

Relationship of Age and Sports Participation to Quality of Life Among Prison Inmates in Nigeria

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Abstract

Age is regarded as a key predictor of prison adaptation by inmates. Increasing age of inmates is synonymous with increased anxiety and depression, low self-esteem and poor general quality of life perception. Further evidence is required on inmates' age as a moderator of QOL outcome. The study investigated the relationship of age and sport participation on quality of life and on each of the three domains of QOL- physical health, social and psychological wellbeing among inmates in Ilesa Prison in Osun State of Nigeria. The study employed experimental pretest – posttest control research design. This study was carried out over a 10 week period at the Ilesa prison in Osun State, Nigerian. 140 inmates whose ages range between 20 and 35 were selected for the study. The respondents were grouped into two age categories of 20-27 and 28-35 years. The World Health Organization Quality of Life Scale (WHOQOL-BREF) was adapted and used to determine the inmates' perception of their quality of life during confinement. The data collected were analysed against each of the age categories (20-27 and 28 – 35 years) of the respondents with descriptive and inferential statistics. Analysis of variance (ANOVA) was used to determine whether differences observed on the interactive effects of age and sports participation on the perceived physical health, social and psychological wellbeing domains of QOL measurements among the inmates are significant. The study showed that the calculated F-ratio of 8.567 and 6.688 for inmates perception of their quality of life was significant at $p=0.000$ when tested at 0.05 level of significance for respondents within 20-27 and 28-35 years respectively. It was further revealed that the calculated F-ratio of 11.273 and 11.571 for inmates perception of their physical health was significant at $p=0.000$ for subjects within 20-27 and 28- 35 years respectively. Also, the study showed that the calculated F-ratio of 11.111 and 12.523 for inmates perception of their psychological wellbeing was significant at $p=0.000$ for respondents within 20-27 and 28 – 35 years respectively. Finally, the study revealed that the calculated F-ratio of 3.758 for inmates perception of their social wellbeing was significant at $p=0.000$ for respondents within 20-27 years while the calculated F-ratio of 1.903 for inmates perception of their social wellbeing was not significant at $p=0.05$ for respondents within the age of 28-35 years. It was concluded that there is relationship between age and sport participation on general quality of life of inmates. However, there is no relationship between age and sport participation on social wellbeing perception among inmates within the age category of 28 and 35 years in Ilesa Prison

Keywords: Inmates, inmate's age, sport participation, wellbeing, quality of life

1. INTRODUCTION

Quality of life focuses on the personal characteristics and circumstances as influential variables as well as the individual's dynamic interactions with society (Naughton & Shumaker, 1995). However, social relationships and good health were among the top criterion of quality of life (Bowling, Banister, Sutton, Evans, & Windsor, 2002; Gabriel & Bowling, 2004; Bowling *et al*, 2002). Quality of life is defined as "individuals' perception of their position in life in the context of the culture and value systems in which they live and in the relation to their goals, expectations, standards and concerns" and should include physical, psychological, and social as the minimum dimensions. Quality of life is a broad concept which incorporates the individual's physical health, level of independence, psychological state, social relationships, personal beliefs, and relationships with the environment in which they live (WHOQOL Group, 1993). Creating recreational sport opportunities for general population brings about a positive relationship among all four of the domains. Doing so also enhances self-confidence and character. According to Duvdevany (2002) "self-concept is built through interaction with one's closet environment" which can be achieved through sports (Files, 2010).

Sappington (1996) observed that time served and age affected beliefs and cognitive coping style. The age of an inmate also appears to determine the psychological effects of imprisonment as younger inmates aged twenty five or below, are initially more resistant to the prison structure which makes them more likely to be the targets of victimization in comparison to older inmates who assume passive avoidance roles in prison hence, increasing psychological effects of imprisonment. However, it has been suggested that after the initial shock of imprisonment, younger inmates tend to demonstrate increasing levels of conformity over time (Bartol & Bartol, 1994). There is a well-established finding that social wellbeing is "U shaped" in age. This has been established by a number of studies including Bell and Blanchflower (2004). That is, social wellbeing is relatively high among the young and older age groups, but low among the middle aged. Helliwell (2001) finds that those in the

next three age groups are less happy than those aged 18-24. Then after reaching a low point among the 35-44 year old group, social wellbeing rises systematically and significantly, with those 55 to 64 as happy as those aged 18 to 24, and those aged 65 and over happier still (Bell, 2005).

McCorkle (1992) found that age was the best predictor of the type of adaptation a prisoner took, with younger prisoners being more likely to employ aggressive avoidance strategies than older ones. MacKenzie (1987) observed that prisoner conflicts and guard conflicts peaked in the early 20's and declined with age. Rapid decline in misconducts from teenage to 20's, thereafter, a more gradual decline were further observed. Assertive interactions and fear of victimisation peaked in the 20's and declined thereafter. It was believed that assertive ages had a strong positive relationship with interpersonal conflicts and low quality of life for all ages. Similarly, it was found that juvenile offenders exhibit significant adjustment problems in the institutional environment and are twice as likely to be problem inmates as older offenders (McShane & Williams, 1989). This shows adjustment differences between older and younger offenders. It was believed that younger offenders require extra support and encouragement to enter constructive programs, specifically when they first enter the prison environment which could discourage them from 'problem behaviour' and improve their quality of life (Picken, 2012; Obadiora, 2016).

Also, McShane and Williams (1989) observed that Juvenile offenders exhibited significant adjustment problems in the institutional environment. While the adult males adjusted to the prison surroundings, the juveniles were being placed under greater restriction. Juvenile offenders were twice more likely to be problem inmates than the adults. The process of institutionalization is facilitated in cases in which persons enter institutional settings at an early age, before they have formed the ability and expectation to control their own life choices. Because there is less tension between the demands of the institution and the autonomy of a mature adult, institutionalization proceeds more quickly and less problematically with at least some younger inmates. Moreover, younger inmates have little in the way of already developed independent judgment, so they have little if anything to revert to or rely upon if and when the institutional structure is removed. And the longer someone remains in an institution, the greater the likelihood that the process will transform them and improve their quality of life (Craig, 2001).

Sport, health and quality of life are closely interconnected. The human body was designed to move and therefore needs regular physical activity in order to function optimally and avoid illness (Dunn, 1984). It has been proved that a sedentary lifestyle is a risk factor for the development of many chronic illnesses, including cardiovascular diseases which are the main causes of death. Furthermore, living an active life brings many other social and psychological benefits and there is a direct link between physical activity and life expectancy, so that physically active populations tend to live longer than inactive ones. Sedentary or confined people who become more physically active report "feeling better" from both a physical and a mental point of view, and enjoy a better quality of life (EU, 2008; Obadiora, 2017).

2. MATERIALS AND METHODS

2.1 Study Setting

The Nigerian Prisons Service, Ilesa Prison Yard, Ilesa, Osun State, Nigeria is a medium security facility, adjacent to Ilesa Police Area Command Headquarters in Ayeso, Ilesa East Local Government Area of Osun State. Ilesa Prison facility was commissioned in 1943 with capacity to accommodate 600 inmates while the 2013 number of inmates is put at about 526. Despite the population of the inmates which was below the prison capacity, beds and bedding in the prisons were inadequate. In some cells or prison blocks where beds are available, mattresses, bed sheets and blankets were lacking. The prison has an open space of about 60 by 80 m size meant for recreational sports and physical activities. The prison yard lacks basic equipment for sporting activities hence the playing field is hardly put into use.

2.2 Type and Period of Study

The study employed experimental pretest – posttest control research design. A total of 140 respondents were selected through purposive sampling technique. The study covered a period of ten weeks. The first week was used to administer pre-test questionnaire, the following eight weeks were used for sports participation. The eight weeks included two weeks of teaching on theory and techniques of sports-skills, rules and regulations and officiating as well as six weeks used for active sports practice and within sport group competition sessions. The last week of the study was used for the administration of post-test questionnaire.

2.3 Population and Sample Size

The study population comprised male inmates in Ilesa Prison. Study respondents were selected using systematic random sampling technique. The study samples were 140 inmates within age 20 and 35 years, excluding inmates on death sentence and those undergoing medical and/or psychiatric treatment. Inmates within the age range were selected because according to Shephard (1998) young adulthood typically covers the period from 20-35 years of

age, when both biological function and physical performance reach their peak. The respondents were randomised into two groups of experimental and control to facilitate comparison of collected data. The study excluded inmates on death sentence or those undergoing medical and/or psychiatric treatment.

2.4 Data Collection

The WHOQOL-BREF scale was adapted to measure the three domains of QOL – psychological, social and physical health among inmates of Ilesa prison. The instrument was developed by WHO and simultaneously tested in diverse cultures across the world, this means that the instrument has a strong potential for easy cross-cultural applicability, since the items are framed in culture-neutral terminology (WHO, 1998). The scale includes widely valued contextual factors of life that are not generally regarded as health-related. The response options range from 1 to 5. The scale is aimed at determining an individual's quality of life perceived (Oladimeji, 2005)

2.5 Ethical Considerations

The study was approved by the academic and postgraduate committees of the Obafemi Awolowo University as a doctorate requirement. Also, the study was approved by the State Comptroller of the Osun State Command of Nigeria Prison Service (NPS) following the advice of the command's legal officer. The study obtained a voluntary and written consent of the inmates to participate in the study. The inmates are fully aware of their right to withdraw from the study at any time during the period of the study.

2.6 Data Analysis

The data collected were analysed against each of the age categories (20-27 and 28 – 35 years) of the respondents with descriptive and inferential statistics. Analysis of variance (ANOVA) was used to determine whether differences observed on the interactive effects of age and sports participation on the perceived physical health, social and psychological wellbeing domains of QOL measurements among the inmates are significant. Statistical significance was set at $P < 0.05$.

3. RESULTS

To determine the relationship of age and sport participation to quality of life of inmates of Ilesa Prison, the sport participation and Quality of Life (physical health, psychological wellbeing and social wellbeing) scores were analysed against each of the age categories (20-27 and 28 – 35 years) of the subjects. The mean scores of quality of life by sport participation and age of inmates are presented in Table 1 below. Also, Table 2 shows that the calculated F-ratio of 8.567 for inmates perception of their quality of life was significant at $p=0.000$ when tested at 0.05 level of significance for respondents within 20-27 years. Again, in Table 2, calculated F-ratio of 6.688 for inmates perception of their quality of life was significant at $p=0.000$ when tested at 0.05 level of significance for respondents within 28-35 years. The findings therefore showed that there is relationship of age and sport participation to quality of life perception among inmates of Ilesa Prison.

In Table 3, the calculated F-ratio of 11.273 for inmates perception of their physical health was significant at $p=0.000$ when tested at 0.05 level of significance for subjects within 20-27 years. Also, in the same Table 3, calculated F-ratio of 11.571 for inmates perception of their physical health was significant at $p=0.000$ when tested at 0.05 level of significance for subjects within 28-35 years. The findings therefore showed that there is relationship of age and sport participation to physical health perception among inmates of Ilesa Prison.

In Table 4, the calculated F-ratio of 11.111 for inmates perception of their psychological wellbeing was significant at $p=0.000$ when tested at 0.05 level of significance for respondents within 20-27 years. Also, in the same Table 4, calculated F-ratio of 12.523 for inmates perception of their psychological wellbeing was significant at $p=0.000$ when tested at 0.05 level of significance for subjects within 28-35 years. The findings therefore showed that there is relationship of age and sport participation to psychological wellbeing perception among inmates of Ilesa Prison.

In Table 5, the calculated F-ratio of 3.758 for inmates' perception of their social wellbeing was significant at $p=0.000$ when tested at 0.05 level of significance for respondents within 20-27 years. Also, in the same Table 5, calculated F-ratio of 1.903 for inmates perception of their social wellbeing was not significant at $p=0.05$ when tested at 0.05 level of significance for respondents within 28-35 years. The findings therefore showed that there is relationship of age and sport participation to social wellbeing perception among inmates between the ages 20-27 years while there is no relationship of age and sport participation to social wellbeing perception among inmates within the age category of 28 and 35 years in Ilesa Prison.

4. DISCUSSION

The findings reveal that there is significant relationship of age of 20 -27 years and sport participation on quality of life perception among inmates of Ilesa Prison. Finding further reveals that age (20 – 27 years) of inmates influences the effect of sports participation on quality of life perception. In other words, younger age of prison

inmates affects the influence of sports participation on each of the three domains of quality of life which are physical health, psychological well-being and social well-being in Ilesa Prison. This finding agrees with the statement of Bartol and Bartol (1994) that age is a significant factor for social and psychological wellbeing among inmates during imprisonment. McShane and Williams (1989) also believed that age affects adjustment of inmates to prison environment, and prison adjustment, according to Weiten *et al.* (2011), have significant effect on the quality of life perception among prisoners.

However, further findings of the study showed no relationship of sports participation on social wellbeing among inmates within age of 28-35 years. This finding agrees with previous observations of Bell and Blanchflower (2004) that social wellbeing is “U shaped” with age. That is, social wellbeing is relatively high among the young and older age groups, but low among the middle aged. The result also agrees with earlier statement of Helliwell (2001) that social well-being reaches a low point among 25- 44 year old group which rise systematically and significantly after 45 years. This assertion is similar to earlier observations of McCorkle (1992) that younger prisoners are twice likely to have poor perception of their quality of life, especially social interaction aspect than older prisoners. McCorkle (1992) found that age was the best predictor of the type of adaptation a prisoner took. Picken, 2012 believed that younger offenders should be given extra support, specifically when they first enter the prison environment. Additionally, they should be encouraged to enter constructive programs which could discourage them from ‘problem behaviour (Obadiora. 2017).

4.1 Limitations of the study

The respondents were limited to male inmates within the age of 20 and 35 years for maximum participation. More than 48 percent of inmates below 20 and above 35 years were excluded from the study due to age. The results of the study may not be applicable to female prisoners and male inmates outside the age between 20 and 35 years.

5. CONCLUSION

It was concluded that there is relationship of inmates’ age, with younger ones more affected, and sport participation to the cognitive coping style and general quality of life perception by inmates during imprisonment. It is therefore necessary to consider inmates’ age when planning for the use of sports in adaptation and rehabilitation programmes.

DECLARATIONS

Competing Interests

The authors declare that there is no competing interest.

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Table 1: Mean score for perceived quality of life by sport participation and age

Element	Athletics				Badminton				Table Tennis				Volley ball			
	Experimental n=16		Control n=16		Experimental n=16		Control n=16		Experimental n=14		Control n=14		Experimental n=24		Control n=24	
Age	20-27	28-35	20-27	28-35	20-27	28-35	20-27	28-35	20-27	28-35	20-27	28-35	20-27	28-35	20-27	28-35
GQOL	81.00	80.30	81.25	74.38	82.88	72.31	62.06	66.13	82.40	78.61	60.79	64.07	90.59	88.31	85.15	87.71
PH	24.58	25.70	23.94	22.69	26.50	23.13	17.00	17.88	26.80	23.67	16.43	18.07	27.97	27.62	23.35	24.29
PW	25.17	24.15	23.25	20.75	24.63	22.19	17.56	19.19	24.80	23.83	16.93	17.07	26.84	26.00	24.60	23.96
SW	31.25	30.45	34.06	30.94	31.75	27.00	27.50	29.06	30.80	31.11	27.43	28.93	35.78	34.69	37.20	39.46

Table 2: Analysis of variance of the relationship of age and sport participation to perceived quality of life

ANOVA						
General Quality Of Life						
Age		Sum of Squares	df	MS	F	Sig.
20-27yrs	Between Groups	28027.464	9	3114.163	8.567	.000
	Within Groups	45803.478	126	363.520		
	Total	73830.941	135			
28-35yrs	Between Groups	24136.536	10	2413.654	6.688	.000
	Within Groups	48000.353	133	360.905		
	Total	72136.889	143			

P <0.05

Table 3: Analysis of variance of the relationship of age and sport participation to inmates' perception of their physical health

ANOVA						
Physical Health						
Age		Sum of Squares	df	MS	F	Sig.
20-27yrs	Between Groups	3933.876	9	437.097	11.273	.000
	Within Groups	4885.506	126	38.774		
	Total	8819.382	135			
28-35yrs	Between Groups	4085.035	10	408.503	11.571	.000
	Within Groups	4695.604	133	35.305		
	Total	8780.639	143			

P <0.05

Table 4: Analysis of variance of the relationship of age and sport participation to psychological wellbeing perception

ANOVA						
Psychological Well Being						
Age		Sum of Squares	df	MS	F	Sig.
20-27yrs	Between Groups	3088.015	9	343.113	11.111	.000
	Within Groups	3891.095	126	30.882		
	Total	6979.110	135			
28-35yrs	Between Groups	3179.169	10	317.917	12.523	.000
	Within Groups	3376.386	133	25.386		
	Total	6555.556	143			

P <0.05

Table 5: Analysis of Variance of the relationship of age and sport participation to inmates' perception of their Social Wellbeing

ANOVA						
Social Well Being						
Age		Sum of Squares	df	MS	F	Sig.
20-27yrs	Between Groups	2836.806	9	315.201	3.758	.000
	Within Groups	10569.010	126	83.881		
	Total	13405.816	135			
28-35yrs	Between Groups	1609.121	10	160.912	1.903	.050
	Within Groups	11244.629	133	84.546		
	Total	12853.750	143			

P <0.05