	[0.252, 4.324]	0.60	[0.225, 1.624]
Partner is employed	1.32	[0.704, 2.483]	1.21	[0.494, 2.987]	1.14	[0.604, 2.170]
Partner exhibits controlling behavior	18.36***	[8.339, 40.406]	5.20**	[1.566, 17.253]	11.93***	[5.024, 28.331]
Alcohol consumption (Ref.: None)						
Woman only	2.50	[0.896, 6.989]	2.51	[0.577, 10.873]	1.13	[0.341, 3.752]
Partner only	2.82**	[1.432, 5.535]	2.06	[0.739, 5.748]	2.55*	[1.216, 5.337]
Both	10.98***	[4.558, 26.465]	2.47	[0.797, 7.633]	4.60***	[2.004, 10.558]

Note. OR = odds ratio; CI = confidence interval; MDD = major depressive disorder.  
 \* $p < .05$ . \*\* $p < .01$ . \*\*\* $p < .001$ .

At the household level, number of children, location of household, household income, partner's controlling behavior, and alcohol consumption were the significant factors associated with IPV. For each additional child, there were slightly higher odds (odds ratio [OR] = 1.3,  $p < .05$ ) of women reporting having experienced recent physical IPV. Women who reported monthly household income greater than 400 BWP had 60% lower odds of having experienced recent IPV compared with women living in households with a monthly income of less than 250 BWP. Women whose partners exhibit controlling behaviors had more than 16 times the odds of reporting recent experiences of physical IPV. Results also suggest that women's odds of experiencing physical IPV were about 10 times greater when both partners consume alcohol and about 2.8 times greater when the male partner, alone, consumes alcohol.

### *Correlates of Sexual IPV*

Study findings suggest there was only one individual-level factor associated with recent sexual IPV: women's experiences of nonpartner sexual abuse. Women who reported having experienced nonpartner sexual violence had more than 6 times the odds of reporting recent sexual IPV ( $p < .01$ ). Of the household-level characteristics examined, only a partner's controlling behavior was a significant predictor of sexual IPV, with a woman's odds of sexual IPV increasing fivefold if she reported having a partner who had exhibited controlling behavior toward her.

### *Correlates of Psychological IPV*

Results from the analysis of individual-level correlates of recent physical IPV suggest that owning land and owning livestock are significant. Land ownership was associated with 2.3 times the odds of recent psychological IPV ( $p < .05$ ). On the contrary, women who owned livestock had more than 60% lower odds of having reported psychological IPV in the last 12 months ( $p < .05$ ).

Significant correlates of recent psychological IPV included number of children, partner's controlling behavior, and alcohol consumption. Results indicate that each additional child was associated with 1.3 times ( $p < .05$ ) the odds of women reporting recent psychological IPV. Women whose partners exhibited controlling behaviors had almost 12 times the odds of having reported recent psychological IPV. In addition, women who reported that their partners, alone, consumed alcohol had 4.2 times the odds of reporting recent psychological IPV ( $p < .001$ ) compared with women who reported that neither partner consumed alcohol. Women who reported that they, alone, consume alcohol had about 2.4 times the odds ( $p < .05$ ) of having reported recent IPV compared with women in relationships where neither partner consumes alcohol.

## **Discussion**

A limited number of individual- and household-level characteristics were found to have explanatory significance in this analysis, and then only in respect to specific forms of IPV. Individual characteristics of importance to the understanding of IPV in

this setting include suicide attempts, childhood exposure to familial violence, and access to and control over certain types of tangible assets. Although several studies in the United States have not shown a link between suicide attempts and experiences of IPV victimization, findings from this study indicate a significant relationship between suicide attempts and women's recent experience of physical IPV (Howard, Wang, & Yan, 2007; Seedat, Stein, & Forde, 2005). In the absence of data on the causal relationship between the two, however, it is difficult to draw conclusions about the extent to which suicide attempts may be a risk factor for or occur as a direct result of IPV. Further research will be needed in this area.

Childhood exposure to family violence and lifetime experience of nonpartner violence have been shown to be key risk factors associated with IPV in a number of studies from around the world. Literature suggests that children exposed to violence may learn to normalize or even expect violence as adults, increasing their risk of marrying abusive partners (Wolf et al., 2014). Similarly, in this study, childhood exposure to violence, measured as self-reports by women of their fathers beating their mothers, more than doubled the odds that women would experience physical or sexual violence; exposure to nonpartner violence increased the odds of a woman reporting sexual IPV more than sixfold.

The link between ownership and control of various tangible assets and IPV has been the subject of limited research to date. Findings from this study would support a more extensive research agenda targeting this relationship in Botswana. Of interest is the fact that the effects of ownership and control of resources on IPV seem to vary according to both the type of resource and the type of violence. In this study, the odds of a woman reporting physical IPV were significantly reduced if she owned and could sell jewelry and livestock without permission and, similarly, the odds of reported sexual violence were reduced by ownership and control of livestock. There are several possible explanations for the protective effects of jewelry. Jewelry making is a common income-generating activity of women in Botswana (Ngwenya, 2002); production and control of such assets might well allow a woman a measure of independence from her partner or be viewed by him as contributing to household resources without challenging gender norms. Control and ownership of livestock is more easily explained in this setting where cattle, in particular, are equated with prosperity. If women own cattle, it is likely that they have acquired them as a result of family legacy or the presence of a well-to-do male relative. Seen as either financial resources, familial support, or both, cattle ownership could be potential sources of risk reduction.

The negative correlation between physical and psychological IPV and land ownership warrants further investigation, particularly as it runs counter to other findings in the literature which document the protective effects of such ownership (Grabe, Grose, & Dutt, 2015; Panda & Agarwal, 2005). Women's land rights in Botswana vary in practice according to the legal system—customary law or Roman-Dutch law—under which they marry (Kalabamu, 2006). Under the former, which recognizes marriage as an in-community-of-property relationship, any land acquired by either party in the marriage belongs equally to each but is under the administration of the husband. Roman-Dutch law recognizes both in-community-of-property and out-of-community-of-property options. By choosing the latter option, women can share equally in

ownership as well as administration of land, but this option is infrequently exercised by women for fear of appearing to doubt the success of their future marriages. A woman's ownership and free control of land are still uncommon in Botswana and might be interpreted as a sign of her independence from, rather than her dependence on, males in what continues to be a patriarchal society. Such challenges to gender norms may well increase a woman's exposure to IPV in an environment where such violence might be construed as a display of male dominance.

This study confirmed anecdotal reports by the WAR staff of greater IPV prevalence in Boseja ward in comparison with other wards in Maun. Because this study focused on individual-level and household-level, rather than ward-level, factors, however, it is limited in its ability to explain observed variability among neighborhoods. Our findings suggest that any future study of IPV in this setting should consider factors at the community and society levels such as those described by VanderEnde and colleagues (2012) to identify underlying structural forces that shape the phenomenon.

Of the four household-level attributes in this study found to be associated with IPV—number of children, household location, alcohol use, and controlling behavior—the most studied of these in the literature has been alcohol use. While much of the research has focused on the relationship between male alcohol use and IPV perpetration, some studies have examined the link between female alcohol use and IPV victimization, suggesting that IPV risk may shift depending on which partner consumes alcohol (Caetano, Cunradi, Schafer, & Clark, 2000; Chase, O'Farrell, Murphy, Fals-Stewart, & Murphy, 2003). Findings from this study indicate that while alcohol use by a woman was not predictive of IPV when she, alone in the relationship, consumed alcohol, her odds for physical or sexual IPV more than doubled if her partner was the only one in the relationship who drank. Alcohol consumption by both a woman and her partner was found to be a particularly potent combination, increasing the odds that a woman would report physical IPV by more than 10-fold and her risk of psychological violence by a factor of 4.6. Considerably more research in this area is warranted by these findings, particularly research that moves beyond assessing the variability in the strength of the association between alcohol and IPV according to partners' use or nonuse of alcohol to explore the temporal and causal relationships between the two phenomena.

Evidence of controlling behavior by a male partner was found in this population to be the single greatest predictor that a woman reported recent physical or psychological IPV. Although this study treated such behavior as a household/relationship characteristic, it should not be considered in isolation from the social and cultural context in which such behavior occurs. The unequal position of women in society or in individual relationships and the normative use of violence during conflicts are reported by Jewkes to be the two most important predictors of VAW amid what she describes as a "web of complementary factors" (Jewkes, 2002, p. 1426). Greater rates of VAW are associated with cultures where strong ideologies of male dominance prevail (Levinson, 1989). Men who consider women to be of low status are more likely to abuse them (Sugarman & Frankel, 1996). Physical abuse is often seen as a form of chastisement and the exercise of a man's "right" to correct his wife or, in instances of rape, as a form of sexual entitlement (Emang Basadi, 1998; WHO, 2012). Societies in which physical

abuse of women and children is acceptable, where violence is a normal means to resolve conflict, or where women are considered property are more likely to be tolerant of IPV. In many cultures, the use of VAW is condoned to the extent that it conforms to socially constructed norms of behavior; abuse that falls within these norms carries little, if any, social cost to the abuser (Jewkes, 2002).

VAW in Botswana occurs within a sociocultural context in which women have been traditionally marginalized and given limited opportunities for decision-making (Schapera, 1970). The Government of Botswana attributes the lack of women's power to a number of obstacles: discriminatory laws, attitudes and practices, women's disproportionately heavy burdens in production and reproduction, limited financial resources, and limited access to educational opportunities and skills (Republic of Botswana, Ministry of Labor and Home Affairs, 1999). Authors of the 2012 study of VAW in Botswana attributed the significant rates of VAW to patriarchal attitudes in Botswana that result in social and economic inequality, gender bias, and tolerance of VAW (Gender Links et al., 2012). Many men feel that they have a right to sex at any time, a sentiment that may have been reinforced by the traditional practice of *bogadi* in which the family of the groom makes a gift to the family of the bride, traditionally in cattle, but often now in money or durable goods. Brides were instructed by older female relatives to be obedient and submissive to their husbands, and "sexual care" of a husband was considered one of the domestic duties of a wife (Dow & Kidd, 1994; Jakobsen, 2014; MacDonald, 1996).

Despite tremendous strides having made by the government of Botswana in creating an equitable legal environment for women, the cultural legacy of patriarchy continues to fuel de facto structural conditions through which women are marginalized (Gender Links et al., 2012). In such a setting, controlling behaviors may be normative, legitimizing the "chastisement" of women and creating an enabling environment for violence. Factors that may at first glance appear to be attributes of individuals or households may in fact reflect structural factors that enable, justify, or endorse IPV (VanderEnde, Yount, Dynes, & Sibley, 2012).

## Conclusion

The individual- and household-level factors associated with IPV against women are shaped by the social and cultural contours of the settings in which such violence occurs. Absent longitudinal data, this study was limited in its ability to assess the temporal and causal relationships between these factors and their precise relationship to IPV in northwestern Botswana. This cross-sectional study suggests, however, that differential access to and control of tangible economic resources, reported attempts of suicide, number of children, alcohol consumption, and exhibitions of controlling behaviors by a male partner are significantly correlated with various forms of IPV in this setting. More research is also needed to determine the extent to which these findings are generalizable to parts of the country other than Ngamiland, particularly given Maun's high ethnic/tribal diversity as compared with other communities.

More research that examines the role of women's access to economic resources as well as the role of alcohol consumption is essential if effective strategies to eliminate the

burden of IPV against women are to be developed. Interventions that target individuals and their partners may be effective at the level of individual relationships but will do little to change underlying norms that legitimize VAW. More attention needs to be paid to the structural factors which shape relationships, male behavior, and women's status if the underlying causes of IPV in Botswana are to be addressed. Qualitative studies are needed to examine the ways in which these factors, particularly gender norms about male dominance, translate into violent acts at the individual level. Thoughtful analysis of this interplay will require not only an understanding of why IPV occurs in some relationships but also why, in other intimate partnerships existing in the same gendered space, it does not.

Findings from this study also illustrate a "policy gap" between the very real strides made by the government of Botswana in establishing a legal framework that recognizes and upholds the human rights of women, and *actual* changes in social norms and practices with respect to women's lives and the prevention of IPV. Greater attention to the enforcement of laws protecting women and to health interventions that are "gender-transformative" (Dworkin et al., 2013) will be needed if women's rights in Botswana are to be fully secured.

### **Availability of Data and Materials**

The datasets generated during the current study are not publicly available due to issues of subject privacy and consent, but are available from the corresponding author on reasonable request.

### **Authors' Note**

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