INFLUENCE OF DEMOGRAPHIC VARIABLES AND PRISON OVERCROWDING ON PSYCHOLOGICAL WELL-BEING OF PRISON INMATES IN SOUTH-WEST, NIGERIA

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ABSTRACT

This study examined the influence of prison overcrowding and demographic variables on psychological well-being of prison inmates. Participants comprised 980 (876 males; 42 females) inmates from three prisons in southwest, Nigeria. Results from the t-test revealed that male inmates had a significantly higher psychological well-being than female inmates. Results of the multiple regression showed that marital status significantly predicted psychological well-being such that inmates who were married tended to report higher level of psychological well-being than those who were not. Duration of stay tended to significantly reduce inmates’ level of psychological well-being. Psychological well-being was significantly associated with category of prison. Psychological well-being significantly increased with inmates’ interpersonal space. However, psychological well-being was not associated with inmates’ age and educational status. Implications for policy and research were discussed.

Keywords: Overcrowding, psychological well-being, prison inmates, Nigeria.

INTRODUCTION

The Psychological Well-Being (PWB) of prison inmates in Nigeria is appalling. Amnesty International (2008) reported that this condition may damage the mental, physical and psychological well-being of inmates and, in many cases, constitute clear threats to health. Conditions such as overcrowding, poor sanitation, lack of food and good medications, denial of contact with families and friends fall short of United Nation (UN) standards for treatment of prison inmates. The worst conditions constitute ill-treatment. In many Nigerian prisons, inmates sleep three or two to a bed or on the floor in filthy cells as a result of overcrowding.

Crowding in prison setting has been associated with lower psychological well-being and physiological well-being (Lepor, Evans & Schnieder, 1991). For instance, the rate of emotional distress and frequent report of anxiety and feelings of depression by inmate have been reported by (Fatoye, Fatoye, Oyebanji & Ogunro, 2006). In their study
of psychological characteristics as correlates of emotional burden in incarcerated offender in Nigeria, it was observed that majority of the inmates reported prison accommodation and feeding as poor and many of these inmates scored above the cut-off points on the measures of psychopathology. In addition, significant depressive symptoms were associated with some demographic variables. This tends to be common to larger percentage of prisons as a result of deplorable conditions of the prisons. Meanwhile, Omorotionwman (2005), in his study of prison overcrowding and inmates behaviours observed that the Nigerian prisons are in sordid state and the conditions under which prisoners live are pathetic, unkind, wicked and anti-development, retrogressive and do not meet the international standards for prisons inmates all over the world.

Most of the Prisons in Nigeria are in a deteriorated situation as inmates are presently experiencing the problem of congestion and shortage of facilities like sleeping mattresses, poor lighting system and inadequate ventilation (Okoza, Imhonde & Aluede, 2010). Most of the buildings are leaking and the sewage disposal units are bad resulting into a terrible stench. In overcrowded prisons, inmates get on one another’s nerves and friction among them are quick to develop leading to serious behavioural problems such as violence and aggression (Lawrence & Andrew, 2004).

Overcrowding in prisons is said to be the state of affairs in which the number of inmates exceeds the capacity of a prison to the extent that it cannot safely provide for the adequate physical and psychological needs of incarcerated persons (Craig, 2006). As reported by Craig (2006), prison overcrowding is ‘an art’ which is not only consider in terms of the ratio of inmates to the capacity but the extent to which prison system houses inmates than it has adequate infrastructure to quarter. Equally, United Nations Standard Minimum rule regarded prison overcrowding as serious problem and elusive phenomenon that researchers and scholars have been trying to deal with for decades (United Nations Standard Minimum Rules for Non –Custodial Measures, 1990).

This issue of overcrowding is a critical problem which has led to the infraction of inmates’ rights as stated in the minimum standard rule (section 9-22) such as provisions for accommodation, classification of inmate, floor space, medical care, bed and beddings, ventilation, personal hygiene, sanitation, contact to family members and access to legal representation. Overcrowding seems to even represent a characteristic troubling the modern prison since its invention in the 19th century. For instance, Allen (2008) reported in his study that most prisons in African countries (Benin, Burundi, Code d’Ivoire, Kenya, Mali, Rwanda, Sudan, Uganda, and Nigeria) their occupancy rate exceed by 200%, meaning that there are at least two prisoners accommodated in space intended for one.

Considering the act of imprisonment as the most effective form of sanctions of offenders, nevertheless, in the last few decades, inmate’s population in Nigeria have grown substantially, to the extent of leading to overcrowding (The Reformer, 2009). The overcrowding tends to alter the psychological, physiological and behavioural well-being of the inmates (Crystal, 2004). The massive influx of inmates that begun in recent times as a result of delay in judiciary process has produced a rate of growth in the nation’s inmates population that scholars and legal commentators have repeatedly described and characterized as unprecedented.

As observed by Aduba (2005), in his critical analysis of prison overcrowding in Nigeria, it was reported that there was a great significant increase in the prison
population. Currently, Nigeria prisons are housing 49,000 in two hundred and thirty four prisons out of which 20% are convicts while the rest are awaiting trial inmates (Amnesty International Report, 2012). This imaginable condition of overcrowding is relatively easy to recognize when one sees in-situations where there is no enough room for prisoners to sleep; no facilities to provide enough food, health care or any form of constructive activities; insufficient staff to ensure that prisoners are safe; lack of accommodation to hold separately types of prisoners who should be kept apart -- juveniles from adult; awaiting trials from convicted, or lack of capacity to admit any more numbers so that emergency measures have to be taken in the form of amnesty, emergency accommodation or the holding of prisoners in police custody.

According to International standards, each prisoner must have enough space, although definitions of adequacy vary from country to country and depend among other factors on how much time prisoners spend in their respective cells. It is one thing to sleep in a confined space another to spend 23 hours a day there. The UN standard minimum rule recommends that all cells and dormitories must have adequate heating, lighting and ventilation and that every detainee or prisoner should have his own bed or mattress with clean bedding. But in the absence of a binding convention on prisoners’ rights, this study is short of comprehensive baseline information.

However, The International Committee of Red Cross (ICRC) recommends minimum standards in respect of these dimensions e.g. minimum space per prisoner of no less than 3.4sqm and the area within the security perimeter of 20-30 sq m per person minimum rates of air renewal and intensity of light have also been specified (Nembrine, 2005). In Europe, the International Centre for Prison Studies (ICPS) has recommended a higher space figure and other international organizations have set other standards of area or cubic capacity. But there is no systematic data available to assess whether these objective standards are being met or to enable comparisons to be made. There is even less data about how prisoners perceive overcrowding. According to a UN reporter “If cells are severely overcrowded, not much privacy is left for individual detainees within the cells.” But little is known about how prisoners experience overcrowding. Perhaps surprisingly research has not uncovered systematic links between overcrowded conditions and suicide; there seems a strong prima facie case that certain types of prisoners need more space (e.g. women, especially those with children, juveniles and those with mental health problems.

Demographic variables such as age, sex, educational background, category of prison and duration of stay in the prison custody has been given less attention in contribution to psychological well-being and other antisocial behaviour such as violent and aggressive behaviours among prison inmates. Cunningham, Sorensen, Vingen and Woods (2011) and Morris et al. (2010) observed that several individual characteristics serve as indicators that are linked to inmates’ antisocial behaviour in different degrees. Among the demographic factors, age is perhaps the individual characteristics most strongly and consistently related to violent and aggressive behaviour (Bench & Allen, 2003; Cooper & Werner, 1990; Flanagan, 1980); in most studies, age shows a strong inverse relationship with prison antisocial behaviour or disciplinary infractions (Cunningham et al., 2005, 2011; Cunningham & Sorensen, 2006a, 2007b; Kuanliang et al., 2008; Morris et al., 2010; Sorensen & Cunningham, 2010). Kuanliang et al. (2008) observed in a sample of juvenile inmates serving in an adult prison in Spain that there is
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a decrease in the age-misconduct curve similar to the age-crime curve in the ‘free world’ that is in the free society.

Age has equally found to be mediating variables between duration/length of sentence and violent and aggressive behaviours. For example, a study conducted by Flanagan (1980) among prison inmates, he found that the rate of involvement in institutional misconduct is lower among older prison inmates serving long terms than among those serving short terms. However, the seriousness of the violent and aggressive behaviours in the long-term group may be greater. In a sample of 24,500 close-custody prison inmates in Florida Department of Corrections, Cunningham and Sorensen (2007b) reported that those serving long sentences had lower rates of disciplinary infractions and violent prison misconduct than those serving short sentences.

Previous studies in samples of inmates sentenced to life imprisonment without parole (Cunningham & Sorensen, 2006b) and with capital life sentences in Texas (Morris et al., 2010) produced similar results. Arbach-Lucioni, Martinez-Garcia and Andres-Pueyo (2012) noted in similar way that some authors attribute the improvement in conduct across the course of the prison terms to varying combinations of the effects of maturation and adaptation to the prison environment. However, others have found sentence length to be independent of age or length served; and thus ‘maturation and adaptation’ are not satisfactory explanations. Probably, the perceptions of compliance of long-term inmates differ from those of the short-term group; they seem to be more convinced of the need to coexist with the prison authorities within the institution.

Another demographic variable that is less frequently and importantly studied in prison setting is gender, and the data produced are less consistent than those for age. The rate at which females commit crime or are imprisoned is disproportionately to make, and contrary to the findings of McCorkle (1995) and Shaylor, (1998) in United States, which reported that the rate of incarceration for women has increased dramatically in the past twenty years. However, covariates of prison misconduct for both males and females have remained relatively consistent as observed by Drury and Delisi (2010), Harer and Langan (2001).

There is a dearth of research on psychological well being of inmates. According to Wooldredge (1999) psychological well being is conceptualised as reflecting inmate perceptions of insecurity, stress, depression, anger, low self esteem, lack of basic amenities, and loneliness felt during incarceration. Particular aspects of the prison environment may lessen some of the negative psychological effects of incarceration, such as depression and alienation, but they depend on the unique need of the inmates (Toch, 1977).

The damaging psychological consequences of long-term solitary confinement have been well documented (e.g. Grassian, 1983; Grassian & Friedman, 1986; Haney, 2003, 2006; Jackson, 2001). Although it has not been conclusively established that short periods of segregated housing produce negative outcomes for the emotional well-being of incarcerates, long-term solitary confinement does, especially in relation to the psychological adjustment of prison. Haney (1993, 2006) described the psychological consequences of and adaptations to long-term solitary confinement particularly well.

Haney (2006) pointed out that the rigid conditions of solitary confinement offer individuals no opportunity to engage in social reality testing. Human beings rely on social contact with others to test and validate their perceptions of the environment.
Ultimately, a complete lack of social contact makes it difficult to distinguish what is real from what is not, or what is external from what is internal. As Haney (1993) explained, social connectedness and social support are the prerequisites to long-term social adjustment.

The adverse psychological consequences of long-term solitary confinement have also been documented by Grassion (1983). He conducted psychiatric evaluations of 14 prisoners who were plaintiffs in a class-action lawsuit challenging the conditions of their solitary confinement at the Massachusetts Correctional Institution at Walpole. These offenders were housed in solid steel doors that were kept closed; shutting off any contact. Prisoners may have had with staff or other prisoners. Each cell was illuminated by a single 60-watt bulb and had no natural light. Prisoners were allowed no personal belongings, including reading materials, except for a Bible. The convicts were housed under these conditions for a median period of 2 months.

The duration of the isolation was also significant in predicting adverse psychological consequences. For example, Grassian and Friedman (1986) noted that the length of solitary confinement at the Massachusetts Correctional Institution at Walpole was too long to protect against serious psychological harm. Prisoners at Walpole were isolated continuously behind solid steel doors for up to 15 days at a time.

Grassian and Friedman (1986) also reported that the individual’s expectation and perception of the containment’s purpose was important. Solid confinement that was perceived as punitive produced greater potential for adverse psychological effects. For example, the convicts evaluated by Grassian and Friedman at Walpole perceived their isolation as a deliberately punitive attempt to drive them crazy. Other researchers have also indicated that the prisoner’s perception regarding the purpose of solitary confinement and the manner in which the offender is treated while in segregation influence whether the convict will suffer adverse psychological consequences (Jackson, 2001; Suedfeld, 1974; Suedfeld, Ramirez, Deaton, & Baker-Brown, 1982; Zinger, Wichmann, & Andres, 2001).

Grassian and Friedman (1986) noted that the individual’s personality affected how the person reacts to solitary confinement. As the investigators explained, the personality types generally found in prisons were particularly vulnerable to the adverse psychological effects of solitary confinement. In all, Grassian and Friedman concluded that greater degrees of sensory deprivation and longer periods of internment were most likely to produce the psychological syndrome described by Grassian (1983) in his previous work. Although the psychological consequences of long-term solitary confinement on prisoners have been demonstrated, there is less evidence that short-term solitary confinement has similar deleterious effects. This study therefore aims at assessing influence of some demographic variables and prison overcrowding on the psychological well-being of prison inmates.

**Hypotheses**

1. There will be a significant gender difference in psychological well-being of prison inmates.
2. Age, marital status, duration of stay, category of prisoner, interpersonal space, and educational status will independently and jointly predict psychological well-being of prison inmates.

**METHOD**

**Design and participants**

The study adopted cross-sectional survey design. Participants were 980 prison inmates (876 males; 42 females; 2 individuals did not indicate their gender) selected from 3 medium security prisons (Agodi, Ilesha, and Ado prisons) in southwest, Nigeria. These prisons were selected because they had facilities for males and female inmates and because the population of the inmate exceeded capacity of the prisons as at the time of the study. The ages of the respondents ranged between 31 and 45 years ($M_{age} = 33.34$; $SD = 4.29$). With regards to educational status, 152 had primary school education, 236 had secondary school education, 515 had tertiary school education, and 17 of them did not indicate their educational status. One hundred and twenty seven of the respondents were convicted, 785 were awaiting trial, and 8 of them did not state their inmate category. In terms of duration of stay, 703 had spent up to 5 years in prison and 215 had spent over 5 years in prison as at the time of this study.

**Measures**

*Prison Overcrowding Questionnaire:* This was developed by the researcher to measure the identified 5 components (social support, access to material resources, amount of privacy, demands upon attention, and social withdrawal) of prison overcrowding. It was a 10-item inventory rated on a 4 point scale ranging from 1 = strongly disagree to 4 = strongly agree. Sample item included: ‘I often feel that privacy is difficult to achieve’ (amount of privacy). A Cronbach’s alpha coefficient of .72 was obtained.

*General Health Questionnaire:* This scale, developed by Goldberg (1978), was used to measure the psychological well-being of the inmates. This 12-item version, rated on likert scale of 0-1-2-3, was the latest and shortest version and commonly used as a screening tool in a public setting. In Nigeria, GHQ has been used by many researchers such as Gureje (1992), Adejuwon (2001), Osinowo and Sodeinde (2001), Awopetu, Osinowo and Tamen (2008). The scale had a Cronbach’s alpha coefficient of .81 (Awopetu et al., 2008). With this sample study, the scale had a Cronbach’s alpha coefficient of .78.

**Procedure**

Prior to data collection, permission was obtained from the zone F headquarters of Nigerian Prison Service (Ibadan, zonal office). Accompanying the questionnaire was a covering letter explaining the purpose of the study, the structure and instructions for the questionnaire, a consent form, and a declaration on the anonymity and confidentiality of responses. Participants consisted of 1,200 both convicted and awaiting trial inmates purposively selected from Agodi Prison, Ilesha Prison and Ado Prison. All these prisons
are Medium Security Prison housing more than required capacity as at the time of data collection. Out of the 1,200 questionnaires, 980 were duly completed and used for analysis.

RESULTS

Hypothesis 1 was tested with a t-independent test. The results are presented in Table 1.

Table 1: Summary of t-test on Gender and Psychological well-being

<table>
<thead>
<tr>
<th>Gender</th>
<th>N</th>
<th>M</th>
<th>SD</th>
<th>df</th>
<th>T</th>
<th>p</th>
</tr>
</thead>
<tbody>
<tr>
<td>Male</td>
<td>876</td>
<td>28.00</td>
<td>5.99</td>
<td>918</td>
<td>3.00</td>
<td>&lt;.05</td>
</tr>
<tr>
<td>Female</td>
<td>42</td>
<td>25.12</td>
<td>2.85</td>
<td></td>
<td></td>
<td></td>
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</tbody>
</table>

Table 1 shows that male inmates had a significantly higher psychological well-being than female inmates \[ t(916) = 3.00, p<.05 \]. This result confirmed hypothesis 1.

To test hypothesis 2, a multiple regression was conducted. The results are shown in Table 2.

Table 2: Multiple Regression on Demographic Variables and Psychological Well-being

<table>
<thead>
<tr>
<th>Predictors</th>
<th>( \beta )</th>
<th>( R )</th>
<th>( R^2 )</th>
<th>( F )</th>
</tr>
</thead>
<tbody>
<tr>
<td>Age</td>
<td>-.06</td>
<td>.36</td>
<td>.13</td>
<td>19.18*</td>
</tr>
<tr>
<td>Marital status</td>
<td>-.14*</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Duration of stay</td>
<td>-.18**</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Category of prison</td>
<td>.28**</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Interpersonal space</td>
<td>.22**</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Educational status</td>
<td>.09</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Note: * \( p < .01 \). ** \( p < .001 \). N = 980.

The results in Table 2 show that marital status significantly predicted psychological well-being such that inmates who were married tended to report higher level psychological well-being that those who were single (\( \beta = -.14, p <.01 \)). Duration of stay tended to significantly reduce inmates’ level of psychological well-being (\( \beta = -.18, p <.01 \)). Psychological well-being was significantly associated with category of prison (\( \beta = .28, p <.001 \)). Psychological well-being significantly increased with inmates’ interpersonal space (\( \beta = .22, p <.001 \)). However, psychological well-being was not
associated with inmates’ age and educational status. All the demographic variables accounted for 13% changes in inmates’ level of psychological well-being.

DISCUSSION

The result of the first hypothesis indicated that male inmates score higher. Meanwhile considering the number of female who participated in the study, it is very difficult to conclude the significant difference. This is because, the rate at which female commit crime or are imprisoned is disproportionately to male, and contrary to the finding of McCorkle, (1995); Shaylor, (1998) in United States that the rate of incarceration for women has increased dramatically in last twenty years. This may likely contribute to the increase in well-being of the male inmate due to the large number and take advantage of them as observed in a previous study carried out by Shaylor (2010). However, covariates of prison misconduct for both males and females have remained relatively consistent as observed by Drury and DeLisi, (2010) and Harer and Langan (2001).

Hypothesis 2 which predicted a significant independent and joint influence of age, sex, marital status, duration of stay, category of prisoner, inter-space and educational status on psychological well-being of the inmates was significant. While only age and educational status did not contribute independently in the joint influence, rather all other variables collectively contributed significantly.

The prison environment should be made clean and devoid of health hazard all the time. As toilet, sanitation and cooking facilities become inadequate to cater for a growing prison population the health of inmates is at risk, making it more difficult to control contagious diseases. Therefore, inmates should be organized and trained in preventive health care including basic sanitation, food preparation and personal hygiene. They should also be involved most especially the identified low risk inmates in manual labour to cultivate vegetable gardens, raise livestock (e.g. cattle, sheep’s, pigs, perhaps poultry) to provide additional and more varied food for the prison. This will improve nutrition also provide inmate with meaningful activity.

CONCLUSION

The fact that overcrowded prisons are more difficult to manage humanely and effectively, there is need for living pace to be increased and the space available for educational, recreational, cultural and religious activities should be expanded.

A few limitation of this study should be acknowledged when interpreting the result. Firstly, data were obtained from less than one thousand inmates (980), whereas there were about 49,000 thousand inmates (both convicted and awaiting trials) as at the time of data collection which makes the data weak compared to growing prison population. Secondly, the female population was relatively small compared to male population because the choice of the setting was based on the fact that the prisons were overcrowded and had facilities for female inmates. Therefore, caution must be taken while interpreting the result. Future replication of the study with a larger sample size involving other crowded populations would be beneficial.
REFERENCES


