DOI: https://doi.org/10.66884/kesj.2020.31btkwwn

Kaduna State University Environmental Science Journal (KESJ) vol. 1 Issue 2

SPATIAL USE PATTERN OF GENDERED-SPACES AMONG FEMALE STUDENTS IN UNIVERSITY CAMPUS MOSQUES

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Abstract:

Extant literature has over the years suggested uniformity and differences in the way different genders use spaces in the same building. This is especially true in campus mosque buildings where both genders offer prayers together. This paper measured the spatial use pattern of gendered spaces among female students of Ahmadu Bello University, Zaria- Nigeria using four mosques as case studies. The methodology adopted was essentially a case study approach supported with a qualitative in-depth interview. Physical survey was also undertaken using a questionnaire. In the analysis, mathematical relationships which measured the extent of use of spaces as well as habitability indices of measured variables were used. Findings on the level of use of the gendered spaces indicated that the greater percentage of respondents (78.1%) across the four mosques used these spaces for five daily prayers (Khamsu Salawat). On the extent of use of gendered spaces (HIsp) however, the results indicated a uniformity for observance of prayers across all four mosques (Education M=0.56, Physical Sciences M=0.58, Medicine M=0.58 and Vet. Medicine M=0.61). Findings suggest that the closer the worshipper is to her faculty mosque, the more likely to use the gendered spaces for all three types of use patterns i.e. spiritual, educational and social. It also suggested that the more privacy is provided to the female worshippers, the more socialization takes place among themselves. The design implications of these findings include the need to provide adequate spaces and facilities as a way of accommodating more worshippers, provision of more privacy around the gendered spaces by way of providing dedicated toilet facilities within the confine of the gendered spaces.

Keywords: *Ahmadu Bello University, Academic Core Area, Campus Mosque, Gendered Spaces,*

1.0 Introduction

In general, the term 'Mosque' connotes the meaning of "place of prostration," which is used for the attainment of spiritual growth and development for the Muslims faithful (MacKrell, 2012; ISSA & WII n.d). It is a term that was generally believed to have evolved from the Arabic word '*Masjid*' (Petersen, 1996; Nurul 'Athiqah & Alice, 2014). Mosques in general, serve as holy-places for worship as well as other multiple functions (Spahic, 2010). As an element of the built environment, it similarly serves as a catalyst for the physical development of the surrounding area as exhibited in Mecca and Medina (Hamid, 2012). Overall, mosques are known to serve worshippers in many aspects and activities in addition to worship. Some of these include promoting the potentialities of tourism (Kessler, 2015; Al-Hamarneh & Steiner, 2004), sustainable community (Baharudin & Ismail, 2014; Tajudeen, 1998), civility and culture among worshippers (AbulQaraya, 2015) among many other functions. In other literature sources however, the roles of women in campus mosque were largely measured in terms of their attendance to worship activities (Olanipekun, 2010). Operationally, four key social attributes of 'campus mosques' were revealed by Dewiyanti & Setia Budi (2015)

which include use of the mosque by campus community, have management team follow a regeneration process and be located on campus or near the campus area respectively. In the context of this paper, the campus mosque shall refer to such buildings or spaces made available in higher institutions of learning among staff, students, visitors and proximate communities.

The relationship between mosque spaces and how they were used were investigated from many perspectives by many authors. For example, the works of Hillenbrand (1994), Adams (2017), and Serageldin, Ismail, and Steele (1996) explored how mosque spaces were used for worship purposes. Similarly, AbulQaraya (1994), Ismail, & Tajuddin (2009) worked on the significance of mosque spaces to achieve political influences and yet studies which focused on and how culture, civility as well as communality were promoted were also undertaken (Baharudin & Ismail, 2014; Tajudeen, 2008). Other extant studies have similarly, discussed spatial requirements for the use of different genders for worship and other activities in mosques (Utaberta, Samia Omi, Roslan, Mohd Ariffin, 2018; Jafroudi, Hakpour & Vahabi, 2015; Woodlock, 2010), influences of gender differences in terms of spatial uses (Eskandari, 2011; Wadud,1999) and how spaces in mosques facilitate activities such as studies, cultural events, leadership training in addition to worship (Dewiyanti, Martokusumo, Faisal & Budi, 2016). However, there is currently little or no detailed study known to the authors, which specifically measured the spatial use pattern of gendered spaces among female university students in a campus mosque. This paper therefore, aims to fill in this gap specifically with focus on the extent of use of gendered spaces to achieve spiritual worship, enhance education as well as promote social values of worshippers.

1.1 An Overview of the Study area

The Ahmadu Bello University, Zaria is a public funded university established in 1962, with a current population of over fifty thousand undergraduate and five thousand postgraduate students (Sada, 2017), a total number of eleven thousand working staff comprising of academic and non-academic staff, covering a landmass of seven thousand hectares. The university spreads across two campuses; Samaru and Congo campuses. Historically, the first mosque constructed in Samaru campus was the central mosque that is still in use by the university community for five daily prayers (*Khamsu Salawat*) as well as for weekly Friday prayer (*Salatul Jummat*).

In the Samaru campus where the study was conducted, four categories of campus mosques were distinguishable based on their locations (Hamza, Musa & Gidado, 2017); academic core areas, administrative areas, student's hostels and in the staff quarters. This paper focused on mosques in the academic core of the university since they provided basis for their use by all students during the official working hours (Hamza & Musa, 2019; Hamza & Ladan 2019). Most students in campus observe atleast two *Khamsu Salawat* prayers of *Zuhr* and *Asr* prayers and in some cases *Magrib* prayers (Hamza, Musa & Gidado, 2017).

Figure 1. Showing the locations of some of the mosques located in the Academic core area of Ahmadu Bello University, Zaria. The mosques used as case studies (marked as rectangles) are located in the Faculties of Veterinary Medicine, Medicine, Education and Physical Sciences respectively. (Source: Adapted from Google Earth, 2019)

1.2 The Architectural Characteristics of Case Study Mosques

The Faculty of Veterinary Medicine mosque which is shown in Figure 2 (a-e) is the most recent of the four case studied mosques. Architecturally, the mosque was designed to take total number of three hundred worshippers at full capacity including the verandahs. As shown in the floor plan (Figure 2 a), the total prayer area for both the male and female worshippers of the mosque totalled at least two hundred and seventy square meters. The female prayer area has an area of slightly over thirty-five; a figure which constitute just over thirteen percent of total area. Because the toilet facility is presently under construction, the female students use the verandah attached to the rear part of the mosque for ablution and for other purposes such baby sitting and social interactions (see Figure 2 b & c).

On the other hand, the faculty of physical sciences mosque is the oldest and the largest of the four studied mosques (PP & MS, 2019). Architecturally, the faculty of physical sciences mosque accommodates approximately five hundred worshippers in both the enclosed and its vast verandah spaces. The mosque was provided with a toilet facility for each of male and female worshippers. The architectural characteristics are similar across all studied mosques (Figure 2 d-e) and they include partition between male and female prayer areas with particle board, finished with carpet over tile floor finish, book shelves. Other elements include use of carpet as the floor finish over tile, a multi-purpose hanger used for hanging hijab and bags.

1.3 Measures of the Spiritual, Educational and Social activities in Selected Mosques

Four mosques located at the academic core area were selected as case studies because of the availability of dedicated female prayer spaces and whose construction were duly approved by the department of Works and Municipalities of the university. The spiritual activities measured include how and the extent of use of spaces in the observance of prayers (Obligatory and non-obligatory), while the educational activities measured include how the female students use the gendered spaces for recitation of Quran (Qira'atul Quran), learning the Quran and other religious books, academic works and assignments. Finally, the social activities measured include the extent the students use spaces to enhance socialization, communication, support among themselves, relaxation, sleeping, baby sitting and while away time (gisting) between lecture times.

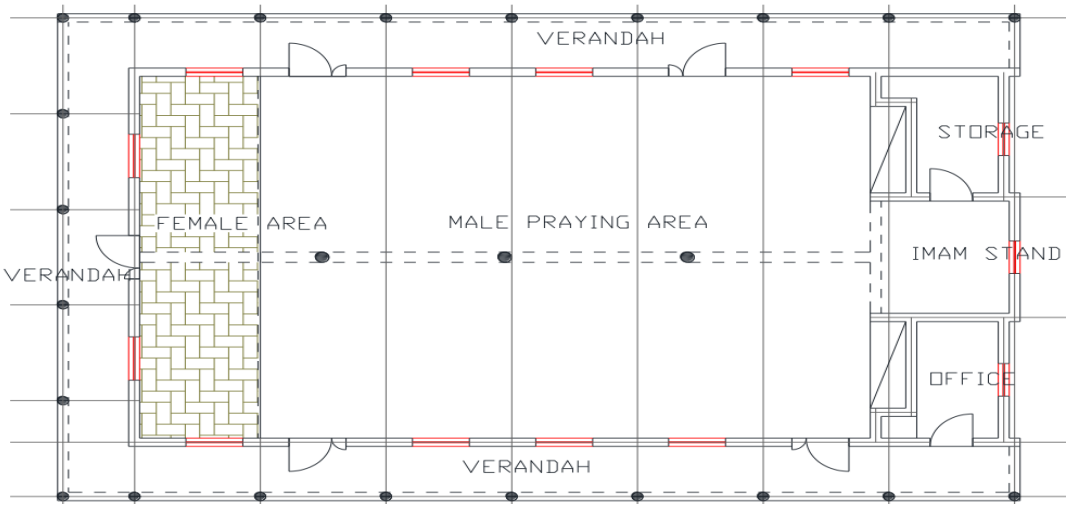


Figure 2 (a). Ground Floor Plan of the Faculty of Veterinary Medicine mosque showing the male and female praying areas.

(Source; department of physical planning and municipal services (PP & MS, 2019)

Figure 2(b). Figure 2(c)

Figures 2 (b &c). Exterior views of the Faculty of Veterinary Medicine mosque. the female students use the verandah

attached to the rear part of the mosque for ablution (a) and other preparations for prayer (b). (Source: Authors Survey, 2019)

Figure 2 (d) Figure 2 (e)

Figures 2 (d & e). Interior Views of the Faculty of Veterinary Medicine mosque. Notice the 2.4m high particle board

(d) used as a partition element which separates the female from the male prayer area (d-e). Source: Authors Survey, (2019)

1.4 Objectives of the paper

The main aim of this paper is to measure the spatial use pattern of gendered spaces among female students in on-campus mosques with specific focus on the mosques located in the academic core areas of Ahmadu Bello University, Zaria. To achieve the stated aim, the following objectives were set:

i) provide contextual understanding of the concept of gendered spaces in general and how they relate to university campus mosque.
ii) discuss how the female students use the gendered spaces in campus mosque with recourse to spiritual, educational and social needs and finally,
iii) to measure the spatial use pattern in terms of the level, frequency and the extent of use of the gendered spaces among female students on campus mosque

2.0 Theoretical Framework: Gendered Spaces in Mosques

According online oxford dictionary (2019), the word gender refers to either of the two sexes i.e. male and or female, with reference to their social and cultural rather than biological differences. It further defines it as ‘’members of a particular gender’’ (male or female) considered as a group. However, a more comprehensive definition was provided in a World Health Organization document defines it *‘’as "socially constructed characteristics of women and men, such as norms, roles and relationships of and between groups of women and men and which varies from society to society and can be changed."* This operational definition by WHO gave rise to many concepts each seeking to further promote the understanding of issues which borders on gender equality and inequality, and discrimination (Bryan & Varat, 2008). For instance, proponents of gender equality seek to facilitate ‘access to rights or opportunities to be unaffected by gender differences (Nyman, Reinikainen & Eriksson, 2018; Tim Huh, Lee, Park, & Park, 2018). Similarly, scholars whose works centered on gender inequality seek to promote understanding that differences, which exist among genders across many domains such as in educational spheres, life expectancy, personality needs to be reduced through sustained efforts (Willie, Kershaw, 2019; Thelwall, Bailey, Makita, Sud, & Madalli, 2019). In the field of architecture, however, scholars have shown great interest on individual differences on spatial use patterns among genders within the context of urban centers, residential areas and at public institutions. Examples of studies at the urban scale include the works of Spain (2014) and Güney & Kubat (2010) where they both highlighted how urban development processes and structure limited the female gender opportunities outside the home.

So what is our operational meaning of a gendered space? due to its relevance to the field of architecture this paper adopted the operational definition of gendered spaces as proposed by Gaber (2012) as a ‘’*clear demarcation and limitation of each gender who are prescribed allocated spaces through the use of architectural devices such as walls, balconies, separate rooms, separate doors, etc. and often accompanied with explicit signage directing where each gender is allowed access’’*. Examples, of spaces for the female gender as suggested by Kath (2004), Murphy (2014) include those generally referred to as women-only space, women only toilets, women parking spaces and women only changing rooms. In mosques, screened or demarcated spaces were provided usually at the back of the mosque for the use of female worshippers (Rachel, 2010; Ingrid, 2006; Dewiyanti, Setia & Budi, 2015). This paper however, focused on how spaces provided to the female gender in campus

mosques are utilized in enhancing their spiritual values, furthering their educational status and promoting social values and interactions.

3.0 Methodology

In this paper, cases study approach was adopted supported with a qualitative, in-depth interview as the guiding methodology. A structured questionnaire was later developed based upon the respondents input from the interviews. A physical survey of the spaces used by the female students in the four studied mosques was undertaken to obtain the primary data, supplemented by still pictures. The selected mosques used as case studies were located in the Faculties of Veterinary Medicine, Medicine, Education and Physical Sciences respectively because they were duly designed and supervised by professionals in other words recognized by department of works and Municipalities of the University. In all, four hundred questionnaires were distributed (*DN*=400) to the respondents across the four mosques, However, a total number of two hundred and seventy-five (*RN*=275) were returned which represents atleast sixty-eight percent (68.75%) of distributed questionnaires. The response rate of 68.75% percent recorded is considered sufficient due to previous studies (Oladapo, 2006) who conducted similar qualitative survey with lower response rate (Ibem, 2011).

The questionnaire was divided into three sections (A-C). In the first section (A), the personal (demographic attributes) data of respondents were measured. In the second section (B), the purposes/uses to which the gendered spaces were put to were similarly measured. The purposes/uses were broadly categorized into three; spiritual, educational and social. Similarly, in the third section (C), the frequency of use of gendered spaces (*EspI*) was measured. The frequency of use of the spaces calculates the total number of actual scores given by all respondents in proportion to maximum possible scores based on Likert scale numbered from 1-5 and calibrated as 1 (rarely frequent), 2 (not frequent), 3 (frequent), 4 (very frequent) and lastly, 5 (always). To obtain the values of the frequency of uses of all the variable, mathematical formulae was used. The formulae which is indicated below calculates the relationship between the values inputted by respondents and the maximum values attainable. In formulae (1), *EspI* represent the frequency of use of gendered spaces in terms of spiritual, educational and social uses. *N* is the total number of respondents, *y*- is the actual total score given by respondents while *Y*-represent the maximum possible score any of the above variables (uses) could score.

$$\text{EspI} = \left(\sum_{I=1} \frac{N}{yI} \div \sum_{I=1} \frac{N}{YI} \right) \quad 1\ldots\ldots\ldots\ldots\ldots\ldots$$

The final analysis undertaken was to measure the Habitability indexes (*HIsp*) of the use pattern of which the gendered spaces were put to. The *HI* refers to the extent or contribution of each of the whole variables to the overall use pattern of respondents in terms of spiritual, educational and social uses. To calculate the habitability index (*HIsp*), a mathematical formula (2) was similarly used. The formula calculates the contribution of a particular variable in relation to the whole and is then determined by adding up all the scores that respondents gave to a particular variable, which is then

divided by the maximum possible score for that variable (in relation to the spiritual, educational and social uses. In the equation, *N* is the number of respondents, *aye* is the actual score of all respondents (*yth*) on one variable, (*eth*). *Aye* is the maximum possible scores that respondents (*Y*) could give to one element (*e*) on the five point Likert scale.

$$HIsp = \left(\sum_{I=1}^{N} aye \div \sum_{I=1}^{N} Aye\right)$$

2……

Using this formula, therefore, a respondent could score a maximum of 5 or a minimum of 1- based on measures of Likert scale used. Therefore, the higher the score to 1, the higher is the contribution of that while the closer the respondents score to 0 the lower the degree of contribution to use pattern

4.0 Results of Findings

4.1 Findings of Demographic Attributes of Respondents

The results of the analysis of demographic attributes of respondents which is shown Table 1, revealed that the age range of between 21 to 25 years constitutes the majority of respondents with total of one hundred and thirty-eight (138) across the four mosques; a figure that is more than half (50.2%) of the total number of all respondents. Married respondents who bring children to the mosque were very few (19 or only 0.07%) across the four mosques. Majority of respondents (58.9% of all respondents across the four mosques were undergraduate students with the faculty of physical sciences mosque having the highest number of 63 or 22.9%. Additionally, the length of time spent by respondents offering prayers at the various mosques indicated that majority spent between 1-5 years (83.6% of total number of respondents) with faculty of physical sciences having the highest number of such respondents (72 or 33.1% across the four mosques). Lastly, the results also indicated that majority of respondents offer both afternoon (*Zuhr*) and late afternoon (*Asr*) prayers with 134 worshippers or 48.7%, with faculty of physical sciences recording the highest number of 49 respondents or 17.8%.

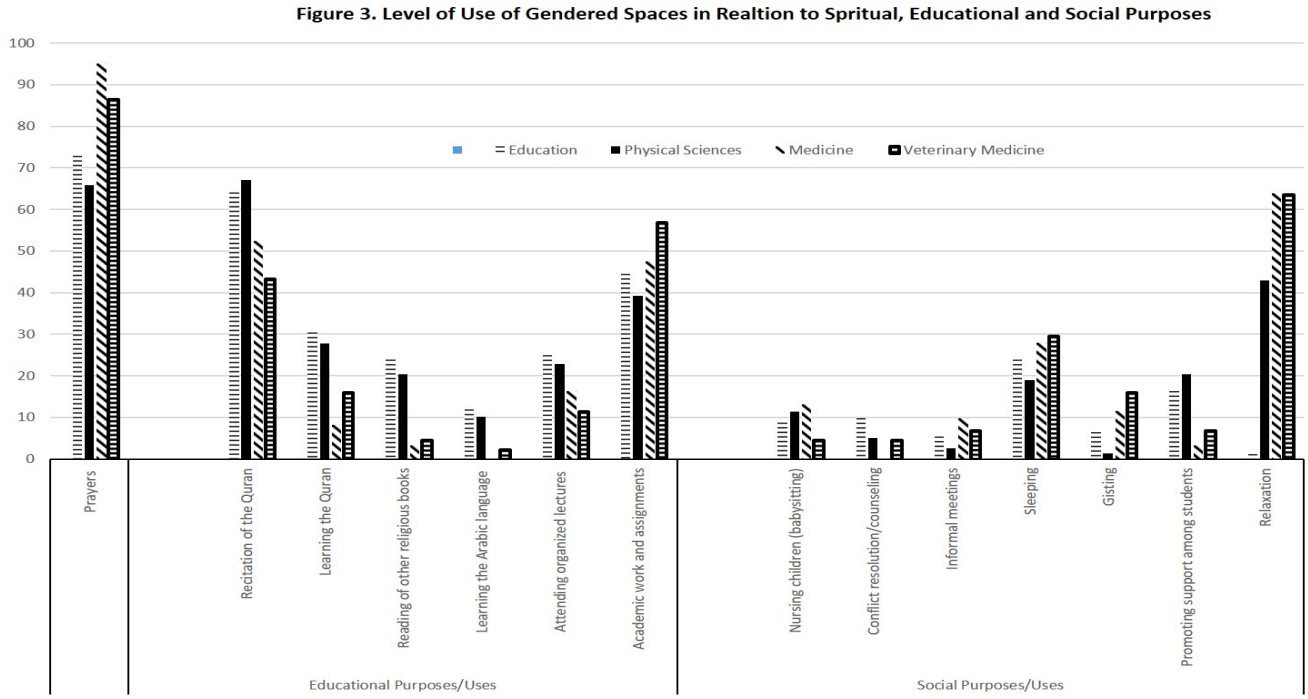
Table 1. Demographic Attributes of Respondents

Attributes		Faculty Mosques							
		Education		Physical Sciences		Medicine		Veterinary Medicine	
		Freq. (*N*=91)	Perc. (%)	Freq. (*N*=79)	Perc. (%)	Freq. (*N*=61)	Perc. (%)	Freq. (*N*=44)	Perc. (%)
Age	16-20 Years	38	41.3	32	40.5	28	45.9	10	22.7
	21-25	38	41.3	42	53.2	24	39.3	34	77.3
	26-30	13	14.1	4	5.1	5	8.2		
	31-above	2	2.2	1	1.3	3	4.9		
Marital Status	Single	67	72.8	64	81.0	39	63.9	37	84.1
	Married	24	26.1	12	15.2	19	31.1	5	11.9
	Divorced			1	1.3	1	1.6		
	Widowed			1	1.3				
Do you bring baby to the Mosque	Yes	7	7.6	3	3.8	7	11.5	2	4.5
	No	42	45.7	28	35.4	21	34.4	7	15.9
Target Qualification Of Respondents	Diploma	18	19.6	6	7.6	6	9.8	1	2.3
	Higher/ Diploma	5	5.4	1	1.3	46	75.4	3	6.8
	Degree	58	63.0	63	79.7	6	9.8	35	79.5
	MSc/M. A	9	9.8	7	8.9	1	1.3	1	2.3
	PhD			1	1.3	1	1.6	1	2.3
Length of time Praying at the Mosque	1-5 Years	70	70.1	72	91.1	55	90.2	33	75.0
	6-10	6	6.5	1	1.3	1	1.6	1	2.3
	11-15	1	1.1	1	1.3			1	2.3
	Above 15							1	2.3
Frequented Prayers	Afternoon (*Zuhr*)	39	42.4	18	22.8	31	50.8	14	31.8
	Late afternoon (*Asr*)	5	5.4	2	2.5	3	4.9	3	6.8
	Both *Zuhr* and *Asr*	39	42.4	49	62.0	23	37.7	23	52.3
	Evening (*Magrib*)	3	3.3	8	10.1			1	2.3
	Late Evening (*Isnai*)								
	Morning (*Subh*)								

Source: Authors Survey (2019)

4.2. Analysis Results of Level of Use of Gendered Spaces in Relation to Spiritual, Educational and Social Purposes/Uses

As shown in Figure 3, the results indicated that majority of respondents (two hundred and fifteen or 78.1% of all the respondents) used the gendered spaces for prayers (*Khamsu Salawat*) under the spiritual purposes/uses. Here, the faculty of medicine mosque recorded the highest percentage with 95.1% of their respondents who offer prayers, while the faculty of physical sciences recorded the least percentage (65.8%). Under the educational purposes/uses however, the highest percentage of respondents (59.1%) of all respondents across the four mosques used the spaces for the 'recitation of the Quran'. However, the percentage of respondents who used the gendered spaces for ''learning the Arabic language (speaking and writing) constituted the least number of worshippers (0.72%). Lastly, under the social purposes/uses, majority of respondents used gendered spaces for sleeping with 24.3% across the four mosques. The results which indicated that majority used the spaces for prayer and recitation of the Quran underscored the need to increase female prayer spaces in future building cycle while the number of shelves for keeping the Quran need to be increased to take many at a time.



Source: Authors Survey, (2019)

4.3 Analysis Results of the Frequency of Use Indices (EspI) of Gendered Spaces in Relation to Spiritual, Educational and Social Purposes

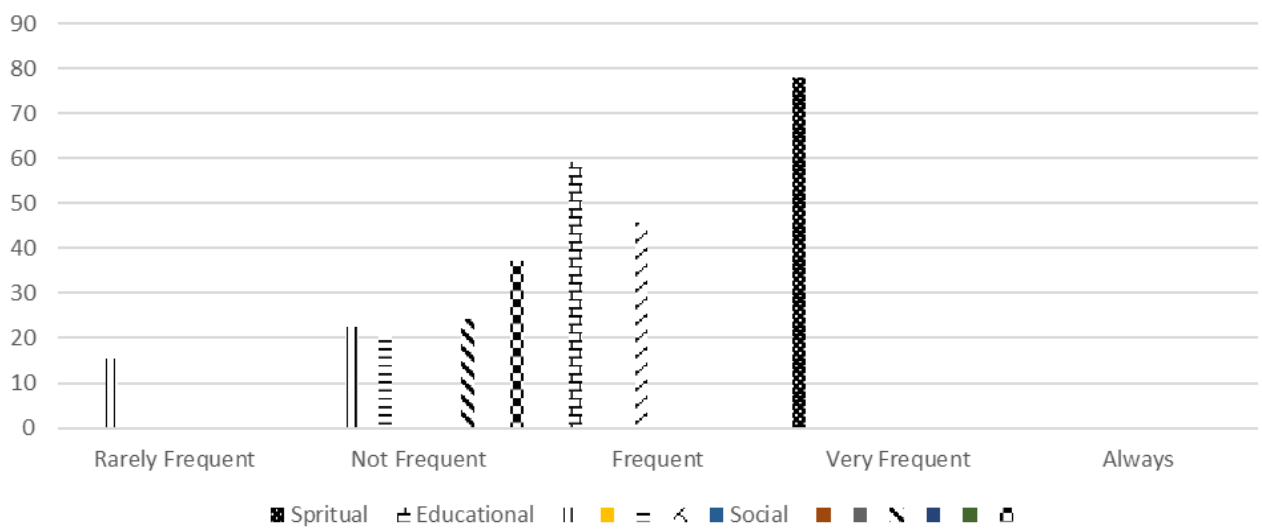
The Frequency of use indices of gendered spaces (*EspI*) was measured in terms of the proportions of respondents that fall in a particular score range. The score ranges were classified into percentage across five score-groups; less than 20% which indicate ‘’Rarely Frequent’ followed by 20-39% ‘’Not Frequent’’, 40-59% ‘’Frequent’’, 60-79% ‘’Very Frequent’’ and 80-100% ‘’Always’. The results as shown in Table 2 below, indicated that respondents who fall under ‘’Very Frequent’’ (VF) score group (i.e. 60-79%) used the gendered spaces for prayer (78.1%) and constitute the highest proportion. Under educational purposes, the highest proportion under ‘’Frequent’’ (learning the Quran) constitute 59.2%, while the least proportion of 0.08% fall under ‘’Rarely’ Frequent’’ learning the Arabic language. A further illustration of the score ranges as shown in Figure 4 suggested that the highest proportion of respondents used the gendered spaces for prayer very frequently having fall under the score range of between 60-79% while the least proportion of respondents which fall under 0-20% score range used the gendered spaces for conflict resolution. Hence, spaces for observance of prayer should as observed earlier be increased or made flexible (could be increased or reduced using movable partition elements) when the need arises.

Table 2. Results of the Extent of Use of Gendered Spaces in Relation to Spiritual, Educational and Social Purposes

Score Range of Respondents in Proportion		< 20% (Rarely Frequent)		20-39% (Not Frequent)		40-59% (Frequent)		60-79% (Very Frequent)		80-100% (Always)	
Purposes/Use		Freq.	(%)	Freq.	(%)	Freq.	(%)	Freq.	(%)	Freq.	(%)
Spiritual Purposes/Uses	Prayer							215	78.1		
Educational Purposes/Uses	Recitation of the Quran					163	59.2				
	Learning the Quran			62	22.5						
	Reading of other religious books	42	15.3								
	Learning the Arabic language	20	0.08								
	Attending organized lectures			56	20.3						
	Academic work and assignments					126	45.8				
Social Purposes/Uses	Nursing children (baby-sitting)	27	0.1								
	Conflict resolution/counseling	15	0.05								
	Informal meetings	20	0.07								
	Sleeping			67	24.3						
	Gisting	20	0.07								
	Promoting support to fellow students	36	0.13								
	Relaxation			102	37.1						
Total number of Respondents	***N = 275***										

Source: Authors Survey (2019)

Figure 2. Frequency of Use Distribution Index according to Score Groupings in relation to Spiritual, Educational and Social Use Pattern



The Habitability Index (*HIsp*) indicates the most frequent spatial use pattern of gendered spaces among female worshippers. A s shown in Table 3, a Mean value of M=0.61 was the highest obtained for prayer. It also shows similar results in term of the use of gendered spaces by respondents for prayers across the four mosques (Education M=*0.56*,

Physical Sciences M=*0.58*, Medicine M=*0.58* and Vet. Medicine M=*0.61*). The results however, revealed some variations in spatial use patterns across the four mosques. For example, academic work and assignments were the second important spatial use patterns in education (M=0.39), medicine (M=0.32) and in Veterinary medicine (M=0.36). The results have further shown that there is also a uniformity of scores of *HIsp* across all mosques for use patterns such as academic work and assignments and relaxation with mean values of M=0.32 to M=0.39 respectively.

Table 3 Results of Habitability Index of variables of gendered spaces (*HIsp*) in Relation to Spiritual, Educational and Social Purposes

Faculty Mosques

	Education		Physical Sciences		Medicine		Veterinary Medicine	
HIsp	**N=91**	***HIsp***	**N=79**	***HIsp***	**N=61**	***HIsp***	**N=44**	***HIsp***
Prayer		***0.56***		***0.58***		***0.58***		***0.61***
Recitation of the Quran		*0.36*		***0.4***		*0.28*		*0.29*
Learning the Quran		*0.31*		*0.29*		*0.11*		*0.18*
Reading of other religious books		*0.24*		*0.23*		*0.09*		*0.12*
Learning the Arabic language		***0.19***		***0.18***		***0.08***		***0.1***
Attending organized lectures		*0.28*		*0.26*		*0.13*		*0.14*
Academic work and assignments		***0.39***		*0.32*		***0.32***		***0.36***
Nursing children (baby-sitting)		***0.15***		*0.16*		*0.15*		***0.1***
Conflict resolution/counseling		*0.18*		*0.12*		***0.07***		*0.11*
Informal meetings		*0.17*		***0.11***		*0.12*		*0.11*
Sleeping		*0.24*		*0.19*		*0.2*		*0.23*
Gisting		*0.19*		*0.13*		*0.14*		*0.2*
Promoting support to fellow students		*0.26*		*0.19*		*0.09*		*0.16*
Relaxation		***0.37***		***0.32***		***0.35***		***0.32***
	N=91		**N=79**		**N=61**		**N=44**	
Total number of Respondents	***N = 275***							

Source: Authors Survey (2019)

6.0 Conclusion and Recommendation

The results of demographic analysis of respondents have shown that majority of respondents were single undergraduate students who have worshipped in the same mosque within the period of between 1-5 years and whose majority offered only afternoon (*Zuhr*) and late afternoon (*Asr*) or both *Zuhr* and *Asr* prayers. The results of analysis on the use pattern of gendered spaces in relation to spiritual, educational and social purposes indicated that nearly all respondents across the four mosques used the gendered spaces firstly to offer ''prayers'' (*Khamsu Salawat* and *Nafil*) as an element of spiritual purposes followed by ''recitation of the Quran'' under the educational purposes and ''sleeping'' under the social purposes/uses.

Since the majority of worshippers pray for maximum of five years, there will be need to undertake major maintenance or renovation on the mosque after this period since it is assumed that majority of worshippers after this period were likely to be new set of students who will come from different backgrounds. The results which indicate that

majority of students used the mosques only during the official working hours of the university underscored the need for other mosques elsewhere which can be used after official working hours preferably in hostels. For the few students who offer the evening (*Magrib*) prayers, in the faculty of physical sciences mosque, this indicated the need for night surveillance systems within the vicinity of the mosque. In addition, architectural elements that further facilitate prayers such as ablution fountain and toilets for purification should also be provided. Furthermore, to enhance the educational pursuit of worshippers the (recitation of the *Quran)* in the gendered spaces, there will be overarching need to provide in-built closets in the walls above window level or wooden movable cabinets to keep the *Quran* in the gendered spaces. On social purposes whereby respondents used the spaces for general ‘’rest’’ for female students should be provided. If these spaces are segregated based on gender, they are likely to decongest the mosques.

The dominance of ‘’prayer’’ in the *HIsp* underlies the need to provide adequate spaces for the use of female students in campus mosques by way of either an increased spaces within the mosque or a screened space that should be directly linked to the gendered spaces as a way of accommodating more worshippers. The exposure levels of gendered spaces to the public which has been found to affect use patterns should be addressed. This can be achieved through provision of a partition wall or the use of shrubs. In addition, separate toilet facilities should be provided and enclosed within the confine of the gendered spaces to reduce female worshippers’ exposure and thereby enhancing their privacy, which is a key ingredient which affect the overall spatial use pattern of female worshippers in university mosques.

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