

Vol 4 (3) pp. 18-27 December, 2018
Author(s) retain the copyright of this article
<http://www.pyrexjournals.org/pjasd>
Copyright © 2018 Pyrex Journals
ISSN: 2985-8763

Full Length Research Paper

Within the Walls of a Human Warehouse: Sex Differences in Aggression among Prisoners in Ghana

George Darko*, Kaj Björkqvist and Karin Österman

Peace and Conflict Research & Developmental Psychology, Åbo Akademi University, P.O.B. 311, 65101 Vasa, Finland

Accepted 11th October, 2018

Abstract

The purpose of the study was to assess inmate-on-inmate aggression in Ghanaian prisons with a focus on sex differences regarding the prevalence of victimization and perpetration of various forms of aggression. A total of 1,717 inmates of which 299 were females (17.4 %), and 1,418 males (82.6%) completed a questionnaire consisting of two parts: one for the measurement of victimization from other prisoners' aggression, and the other for the measurement of perpetration of aggression against other prisoners. Both parts consisted of five subscales: (1) Physical Aggression, (2) Verbal Aggression, (3) Indirect Aggression, (4) Property Aggression, and (5) Sexual Aggression. The data showed that males used physical aggression more than females while females used indirect aggression more than males. The other three forms of aggression were equally often perpetrated by both sexes. Females were more often victimized from sexual aggression than males.

Keywords: Aggression, prison, sex differences, Ghana.

INTRODUCTION

Prisons are powerful social settings that have the potential of transforming people in a positive way. Nonetheless, many prison environments have become the context for extra judicial punishment for inmates who are already held accountable for their actions. Harsh prison conditions may have a serious negative impact on those who live in them, and bad prisons are not only hostile, but they may be outright damaging (Haney, 2006). The aim of the present study is to investigate aggressive behavior in prisons in Ghana, with a special focus on sex differences in both victimization and perpetration of aggression.

The Ghana Prisons Service

Ghana has a total of forty-five prison establishments, including twelve major male prisons and seven major female ones. The total prison population (including pre-trial detainees and remand prisoners) is approximately 14,467, and the population rate (per 100,000 of the national population of 27.57 million) is 50. The percentage of pre-trial detainees and remand prisoners of the total prison population is 13.8% as of May 2018; the female prison population is approximately 1.3% of the prison population; 0.9% are juveniles/minors/or young prisoners; and 6.6% of convicted prisoners are foreigners. The official capacity of the Ghanaian prison system is 9,875; the occupancy level, based on official capacity, is 146.5% (World Prison Brief, 2018; Ghana Prisons Service, 2015).

Prisons in Ghana are administered by the Ghana Prisons Service, which is under the jurisdiction of the Ministry of the Interior. The Ghana Prisons Service started formally in 1920, became a department in 1922, and finally became autonomous in 1964. The Prisons Service Council is the governing body of the Service, and it advises the President on matters relating to the organization and maintenance of the prison system. The Ghana Prisons Service operates as a security organization and criminal justice agency. Its functions are to ensure the safe custody and welfare of prisoners and to undertake their reformation and rehabilitation (Ghana Prisons Service, 2015; World Prison Brief, 2016).

The core functions of the Ghana Prisons Service are providing a safe custody and the well-being of inmates. Reformation and rehabilitation of prisoners are not part of these functions (Ghana Prisons Service, 2015).

Recently though, there is some evidence that the prison service is moving from warehousing of inmates to correction and treatment of offenders. This change in philosophy includes the execution of sentences in a humane manner to reduce recidivism, offering opportunities to prisoners to develop their skills through vocational training, moral and formal education, encouraging public/private participation in the provision of skills training, improvement in the welfare of prisoners (i.e. health care, clothing, bedding, feeding, recreation, and library facilities) and the protection of rights of prisoners (Ghana Prisons Service, 2015). Unfortunately, due to lack of funds, few privileged inmates benefit from this change.

At independence in 1957, Ghana's population was about 6 million; 60 years later it has increased to about 24 million. With the growth in population, there has been a corresponding growth in crime, resulting in more arrests and more incarceration. The prison population for the past three years has been hovering around 15,000 against an authorized capacity of about 7,000. This creates huge overcrowding with its concomitant problems of poor classification, health hazards, and pressure on facilities (Ghana Prisons Service, 2015; World Prison Brief, 2016).

The Ghanaian Criminal Justice System

It is impossible to study prisons without mentioning the judicial system, since it is the courts that send people to prisons in the first place. The criminal justice system was inherited from the British colonial system, which was in operation in the former Gold Coast for 113 years. It comprises the Police, Prosecution, Courts, Prisons, and Social Welfare Department. The police and prisons fall under the Ministry of Interior; prosecution is under the Ministry of Justice; the Courts are under the Judiciary, and the Social Welfare Department is under the Ministry of Employment and Social Welfare. The scope of sentencing disposals is quite narrow. Those available are fines, absolute and conditional discharge, juvenile probation, imprisonment, and death. Community service orders, suspended sentences, and adult probation are non-existent. Post sentence disposals are remission of sentences and Presidential pardons and amnesties (Ghana Prisons Service, 2015).

Neither parole nor half way houses exist. Bail has such stiff conditions that defendants seldom are able to benefit from it. The system is characterized by slow police investigations, protracted court trials, increasing numbers of remand prisoners and a high rate of prison

overcrowding. The fragmented nature of the criminal justice system, the inability of the different components of the system to establish linkages and co-ordinate their activities have militated against effective crime control and public safety (Ghana Prisons Service, 2015).

The main challenges facing prison authorities is the persistent lack of funds, which has resulted in insufficient budget allocation for reformation programs, poor accommodation structures unsuitable for long detention of people, and extremely outdated prison structures built 400 years ago and originally constructed for 200 slaves, which currently holds 740 male and female prisoners (Ghana Prisons Service, 2015). All these challenges have rendered the service unable to provide for the basic needs of prisoners and ensure that former prisoners do not reoffend.

Ghanaian prisons have also had a direct negative impact on inmates. Although there is no study that has explored the psychological impact of overcrowding in prisons in Ghana, there is one (Ibrahim, Esena, Aikins, O'Keefe, & McKay, 2015) that sought to determine the rate of psychological distress in the oldest correctional facility in Ghana. In a cross-sectional study using the Kessler Psychological Distress Scale (K10, 1994), they found that more than half of all respondents felt moderate to severe mental distress in the four weeks preceding their interviews, and nearly 70% of inmates with only a primary education had moderate to severe mental distress. Though this figure was higher than the rate of inmates with more education, it exceeded the rates for those with no education (Ibrahim *et al.*, 2015).

Amnesty International (2011) reports that Ghana's prison system is facing acute overcrowding and conditions which do not meet international standards. For example, 3,000 inmates are awaiting trial and have not been convicted of a crime. Prisoners are locked up for 12 hours a day, 365 days a year, in cells meant to accommodate a half, a third or a quarter of the numbers squeezed into dark, poorly ventilated and unhygienic spaces (Amnesty International, 2011).

Sex Differences in Aggression in Prisons

Rates of physical victimization vary significantly among other things, by gender. For example, in a study conducted to estimate prevalence rates of inmate-on-inmate victimization with a total of 7,221 men and 564 women in the United States, the study found rates of physical victimization varied by gender. Prevalence rate of inmate-on-inmate physical violence in the previous six months were equal for males and females (Wolff, Blitz, Shi, Siegel & Bachman, 2007). Wolff *et al.* also found 20 percent of prisoners had been subjected to physical

violence by other prisoners and 23 percent had experienced violence by prison staff during the preceding six months. For females, the prisoner-on-prisoner rate was the same whereas the staff-on-prisoner rate was 8%, that is, male prisoners experience more staff-on-inmate violence than female prisoners do.

Consistent with the American studies, an Australian one conducted by Wolff, Shi, and Blitz (2008) found that thirty-four percent of male prisoners and twenty-four percent of female inmates had sometimes been physically assaulted during their imprisonment, and seven percent of both sexes had been threatened with sexual assault (Wolff, Shi, & Blitz, 2008).

In the first of an extensive series of studies on bullying in British prisons, Ireland and Archer (1996) defined the forms of bullying to include indirect forms such as "gossiping" and "ostracism", which are central to the concept of indirect aggression. In their study, women reported using such indirect forms of aggression more frequently than men did. However, after developing a detailed self-report measure of bullying behavior in prisons (the Direct and Indirect Prisoner Behavior Checklist, DIPC, Ireland, 1998, 1999), Ireland found no sex difference in indirect forms of bullying behavior in young offenders and adult prisoners (Ireland 1999), contrary to the previous finding. Similar results have been reported in successive studies (Ireland, 2002), including a large-scale one across 11 prisons in the United Kingdom (Ireland, Archer & Power, 2007).

In their study assessing intra-group aggression among 605 adult prisoners (487 men and 118 women) prisoners using the Direct and Indirect Prisoner behavior Checklist - Scaled version (DIPC-SCALED), Ireland and Ireland (2008) found higher rates of indirect aggression compared to direct aggression, and this finding was consistent over studies using men and women samples (Ireland & Ireland, 2008). They also indicated an absence of sex difference either in proportion or the frequency of aggression, a suggestion that sex is not a determining factor in choosing aggression strategies among adults detained in prison (Ireland & Ireland, 2008). Physical forms of aggressive incidents in male and female prisons in the United Kingdom are relatively similar.

In 2011, the annual rate of assault in male prisons in the United Kingdom was 180 incidents per 1,000 prisoners compared with 167 in female prisons. Until 2008, the rates in female prisons were consistently higher than in male prisons. The trend has now reversed with rates in male prisons now being higher (Ministry of Justice, 2012). However, the rate of extreme forms of aggression by male prisoners in the United Kingdom has consistently been much higher than in female prison

populations (Ministry of Justice, 2012).

Prison inmates are exposed to and experience sexual violence, which consequently, follow the individual into the community upon release (Wolff, Blitz, Shi, Bachman, & Siegel, 2006). In their estimation of the prevalence of sexual violence amongst 6,964 men and 564 women in a survey administered using an audio Computer-Assisted Self Interviewing (audio-CASI) in the United States, weighted estimates or prevalence were constructed by gender and facility size. Rates of inmate-on-inmate sexual victimization in the previous 6 months for female inmates (212 per 1,000), were more than four times higher than male rates (43 per 1,000) (Wolff, Blitz, Shi, Bachman, & Siegel, 2006).

Harsh prison conditions can create the environment for prisoners to use aggression in order to resolve personal conflicts, especially in prison facilities where day-to-day discipline is overseen by the prisoners themselves. However, since direct forms of aggression could be identified and punished by the prison authorities, one should expect indirect forms of aggression to be intense and greater. The aim of the present study is to investigate aggressive behavior in prisons in Ghana, with a special focus on sex differences in both victimization and perpetration of aggression.

METHOD

Participants

A total of 1,717 inmates of which 299 females (17.4 %), and 1,418 males (82.6%) took part in the current study. Participants were selected from 10 prison facilities in Ghana, among a total prison population of 14,467. These figures include inmates serving life sentences, terminal sentences, pre-trial detainees, and remand prisoners. The educational level of participants was coded as either having (1) no education, (2) elementary school (3) secondary school, or (polytechnic/university). Most female prisoners, 13.8% had secondary education and only 0.2% had polytechnic/university education. With respect to males, majority of them (66%) had secondary school level education while 1.8% had polytechnic/university education.

The age difference between males (mean age 26.5 yrs., SD2.4) and females inmates (mean age 26.6 yrs., SD2.5) was not significant.

Instrument

The participants completed a paper-and-pencil questionnaire (Prison Aggression Questionnaire, PAQ;

Darko, Björkqvist, & Österman, 2015) consisting of 35 items. The questionnaire consisted of two parts: one for the measurement of victimization from other prisoners' aggression, and the other for the measurement of perpetration of aggression against other prisoners. Both parts consisted of five subscales: (1) Physical Aggression, (2) Verbal Aggression, (3) Indirect Aggression, (4) Property Aggression, and (5) Sexual Aggression. The items of the scales, as well as the reliability scores (Cronbach's α) for both victimization and perpetration, are presented in Table 1. Please note that the scale for the measurement of victimization from Physical Aggression did not meet an acceptable reliability, and it was therefore excluded from further analysis.

Procedure

The current study employed nine research assistants, a female and eight males, all having a Master's degree in psychology or a related subject, and who were familiar with research procedures. All prison facilities are security areas, which need security clearance for any person to enter. Written permission was sought and obtained from the representative of the director of the Ghana Prison Service, for the interviews to proceed after inspecting and reading our questionnaire. Interviews were held in 10 facilities: Nsawam Central Men's Prison, Nsawam Female Prison, Senior Correctional Centre (Accra) for boys, Tamale Men's Prison, Tamale Female Prison, Kumasi Male Prison, Kumasi Female Prison, Sunyani Male Prison, Sunyani Female Prison and Sekondi Male Prison.

These prisons were selected for two reasons: first, because they fall under the control of the national prison authorities, and second, they are among the biggest, where most inmates have long-term sentences, including life sentences. They are also the most overcrowded ones. Our female research assistant visited the female prisons, while the male research assistants went to the male prisons for the interviews.

The data collection took place within the prison premises. Each participant filled in the questionnaire individually, in the absence of prison officials and other prisoners, and no unauthorized prison official or other inmate saw the questionnaire. This was done to prevent a probable retaliation in response to what the participants said.

Ethical Considerations

Participation was totally voluntary. After explaining the nature of the research to the prisoners, volunteers who

Table 1

Cronbach's Alphas and Single items of the Subscales Measuring different Types of Victimization and Perpetration of Inmate-on-Inmate Aggression in a Ghanaian Prison Sample. The First Alpha is for Victimization and the Second for Perpetration (N = 1,717)

Physical Aggression (6 items, $\alpha = .80$ Perpetration only).

Hit me, Kicked me, Pushed me, Started a fight, Scratched me, Spat on me.

Verbal Aggression (8 items, $\alpha = .92$ and $.89$)

Threatened to hurt me, my family or friends, Shouted at me, Said offensive/bad things about me, Teased me about my offence and prison term, Harassed me, Provoked a quarrel with me, Forced me to lie or support a lie, Been disrespectful towards me.

Indirect Aggression (7 items, $\alpha = .82$ and $.80$)

Called me names about my ethnicity/illness/deformities, Gossiped about me, Spread harmful rumours about me, Stopped doing things he/she usually does with me (e.g. sports, walking, eating), Ignored me or grinned at me, Tried to influence others against me, Tried to exclude me from social situations.

Property aggression (4 items, $\alpha = .80$ and $.76$)

Withholding food or other needed supplies, Made me give out my personal items, forced me to swap my property, Forced me to pay huge interest on borrowed money/items.

Sexual aggression (2 items, $\alpha = .82$ and $.86$)

Sexually abused or assaulted me, Forced me to perform sexual acts on self/others.

wanted to participate came forward, and were further briefed and reassured that the data collection was for research purposes and not connected to the reasons they were in prison.

They were also reassured about the confidentiality of the study, and that no prison official or other individual besides the research group would see the completed questionnaires. After obtaining the participants' consent and permission, the completion of the questionnaires took place. The study adheres to the principles concerning human research ethics of the Declaration of Helsinki (World Medical Association, 2013), as well as guidelines for the responsible conduct of research of The Finnish Advisory Board on Research Integrity (2012).

RESULTS

Perpetration of Inmate-on-Inmate Aggression among Prisoners

A multivariate analysis of variance (MANOVA) was conducted with sex as an independent variable, and the five scales measuring perpetration of aggression as dependent variables. Mean values and standard deviations on the subscales are presented in Table 2, and results of the MANOVA in Table 3.

The multivariate analysis was significant for sex. The univariate analyses showed that males perpetrated

significantly more physical aggression on their fellow prisoners than females did on their colleagues, an indication that males preferred to use this type of aggression more than other types. Females on the other hand, scored higher on indirect aggression perpetration than males, according to the univariate analysis, indicating their preferred choice of aggression type. However, no sex differences were found regarding verbal aggression, property aggression, and sexual aggression.

Victimization of Inmate-on-Inmate Aggression among Prisoners

With respect to victimization, another multivariate analysis of variance (MANOVA) was conducted to measure sex differences in regard to four types of victimization from inmate-on-inmate aggression. The results are presented in Table 4, with means and SDs in Table 2.

The multivariate analysis was also in this case significant for sex. The univariate analyses showed that females were significantly more often than males victimized from both indirect aggression and sexual aggression. There was no significant difference between males and females on victimization from verbal and property aggression. (Please note that the scale of victimization from physical aggression did not receive a satisfactory reliability score, and did therefore not provide any data.)

Table 2

Means and Standard Deviations of the Five Scales of the Study Measuring Perpetration of and Victimization from Inmate-on-Inmate Aggression in a Ghanaian Prison Sample (N for Females = 299, N for Males = 1,417)

Types of Aggression	Perpetration				Victimisation			
	Females		Males		Females		Males	
	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>
Physical	0.52	0.67	0.71	0.76	–	–	–	–
Verbal	1.86	0.96	1.86	0.99	2.72	0.81	2.69	0.91
Indirect	1.98	0.80	1.85	0.85	2.68	0.73	2.32	0.87
Property	2.28	0.86	2.33	0.86	2.80	0.70	2.79	0.80
Sexual	0.13	0.57	1.16	0.61	0.33	0.91	0.18	0.65

Table 3

Results of a Multivariate Analysis of Variance (MANOVA) Measuring Sex Differences Regarding Five Types of Perpetration of Inmate-on-Inmate Aggression in a Ghanaian Prison Sample (N = 1,716). Cf. Table 2 for Mean Values and SDs.

	<i>F</i>	<i>df</i>	<i>p</i> ≤	η_p^2	Group with Higher Mean
Effect of Sex					
Multivariate analysis	2.57	5, 1700	.001	.027	
Univariate analyses					
Physical aggression	15.94	1, 1704	.001	.009	Males
Verbal aggression	0.01	"	<i>ns</i>	.000	–
Indirect aggression	5.83	"	.016	.003	Females
Property aggression	0.66	"	<i>ns</i>	.000	–
Sexual aggression	0.58	"	<i>ns</i>	.000	–

Table 4

Results of a Multivariate Analysis of Variance (MANOVA) Measuring Sex Differences Regarding Four Types of Victimization from Inmate-on-Inmate Aggression in a Ghanaian Prison Sample (N = 1,716). Cf. Table 2 for Mean Values and SDs

	<i>F</i>	<i>df</i>	<i>p</i> ≤	η_p^2	Group with Higher Mean
Effect of Sex					
Multivariate analysis	31.64	4, 1711	.001	.069	
Univariate analyses					
Verbal aggression	0.34	1, 1714	<i>ns</i>	.000	–
Indirect aggression	42.24	"	.001	.024	Females
Property aggression	0.10	"	<i>ns</i>	.000	–
Sexual aggression	10.74	"	.001	.006	Females

Table 5

Results of a Within-Subjects Multivariate Analysis of Variance (WSMANOVA) Measuring Differences between Perpetration and Victimization of Four Types of Aggression, and the Interaction between Sex and this Difference, in a Ghanaian Prison Sample (N = 1,708). Cf. Table 2 for Mean Values and SDs

	<i>F</i>	<i>df</i>	<i>p</i> ≤	η_p^2	Higher Scores
<i>Effect of Perpetration vs. Victimization</i>					
Multivariate analysis	137.33	4, 1703	.001	.244	
Univariate analyses					
Verbal aggression	544.64	1, 1706	.001	.242	Vict. > Perp.
Indirect aggression	330.21	"	.001	.162	Vict. > Perp.
Property aggression	181.45	"	.001	.096	Vict. > Perp.
Sexual aggression	15.21	"	.001	.009	Vict. > Perp.
<i>Interaction Effect between Sex and Perpetration vs. Victimization</i>					
Multivariate analysis	9.28	4, 1703	.001	.021	
Univariate analyses					
Verbal aggression	0.24	1, 706	<i>ns</i>	.000	–
Indirect aggression	11.56	"	.001	.007	a)
Property aggression	0.55	"	<i>ns</i>	.000	–
Sexual aggression	9.05	"	.003	.005	a)

a) Females scored higher than males on victimization.

Perpetration Scores Compared With Victimization Scores: A Within-Subjects Analysis

A within-subjects multivariate analysis of variance (WSMANOVA) was carried out to measure differences between participants' scores on perpetration and victimization of four types of aggression, and the interaction between sex and this difference. The results of the WSMANOVA are presented in Table 5, with the means and SDs presented in Table 2.

Table 5 demonstrates that irrespective of sex, respondents reported themselves to be victimized on all four types of aggression (verbal, indirect, property, and sexual aggression) to a significantly higher degree than they reported themselves to perpetrate these forms of aggression. This finding is perhaps not surprising taking into account the principle of social desirability; they probably wanted to present themselves as innocent victims of aggression rather than as perpetrators of aggression.

An analysis of the interaction effect between sex and perpetration vs. victimization on four of the scales verbal, indirect, property and sexual aggression found that

females scored higher than males on the difference between perpetration and victimization scores on indirect and sexual aggression.

DISCUSSION

Correctional settings are harsh and known for their aggression. Ghana's prison population for the past three years (2014-2016) has been soaring to approximately 15,000 against an authorized capacity of about 7000 (World Prison Brief, 2018). This obviously creates huge overcrowding with its associated problems of health hazards and pressure on facilities, a potential hostile environment and behavioral problems including the use of aggressive behavior (Virtanen, Vahtera, Batty, Tuisku, Pentti and Oksanen, 2011).

The findings of the present study suggest that overall, the perpetration of indirect and physical aggression was more common than the rest of the aggression forms, and their use varied significantly by biological sex. In the present study, males perpetrated significantly more physical aggression on their fellow prisoners than

females did, while females used indirect aggression more than males did, supporting the findings of previous studies, (Björkqvist, 2018).

Physical aggression amongst inmates is likely to involve a group or a group-leader who wants to instill direct discipline in other prisoners, or affirm his or her authority. Physical aggression serves as a message to would-be challengers to their leadership or authority, to make other inmates obey them and avoid being seen as a coward. Those who do not perpetrate aggression themselves are more likely to be stigmatized, bullied and seen as cowards, a suggestion made by Ireland and Qualter (2008). This may force inmates to perpetrate aggression unwillingly to show how 'strong' they are, a show which could be perceived by others as a direct challenge to them and therefore lead to aggressive retaliation, continuing the cycle of aggression.

These results are not surprising, since prison authorities in Ghana delegate their job of supervising the prisoners to such prisoners who have influence and power over the rest of the prisoners. Therefore, the use of physical aggression can be seen even as a legitimate method to address those who violate rules and show disrespect for prisoner 'bosses' and prison authorities. In such circumstances, inmates accept the logic of aggression as the norm. Perpetration of aggression in prisons, though, is not always driven by non-material gains such as power, respect, and control. It can also be motivated by material gains such as cigarettes, food and drugs.

Sex differences in physical aggression could be a result of a socialization process in Ghana, where boys are encouraged to be 'courageous' as a 'man', implying using physical aggression to resolve conflicts where necessary, while girls are encouraged not to behave like boys in terms of the use of physical aggression. This belief encourages boys to behave according to this social expectation, and the prisons provide them with the opportunity to test strengths against other males. This may explain why males use more physical aggression than girls, while girls use more indirect aggression than boys (Björkqvist, 2018), at least in some cultures.

An 'official' prohibition of the perpetration of physical aggression, and societal discouragement of the use of physical aggression by females, allows indirect forms of aggression to become intense, and used in greater proportion, and to be the preferred choice of aggression type for them. Despite the prison authorities' indifference towards the use of physical aggression among inmates, unauthorized perpetration might sometimes be punished. Therefore, the higher rates of the use of indirect aggression compared with direct forms of aggression could be explained by the need to avoid punishment and

retaliation. This is consistent with Björkqvist's (1994) cost-benefit theory of aggressive development, which suggests that indirect aggression is a typically inexpensive form of aggression compared to direct forms, because it allows perpetrators to hide their identity and avoid reprisal. In this case, indirect aggression allowed those inmates who, for various reasons could not use physical aggression, to attack or retaliate against their fellow inmates by e.g. secretly destroying or throwing away their belongings, or spitting in their food.

The results showed that females reported higher scores on victimization from sexual aggression. This sex difference may be explained by traditional sex roles about female sexuality. In the larger Ghanaian context, females who engage in multiple sexual activities may be regarded as 'loose' women by society-at-large. When prison supervision is not adequate, and inappropriate touching goes unpunished, prison provides a rare environment for loosening sexual restrictions for females, which allows them to demonstrate sexual activity, and sexual liberalization. Attitudes towards sexual aggression may have a direct impact on whether a victim reports this type of aggression. Myths such as 'real' men should be able to fend off attack; only gay men are victims and/or perpetrators, and others including homosexuality being 'evil' and 'not Ghanaian', may inhibit male inmates from reporting for fear of being viewed a gay or weak. Victims of aggression may not report for fear of being further sexually victimized. Lack of reporting could intensify victimization.

Implications

Preventing these forms of aggression requires a double-edge approach, changing the physical and social climate. Overcrowding, which may trigger aggression, is a huge problem in most jails; therefore changing the physical environment e.g., by providing more space for inmates, may reduce the opportunities for perpetrators to victimize and minimize conditions that give rise to aggression. Understanding the social dynamics inside the prison walls, e.g., the power relations amongst inmates and their routines, will help to design programs that promote peaceful co-existence between prisoners, and eliminate hostile surroundings. The mental health of prisoners needs to be taken seriously, by treating inmates with mental health issues.

Prison aggression often has its origins in a range of issues occurring in the community, which crosses over into the prison environment. Perpetrators do not often victimize alone but in league with others. The structure and effective management of prisons can minimize aggression among prison inmates. Prisoners are people

who have committed some of the most atrocious crimes. But they are in prison paying for those crimes. Any extra judicial treatment which creates the conditions for prisoners to hurt each other is inhuman and does nothing to reform those who are walled in prison warehouse.

To be in a prison environment must be a very challenging experience, and to be experiencing aggression in a hostile environment must be very traumatic. Victims of often vicious aggression find themselves in the same situation, environment, and conditions as their perpetrators. This ensures that victims are left unable to report their experiences for fear of breaking prisoner code of silence. This may result in frustration and fear in victims, which may result in victims becoming perpetrators themselves, and joining the cycle of aggression together.

Limitations of the Study

Some limitations are noteworthy. A sample bias cannot be excluded, even though a significant number of prison inmates was sampled (1,717 inmates out of a total Ghanaian prison population of 14,467), still all types of prisoners may not be fully represented. However, the sample size was quite large and consisted of inmates from several different prisons. A second limitation concerns the possibility of biased reporting. However, the survey provided a rare chance to report anonymously about their experiences in prison, without anyone else around and in real time. The prisoners had nothing to fear from honest reporting, and nothing to gain from lying. These facts speak in favor of the validity of the findings.

REFERENCES

- Allen, W. D. (2007). The reporting and underreporting of rape. *Southern Economic Journal*, 73, 623–641.
- Allen, J. J. & Anderson, C. A. (2017). Aggression and violence: Definitions and distinctions. <https://public.psych.iastate.edu/caa/abstracts/2015-2019/17AA2.pdf>
- Amnesty International (2011). Ghana urged to meet international prison standards. <https://www.amnesty.org/en/latest/news/2012/04/ghana-improve-infrastructure-reduce-overcrowding-and-increase-prison-monitoring-meet-internatio/>
- Björkqvist, K. (2018). Gender differences in aggression. *Current Opinion in Psychology*, 19, 39–42. doi: 10.1016/j.copsyc.2017.03.030.
- Björkqvist, K., Österman, K., & Kaukiainen, A. (1992). The development of direct and indirect aggressive strategies in males and females. In Björkqvist K, Niemelä P (Eds.), *Of mice and women: Aspects of female aggression* (pp. 51–64). San Diego, CA: Academic Press.
- Bushman, B. J., & Huesmann, L. R. (2010). Aggression. In S. T. Fiske, D. T. Gilbert, & G. Lindzey (Eds.), *Handbook of social psychology* (5th ed., Vol. 2, pp. 833–863). Hoboken, NJ: John Wiley.
- Camp, S., Gaes, G., Langan, N., & Saylor, W. (2003). The influence of prisons on inmate misconduct: A multilevel investigation. *Justice Quarterly*, 20, 501–534.
- Chan, J. P. K., & Ireland, J. L. (2009). Fear of bullying among adult and juvenile offenders: Its association with perpetration, victimization and behavioural predictors. *International Journal of Prisoner Health*, 5, 223–232.
- Cooke, D. J., Wozniak, E., & Johnstone, L. (2008). Casting light on prison violence in Scotland: Evaluating the impact of situational risk factors. *Criminal Justice and Behaviour*, 35, 1065–1078, doi:org/10.1177/0093854808318867
- Darko, G., Björkqvist, K., & Österman, K. (2015) *Prison Aggression Questionnaire*. Vasa, Finland: Department of Social Sciences, Åbo Akademi University.
- DeWall, C. N., Anderson, C. A., & Bushman, B. J. (2012). Aggression. In H. Tennen, J. Suls, & I. B. Weiner (Eds.), *Handbook of psychology* (2nd ed., Vol. 5, pp. 449–466). Hoboken, NJ: John Wiley & Sons.
- Drury, A., & DeLisi, M. (2010). The past is prologue: Prior adjustment to prison and institutional misconduct. *Prison Journal*, 90, 331–352.
- Gadon, L., Cooke, D. J., & Johnstone, L. (2006). Situational variables and institutional violence: A systematic review of the literature. *Clinical Psychology Review*, 26, 515–534.
- Ghana Prisons Service (2015). Ten-year strategic development plan 201–2025. <http://www.ghanaprison.gov.gh/pdf/10%20years%20Strategic%20Plan%20for%20Ghana%20Prisons.pdf>
- Haney, C. (2012). Prison effects of in the age of mass incarceration. https://www.researchgate.net/publication/274998193_Prison_Effects_in_the_Era_of_Mass_Incarceration
- Ibrahim, A., Esena, R. K., Aikins, O'Keefe, A. N., & McKay, M. M. (2015). Assessment of mental distress among prison inmates in Ghana's correctional system: A cross-sectional study using the Kessler Psychological Distress Scale. *International Journal of Mental Health Systems*, 9:17. doi: 10.1186/s13033-015-0011-0
- Ireland, J. L. (1998). Direct and indirect prisoner behaviour checklist (DIPC). University of Central Lancashire.
- Ireland, J. L. (1999). Bullying behaviours among male and female prisoners: A study of adult and young offenders. *Aggressive Behavior*, 25, 161–178.
- Ireland, J. L. (2005). Direct and Indirect Prisoner Behaviour Checklist– Scaled Version (DIPC-SCALED). University of Central Lancashire.
- Ireland, J. L. (2012). *Bullying among prisoners, evidence, research and intervention strategies*. London, UK: Brunner-Routledge.
- Ireland, J. & Archer, J. (1996). Descriptive analysis of bullying in male and female adult prisoners. *Community & Applied Social Psychology*, 6, 35–47.
- Ireland, J., Archer, J., & Power, X. (2007). Characteristics of male and female prisoners involved in bullying behavior. *Aggressive Behavior*, 33, 220–229.
- Ireland, J. L., & Ireland, C. L. (2008). Intra-group aggression among prisoners: Frequency of bullying and exploration of victim-perpetrator mutuality. *Aggressive Behavior*, 34, 76–87.
- Ireland, J. L. & Quarter, P. (2008). Bullying and social and emotional loneliness in a sample of adult male prisoners. *International Journal of Law and Psychiatry*, 31, 19–29.
- Lappi-Seppälä, T. (2010). Causes of prison overcrowding. http://www.unafei.or.jp/english/pdf/Congress_2010/

- 12Tapio_Lappi-Seppala.pdf
- Ministry of Justice (2012). Safety in custody statistics quarterly bulletin, January to March 2012, England and Wales. https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/218392/safety-custody-jan-march-2012.pdf
- Ministry of Justice (2013). Safety in custody statistics England and Wales update to March 2013. https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/225104/safety-custody-mar-2013.pdf
- Montasevee, K. (2016). Examining the nature of aggressive behaviour in Thai male prisoners and factors that contribute to its aetiology. <http://etheses.bham.ac.uk/8005/1/Montasevee17PhD.pdf>
- Morris, R. G., Longmire, D. R., Buffington-Vollum, J., & Vollum, S. (2010). Institutional misconduct and differential parole eligibility among capital inmates. *Criminal Justice and Behavior*, 37, 417–438.
- Nisbett, R. E., & Cohen, D. (1996). *Culture of honor: The psychology of violence in the south*. Boulder, CO: Westview Press.
- Ndoromo, O., Österman, K. & Björkqvist, K. (2018). Sex differences in perpetration of low intensity intimate partner aggression in South Sudan. *European Journal of Interdisciplinary Studies*, 10 (1), 93–101. doi: 10.26417/ejis.v10i1.p93-101
- Piecora, C. (2014). Female inmates and sexual assault. <http://jurist.org/dataline/2014/09/christina-piecora-female-inmates.php>
- Power, K. G., Dyson, G. P. & Wozniak, E. (1998). Bullying among Scottish young offenders: inmates' self-reported attitudes and behaviour. *Journal of Community and Applied Social Psychology*, 3, 209–218.
- Preti, A., & Cascio, M. T. (2006). Prison suicides and self-harming behaviours in Italy, 1990–2002. *Medical Science and Law*, 46, 127–134.
- Sykes, G. M. (1958). *The society of captives: A study of a maximum security prison*. Princeton: Princeton University Press.
- Turner, P. (2015). Intent to aggress in forensic settings. <http://clok.uclan.ac.uk/11806/1/Turner%20Polly%20Final%20Thesis%20%28Master%20Copy%29.pdf>
- Virtanen, M., Batty, G., Pentti, J., Vahtera, J., Oksanen, J., Tuisku, T., Salo, P., Terho, K., Elovainio, M., & Kivimäki, M. (2010). Patient overcrowding in hospital wards as a predictor of diagnosis-specific mental disorders among staff. A 2-year prospective cohort study. *Journal of Clinical Psychiatry*, 71, 1308–1312.
- Wolff, N., Blitz, C. L., Shi, J., Bachman, R. & Siegel, J. A. (2006). Sexual violence inside prisons: Rates of victimization. *Journal of Urban Health*, 83, 835–848.
- Wolf, N., Blitz, C., Shi, J., Siegel, J. & Bachman, R. (2007). Physical violence inside prisons: Rates of victimisation. *Criminal Justice and Behaviour*, 34, 588–599, doi: 10.1177/0093854806296830
- Wolff, N. & Shi J. (2009). Contextualization of physical and sexual assault in male prisons: incidents and their aftermath. *Journal of Correctional Health Care*, 15, 58–82. doi:10.1177/1078345808326622
- Wolff, N. & Shi J. (2011). Patterns of victimization and feelings of safety inside prison: the experience of male and female inmates. *Crime & Delinquency*, 57, 29–55.
- Wolff, N., Shi, J. & Siegel, J. A. (2009). Patterns of victimization among male and female inmates: Evidence of an enduring legacy. *Violence and Victims*, 24, 469–484.
- World Prison Brief (2018). World prison brief data, Ghana. <http://www.prisonstudies.org/country/ghana>