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SPATIAL DISTRIBUTION AND PATRONAGE OF RECREATIONAL FACILITIES IN UNIVERSITY OF ILORIN, NIGERIA

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ABSTRACT

The paper examined the spatial distribution and patronage pattern of recreational facilities in the University of Ilorin (UNILORIN). The study used primary data, which were obtained through a structured questionnaire administered randomly to the selected academic and non - teaching staff of UNILORIN. Geo-spatial data on the locations of the recreational facilities were collected and analyzed with the use of Global Positioning System (GPS) and Nearest Neighbour Analysis respectively. Pearson's Product Moment Correlation Analysis was employed to examine the relationship between residence and patronage of recreational facilities at 5% level of significance. With an R_n value of 1.47 ($p=0.000378$), the distribution of recreational facilities in UNILORIN was dispersed. The paper also observed that, there was no significant relationship between staff place of residence and their patronage of recreational facilities ($r = 0.05$, p value = 0.474). The study established that health benefits and pleasure with Enhancing Factor Index of 2.58 and 2.46 respectively, were the major enhancing factors of recreational facilities patronage. The paper concluded that locations of recreational facilities are far from each other and by implication the distribution is nor regular. The paper therefore recommended that future recreational facilities should be evenly distributed so as to foster more patronage by staff members of University of Ilorin.

KEY WORDS Recreation, Recreational Facilities, Spatial Distribution, Patronage, Location

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1. INTRODUCTION

Recreation involves physical activities that result in personal excitement, enjoyment and fulfilment. It is an activity that people voluntarily pursue simply for personal satisfaction during free time (Olaitan *et al.*, 2012). Zhang *et al.* (2004) defined recreation as the voluntary, non-work activity organised for the attainment of personal and social benefits including restoration and social rapport. Considering the different views of scholars with respect to recreation, one can argue that recreation encompasses activities that people do in order to be fit and healthy for different engagement. Obesity reduction, self-esteem improvement, stress reduction and maintenance of overall physical health are some of the benefits of recreation (Ransdell *et al.* 2001; Harrison *et al.*, 2003; World Health Organization, 2010). Despite the enormous social, economic and health benefits of participating in recreational activities, the percentage of adults who engage in regular leisure time physical activity is decreasing (Hashem *et al.*, 2012), thereby causing an increase in risk for many health challenges. Lack of adequate exercise, partially resulting from inadequate recreational facilities or opportunities, often contributes to obesity (Moseley, 2015).

Young people who do not get adequate exercise may face future health risks. The challenge is to effectively promote the potential health and well-being benefits of increasing workplace recreational activity. University employees represent a population at risk from a sedentary working pattern (Butler *et al.*, 2015), and the need for wellness programmes within universities is becoming more common (Tudor-Locke *et al.*, 2011; Gazmaranian *et al.*, 2013; Hanson, 2013). The type, conditions and location of recreational facilities play an important role in determining the recreational patronage of a community. It has been asserted that people tend to participate more in recreational activities if the type, condition, and location of recreational facilities meet their expectations

(Andereck *et al.*, 2007). It has been observed that patronage of recreational facilities is a function of accessibility of the facilities (Chen *et al.*, 2016). In the mid 1950s, environmental planners started paying significant attention to recreation planning in workplace with the tense work duties or responsibilities from employees (Kaplan, 1993; Belkic and Nedic, 2007; Mokaya and Gitari, 2012; Keller *et al.*, 2016).

Recreation planning becomes paramount as it involves the collection and analysis of information to ensure the right facilities are provided and the locations of recreational activities are developed and equally making sure that such places are accessible and protected to meet the users' future recreation needs (Gul *et al.*, 2006). Recreation planning also becomes very important based on the need to solve numerous health challenges that people experience every day that could not be healed using medical techniques or medicines except in naturally protected areas that offer many benefits (Cakir *et al.*, 2016). However, recreation planning seems nearly impossible if the spatial distribution of recreational facilities is not established. This is so, as access to a facility may out of all other factors (such as willingness, level of awareness and so on) depend strongly on the location and spatial distribution of such facility within the given space. Accessibility to places to engage in physical activity may improve physical activity levels among adults and youth (Heath *et al.*, 2006). Access to recreation park has been viewed as a principal key to enhancing health and well-being" (Thompson *et al.*, 2012).

Studies have suggested that characteristics of neighborhood design such as range, access to various activity-promoting resources (e.g., recreational facilities, open space, public parks), aesthetics and land use patterns, among others, are important contributors to physical activity and healthy living in adults and children (Cohen *et al.*, 2006; Kaczynski and Henderson, 2007a; 2008b). Even distribution of recreational

facilities will facilitate accessibility and encourage high patronage. An individual who finds a location of recreational facilities far or inaccessible may be discouraged from the use of those facilities. Thus, recreation planning encourages even distribution of recreational facilities so as to bring about a practicable patronage of the facilities. However, planning involves the arrangement of land uses in an orderly manner, such that the right site is chosen at the right time, in the right place and for the right people. Sitting recreational facilities in right places will adequately enhance high level of patronage of recreationists. However, it is against this backdrop that this paper examines spatial distribution and patronage of existing recreational facilities in the University of Ilorin, Nigeria. The study mainly focused on the spatial distribution of the facilities in the study area; level of staff's patronage of the recreational facilities; the Socio-economic characteristics of staff of the Universities and; the factors that influence and impede patronage of recreational facilities by the staff in the University.

2. LITERATURE REVIEW

Locations of recreational facilities plays an important role in determining the level of patronage by people. People tend to visit recreational facilities that are closer to their place of residence than the ones that are far (Næss *et al.*, 2019). Studies have established that attractiveness of recreational facilities to the recreationists enhances involvement in recreational activities and eventual patronage of the near facilities (Lagarense, 2014; Gnanapala, 2015). Sugiyama *et al.* (2015) reported that residential density, access to destinations, esthetics, traffic/barriers, and crime safety were mostly considered by recreationists. Cleland *et al.* (2015) discovered that recreationists considered functionality of recreational facilities before participating in recreational activities. Within the functionality theme, recreationists prioritised connectivity of a recreational centre or area with other destinations. Distance, safety, continuity, supporting

infrastructure and surfacing were also seen as significant factors that could motivate them (Cleland et al., 2015). This finding equally strengthens the importance of functionality of recreational facilities as it also determines the level of participation. This means that recreational facilities become functional if the recreationists are able to derive maximum satisfaction from their patronage.

Furthermore, Eratay and Aydoğan (2015) found that students of a college preferred to spend their leisure at outdoors, homes, dormitories, friend's homes and locations such as patisserie and cafés. This is in consonance with the discovery of Sugiyama et al., (2015), which posited that participants place emphasis on easy and convenient access to a natural environment that accommodated physical activity. In the same vein, Rissel et al. (2015) discovered that more people participated in walking and cycling when the environment was more pleasant. Existing studies have also revealed that people tend to participate in recreational activities when there are motivational tendencies (Yu et al, 2014; Pomfret and Bramwell, 2016; Guo and Liu, 2016; Cooper and Barton, 2016). The study of Onohwakpor and Eboh, 2006; Olawumi and Oloyede, 2011, concluded that job demand, fear of injury, lack of knowledge and lack of motivation are some of the constraints to recreational sport participation. Eratay and Aydoğan (2015) also found that passive recreational activities attract young individuals at higher rates due to insufficient knowledge on active activities or limited possibilities. Emerging findings within demographic context indicate that male undergraduates participated in aquatic sports more than their female counterparts (Wang and Wu, 2016).

Moreover, Forrester (2015) found that students who explored recreational sport facilities and programmes more are healthier and improved in learning than light and non-users. Bezold et al. (2017) later discovered that medium, not proliferation of recreational resources in the area surrounding a school

was associated with greater annual improvements in fitness for both boys and girls. More specifically, the scholars discovered that the connection was driven by the existence of parks. On one hand engaging in physical activity and exercise related with healthy-life behaviour of academic staff at a university in Turkey (Turkmen et al., 2015). On the other hand, the increase in physical inactive activities was associated with increase in obesity prevalence; while baseline levels of, and increase in physician density and grocery store/supercenter density were related to smaller increase in obesity rates (Turkmen et al., 2015; Myers et al., 2015).

Going by the existing studies, it is clear that there are reasons and benefits attached to recreational activities. During recreation, people are most likely to have different experiences especially satisfaction level being derived from the services rendered by the management of recreational facilities and areas. Finding of Fine, Clarka and Scheuerb (2016) suggested that loyalty, staffing, cleanliness, and parking are significant indicators of satisfaction with on-campus recreational facilities. Lee and Jan (2015) had previously found recreation experience as a significant factor in the tourists' perceived biospheric value, environmental attitude and general and site-specific environmentally responsible behaviour. Studies have equally revealed that people may not participate in recreational activities because of perceived health issues that could arise from sharing or using recreational facilities with other people. For instance, Evans and Allen-Collinson (2016) reported that some swimmers perceived dirt and germs in a swimming pool. This undoubtedly lends belief to the earlier discovery of Hlavsa et al. (2015), who reported that between 2011 and 2012, a total of 90 recreational water-associated outbreaks were reported to Centre for Disease Control in the United States, resulting in at least 1,788 cases, 95 hospitalisations, and one death.

According to the study, *Cryptosporidium* caused over half of the outbreaks associated with treated recreational water venues such as pools. It was also found that *Escherichia coli* (*E. coli* O157:H7 or *E. coli* O111) caused one-third of outbreaks associated with untreated recreational water such as lakes. In a different perspective, Evans and Allen-Collinson (2016) also found that women reflected upon their self-perceived physical deficiencies when wearing revealing swimming costumes under the critical gaze of 'other' bodies. It is clear from the various relevant studies explored on recreation that recreationists' attitude is important in determining their level of involvement in recreational activities, as well, the functionality of recreational facilities in terms of accessibility, safety, the types of facilities, management and so on, have influence on the level of participation. The knowledge of the inherent health, economic, social and psychological benefits of recreation and the absence of barriers such as lack of time and energy, heavy school work and inadequate operational hours of recreational facilities are equally paramount in determining the pace of recreational activities involvement. However, this study specifically examined the spatial distribution of existing recreational facilities in the University of Ilorin and the level of patronage of academic and non-academic staff in recreational activities. As a matter of fact, this was done in order to suggest an appropriate and feasible workplace intervention that will positively affect physical activity and well-being. The study also investigated the factors influencing the patronage of workplace recreational facilities.

3. THE STUDY AREA

The study was carried out in University of Ilorin, Kwara State. The University of Ilorin is located in the ancient city of Ilorin, about 300 kilometers from Lagos and 500 kilometers from Abuja, the Federal Capital City. The University is one of the institutions of higher learning established by a decree of the Federal Military Government in August, 1975. The University is located within Ilorin metropolis. Ilorin metropolis is made up of three local government areas which are: Ilorin West Local Government, Ilorin East Local Government and Ilorin South Local Government, where University of Ilorin is situated. Ilorin, which is the state capital of Kwara State, is mainly located on latitude 8°30' and 8°50'N and longitude 4°20' and 4°35'E of the equator. Ilorin extends to an area of about 468sqkm (180.696sqmi) and it is situated within the forest and the guinea savannah regions of Nigeria. It is about 500 kilometers away from Abuja, the Federal Capital of Nigeria. The climate of Ilorin is under the influence of the two trade winds. Ilorin metropolis usually experiences rainy and dry season. The rainy season is between March and November and the annual rainfall varies from 1000 mm to 1500 mm, in which the peak is between September and early October. The monthly mean temperature is generally high throughout the year, while on the average the daily temperatures are in January with 25.5 °C, May 27.4 °C, and in September 25.1 °C. The vegetation is derived savannah with riparian forest along the river bank. The pattern of drainage system of the city is dendritic. The most important river is Asa River which flows in south-northern direction. The River occupies a fairly wide valley and divides Ilorin into two parts, namely: the eastern and the western part.

4. METHODOLOGY

4.1. Population of Study and Sampling technique

According to 2018/2019 annual report of the University of Ilorin has a total number of 17 Faculties with 119 Departments, and 22 Units comprising 167 Sub-units. However, the University has a total population of 2,453 staff members which include both academic and non-teaching staff of the university. Multi-stage sampling technique was employed in the study. In the first stage of sampling, every one of two of the departments and sub-units in all the faculties and units amounting to 50% (Table 1) of the population was selected using simple random sampling techniques. However, Table of Random Numbers was adopted for the selection of departments and sub-units. Notwithstanding, in the second stage a total of 286 which represent 15% of staff members were selected using sample size calculator. The selection of staff members followed as above for departments and sub-unit.

Table 1: Questionnaire Distribution among Staff in various Faculties and Units in Unilorin

Faculty/Unit	No of Existing Department(s)/ Sub-unit(s)	Selected Department(s)/ Sub-unit(s) @ 50%	Number of Staff	Sample size @ 15% of the Population
Agriculture	10	5	100	17
Arts	8	4	86	13
Basic Med. Sci	11	6	51	11
Central Admin.	23	12	516	79
Centre	12	6	35	7
Clinical Sciences	12	6	76	15
Com. and Info. Sci.	7	4	79	15
Comsit Directorate	5	3	45	7
Education	11	6	99	16
Engine & Tech.	12	6	105	17
Enviroment. Sci.	5	3	31	6
Law	5	3	36	6
Life Science	6	3	74	12
Management Science	6	3	22	3
Other Academic Unit	1	1	106	16
Phamarceutical Sci.	6	3	41	6
Physical Science	7	4	80	14
Public Service Unit	3	2	4	2
Social Sciences	7	4	54	10
Teach. Support Unit	2	1	1	1
Veterinary Med.	14	7	63	13
	Grand Total		1706	286

Source: University of Ilorin Annual Report 2018/2019 Academic Session, Author's Compilation (2019).

5. METHODS AND INSTRUMENTS OF DATA COLLECTION

A set of pretested questionnaire was used to obtain information from the selected staff members of the university. The questionnaire was designed to capture Socio-economic characteristics e.g., staff category, occupation, marital status, level of education, cadre, income, place of residence, religion, car ownership among other questions. The questionnaire was prepared in English and administered by two research assistants. Questionnaire administration was conducted between 9am and 3pm daily for 5 days from Monday to Friday in the Month of April, 2020.

6. DATA ANALYSIS

After the completion of the survey, the data from the questionnaire were translated into a format that could be analyzed by SPSS 21. A total of 11 questionnaires were dropped due to reasons such as incomplete response. Therefore, 275 questionnaires were eventually captured in the analysis. Descriptive statistical tools i.e. simple frequency distributions and percentages were used in carrying out data interpretation and analysis. Furthermore, Pearson's Product-moment Correlation Analysis was used to statistically measure the relationship between staff's place of residence and patronage of recreational facilities.

7. RESULTS AND FINDINGS

7.1. Socio-economic Characteristics of Respondents.

The result shows that, 90.1% are married; 8.8% are single; 0% divorced; 0.4% separated, and 0.7% staff members are widowed. This findings clearly revealed that the bulk of the respondents are married (Table 2). This variable has implication as the recreation habit of staff members may be influenced by their marital status as staff members who are single may have more time to participate in recreational

activities than the married ones. The results also reveals that, 6.2%, 13.2%, 6.6%, 5.1%, 8.6%, 2.3%, 3.5%, 18.3%, and 36.2% staff members are Graduate Assistant, Assistant Lecturer, Lecturer II, Lecturer I, Senior Lecturer, Reader, Professor, Junior Non Academic staff and Senior Non Academic staff respectively (Table 2). However, staff members who are Senior Non-Academic staff and Junior Non-Academic staff in the university accounted for the highest number of respondents, while staff member with readership cadre constituted the lowest number. This trend must be as a result of the fact that the total number of Non-teaching staff member is more than teaching staff in the University. Some 12.9% earn between ₦18,000 - ₦50,000, 27.9% earn between ₦50,001 - ₦100,000, 42.0% earn ₦100,001 - ₦200,000, 12.1% respondents earn between ₦200,000 - ₦300,000 as monthly income and 5.1% staff members earn above ₦300,001 in UNILORIN (Table 2). However, since the highest number of respondents earn between ₦100,001 to ₦200,000 and ₦50,001 to ₦100,000, this means that income level of respondents should not be a major constraint in the patronage of recreational facilities.

To some people, religion can be a major barrier in their engagement in recreational activities (Ikulayo and Adekoya, 2006). The result on this variable indicates that, 49.6% practice Christianity, 50% practice Islam and 0.3% and 0.1 staff member practice Traditional religion in (Table 2). It can be inferred that Christianity and Islam remain the most practiced religion in the Universities.

Table 2: Socio-economic Characteristics of Respondents.

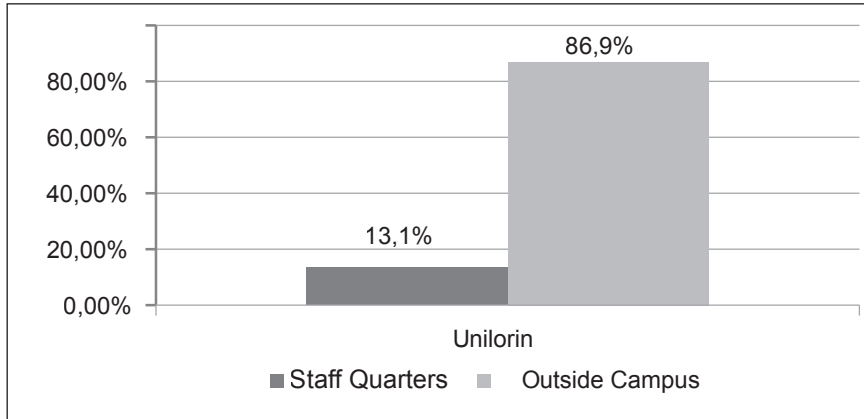
Socio-demographic variable	Category	Frequency	%
Marital Status	Single	24	8.8
	Married	245	90.1
	Divorced	0	0.0
	Separated	1	0.4
	Widowed	2	0.7
Cadre/ Level of Respondents	Graduate Assistant	16	6.2
	Assistant Lecturer	34	13.2
	Lecturer II	17	6.6
	Lecturer I	13	5.1
	Senior Lecturer	22	8.6
	Reader	6	2.3
	Professor	9	3.5
	Junior Non Academic	47	18.3
	Senior Non Academic	93	36.2
Income Status of Respondents	₦18,000 - ₦50,000	35	12.9
	₦50,001 - ₦100,000	76	27.9
	₦100,001 - ₦200,000	114	42.0
	₦200,001 - ₦300,000	33	12.1
	₦300,001 and above	14	5.1
Religion of Respondents	Christianity	135	49.6
	Islam	137	50.0
	Traditional	001	0.1

Source: Authors' field survey, 2019

7.2. Place of Residence of Respondents

This result shows that 97.1% of staff members responded to this variable. University of Ilorin, being a residential University with staff quarters, 13.1% of staff members live on campus while the majority of the respondents with a total of 86.9% live outside the University campus. (Figure 1). It can then be understood that the majority of staff members live outside the campus. Nearness of recreational facilities to recreationists may also influence the level of their patronage of such facilities.

Figure 1: Place of Residence of Respondents



Source: Author’s Field Survey (2019).

7.3. Car Ownership Status of Staff

This variable is also relevant in this study. This is because it is assumed that patronage of recreational facilities can be influenced by the means of movement to the location of such facilities. A staff member who is mobile may find it easier to increase the level of his/her patronage, much more than a respondent who relies on trekking to access the recreational facilities. However, the summary of this variable presented in Table 4.5 shows that 67.7% staff members have car, only 1.5% have motorcycle, 30.4% respondents are not mobile and 0.4% staff member has a lorry. (Table 6). Thus it can be understood that in the two Universities, majority of staff members are mobile. This is an indication that distance should not be a major barrier to the patronage of Universities’ recreational facilities.

Table 3: Car Ownership Status of Staff

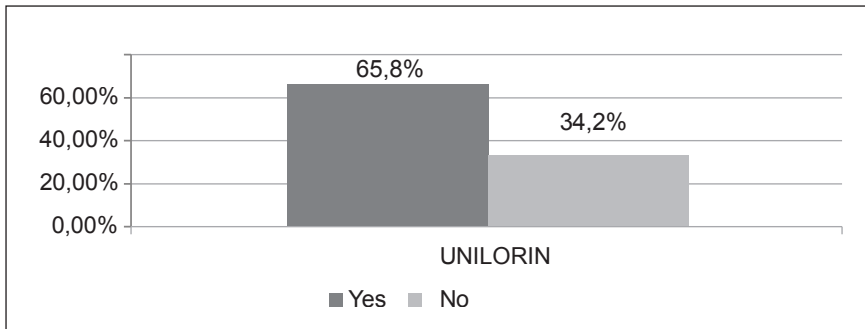
Car	Ownership	Freq. %
Car	185	67.7
Motorcycle	4	1.5
Lorry	1	0.4
None	83	30.4
Total	273	100.0

Source: Authors’ field survey, 2019

7.4. Engagement in Recreational Activities

The summary of this variable reveals that 97.8% respondents reacted to this variable in UNILORIN. Some 65.8% engage in recreational activities, while 34.2% respondents do not in the university (Figure 2). This finding indicates that the majority of the staff members engage in recreational activities.

Figure 2: Engagement in Recreational Activities



Source: Author's Field Survey (2019).

7.5. Utilisation of University Recreational Facilities

The summary of findings on this variable shows that 34% of staff members do patronize, while 66% of the respondents do not. This result reveals that the majority of staff members in the Universities do not utilise the existing recreational facilities provided by the school management (Table 4). This non-utilisation or non-patronage may be as a result of inadequate free time for staff members.

Table 4: Utilisation of University Recreational Facilities

Utilisation	Freq.	%
Yes	84	34.0
No	163	66.0
Total	273	100.0

Source: Authors' field survey, 2019.

7.6. Participation in Recreation Program

The summary of this finding reveals that only 35.6% participants responded to this variable. However, 21.4% of staff members participate in such program, while some 78.6% of the respondents do not engage in such sport program in UNILORIN. However, this result shows that the large proportion of staff members do not partake in the programme in the University (Table 5). This means that the majority of the respondents that confirmed the existence of such sport program on the campus do not participate in the programme.

Table 5: Participation in Recreation Programme

Participation	Freq.	%
Yes	21	21.4
No	77	78.6
Total	98	100.0

Source: Authors' field survey, 2019.

7.7. Reasons for Non-participation in Mandatory Sport Program

The summary of this variable reveals that 16.9%, 15.3%, 50.8%, 5.1%, 1.7%, 3.4% and 6.8% of staff members in UNILORIN claimed no interest, not aware, excess workload, too distant from office, poor operation hour, health challenges and the sport program is voluntary and not mandatory respectively, as reasons for non-participation

in the sport program. (Table 6). Therefore, this finding clearly shows that the majority of the respondents chose excess workload as a major reason for their non-participation in the universities' sport program.

Table 6: Reasons for Non-participation in Mandatory Sport Program:

Reason	Freq.	%
No Interest	10	16.9
Not Aware	09	15.3
Excess Workload	30	50.8
Too far from Office	3	5.1
Poor Operation Hour	1	1.7
Health Challenges	2	3.4
Not Mandatory	4	6.8
Total	59	100.0

Source: Authors' field survey, 2019.

7.8. Factors that Enhance the Patronage of the Recreational Facilities

The mean score on the factors that enhance the patronage of recreational facilities by staff members in University of Ilorin is shown in table 10. These scores were gotten by assigning weight to variables, which range from very important reason as 3 point, to least important reason as 1 point, with the use of Likert scale. The addition of each item was divided by the actual number of staff members that reacted to these set of variables. The summary of findings on this unravels that the major reasons why staff members in UNILORIN utilise or patronise the University's existing recreational facilities include: the health benefit (EFI 2.58), pleasure and satisfaction (EFI 2.46), physical and mental fitness (EFI 2.39), good location (EFI 2.33), free time (EFI 2.23), the cost of utilisation is not expensive (EFI 2.19). These set of variables constitute the highest set of factors that enhance the staff members' patronage of recreational

facilities in University of Ilorin. Other reasons why staff members patronise the existing recreational facilities include: improving and learning of new sporting skills (EFI 2.15), presence of picnic facilities (EFI 2.13), no overcrowding (EFI 2.13), attractiveness of the facilities (EFI 2.13), enjoyment of peace and quietness (EFI 2.11), naturalness of the facilities (EFI 2.11), closeness of the facilities (EFI 2.10), meeting of new people or making of new friends (EFI 2.06), good operation hour (EFI 2.06) and good security (EFI 2.02). Factors such as good parking space (EFI 1.99), test or display of sporting skills (EFI 1.98), marital status (EFI 1.84), age factor (EFI 1.84) and gender (EFI1.83) constitute least important reasons or factors why staff members of University of Ilorin utilise or patronise the University's existing recreational facilities.

Table 7: Factors that enhance the Patronage the Recreational Facilities in UNILORIN

EFI (X) TWV/N	
Good Location	2.33
Closeness of the facilities	2.10
Less Expensive	2.19
Health Benefit	2.58
To Meet People/make friends	2.06
Marital Factor	1.84
Age Factor	1.84
Physical and mental Fitness	2.39
To Enjoy Peace and quiet	2.11
To improve and learn new sporting Skills	2.15
Free Time	2.23
Pleasure and Satisfaction	2.46
Presence of Picnic facilities	2.13
Good Operation Hour	2.06
Good parking space	1.99
Good security	2.02
Not overcrowding	2.13
Gender	1.83
Test/display of sporting skills	1.98
The facilities are very attractive	2.13
Naturalness of the facilities	2.11
Total	44.66
Mean	2.13

Source: Author's Field Survey (2019).

UNILORIN: Where TWV means Total weight value, Variance = $\sum (x-\bar{x})^2/31 = 0.76/21 = 0.04$, Standard Deviation = $\sqrt{\text{Variance}} = \sqrt{0.04} = 0.2$. Co-efficient of Variation (CV) = $S.D \times 100/\text{Mean EFI} = 0.2 \times 100/2.13 = 9.39\%$, Total = Total number of respondents, $EFI(X) = \text{Enhancing Factor Index}$, $F = \text{Frequency of different reply}$, $W = \text{Weighted Index}$, $\text{Mean} = \sum EFI/N = 44.66/21 = 2.13$

7.9. Duration of use of the Recreational Facilities

The summary of findings on this variable indicates that 19.6%, 33.7%, 33.7%, 12% and 1% of staff members do utilise the recreational facilities for less than one hour, between one to two hours, between two hours and one minute to three hours, between three hours and one minute to four hours and more than four hours respectively in the University (Table 8). However, it can be established that majority of the few staff members that responded utilise the University's recreational facilities between one to two hours and between two hours and one minute to three hours.

Table 8: Duration of use of the Recreational Facilities

Car Ownership	Freq.	%
Less than 1 hour	18	19.6
One to two hours	31	33.7
2hrs and 1min to 3hrs	31	33.7
3hrs and 1min to 4hrs	11	12.0
Above 4hrs	1	1.0
Total	92	100.0

Source: Authors' field survey, 2019

7.10.Choice of Location of Recreational Facilities in case of New Recreational Facilities or

7.10.1.RELOCATING THE EXISTING ONES BY STAFF MEMBERS

The summary of result on this reveals that 31.4% of the respondents pointed that location should be in each faculty, 1.5% chose motion ground, 24.8% chose central location, 6.6% decided on dam site, 13.1% preferred Student Union building, 15.3% of staff members chose around the existing facilities, 2.2% chose outside campus and 5.1% of staff members preferred the location to be close to the Senate Building in University of Ilorin (Table 9). This finding shows that the majority of the respondents prefer the location of recreational facilities to be in each faculty and in central location in the University. Therefore, this clearly indicates that the staff members desire an even distribution of the facilities so as to ensure equal distance coverage to access the recreational facilities.

Table 9: Choice of Location of Recreational Facilities

Choice of Location	Freq.	%
In each Faculty	43	31.4
Motion Ground Area	02	1.5
Central Location	34	24.8
Dam Area	09	6.6
Student Union Building Area	18	13.1
Around Existing Facilities	21	15.3
Outside Campus	3	2.2
Close to Senate Building	7	5.1
Total	137	100.0

Source: Authors' field survey, 2019.

8. SPATIAL DISTRIBUTION OF RECREATIONAL FACILITIES IN UNILORIN

The analysis of the spatial distribution of the recreational facilities in University of Ilorin was carried out to know the pattern of distribution of the facilities on campus. However, the result of the analysis showed that the computation of the Average Nearest Neighbor Analysis (NNA) on recreational facilities in UNILORIN returns a Nearest Neighbor Ratio R_n of 1.464568 with a critical value i.e. z-score of 3.555007 and at a significant p-value of 0.000378 (Table 10). This result simply shows that recreational facilities in University of Ilorin are dispersed with R_n value of 1.464568 since the value derived is more than 1 which is also tending to regular value of 2.15. This implies that the locations of recreational facilities on campus are far from each other, considering the fact that University of Ilorin has a large expanse of land (over 40000 hectares) with built up area of 43549367 sqm. However, distance may have negative effect on the patronage level of recreational facilities by staff members, as the distributions of these facilities are not regular that is, they are too distant from each other. However staff members do not have equal access to recreational facilities within the University campus. Of course, recreation planning fosters even distribution of recreational facilities. The essence of this is to encourage high patronage level of recreational facilities.

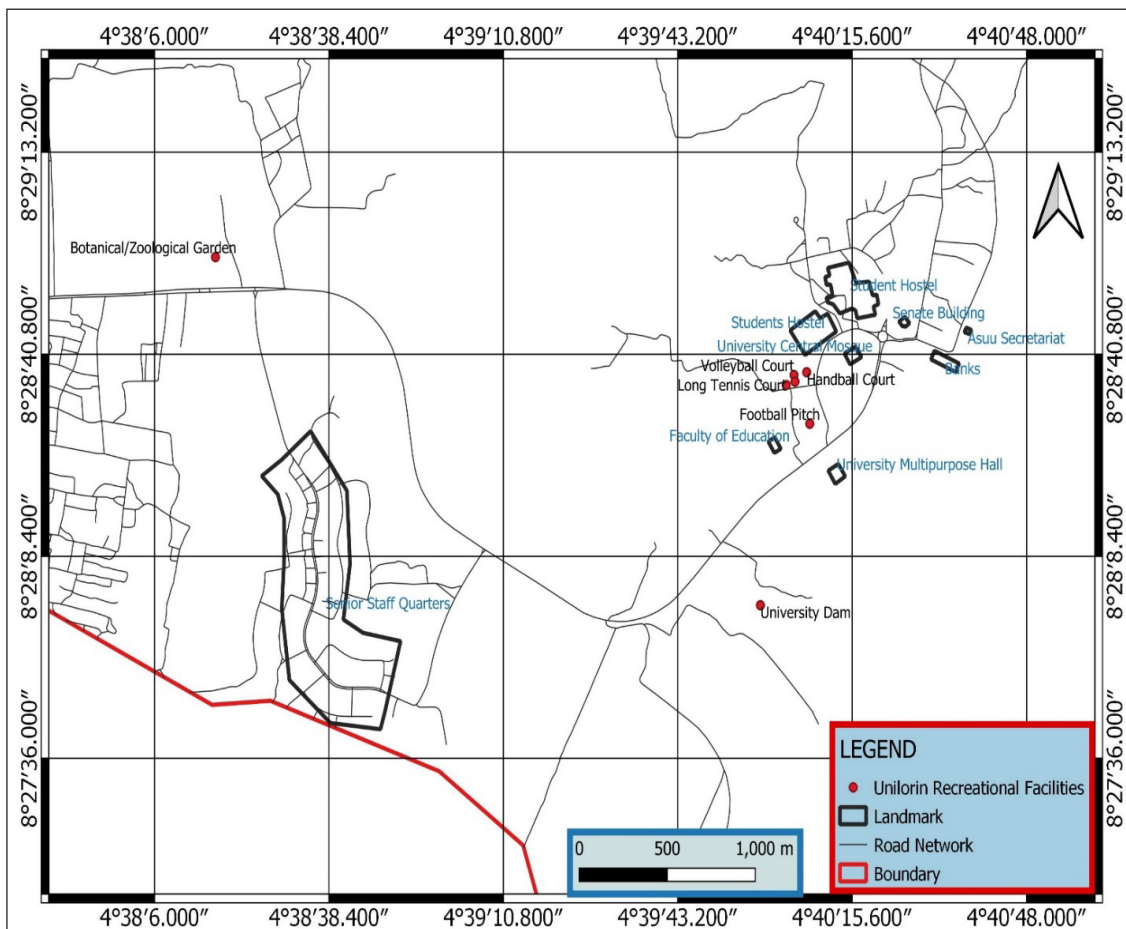
Provide the evidence of the nearest neighbourhood analysis in chart

Table 10: Average Nearest Neighbour Analysis in UNILORIN

Observed Mean Distance:	120.8120 Meters
Expected Mean Distance:	82.4899 Meters
Nearest Neighbor Ratio(Rn):	1.464568
z-score:	3.555007
p-value:	0.000378

Source: Author's field survey (2019).

Figure 3: Distribution Pattern of Recreational Facilities in UNILORIN



Source: Author's Field Survey (2019).

To determine the influence of place of residence staff members on their patronage of recreational facilities in the University, a hypothesis was formulated as follows: there is no relationship between staff's place of residence and patronage of recreational facilities. The hypothesis was tested using Pearson correlation analysis. The staff's patronage of recreational facilities was correlated to staff's place of residence. The table 16 shows that the P-value of 0.474 > 0.05. Thus, the null hypothesis will be rejected and the research hypothesis that there was no relationship between staff's place of residence and their utilisation or patronage of the Universities' recreational facilities will be accepted. This means that the patronage of recreational facilities by the staff members in the University is not being influenced by their place of residence. Whether staff members live within or outside the campus has nothing to do with their level of utilisation of the facilities.

Table 11: Pearson Correlations

		Place of Residence	Do you Utilize the Universities' recreational facilities?
Place of residence	Pearson Correlation	1	-0.038
	Sig. (2-tailed)		0.474
	N	267	273
Do you Utilize the Universities' recreational facilities?	Pearson Correlation	-0.038	1
	Sig. (2-tailed)	0.474	
	N	273	263

Source: Author's Field Survey (2019).

9. CONCLUSION

The importance of recreation cannot be over-emphasised. Apart from the fact that it fosters social cohesion, evidences have also shown that physical activity can improve not only the mental, but overall health and reduce the risk of chronic diseases such as heart disease, stroke, type 2 diabetes and some common cancers. Quality of working life is the key to success in any organisation and is a comprehensive program that increases employee's satisfaction as well as strengthens the learning and flexibility in their changing environment. Organisations that offer their employees a good quality of working life enjoy favourable indicators in attracting and retaining employees. Spatial distribution of recreational facilities is key to recreation planning. The need for campus recreation planning and active participation by staff members cannot be overemphasised. However, it is very important that all efforts must be put in place by the management of University of Ilorin to ensure that all the factors constituting impediments to the patronage of the recreational facilities in the Universities by staff members are addressed. Reduction of excess workload and the review of the Universities' master plan must be done so as to guide the future location and even distribution of the recreational facilities in the University.

10. RECOMMENDATIONS

Engagement in recreational activities is very key to one's physical and mental health and productivity. However, the management of recreational facilities in University Ilorin becomes very paramount as improvement on the physical conditions of the recreational facilities will largely encourage the patronage of recreational facilities by staff members in the University.

Participating in recreational activities has social, economic, physical and psychological benefits which must be understood by the staff members, so that they can be encouraged to be participating in recreational activities. The encouragement can be achieved through sensitisation of staff members on the importance of recreation as it will improve their physical and mental health and productivity.

More so, excess workload among the staff members in the University has been found to be the major factor impeding them from utilising the universities' recreational facilities. It is recommended that reduction of workload on staff by the school management

must be encouraged so as to improve on their level of participation in recreational activities as this will improve their level of physical and mental health and productivity.

Furthermore, organisation of more mandatory sport activities for staff members should be encouraged. It is believed that this will encourage all staff to choose their best form of recreational sport activities and participate actively in them.

Even distribution of recreational facilities. This can be made realistic by the review of the master plan of the University. Recreational resources such as natural and cultural resources, facilities, infrastructural, personnel, and management regulations and actions must be harmonised so that the benefits of participating in recreational activities (improved physical and mental health, family unity, civility, social integration, economic stimulation, work productivity, resource stewardship and conservation ethic among others) are maximized. The spatial distribution of future recreational facilities is considered and monitored to ensure that the facilities are evenly distributed. This is to make sure that staff members in their various locations on campus have equal access to the facilities as this will boost the level of patronage of recreational facilities.

In order to also enhance high patronage and participation in recreational activities, recreational facilities are expected to be in good condition, adequate and should be able to satisfy individual recreational desire.

11. REFERENCES

- Andereck, K. L., & Knopf, R. C. (2007). The Relationship Between Experiences Sought, Preferred Settings, Resource Conditions, and Management Preferences in an Urban-Proximate Recreation Area. *Journal of Park & Recreation Administration*, 25(4).
- Belkic, K., & Nedic, O. (2007). Workplace stressors and lifestyle-related cancer risk factors among female physicians: Assessment using the occupational stress index. *Journal of occupational health*, 49(1), 61-71.
- Bezold, C. P., Stark, J. H., Rundle, A., Konty, K., Day, S. E., Quinn, J., ... & Roux, A. V. D. (2017). Relationship between recreational resources in the school neighborhood and changes in fitness in New York City public school students. *Journal of urban health*, 94(1), 20-29.
- Butler, C. E., Clark, B. R., Burlis, T. L., Castillo, J. C., & Racette, S. B. (2015). Physical activity for campus employees: A university worksite wellness program. *Journal of Physical Activity and Health*, 12(4), 470-476.
- Çakir, G., Müderrisoğlu, H., & Kaya, L. G. (2016). Assessing the effects of long-term recreational activities on landscape changes in Abant Natural Park, Turkey. *Journal of forestry research*, 27(2), 453-461.
- Castle, J., Alman, R., Kostelnik, R., & Smith, S. (2015). Factors that affect the usage of fitness and recreation centers by students on College campuses. *Journal of Physical Education and Sports Management*, 2(2), 100-119.
- Chen, T., Hui, E. C. M., Lang, W., & Tao, L. (2016). People, recreational facility and physical activity: New-type urbanization planning for the healthy communities in China. *Habitat International*, 58, 12-22.
- Cleland, V., Hughes, C., Thornton, L., Squibb, K., Venn, A., & Ball, K. (2015). Environmental barriers and enablers to physical activity participation among rural adults: A qualitative study. *Health Promotion Journal of Australia*, 26(2), 99-104.
- Cohen, D. A., Ashwood, S., Scott, M., Overton, A., Evenson, K. R., Voorhees, C. C & McKenzie, T. L. (2006). Proximity to school and physical activity among middle school girls: The trial of activity for adolescent girls study. *Journal of Physical Activity and Health*, 3(s1), S129-S138.
- Cooper, K., & Barton, G. C. (2016). An exploration of physical activity and wellbeing in university employees. *Perspectives in public health*, 136(3), 152-160.
- Eratay, E., & Aydoğan, Y. (2015). Study of the relationship between leisure time activities and assertiveness levels of students of Abant İzzet Baysal University. *Procedia-Social and behavioral sciences*, 191, 2213-2218.
- Evans, A. B., & Allen-Collinson, J. (2016). From 'just a swimmer' to a 'swimming mother': Women's embodied experiences of recreational aquatic activity with pre-school children. *Leisure Studies*, 35(2), 141-156.
- Fine, M. B., Clark, M. N., & Scheuer, C. L. (2016). Value-added university services: The importance of on-campus recreational facilities. *Services Marketing Quarterly*, 37(1), 24-35.
- Forrester, S. (2015). Benefits of collegiate recreational sports participation: Results from the 2013 NASPA assessment and knowledge consortium study. *Recreational Sports Journal*, 39(1), 2-15.
- Gazmararian, J. A., Elon, L., Newsome, K., Schild, L., & Jacobson, K. L. (2013). A randomized prospective trial of a worksite intervention program to increase physical activity. *American Journal of Health Promotion*, 28(1), 32-40.
- Gnanapala, W. A. (2015). Tourists perception and satisfaction: Implications for destination management. *American Journal of Marketing Research*, 1(1), 7-19.
- Gül, A., Örucü, M. K., & Karaca, Ö. (2006). An approach for recreation suitability analysis to recreation planning in Gölcük Nature Park. *Environmental management*, 37(5), 606-625.
- Guo, J., & Liu, X. (2016). College students' consciousness of participation in leisure activities behavior related research. *International Journal of e-Education, e-Business, e-Management and e-Learning*, 6(3), 186.
- Hanson, M. (2013). How many institutions care about faculty and staff health programs?. *International Journal of Health Promotion and Education*, 51(2), 75-84.
- Harrison, P. A., & Narayan, G. (2003). Differences in behavior, psychological factors, and environmental factors associated with participation in school sports and other activities in adolescence. *Journal of School Health*, 73(3), 113-120. doi: 10.1111/j.1746-1561.2003.tb03585.
- Hashem, K., Akbar, H, Ali, S., & Masume, H., (2012). Campus recreation worldwide: A literature review. *International Journal of Academic Research in Business and Social Sciences*, (04), 132.
- Heath, G. W., Brownson, R. C., Kruger, J., Miles, R., Powell, K. E., & Ramsey, L. T. (2006). The effectiveness of urban design and land use and transport policies and practices to increase physical activity: a systematic review. *Journal of Physical Activity and Health*, 3(s1), S55-S76.
- Hlavsa, M. C., Roberts, V. A., Kahler, A. M., Hilborn, E. D., Mecher, T. R., Beach, M. J., ... & Yoder, J. S. (2015). Outbreaks of illness associated with recreational water—United States, 2011–2012. *MMWR. Morbidity and Mortality Weekly Report*, 64(24), 668.

- Kaczynski, A. T., & Henderson, K. A. (2007). Environmental correlates of physical activity: A review of evidence about parks and recreation. *Leisure Sciences*, 29(4), 315-354.
- Kaczynski, A. T., & Henderson, K. A. (2008). Parks and recreation settings and active living: a review of associations with physical activity function and intensity. *Journal of Physical Activity and Health*, 5(4), 619-632.
- Kaplan, R. (1993). The role of nature in the context of the workplace. *Landscape and urban planning*, 26(1-4), 193-201.
- Keller, J., Gellert, P., Knoll, N., Schneider, M., & Ernsting, A. (2016). Self-efficacy and planning as predictors of physical activity in the context of workplace health promotion. *Applied Psychology: Health and Well-Being*, 8(3), 301-321.
- Lagarese, B. E. S. (2014). Evaluating waterfront uses for tourism and recreation with acceptance to changes: the case of Manado Waterfront Development. *GSTF Journal on Business Review (GBR)*, 3(1).
- Lee, T. H., & Jan, F. H. (2015). The effects of recreation experience, environmental attitude, and biospheric value on the environmentally responsible behavior of nature-based tourists. *Environmental management*, 56(1), 193-208.
- Mokaya, S., & Gitari, J. W. (2012). Effects of workplace recreation on employee performance: The case of Kenya Utalii College. *International Journal of Humanities and Social Science*, 2(3), 176-183.
- Moseley, L. (2015). *The Effect of a Structured Exercise Program on Obese African American Participants' Physical and Psychological Health*. AT Still University of Health Sciences.
- Myers, C. A., Slack, T., Martin, C. K., Broyles, S. T., & Heymsfield, S. B. (2015). Regional disparities in obesity prevalence in the United States: A spatial regime analysis. *Obesity*, 23(2), 481-487.
- Næss, P., Strand, A., Wolday, F., & Stefansdottir, H. (2019). Residential location, commuting and non-work travel in two urban areas of different size and with different center structures. *Progress in Planning*, 128, 1-36.
- Olaitan, O. L., Bakinde, S. T. & Ibraheem, T.O. (2012). Recreational activities and body exercise among secondary school students in Kwara State, Nigeria. *International Journal of Research in Ayurveda and Pharmacy*, 3 (5), 690-694.
- Onohwapor, A. E. O., & Eboh, L. O. (2006). Perceived barriers to recreational activities for healthy living among academic staff of College of Education, Warri, Delta State. *Journal of International Council for Health, Physical Education, Recreation, Sports and Dance*, 1, 109-113.
- Pomfret, G., & Bramwell, B. (2016). The characteristics and motivational decisions of outdoor adventure tourists: A review and analysis. *Current Issues in Tourism*, 19(14), 1447-1478.
- Ransdell, L.B., Dratt, J., Kennedy, C., O'Neill, S., and DeVoe, D. (2001). Daughters and mothers exercising together (DAMET): a 12-week pilot project designed to improve physical self-perception and increase recreational physical activity. *Women & Health*, 33(3/4), 113-129.
- Rissel, C., Greaves, S., Wen, L. M., Crane, M., & Standen, C. (2015). Use of and short-term impacts of new cycling infrastructure in inner-Sydney, Australia: A quasi-experimental design. *International Journal of Behavioral Nutrition and Physical Activity*, 12(1), 129.
- Sugiyama, T., Howard, N. J., Paquet, C., Coffee, N. T., Taylor, A. W., & Daniel, M. (2015). Do relationships between environmental attributes and recreational walking vary according to area-level Socio-economic status?. *Journal of urban health*, 92(2), 253-264.
- Thompson, C. W., Roe, J., Aspinall, P., Mitchell, R., Clow, A., & Miller, D. (2012). More green space is linked to less stress in deprived communities: Evidence from salivary cortisol patterns. *Landscape and urban planning*, 105(3), 221-229.
- Tudor-Locke, C., Craig, C. L., Brown, W. J., Clemes, S. A., De Cocker, K., Giles-Corti, B., Hatano, Y., Inoue, S., Matsudo, S. M., Mutrie, N., Oppert J. M., Rowe, D. A., Schmidt, M. D., Schofield, G. M., Spence, J. C., Teixeira, P. J Tully, M. A., & Blair, S. N. (2011). How many steps/day are enough? For adults. *International Journal of Behavioral Nutrition and Physical Activity*, 8(1), 79.
- Turkmen, M., Ozkan, A., Murat, K. U. L., & Bozkus, T. (2015). Investigation of the relationship between physical activity level and healthy life-style behaviors of academic staff. *Educational Research and Reviews*, 10(5), 577-581.
- Wang, T. W., & Wu, C. T. (2016). Identifying leisure constraints among college students-application of a fuzzy approach. *International Journal of Organizational Innovation*, 8(4).
- World Health Organization (2010). Population-based prevention strategies for childhood obesity: report of a WHO forum and technical meeting, Geneva, 15-17.
- Yu, H. S., Zhang, J. J., Kim, D. H., Chen, K. K., Henderson, C., Min, S. D., & Huang, H. (2014). Service quality, perceived value, customer satisfaction, and behavioral intention among fitness center members aged 60 years and over. *Social Behavior and Personality: An international journal*, 42(5), 757-767.
- Zhang, J. J., DeMichele, D. J., & Connaughton, D. P. (2004). Job satisfaction among mid-level collegiate campus recreation program administrators. *Journal of Sport Behavior*, 27(2).

