

The Relationship of Sexual and Gender-Based Violence to Sexual-Risk Behaviour among Refugee Women in Sub-Saharan Africa

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Abstract

This study utilized the reformulated theory of learned helplessness to investigate the relationships of sexual and gender-based violence (SGBV), learned helplessness, depression and sexual-risk behaviours among refugee women in a camp setting in Botswana. Simultaneous multiple regression analysis showed that past SGBV predicts current sexual-risk behaviour ($F = 2.018$; $p < .011$). Although the hypothesized mediating roles of learned helplessness and depression on the relationship between past SGBV and current sexual-risk behaviour were not supported, 55% of participants experienced learned helplessness and 90% were depressed.

Introduction

Sexual and gender-based violence (SGBV) has been reported to occur during all phases of the refugee experience: prior to flight, during flight, while in the country of first asylum and during repatriation and reintegration. The perpetrators are reportedly fellow refugees, members of other clans, religious or ethnic groups, military personnel, relief workers, members of the host population and family members (United Nations High Commissioner for Refugees [UNHCR 1999]). "SGBV encompasses a wide variety of abuses that include rape, sexual threats, exploitation, humiliation, assaults, molestation, domestic violence, incest, involuntary prostitution (sexual bartering), torture, insertion of objects into genital openings, and attempted rape" (UNHCR 1999: 36).

Like other regions of the world, women in sub-Saharan Africa are not only vulnerable to SGBV during conflict, but also during the periods of social disruption and disintegration in the aftermath of war, especially when they are fleeing the conflict and residing in camps for refugees or internally displaced persons (Human Rights Watch [HRW] 2000). For instance, a 1994 survey of 205 Liberian women and children aged 15–70 years found 49% had experienced at least one incident of physical and/or sexual abuse by soldiers during the Liberian civil war (Koss and Kilpatrick 2001). In Sierra Leone, a household survey of women revealed that 9% experienced war-related sexual assault and an additional 9% had been sexually assaulted outside a war situation (Coker and Richter 1998).

The injuries that refugee women sustain from SGBV persist long after the crime. The social, psychological and health consequences of SGBV have been widely noted among refugees in sub-Saharan Africa. Refugee victims of SGBV in the region have reported ongoing sexual and reproductive health problems, psychological and social problems. Survivors of SGBV in refugee situations have been observed to experience depression, guilt, terror, shame and loss of self-esteem. In refugee camp settings in Africa, SGBV victims are often rejected by spouses and families, ostracized and subjected to further exploitation and/or punishment (UNHCR 1999). These physical, psychological and social consequences of SGBV only add to the pain of uprooting and forced migration.

The violence that usually produces refugees has complex and multiple direct and indirect effects on health and disease. Sexual violence and exploitation are a shockingly frequent experience for refugee women before or during flight and even in refugee camps. In sub-Saharan Africa, like most refugees in other regions of the world, sexual exploitation and/or violence by border officials, fellow refugees and members of the host community are unfortunately part of the experience of forced migration (Kalipeni and Oppong 1998).

The population of African refugees in this study are women residing at the Dukwi camp in Botswana who, owing to external aggression, occupation, foreign domination or events seriously disturbing public order in various parts or the whole of their countries of origin, were compelled to leave their place of habitual residence and are now seeking refuge in Botswana. The refugees at the Dukwi camp are predominantly from Angola, Namibia and Somalia. The refugee women who participated in this study are from Angola, Burundi, Democratic Republic of Congo, Namibia, Rwanda, Sudan, Somalia, Uganda and Zimbabwe. All these countries have had histories of conflict and/or war in the last decade or so.

Although some reports are available, the nature and extent of SGBV and its relationship to sexual-risk behaviour has not been systematically documented in refugee situations in sub-Saharan Africa. This study investigated the relationships of SGBV, learned helplessness, depression and sexual-risk behaviours among refugee women in a camp setting in Botswana. Guided by the reformulated theory of learned helplessness (Abrahamson et al. 1978), the potential mediating roles of depression and learned helplessness were also explored. The specific research questions addressed were: (1) What is the magnitude of SGBV in refugee camp settings in sub-Saharan Africa? (2) What is the relationship between SGBV and sexual-risk behaviours in refugee situations, and how does depression affect this relationship? (3) How does learned helplessness explain the relationship between SGBV and sexual-risk behaviours in refugee situations? (4) Does learned helplessness (as a result of SGBV) increase the likelihood of engaging in sexual-risk behaviours by refugee women? (5) Is depression an outcome of learned helplessness by refugees?

Theoretical framework

This study utilized the reformulated theory of learned helplessness (Abrahamson et al. 1978), an extension of the theory of learned helplessness (Seligman 1975), to investigate the relationship of SGBV and sexual-risk behaviours among refugee women in Botswana. The reformulated theory of learned helplessness posits that causal attributions for unpleasant and perceivably uncontrollable events have three dimensions: global versus specific (globality), stable versus unstable (stability) and internal versus external (Abrahamson et al. 1978). A global causal attribution occurs when the individual presumes that the cause of negative events is consistent across multiple situations, whereas

a specific causal attribution occurs when the individual presumes that the cause is unique to only one situation. A stable causal attribution occurs when the individual presumes that the cause is consistent across time, whereas an unstable causal attribution occurs when the individual presumes that the cause is specific to one point in time (Abrahamson et al. 1980).

Although the reformulated theory of learned helplessness has not been scientifically tested among refugee populations with histories of SGBV, it has had widespread applications in the social, behavioural and health sciences in understanding human behaviour in a variety of situations. For example, learned helplessness has been shown to be a potential outcome of involuntary exposure to risk components such as forced sex and attendant sexually transmitted diseases (STD) (Eisenstein and Carlson 1997; Seligman 1975). When applied to risk taking in general, learned helplessness has been shown to typically develop when attempts to avoid harm (e.g., potential exposure to STD through sexual risk taking) do not yield diminished risks and where the victim cannot avoid exposure. Thus, through experience, the victim learns that trying to avoid risk is futile (Hogben et al. 2001).

The motivational, cognitive, emotional and behavioural deficits that lead to depression have also been identified in humans experiencing learned helplessness. Depressed individuals have been shown to have negative, pessimistic beliefs about the efficacy of their actions and the likelihood of obtaining future rewards (Southwood 1986). Depression has also been shown to be a typical collateral outcome of learned helplessness (Klein and Seligman 1976). Higher rates of depression and a putative increase in depression have also been attributed to forced sex or physical violence (Hogben et al. 2001). Victims of forced sex in general are typically more depressed than non-victims (Fishbach and Herbert 1997). According to Isaac and Schneider (1992), depression is also related to perceived loss of control and may influence sexual-risk behaviours among women who would normally avoid such behaviours and may predict STDs.

Methods

Study Site

The research setting was the Dukwi Refugee Camp in Botswana that is located along the main highway that links the north and south of the country, about 560 km from Gaborone (capital city of Botswana). The camp covers an area of approximately 20 square kilometers and is inhabited by refugees from 16 countries, predominantly from Southern Africa, the Great Lakes region and the Horn of Africa. During the time of the study, the camp was occupied by about 3000 refugees, of which about 65% were women and 35% men. The refugees live in houses, tents and huts that are assigned on a first-come, first-served basis.

Research Design

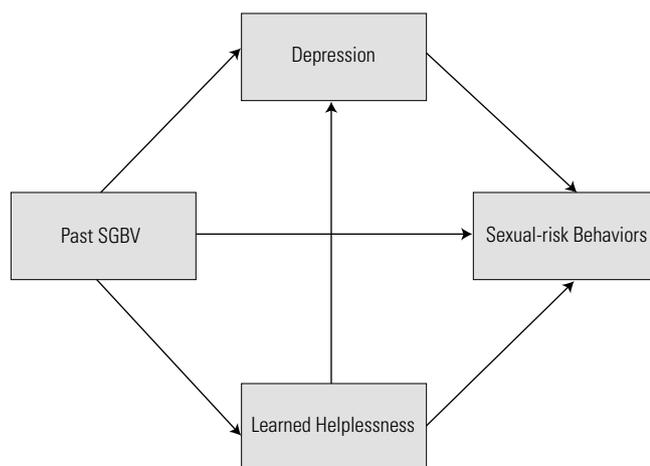
A cross-sectional research design was used to test the main hypotheses in the study. A survey questionnaire that was informed by the relevant theoretical and empirical literature served as the data collection instrument. Trained female research assistants interviewed participants at their preferred locations in one of the four widely spoken languages (Mbukushu, Lozi, Swahili and English) in the camp. Participation in the interviews was voluntary, and all information obtained was made confidential. After completion of the interview participants were given a package containing bathing soap, educational materials on safe sex practices/HIV/AIDS and information on referrals for physical and mental health services available to refugees in Botswana. Those refugees who declined to participate in the research were also offered the package.

This research was reviewed and approved by the Office of the President of Botswana and the Chief of Party of the UNHCR office in Botswana. In addition, approval was also obtained from the Institutional Review Board of the University of Pittsburgh, after an exempt review for human subjects' protection. Every effort was made to ensure protection, anonymity and confidentiality to minimize any potential adverse consequences to participants.

Hypotheses

Based on the reformulated theory of learned helplessness, I hypothesized that among refugee women in sub-Saharan Africa: (1) A history of past SGBV (uncontrollable event) predicts engagement in sexual-risk behaviours, (2) learned helplessness predicts depression and sexual-risk behaviours, and (3) depression and learned helplessness mediate the relationship between past SGBV and sexual-risk behaviours. The hypothesized relationship between the central study variables is shown in Figure 1.

Figure 1. Hypothesized model of SGBV, depression, learned helplessness and sexual-risk behaviour



Variables

Sexual and Gender-Based Violence (Independent Variable)

This was defined as any type of abuse that includes rape, sexual threats, exploitation, humiliation, assaults, molestation, domestic violence, incest, involuntary prostitution (sexual bartering), torture, insertion of objects into genital openings and attempted rape (UNHCR 1999). A history of SGBV was assessed.

Learned Helplessness (Independent Variable)

This was characterized as the failure to take harm-avoidant responses even when such responses led to reduced exposure to harm and/or risk of harm as measured by the Learned Helplessness Scale (Quinless and McDermott 1988). This variable was also hypothesized as mediating the relationship between past SGBV and current sexual-risk behaviour.

Depression (Independent Variable)

This encompasses the depressed mood symptomatology. It comprised the symptoms of depression in the last week as measured by the Hopkins Symptoms Check List-25 (Mollica et al. 1987). This variable was also hypothesized as mediating the relationship between past SGBV and current sexual-risk behaviour.

Sexual-Risk Behaviour (Dependent Variable)

This is considered a constellation of behaviours involving inconsistent or no condom use during vaginal, oral and anal intercourse with primary and non-primary male partners (Jones 2001). It also

included having sex with partners who are perceived by the participant to be having sexual intercourse with other women and/or men, taking drugs and/or using alcohol (Aral and Wasserheit 1995).

Measures

Sexual and Gender-based Violence (SGBV) Scale

The SGBV measure in this study was adapted from the Gold Standard SGBV Questionnaire (GSSQ) of the Reproductive Health of Refugees Consortium. The GSSQ is a 188-item measure that assesses SGBV in refugee and/or conflict settings by estimating the prevalence of sexual and physical violence during several periods defined by historical markers such as prior to the war, during war, during occupation and while internally displaced. It has been pilot tested cross-nationally in Rwanda (Africa), Kosovo (Europe) and East Timor (Asia), but its psychometric properties are yet to be determined (Ward et al. 2003). For the purposes of this research, only three sections of the GSSQ were used to create a scale that assessed SGBV during the occupation and/or conflict, during flight/displacement and post-conflict (host country) on 6-point Likert scale format. The reliability coefficient of the SGBV scale in this study's sample was .97 (Cronbach's alpha). Composite SGBV scores were computed by categorizing the items into physical violence (PV); intimidation and control (IC) and sexual violence (SV). Physical violence was defined as "pulled hair, slapped/twisted arm, hit with fist or something else, pushed down/kicked, choked." Intimidation and control was defined as "forbidden to see friends or family, kept away from medical care, and refusal to give money for food, insulted or swore at you, threatened to hurt you, threatened with weapon." Sexual violence was defined as "partner using threats of physical harm or using force to obtain sex, or forcing the woman to have sex with other people" (Ward et al. 2003). Exploratory factor analysis of the SGBV items was used to assess construct validity and to detect structure (classify) in the relationships between the variables. The established SGBV categories were confirmed using principal components factor analysis with a varimax rotation. The principal components factors analysis confirmed three factors that manifested the underlying dimensions of the original categories of physical violence, intimidation and control, and sexual violence, and these were used in subsequent analyses.

Learned Helplessness Scale (LHS)

The LHS is a 20-item scale that measures the degree of learned helplessness with each item rated on a 4-point Likert scale. Participants were asked whether they "strongly agree" (1), "agree" (2), "disagree" (3), or "strongly disagree" (4) to a list of statements related to the dimensions of the reformulated theory of learned helplessness, i.e., globality, stability and internality. Total possible scores ranged from 20 to 80, and the higher the LHS score, the higher the individual's level of learned helplessness (Quinless and McDermott 1988). A composite learned helplessness (LH) score was computed by calculating the average of the individual scores. The composite LH score was used to categorize participants into low and high groups of learned helplessness based on the median split (Wilson et al. 1992); this was done for descriptive purposes only. Those participants who scored above the median (55.3%; $n = 211$) were classified as the high-learned-helplessness group and those who scored below the median (44.7%; $n = 187$) were the low group. Internal consistency for the LHS in this study was .80 (Cronbach's Alpha).

Hopkins Symptoms Check List (HSCL-25)

This is a symptom inventory that measures symptoms of anxiety and depression. It consists of two scales with a total of 25 items that assess anxiety and depression symptoms. Only the depression scale with 15 items (HSCL-15) was used in this study to compute depression scores for the participants. They were asked to respond to a list of statements by indicating whether they had felt that way in the last week. Response options ranged from "not at all" (1) to "extremely" (4). The depression score from the HSCL-15 has been consistently shown to be highly correlated with major

depression in several populations and was used in this study because of its sensitivity and specificity as a screening instrument with refugee populations. In contrast to other known depression scales, the HSCL-15 has been extensively used to identify distress in refugee populations (Mollica et al. 2001). The sensitivity and specificity for the presence of depression (using a cut-off score of 1.75 from the 15 depression items) in a study of newly admitted patients into a mental health facility were .88 and .73, respectively (Mollica et al. 1987). The HSCL-15 has also been widely translated and used in several studies among diverse groups (Cardozo et al. 2000), has been validated against clinical diagnosis (Smith-Fawzi et al. 1997) and has been shown to have high internal consistency in studies of Russian-, Arabic-, Farsi-, English-, Bosnian- and Croatian-speaking patients (Mollica et al. 2001). In this study a cut-off score of 1.75 was used to classify participants into depressed and non-depressed groups. Those participants with depression scores of 1.75 and higher (90%; $n = 363$) were classified as depressed, and those with scores lower than 1.75 (10%; $n = 35$) were non-depressed. The reliability of the HSCL-15 in this study's sample was .76 (Cronbach's Alpha).

Sexual-Risk Behaviour (SRB) Scale

The SRB scale in this study was adapted from the Women's Relative Sexual Risk Scale (WRSRS). The WRSRS is a 31-item instrument that assesses women's unprotected intercourse with male partners who engaged in sexual-risk behaviours during the previous three months' recall period (Downey et al. 1995). It consists of two dimensions that assess sexual-risk behaviours. The first dimension assesses the numeric frequency of the participant's engagement in unprotected vaginal, oral and anal sex during the last three months with a male partner. The other dimension taps the participant's perceived likelihood that her male partner engaged in sex with other women, sex with men or used drugs and/or alcohol during the same time period (Jones 2001). All items were in the context of a primary or a non-primary partner and were based on the previous three months. A composite SRB score was computed that was the sum of the weighted frequencies of unprotected vaginal, oral and anal intercourse and the perceived partner behaviour score for both primary and non-primary partners combined. A higher SRB score translates to a higher level of sexual-risk behaviour. The internal consistency of the SRB scale in this study was .77 (Cronbach's alpha).

Statistical Analysis

The central study variables in this study were: past SGBV (categorized as past physical violence, past intimidation and control, and past sexual violence); learned helplessness; depression and sexual-risk behaviour. The composite scores of each of the SGBV categories are based on logarithm transformations of the average scores for the total items in the category. The Kolmogorov-Smirnov and Shapiro-Wilk tests of normality confirmed the normality of the log-transformed variables. The computed composite scores of the other central study variables also satisfied the assumptions of normality, linearity, homoscedasticity and homogeneity of variance (Table 1). Bivariate analyses were performed to examine the relationships between the variables. Pearson product-moment correlations and one-sample t-tests were used to test for associations. Simultaneous multiple regression analyses were performed to test the central study variables, and a fully recursive path analysis was also performed to test the mediating roles of learned helplessness and depression in the hypothesized model.

Results

Descriptive Findings

A total of 402 refugee women residing at the Dukwi camp in Botswana were interviewed. They ranged in age from 21 to 63 years, with a mean age of 29.2 years ($SD = 7.20$). Participants in the study originated from nine African countries: Angola, Burundi, Democratic Republic of Congo, Namibia, Rwanda, Somalia, Sudan, Uganda and Zimbabwe. About half were from Namibia (49.3%) and another 28.6% from Angola.

Overall, about 75% of participants reported having experienced SGBV either in their home country, during flight/transit or while in Botswana. More than half of the participants (56%) experienced SGBV in their home country during the conflict, while about 39% reported SGBV during flight. About 37% reported having experienced SGBV while in Botswana (host country).

The median split of the composite LH score was used to categorize participants into low and high groups of learned helplessness. More than half (55%) of participants scored above the median and were classified as the high-learned-helplessness group and those who scored below the median (45%) were classified as exhibiting low learned helplessness.

Using a cut-off score of 1.75 (Mollica et al. 1987) to classify participants into depressed and non-depressed groups, about 90% of participants scored 1.75 and higher on the HSCL-15 scale and were classified as depressed, and only 10% scored lower than 1.75 to be classified as non-depressed.

Table 1. Descriptive statistics of the central study variables

Variable	N	Range	Mean	SD
Past physical violence	401	1.73	-.23	.40
Past intimidation and control	401	1.92	-.23	.41
Past sexual violence	401	1.92	-.13	.35
Learned helplessness	398	2.21	2.84	.44
Depression	398	2.67	2.42	.52
Sexual-risk behaviour	398	10.91	.00	1.30

In terms of sexual partnerships in the last three months, about two thirds (68%) of participants reported having only a primary partner(s), and about 15% said they had only a non-primary partner(s). Two percent had both primary and non-primary partners, and 14% claimed they had no sexual partner(s) in the last three months. About 76% said their primary partner was their husband, and 22% claimed their main boyfriend was their primary partner. More than half (59%) of participants with a non-primary partner reported their non-primary partner was someone they had seen occasionally in the last three months, while the remaining 41% said their non-primary partner was someone whom they saw for only one night.

Inferential Findings

Simultaneous multiple regression analyses were used to test the relationships between the variables, and a fully recursive path analysis of the hypothesized model was also performed. Results from a path analysis of the hypothesized model using simultaneous linear regression techniques with the Statistical Package for Social Sciences (SPSS) version 13.0 follow.

Past SGBV and Sexual-Risk Behaviours among Refugee Women

To test this relationship, simultaneous multiple regression analysis was performed with sexual-risk behaviour as the dependent variable and past physical violence, past intimidation and control, and past sexual violence as the independent variables at the .05 level of significance. There was an overall statistically significant effect ($F = 2.018$; $p < .011$) on sexual-risk behaviour. The three predictor variables together explained 15% of the variance in sexual-risk behaviour. However, when the standardized regression coefficients of the individual independent variables are examined, only past sexual violence was found to contribute significantly to the prediction of sexual-risk behaviour ($\beta = .461$; $p < .024$), as shown on Table 2.

Table 2. Coefficients of the simultaneous multiple regression of past SGBV to sexual-risk behaviour

Independent Variable	β	<i>t</i>	<i>p</i>
Past physical violence	-.033	-.173	-.863
Past intimidation and control	.005	.025	.980
Past sexual violence	.461	2.267	.024*
$R^2 = .015; F = 2.018, p < .011$			

Dependent variable: Sexual-risk behaviour; * $p < .05$.

Learned Helplessness and Sexual-Risk Behaviours among Refugee Women

Simultaneous multiple regression analysis was used to test whether learned helplessness predicts sexual risk among refugee women. It showed that the effect of learned helplessness on sexual-risk behaviour was not statistically significant ($\beta = .005; p < .91$), and therefore learned helplessness does not predict sexual-risk behaviour among refugee women (Table 3).

Learned Helplessness and Depression among Refugee Women

Simultaneous multiple regression analysis was also employed to test whether learned helplessness predicts depression among refugee women. The effect of learned helplessness on depression was statistically significant ($\beta = .360; p < .001$), suggesting that learned helplessness predicts depression among refugee women (Table 4).

Table 3. Coefficients of regression of learned helplessness with sexual-risk behaviour

Independent Variable	β	<i>t</i>	<i>p</i>
(Constant)	--	-.082	.935
Learned helplessness	.005	.102	.919
$R^2 = .001; F = .010$			

Dependent variable: Sexual-risk behaviour

Table 4. Coefficients of regression of learned helplessness with depression

Independent Variable	β	<i>t</i>	<i>p</i>
(Constant)	--	7.470	.000
Learned helplessness	.360	7.676	.000**
$R^2 = .130; F = 58.918$			

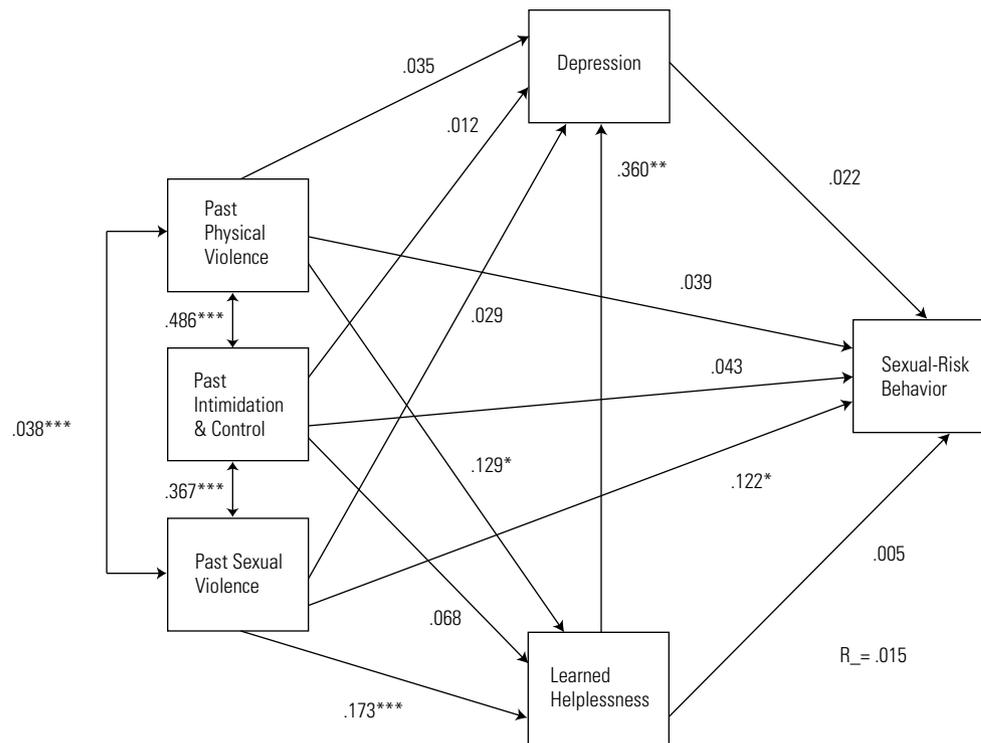
Dependent variable: Depression; ** $p < .001$.

Mediating Roles of Depression and Learned Helplessness

A fully recursive path analysis of the hypothesized model was performed to determine the paths and effects of the predicted relationships and mediating roles. Only four paths were significant: the past physical violence to learned helplessness path, the past sexual violence to sexual-risk behaviour path, the learned helplessness to depression path and the past sexual violence to learned helplessness path. Although past sexual violence was found to have a significant effect on both sexual-risk behaviour ($\beta = .122; R^2 = .015; p < .010$) and learned helplessness ($\beta = .173; R^2 = .030; p < .001$), the path between learned helplessness to sexual-risk behaviour was not significant ($\beta = .005; R^2 = .001; p < .919$), demonstrating that learned helplessness does not mediate the relationship of past sexual violence and sexual-risk behaviour. Although learned helplessness was found to have a significant

effect on depression ($\beta = .360$; $R^2 = .130$; $p < .001$), the path between depression and sexual risk-behaviour was not significant ($\beta = .022$; $R^2 = .001$; $p < .668$). Therefore, since depression had no significant effect on sexual-risk behaviour, it was also not a mediator of the relationship between sexual violence and sexual-risk behaviour. A path diagram of the fully recursive hypothesized model is shown on Figure 2.

Figure 2. Path-analytic model: influence of past physical violence, past intimidation and control, past sexual violence, learned helplessness and depression on sexual-risk behaviour



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

Discussion

This study found that about 75% ($n = 303$) of participants had experienced some form of SGBV either in their home country, during flight/transit or in the host country. The refugee women in this study were more likely to experience SGBV in their home countries (during conflict) than during flight or in the host country. These findings show that refugee women in sub-Saharan Africa are not only vulnerable to sexual violence during conflict, but also during the periods of social disruption and disintegration that follow war, when they are fleeing the conflict and residing in camps for refugees.

The most common perpetrators of SGBV were soldiers, Civil Defense Forces, paramilitary, and family members or relatives of the victims. Soldiers were the main perpetrators in the home country and during flight, whereas the police and/or interrogators were the main perpetrators of SGBV once the refugee had entered Botswana. These findings suggest that refugee women in the region may lack the protection and recourse that international human rights law affords them.

The current study found that more than half of the participants (55%) experienced learned helplessness and about 90% were depressed. This finding is congruent with prior research on

battered and abused women (Walker 2000) that shows women's experiences of uncontrollable violence produce learned helplessness over time and eventually depression. Repeated experiences of violence have also been shown to diminish the victim's motivation to respond appropriately (Abrahamson et al. 1980). In this study, learned helplessness was also found to be moderately and significantly correlated with depression. This finding is consistent with the LH model of depression that suggests depression is a typical collateral outcome of learned helplessness (Klein et al. 1976; Klein and Seligman 1976).

The finding that past SGBV predicts current sexual-risk behaviour suggests that refugee women in sub-Saharan Africa with histories of SGBV are more likely to engage in sexual-risk behaviours than their counterparts without such histories. This finding is consistent with prior research that has examined the correlates of sexual-risk behaviours among vulnerable populations (Hogben et al. 2001; Susser et al. 1998; Tubman et al. 2001).

Past physical violence was also found to be positively and significantly correlated with learned helplessness but not correlated with depression. However, learned helplessness was moderately and significantly correlated with depression. This finding supports the learned helplessness–depression model, as first proposed by Klein and Seligman (1976).

The hypothesized relationship between learned helplessness and depression with sexual-risk behaviour was not significant. This suggests that both learned helplessness and depression (as potential outcomes of past SGBV) do not predict current sexual-risk behaviour among refugee women in sub-Saharan Africa. Thus, the hypothesized mediating roles of learned helplessness and depression in the relationship between past SGBV and current sexual-risk behaviour were not supported in this study. Learned helplessness was found to have a significant effect on depression among refugee women, although the path between depression and sexual-risk behaviour was not significant, suggesting that learned helplessness is a likely mediator of the relationships between both past sexual violence and past physical violence to depression, which could be the subject of further research.

Limitations

The cross-sectional nature of this study limits causal inferential interpretations of the findings, due to the limitations in establishing temporal order. Longitudinal studies will be needed to provide stronger evidence of associations. This study is also limited by the self-report measures that are subject to the influences of social desirability, response bias, or inaccurate recall. The sensitive nature of some of the questions may also be particularly prone to under-reporting. Like similar studies of SGBV with vulnerable populations, refugee participants in this study may have deliberately under-reported their SGBV experiences out of fear of stigmatization and retribution, especially when the interviewers were themselves female refugees residing at the camp. The learned helplessness and women's relative sexual-risk scales are limited by the fact that they had not been validated with refugee populations prior to this study. In addition, potential errors in the translation of the scales from English into three different African languages may likely affect the psychometric properties of the individual measures.

Conclusion

The patterns of vulnerability to SGBV evident in this study suggest specific prevention approaches for governments and other refugee assistance agencies in sub-Saharan Africa that include public acknowledgment and discussion of the problem of SGBV in refugee situations on the continent. The findings in this study could be utilized in various initiatives geared toward national consensus building in preventing SGBV in refugee programs in Africa. Initiatives aimed at building national consensus on preventing sexual abuse and exploitation in refugee situations have been shown to be very successful in moving forward the agenda on preventing sexual exploitation and abuse in refugee camps, as in the Kenya refugee program, for example. A national consensus building initiative could bring together participating agencies to agree, review and adopt fundamental protocols, in addition to providing an important opportunity for decision makers and key stakeholders in refugee situa-

tions to agree to a Code of Conduct and discuss their views on how to mainstream policies and programs on sexual exploitation in refugee settings.

The findings of this study could also provide program managers and humanitarian workers in refugee situations with some of the indicators of the psycho-social needs of refugee women in camp settings in Africa. It may equip them with knowledge about and indicators of some of the risk and protective factors of SGBV (including the psycho-social impact). This may be useful in the design and implementation of behavioural surveillance systems and behavioural change interventions that target risky sexual behaviours in refugee settings. These findings could also be utilized in ways that could raise awareness of the problem of SGBV and its associated mental health implications among policy makers and humanitarian aid workers alike. It could be utilized by refugee agencies as the basis to mainstream the prevention of SGBV within their programs, in addition to providing them with the knowledge and tools to raise awareness of the problem of SGBV in refugee situations.

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