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Factors which Predict Interpersonal Violence in Sierra Leone

Lincoln J Fry
Academic Member
Sociology Research Unit, Athens Institute for Education and Research, (ATINER) Athens Greece.

Abstract

Introduction: Violence is a major public health issue, globally and on the African continent. This paper continues a series of papers that have looked at the factors that predict interpersonal violence in sub-Saharan African countries, and this study looks at Sierra Leone. The purpose is to identify the factors which predict violence in Sierra Leone, and then to interpret the implications of the results for violence prevention programs.

Methods: The study includes the responses of 1,190 respondents collected in 2012 by Round 5 of the Afrobarometer surveys. The research concentrates on 145 respondents who reported either they or someone else in their family had been the victim of violence, defined as being physically attacked in their home in the last year**.**

Results: Logistical regression analysis identified five factors which predicted respondent victimization. In order of their strength these were being the victim of a property crime, fear of crime in the home, trust in the police, feeling unsafe walking in the neighborhood, .and the respondent's employment status. The logistic regression produced Pseudo R2 of .60.

Conclusions: These findings suggest that target hardening should be the framework used to begin to plan, implement and evaluate violence prevention programs in Sierra Leone. Re-victimization appears central to interpersonal crime in Sierra Leone. The implication of this study is crime prevention personnel/ law enforcement need to respond to reported incidents of property and/or violence victimization and attempt to prepare victims to protect both their premises and their persons in the future.

Key words: Crimes of violence, property crime, crime prevention programs, fear of crime- home, fear walking.

Introduction

In 1996, the World Health Organization (WHA 1996) declared violence a major public health problem. In 2000, WHO created the Department for Injuries and Violence Prevention (Krug et al, 2000) and in 2002 released the World Report on Violence and Health. Violence was included in the call for improved research that highlighted public health's need to address data collection deficiencies, including hospital and police records, in order to begin to develop preventive interventions, including injury control programs.(Krug et al, 2002).

Violence in Africa and Previous Violence Prediction Studies

According to the United Nations Office of Drugs and Crime (2005), the need to alleviate poverty has received the most international attention concerning Africa, and little has been done to assess the extent of crime which plagues Africa. Most African governments receive some criticism because of their failure to participate in the international sharing of official crime statistics. Where data do exist, they support the statement that Africa is experiencing an extremely serious crime problem. The UNDOC report concentrates on the types of crime central to this report, conventional crimes, violent and property crimes, and also lists some of the correlates of crime in Africa. These were income inequality, youth unemployment, urbanization rates, under-funded criminal justice systems, and the proliferation of firearms. The report indicates knowledge of crime in Africa is based on two seriously deficient sources, police reports and victim surveys. As indicated above, this study is a continuation of a series of papers which attempted to identify the factors which predicted violence victimization in other sub-Saharan countries, namely. South Africa, Nigeria, Uganda and Kenya. (Fry, 2014a, Fry, 2014b, Fry, 2014c, Fry, 2015). Briefly, these previous papers showed that property crime victimization was the first variable to emerge as a predictor of violence victimization in every study conducted in the larger research study; logistical regression analysis revealed that the number of predictor variables in these studies ranged from three to seven.

Violence Prevention Programs

There has been an increasing volume of calls to develop violence prevention programs at the country, continental and international levels, as well as the concomitant need to begin to develop the infra-structure to identify mediating factors which deter or promote better health. One approach central to that call has gained some support in Africa is target hardening, derived from what is known as the built environment framework (Rapoport; 1983) Elements in the built environment include homes, schools, workplaces, parks/recreation areas, business areas

and roads. It encompasses all buildings, spaces and products that are created or modified by people. This approach endorses a crime prevention approach called CPTED (Crime Prevention Through Environmental Design), and target hardening falls under that rubric. Research in this tradition has focused mainly on housing, transportation and neighborhood characteristics, emphasizing improved protection of self, property and neighborhoods (Srinivasan, O'fallon and Dearry (Inadequate urban planning has been identified as a major source of problems in those areas, and some studies indicate that the impact of mediating and moderating factors within the built environment must be the focus of future health research. These issues raised about CEPTED as they relate to Public Health strategies will be addressed in the Discussion.

Methods and Materials

This study's Data Source is Afrobarometer, a collaborative research effort produced by social scientists from 35 African countries. The Project's objectives are as follows: 1) to produce scientifically reliable data on public opinion in sub-Saharan Africa; 2) to strengthen institutional capacity for survey research in Africa; and 3) to broadly disseminate and apply survey results. Begun in 1999, six rounds of the survey have been completed.

The Survey consisted of face-to-face Interviews completed by 2 386 respondents 18 years of age or older. These interviews were conducted in six different languages, with 75 percent conducted in Krio, the language spoken by about 90 percent of the population. The sampling frame included all Regions in Sierra Leone, and included the place of residence, rural or urban. The sampling procedures used in all of the Afrobarometer surveys are explained in detail in Bratton, Mattes and Gyimah-Boadi (2005).

The Dependent Variable: Violence victimization: Survey respondents were asked about criminal victimization. One question asked "over the past year, how often, if ever, have you or anyone in your family been physically attacked?" Fixed responses were provided as follows: never; just once or twice; several times; many times; and always. The study's dependent variable was created by treating never as one category (0) and all other affirmative responses were coded as one (1). This dichotomous variable is the study's dependent variable and provides the basis for the logistic regression presented below.

The Independent Variables: A poverty index used in the Afrobarometer studies was adopted from Mattes et al. (2003). The Question which generated poverty related responses was " over the past year, how often, if ever, have you or anyone in your family gone without the following: enough food to eat; enough clean water for home use ; without medical care; enough fuel to cook your food and ; a cash income." The control variables listed in Table 1 were measured by a single item, like age, and others were collapsed into fewer categories; for instance, race which became a dichotomous variable, Black Africans and all others, and education, which was reduced to five categories, by combining no school, informal only and some primary. Other variables were also measured by single items, including the fear of crime in the home and feeling of being unsafe walking in your neighborhood, property crime victimization and trust of the police. Others, like the presence of a police station in the respondent's local area or whether police were visible in the local area were recorded by the interviewer and supplemented/checked by the interviewer's supervisor.

Results

Table 1 shows that there were statistically significant differences in violence victimization by age, gender, religion, education, employment status, and place of residence, urban versus rural, .in this Sierra Leone sample, all at .01 or higher. Older respondents were less likely to be violent crime victims and males rather than females. Respondents with higher levels of educational attainment were more likely to be victimized. Christians were more likely to be violence victims than were Muslims. Urban residents had the highest percentage of violence victims. Employment status and gender failed to reach significance in Table 1.

Table 1 about here

In Table 2,1 violence victimization in the last year is displayed cross-tabulated by selected independent variables. These items begin with whether the respondent was a victim of property crime within the last year, and include fear of crime in the home as well as feeling unsafe while walking in the neighborhood. Other measures included in Table 2 are residential crowding, measured by the number of adults living in each residence, whether there was a police station in the area and whether police were visible in the area. Another question asked whether the respondent trusted the police. The final measure included in Table 2 asked if the area was connected to the electricity grid. This was included because lighting is an important consideration in the CPTED, target hardening approach.

Table 2 about here

Table 2 shows that being the victim of a property crime in the last year, fear of crime in the home, and feeling unsafe walking in the neighborhood were statistically significant independent variables related to violence victimization. This was also true for police visibility in the area, trust of the police, and whether the area was connected to the electricity grid; all of the above measures were significant at the .001 level or higher. Residential crowding was significant at the .04 level, and the only measure in Table 2 that fell short of significance was whether there was a police station in the area.

The independent variables listed in Tables 1 and 2 were all included in the logistic analysis presented in Table 3, with violence victimization the dependent variable.

Table 3 about here

Table 3 reveals that five independent variables reached significance in the logistical regression analysis. Four of these were highly significant, with property crime victimization the strongest, Z=22.57 Fear of crime in the home was next, Z=12,58 , followed by trust of the police, Z-_2.92, feeling unsafe walking in the neighborhood, Z=2.48. The other independent variable that reached significance in Table 2 was residential crowding, Z=_2.33, p=.04. The logistic regression results produced a pseudo R2 of .60.

Before the implications of the findings are discussed further, it should be noted the results of the findings presented in Tables 2 and 3 point to one of the weaknesses in this study, and an issue which needs to be addressed in future research. There is the need to establish the time priority for the physical and property crime victimizations. We are unable to determine from this data which victimization occurred first or if they occurred at the same time; that is the old problem that correlation does not necessarily mean causation. This same caution applies to the fear of crime indicator. Regarding fear of crime, the real issue may be whether these respondents did not in fact have a valid reason to fear crime, especially since a large percentage of them had been victims of crime.

Discussion

The striking findings in Table 3 was the strength of the property crime victimization and fear of crime in the home measures in the logistical regression equation. This was not a surprising finding, given the results included in Table 2. Note that in Table 2, of the 779 of 848 respondents, 91.9 percent, who reported a property crime in their residence within the last year were also violent crime victims. While slightly less in magnitude, of the 984 respondents who reported fear of crime in their homes, 798 , 81.1 percent also reported violent crime in their households. These results point to the need to consider re-victimization as the basis for any crime prevention program in Sierra Leone.

The logistical regression analysis showed that there were five statistically significant factors that predicted violence in Sierra Leone. Being a victim of property crime was the strongest, fear of crime was the second strongest, followed in order by trust of the police, feeling unsafe while walking in the neighborhood, and finally residential crowding. Given the strength of the re-victimization implications for crime prevention programs, these findings suggest that the target hardening should be the basis to begin to implement violence prevention programs in Sierra Leone. This suggests an approach crime prevention where law enforcement personnel would respond and follow-up incidents of reported property and/ or violence victimization within their jurisdictions. The purpose of these home visits would be to attempt to prepare and assist previous victims to better protect both their premises and their persons. Target hardening refers to issues like improving locks, installing proper night lighting and clearing bushes from in front of their windows that might impede visibility of their property and neighborhoods. Personal experience with target hardening programs suggests that residents become open to target hardening approaches, and personnel, once they have been victimized. Also, once victimized, residents can be encouraged to develop local neighborhood groups that help provide security for them and those in their own communities.

In conclusion, the issues raised here are central to the development of crime prevention programs in Sierra Leone. These findings raise the issue of what Shepard (2001) defined as criminal deterrence as a public health strategy. As Shepard suggested, despite the fact that violence is now seen as a public health issue, criminal deterrence as a public health strategy has been greeted with ambivalence and even hostility. Target hardening is one form of deterrence and implies the need to implement crime prevention programs based on prior victimization. Law enforcement personnel would respond and follow-up incidents of reported property and/ or violence victimization within their jurisdictions. The purpose would be to attempt to prepare and assist victims to better protect both their premises and their persons. Target hardening includes procedures like installing improved locks, making sure that residents have installed proper night lighting and clearing bushes from the windows that might impede resident's visibility of their property and neighborhoods. Personal experience with target hardening programs suggests that residents become open to target hardening approaches, and personnel, once they have been victimized. Also, once victimized, residents can be encouraged to develop local neighborhood run groups that provide security for their own communities.

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Annexure

Table 1. Demographic Characteristics of Sierra Leone Sample by Violence Victimization (N=1,190)

	Victim of Violent Crime			
Variable	Yes	No	Total	P.
Age				
18 through 29	44(12)	320 (87)	-364	.48
30 thru 49	48 (13)	314 (87)	-362	
50 and over	39 (10)	336 (90)	375	
Gender				
Male	-57 (10)	-492 (90)	549-	.11
Female-	76 (14)	497 (87)	563	
Religion				
Christian	_617 (45.2)	—748 (54.8)	__1 ,365-	.001
Muslim	_398 (41.2)	—569 (58.8)	___967	
None	_9 (19.6)	—37 (80.4	___46	
Education				
No formal/informal schooling only	—65 (27.7)	-170 (72.3)	–235	.000
Some / Primary school completed	—716 (44,0)	-911 (56.0)	-1,627	
Some /completed high school—	208 (47.1)	234 (52.9)	442	
Post secondary/qualifications	—34 (47.9)	37 (52.1)	71	
Completed University	—16 (67)	__8 (33)—	24	
Employment				
Unemployed—	664 (43.1)	875 (56.9)	1,539	.66
Employed part time	—136 (44.6)	169 (55.4)	305	
Employed full time	—230 (41.5)	324 (58.5)-	601	
Residence				
Urban—	360 (47.4)	400 (52.6)	760 .	.000
Rural	—671 (40.9)	968 (59.1)	-1,639	

Table 2. Cross-tabulation Violence Victimization and Selected Independent Variables

	Victim of Violent Crime			
Variable	Yes	NO	Total	P
Victim of property crime				
Yes	779 (91.9)	69 (8.1)	848	.000
No	252 (16.3)	1,299 (83.8)	1 ,551	
Fear of crime-home	798 (81.1)	186(18.9)	984	.000
No	233 (16.5)	1,182 (83.5)	1,415	
Felt unsafe walking				
Yes	813 (69	211 (24.3)	867	.000
No	371 (31)	1,157 (75.5)	1,532	
Residential Crowding				
One or two adults	398 (41.2)	567 (58.8)	965	.04
Three or four adults	346 (41.8)	482 (58.2)	828	
Five or more adults	287(47.4)	319 (52.6)	606	
Police station in area				
Yes	169 (46.9)	191 (53.1)	360 .	.10
No	862 (42.3)	1,177 (57.7)	2,039	
Police Visible in area				
Yes	124 (53.5)	108 (46.6)	232	.001
No	907 (41.9)	1 ,260 (58.1)	2,167	
Trust the police				
Not at all	207 (56.1	162 (43.9)	369	.000
A little	294(52.3)	268 (47.7)	562	
Some	339 (38.2)	548 (61.8)	887	
A lot	188 (32.7)	387 (67.3)	575	
Electric grid in the area				
Yes	313 (49.3)	319 (50.5	1 847	.000
No	91 (16.5)	461 (83.5)	632	

Table 3. Logistic regression with Violence Victimization as the Dependent Variable.

Variable	Coefficient	Standard Error	Z	P
Property crime victim	4.05	.180	22.57	.0000
Fear of crime -home	2.65	.21	12.58	.0000
Trust police	- .21	.07	- 2.92	.0000
Fell unsafe-walking	.51	.21	2.48	.01
Residential crowding	-. 21	.09	- 2.23	.04
Employment status	-.80	. 45	-1.79	.07
Gender	-.22	.149	-.14	.14
Police visible	.48	.28	1.74	.08
Education	.155	.113	1.38	.17
On electric grid	-.27	.21	-1.28	.20
Urban-rural	-.22	.20	-1.11	.27
Police roadblocks	.15	.55	.26	.79
.Religion	.01	.148	.07	.95
Police station	- .17	.22	-.78	.44
Poverty	.007	.02	.36	.72
Age	-.000	.004	-.02	.98
Constant	- 1.62	.65	- 2.49	.01

Number of observations = 2 359
Chi square = 1925.03
Probability = .000
Pseudo R2 = .60