FACTA UNIVERSITATIS

Series: Architecture and Civil Engineering Vol. 19, No 1, 2021, pp. 115-128

https://doi.org/10.2298/FUACE210818009A

Original Scientific Paper

DOMESTIC SPACE UTILISATION AND GENDER IDENTITY AMONG STAFF OF OSUN STATE UNIVERSITY, OSOGBO, NIGERIA

UDC 904:72(497.11) 711.168(497.11)

Aderonke Olufumi Ajayi¹, Jayeoba Babatunde², Ayodeji Olusola Ajayi²

¹Department of Architecture, Obafemi Awolowo University, Ile-Ife, Nigeria ²Department of Urban and Regional Planning, Osun State University, Osogbo, Nigeria

Abstract. Gender identities are expressions of masculine or feminine natures and interpreted within socio-cultural contexts. In this study, gender identities, domestic space utilisation and gender roles among staff of Osun State University, Osogbo, Nigeria were identified and analysed. With the aid of pre-tested questionnaires, primary data were collected using multi-stage sampling technique from 222 out of 675 staff members of Osun State University Osogbo. Secondary data were obtained from the Academic Planning Unit of the University and Osun State Ministry of Lands and Physical Planning. Descriptive statistics such as frequency and percentage tables, cross tabulation, and Bem Androgyny Model were utilized for the analysis of data obtained. Findings on individual gender identities showed that 1.3% of the respondents were masculine, 36% were feminine while 62.7% of the respondents were androgynous. Majority of the males and females were androgynous however some males were feminine although no female was masculine. Remarkably, only 2.2% of the males were masculine. These findings further confirm that most individuals possess a combination of feminine and masculine traits known as androgyny, and that individuals' gender identities do not necessarily correspond with their biological sex. Results also showed that domestic space utilisation and domestic gender roles varied with individual gender identities rather than just gender (being male or female). The study concluded that gender identities are important to the concept of gender-integrated housing design. Therefore gender-responsive housing designed to equitably meet the needs of men and women should be encouraged.

Key words: Domestic space utilisation, gender identity, gender-integrated housing design, gender equity, Nigeria.

Received August 18, 2021 / Accepted November 23, 2021

Corresponding author: Ayodeji Olusola Ajayi

Department of Urban and Regional Planning, Osun State University, Osogbo, Nigeria

E-mail: ayodeji.ajayi@uniosun.edu.ng

© 2021 by University of Niš, Serbia | Creative Commons Licence: CC BY-NC-ND

1. Introduction

Domestic space utilisation, gender roles and gender identity are important concepts to the study of gender. Gender roles are socially constructed norms and roles ascribed to males and females in line with their corresponding biological sex; these are communicated through social and cultural institutions [1,2,3]. Domestic work constitutes an important gender role within the household and is mostly consistently allocated to women; and even in some highly modernized societies where men are increasingly getting involved in domestic duties, still women mostly remain in charge of coordinating and organizing them [4]. Evidence shows that responsibility in the household strongly influences women's experience of urban infrastructure while it does not affect those of men [5]. This implies that as a result of gendered domestic responsibilities, the housing and neighbourhood concerns of women differ from those of men [6]. Gender identities are expressions of masculine and feminine natures [7]. However, definitions of what is masculine and feminine vary with culture, from place to place and over time [8,9,10]. Similarly, some gender identities are not fixed (such as in androgynous people); rather they are constantly negotiated in interactions based on social and cultural institutions [11,12,13]. Gender identity refers to the degree by which people see themselves as masculine or feminine depending the society's definitions of what it means to be a man or woman, for instance being male or female may mean brave or emotional; and in response males will generally define themselves as masculine and females will define themselves as feminine. These self-definitions or self-meanings are formed in social situations beginning early in life as a result of interactions with important figures such as parents, teachers, peers and educators [14].

Individuals may consider their gender identity as deviating from the model set by the society that is, although they recognize themselves male or female they consider themselves as possessing traits contrary to the assumed stereotype; for example a female may think of herself as being rational and dominant rather than fitting into the stereotype of being expressive and submissive; this forms their gender identity and guides their behaviour. Furthermore, gender identities tend to be more important predictors of behaviour than gender (male or female). These indicate that domestic space utilisation, gender roles and gender identity constitute important aspects of the concept of gender and housing.

Studies have shown that men and women experience and interact with their housing differently [5,6,15,16,17,18]. Gender differences have mostly been the focus of these studies with gender similarities being rarely examined. Gender differences have been found to exist in various aspects of housing and the built environment such as spatial experience, transportation patterns, work opportunities, work-family balance, housing preferences and satisfaction, use of space and relations within space [5,19,20,21]. The structure of houses is directly influenced by gender differences, which in turn reinforces gender relations [6]. Gender differences also translate into gender-specific housing preferences in terms of type of housing, neighbourhood and community [16]. Likewise, gender differences have been found in housing satisfaction levels between female and male heads of households [22]. Furthermore, according to [23] there are gender differences in feelings of place attachment; women tend to have higher mean place attachment at home than men, likewise women tend to have a higher mean level of control when responses are standardized across all activities. Although studies on gender and housing are gradually increasing, some shortcomings have been observed in the existing literature. While there is a considerable amount of literature on gender differences, gender similarities are rarely examined [24]. Also, majority of the existing studies tend to examine gender as just the characteristic of being male or female

without considering individual gender identities. Meanwhile individuals vary in their gender identity regardless of biological sex; meaning that a female may possess masculine traits and a male may possess feminine traits. Furthermore, in spite of the fact that gender roles and domestic space utilisation are important to the whole concept of gender, domestic space utilisation are hardly considered in the studies on gender and housing, hence this study.

2. LITERATURE REVIEW

Conventionally, strong opposites in gender attributes of males and females form the basis for gender identity in which femininity is related with reproductive and unpaid housework, domestic sphere, body and emotions while masculinity is related to productive paid work, public sphere, mind and reasoning. The distinct roles and relations of men and women in a given culture, dictated by that culture's gender norms and values, give rise to gender differences. These gender norms, roles and relations also give rise to gender inequalities, that is, differences between men and women that systematically value one group often to the detriment of the other [3]. Although the gender division of labour varies from community to community, household work is mostly consistently allocated to women; and even in some highly modernized societies where men are increasingly getting involved in domestic duties, still women mostly remain in charge of coordinating and organizing them [4]. As a result of these gendered domestic responsibilities, the housing and neighbourhood concerns of women differ from those of men [6]. This is mostly as a result of the socio-cultural gendered division of labour which exists in varying degrees from place to place. According to the literature, individuals are socialized into these gendered domestic roles which are acquired early in life [20]. Consequently, individuals' needs and experiences many differ along the lines of these gender differentiated roles. However, it is worthy of note that gender cannot act in isolation in shaping needs and experiences, rather it interacts with other personal characteristics such as age, household structure and composition, marital status, stage in family cycle, level of income and level of education in influencing these needs and experiences [6,17,20].

Different domestic roles are carried out in different spaces, require different levels of support services and infrastructure, and shape specific patterns of activities in daily life; this implies that based on gender, individuals are likely to relate differently with the different spaces, features, services and infrastructure that make up housing. This is supported by findings of a study by [18] which asserts that when there are no significant differences in household income, householders are likely to value housing characteristics differently because of different social experiences and needs of men and women [18]. This implies that since compared to men, women often combine different activities daily such as an employment, caring for children and the elderly, cooking, cleaning and maintaining the home, this might translate into differing housing and neighbourhood needs, expectations and aspirations from those of men. Likewise, there is evidence that responsibility in the household strongly influences women's experience of urban infrastructure while it does not affect those of men [5]. For example, the absence of basic services such as good water supply means additional work and time spent in sourcing for it by women and young girls who are usually allocated the responsibility. Thus, it becomes clear that gender roles form an integral part of gender differentiated experience of housing.

Since the measuring of gender identity was developed by Lewis Terman and Catherine Cox Miles in 1936, various measures have been developed by different scholars; however the Personal Attributes Questionnaire (PAQ) developed by [25] and the Bem Sex-Role Inventory (BSRI) developed by Sandra Bem in 1974 have become the most widely used measures of gender identity.

While the BSRI is designed to measure dimensions of masculinity and femininity based on the concept of gender schematization (internalized traits of seeing things in gendered terms), the PAQ is based on the concept of gender as being multifactorial i.e. the attributes distinguishing males and females are numerous unlike gender schematization which binds them all into one.

The PAQ comprises two scales: expressivity and instrumentality which measure the degree to which a person can be classified according to masculine or feminine adjectives. It is a 24 item self-report questionnaire in which people are asked to indicate the extent to which they can be characterized in terms of various adjectives. Thus, for example, a person responding to the questionnaire will be asked to indicate the extent to which they see themselves as independent: Not at all independent A....B....C.....D....E Very independent [25]. The BSRI is originally a 60-item index however short forms have been developed and adopted. The original BSRI included 60 dichotomous items divided into 3 subscales (Masculinity, Femininity, and Neutral) of 20 items each [26]. A personality characteristic was categorized as feminine if it was independently judged, using a 7-point scale, by both females and males to be significantly more desirable for women than for men and vice versa for masculine characteristics. In 1981, Bem used factor loading to develop a 30-item scale, with 10 items per subscale, validated independently by others [27]. Also, a 12 item Spanish version of the BSRI (BSRI-12) was validated by [28] and included the items: gentle, sympathetic, leadership abilities, acts as a leader, dominant, tender, warm, affectionate, strong personality, defend own beliefs, sensitive to other's need, and makes decision easily. This version demonstrated strong psychometric properties, in some cases better than the original 60 item BSRI [27,28].

A study of gender relations as they affect housing shows evidence of gender differences in the quality of space of the dominant users (usually the male head of households), size of space, hierarchy of space and the gender division of space. It also points out that women are mostly the victims of housing related health hazards such as accidents and diseases. It concluded that gender differentiation has a direct bearing on the structure of houses, which in turn reinforces gender relations [6]. Another study on gender related differences in housing preferences reveals that housing experience is indeed gendered in nature and these gender differences translate into gender-specific housing preferences in terms of type of housing, neighbourhood and community. Furthermore, the study shows that gender cannot be studied in isolation; rather it intersects other variables such as age, ethnicity, personal characteristics, residential history and household composition which account for remarkable diversity of housing preferences [6]. A study of gender differences in involvement in housing development found that more men than women were involved in housing development, most especially due to negative gender stereotyping of female house owners; and gender differentiated obstacles present in the mode of inheritance or purchase of land among other impeding factors like inadequate finance and knowledge [17]. Another study revealed gender differences in housing satisfaction levels between female and male heads of households [22]. A few similar studies have also been conducted in the Nigerian context. In a study of gender differences in the responses of students to their housing, findings revealed very strong differences between males and females in the use of domestic facilities, while

differences were barely observed in the use of non-domestic facilities. The study attributes these to the acquisition of and socialization into gendered domestic roles, which according to the literature seem to be acquired from an early age. However, there were also some gender differences which seem intrinsic and may be innate such as differences in satisfaction with crowding and design and furniture arrangement [20]. Likewise, [5] examined gender and urban infrastructural poverty in an African city: findings show significant relationship between urban infrastructural experience of both men and women and household income, level of education, household size and stage in family cycle. However, although household income and household size was most important for both genders, household responsibility was inclusively of great importance in the case of women only. Furthermore, occupation and responsibility in the household was only found in relation to the experience of women. In a similar study, the same author examined gender differences in the experience of housing, findings reveal gender differences in aspects of housing in which users were interested; and also, in the aspects of housing which were perceived to most affect their daily activities [15].

The foregoing shows that housing is not gender neutral. In fact, houses are a product of an array of socio-cultural factors which include gender; the design or spatial arrangement of a house is shaped by the socio-cultural force of power and gender relations and the nature of housing in turn differently affects the lives of men and women [6]. This implies that more research is needed in order to better understand the differences in needs, desires and responses of men and women in relation to their housing and its environment. Gender differences are displayed in domestic space through gendered spaces, objects and practices [29]. Therefore, in trying to understand gender differences in relation to housing attributes, it becomes necessary to study domestic gendered practices and gender differentiated roles.

3. METHODOLOGY

The Research Design

The study is empirical in nature and it utilized the quantitative approach of research, using a survey research design. The Osogbo Campus of Osun State University was randomly selected from the University Campuses. Data was obtained from both primary and secondary sources. The primary data was collected in the field from respondents while secondary data was obtained from journals, books, official records and statistics. The questionnaire was used in obtaining information from respondents.

Population, sample and sampling procedure

The study population is the staff of the university, broken down into Top level management, Middle level management, Senior and junior Academic staff, Senior non-teaching staff and Junior non-teaching staff [30].

Method of sampling

Multi-stage sampling technique was used in data collection. In the first stage, the study population was stratified into 7 cadres based on the organisational structure of the university, namely: principal officers, deans/ provosts/university administrators, heads of

departments and units, senior non-academic staff, junior non-academic staff, senior academic staff, and junior academic staff. At the second sampling stage, disproportionate sampling was used to survey respondents from each of the cadres; where number of staff in a cadre is below 100, the total number was surveyed, while 20% was surveyed from cadres having 100 or more staff. Preliminary investigation showed that there were 675 staff; all principal officers, deans/provosts/university administrators, heads of departments and senior academic staff were surveyed cumulating in 107 respondents, while 20% of senior non-academic staff, junior non-academic staff and junior academic staff were surveyed cumulating in 115 respondents. In total, 222 respondents were surveyed.

Instrumentation and Data Analysis

The data was collected using the pretested and validated questionnaire in 2018. Descriptive and inferential statistics were used for data analysis. In this study, gender identities were measured with the short-form of the BSRI [31]. As shown in Table 1, the masculine scale (8 items) includes characteristics that are perceived as men's characteristics (e.g., assertive, strong personality, and dominant). The feminine scale (8 items) includes characteristics that are perceived as women's characteristics (e.g., emotional, sympathetic, and understanding). The rest of the inventory (8 items) is composed of neutral items, which are

Table 1 BSRI Items showing the categories of items

	Items
A.	Neutral (androgynous)
	1. Very Aggressive
	2. Very Dominant
	3. Very Excitable in A Major Crisis
	4. Very Worldly
	5. Highly Needful of Others Approval
	6. Feelings Easily Hurt
	7. Cries Very Easily
	8. Very Strong Need for Security
В.	Masculine
	1. Very Independent
	2. Very Active
	3. Very Competitive
	4.Can Make Decision Easily
	5. Never Gives Up Easily
	6.Very Self-Confident
	7.Feels Very Superior
	8.Stands Up Well Under Pressure
C.	Feminine
	1.Very Emotional
	2. Able to Devote Self
	3. Very Gentle
	4. Very Helpful to Others
	5. Very Aware of Feelings of Others
	6. Very Understanding of Others
	7. Very Warm in Relations with Others
	8. Very Kind
	Source: [7].

Source: [7]

perceived neither as men's nor women's characteristics (e.g., very aggressive, very dominant and highly needful of others approval). Participants assessed how well each of the 24 personality characteristics describes themselves by using a 5-point scale (1 = very untrue of me, 5 = very true of me).

Generally, gender identity classification is done using participants' scores on the masculine and feminine scales. Common methods for classifying scores on the BSRI into gender identities are to split the sample using either the medians from Bem's original normative samples, the theoretical mean of the scale or the sample medians and Bem Androgyny Model. Whether dividing the scores by theoretical mean or median (sample or normative) the technique is the same [26,32,33,34].

The study applied the Bem Androgyny Model for construction of gender role or gender identity. After respondents complete the scale, they receive three scores: a masculinity score, a femininity score, and, an androgyny score. The masculinity score is determined by adding up all the scores on the masculine items and dividing by 8 to obtain the average rating on those items. The femininity score is likewise determined. Androgyny was determined by subtracting an individual's masculinity score from the femininity score. The gender identity of a respondent is determined by the value of androgyny score. If the value is 1.0 or greater, the respondent is feminine, -0,50 to +0.50 is androgynous while -1.0 or less is masculine. Therefore, scores closest to zero (whether positive or negative) indicate androgyny; as scores move farther away from zero in the plus direction greater femininity is indicated and as scores move farther away from zero in the minus direction, greater masculinity is indicated. Thus, sex-disaggregated data on their needs in relation to the housing attributes were obtained.

Domestic Gender Roles of respondents

In order to investigate the domestic space utilisation of the staff, respondents were asked to indicate the duties they perform at home and the frequency of these activities using a 5-point Likert scale. In the first instance, responses were disaggregated into male and female and later responses were disaggregated by gender identity. Some of the activities are cleaning inside the house, cooking, cleaning up after cooking, repairs around the house, laundry, fetching water, cutting grass, cleaning gutters, cleaning the surroundings and shopping for food. Others are caring for children, paying rent, paying school fees, paying other family bills and running errands for the family. The Likert scale was used to weigh the occurrence and frequency of these activities by attaching values of weight to different degrees of responses as shown below:

Everyday = 5 Often = 4 Sometimes = 3 Rarely = 2 Never = 1

A GRWV (Gender Role Weight Value) was obtained for each gender (male and female) by summing up the product of the total numbers of responses to each variable and the weight attached to each rating i.e. $(a \times 5) + (b \times 4) + (c \times 3) + (d \times 2) + (e \times 1)$. The mean used in the course of computation was also obtained by summing up the GRWV and dividing it with the total number of variables. The deviation (which was also used as gender role index) was also calculated, in order to establish the frequency of roles

carried out by respondents. From the calculation, a positive deviation indicates a high level of participation in these household tasks, and when the deviation is negative, it depicts a low level of participation.

Note:

NR (f) = Number of Respondents (questionnaire) GRWV = Gender Roles Weight Value

 $X = Mean = \sum GRWV /NR(f)$ No. of variables D = Deviation (Gender Role Index) = GRWV /NR(f) - X

4. RESULTS AND DISCUSSION.

Demographic characteristics of respondents

Information obtained shows that 52.3% of the respondents were male while 47.7% were female. Most of the surveyed participants were between 31-50 years (64.3%) with high level of literacy. The results revealed further that 2.9% of the respondents were Principal Officers, 5.8% Deans/Provost, and 10.5% were Heads of Department / Unit. Furthermore, 29.8% were Senior Academic Staff while 11.1% were Junior Academic Staff; likewise, 15.2% were Senior Non-Academic Staff while 24.6% were Junior Non-Academic Staff. Majority (63.4%) of the respondents were married, while 21.5% were single. The other categories constituted smaller proportions of the study population with 8.1% separated, 2.9% single parents, 2.3% widowed and 1.7% divorced. The respondents mostly fall into the married and single categories for both males and females alike. An equal number of males and females (4.1%) are separated, 1.7% of males and 0.6% of females are widowed while none of the males and 1.7% of females are divorced.

Gender Identity Classifications

Results of gender identity classifications are shown in Table 2. In general, 1.3% of the respondents were in the masculine group, 36% were feminine while 62.7% of the respondents were androgynous. In general, most individuals possess a mix of both masculine and feminine traits, known as androgyny. These results were similar to the findings of Bem's androgyny model in [32]. Further analysis showed that none of the female staff in the study had masculine gender identity, 43.9% were feminine and most of the females were androgynous (56.1%). Similarly, most of the male respondents were androgynous (68.9%) whereas 28.9% were feminine and interestingly, only 2.2% of the male respondents were masculine. These results show that individuals indeed vary in their gender identities regardless of biological sex; being male does not necessarily translate into being masculine, neither does being female necessarily translate into being feminine as some individuals possess a combination of both masculinity and femininity [14]. This implies that issues which are typically classified as feminine and therefore regarded as pertaining only to females may in actual sense apply to some men and vice versa; thus, generalizations based on stereotyped assumptions about gender would be in fact incorrect.

Table 2 Gender Identity across Biological Sexes

Gender Identity Group	Male (%)	Female (%)	Total (%)
Masculine	2	0	2 (1.3)
Feminine	26	36	62 (36.0)
Androgynous	62	46	108 (62.7)
Total	90 (52.3)	82 (47.7)	172 (100.0)

Domestic Space Utilisation in relation to Gender (male/female)

In this section, domestic gender roles refer to the domestic duties that males and females are expected to perform based on society's definition of what is masculine and feminine. As presented in Table 3, result of the analysis shows the gender roles of male and female staff of Osun State University. It was evident that the following household tasks, cleaning inside the house, cooking and cleaning up after cooking had the highest positive gender role index of 1.4 among the female category of staff whereas the index values were 0.2, 0.0 and 0.0 respectively for the male respondents. This implies that these tasks are mainly allocated to women and as such, women do these tasks very often. This reflects the domestication level of women in our society; regardless of their actual gender identity which in this case is mostly androgynous, the society has stereotyped them as such. This is also irrespective of their socio-economic characteristics such as level of education, employment cadre and level of income.

Table 3 Domestic gender roles of respondents.

	Domestic gender roles	Deviati	Deviation (D)	
		Male	Female	
i	Cleaning inside the house	0.2	1.4	
ii	Cooking	0.0	1.4	
iii	Cleaning up after cooking	0.0	1.4	
iv	Repairs around the house	1.0	0.0	
v	Laundry	0.1	0.8	
vi	Fetching water	-0.3	0.3	
vii	Cutting grass	-0.4	-1.1	
viii	Cleaning gutters	-0.4	-0.7	
ix	Cleaning the surroundings	0.1	0.0	
X	Taking children to school	-0.2	0.2	
xi	Picking children from school	-0.4	0.2	
xii	Shopping for food	-0.1	0.7	
xiii	Shopping for other domestic needs	-0.1	0.7	
xiv	Caring for children	0.4	0.5	
XV	Caring for the elderly	0.5	-0.4	
xvi	Paying rent	0.1	0.3	
xvii	Paying electricity bills	0.5	-0.3	
xviii	Paying school fees	-0.1	-0.3	
xix	Paying hospital bills	0.4	-0.5	
XX	Paying other family bills	0.3	-0.2	
xxi	Running errands for the family	0.3	0.2	

Furthermore, responsibilities such as laundry (0.8) shopping for other domestic needs (0.7), caring for children (0.5), and picking children from school (0.2) were performed in a decreasing order as reported by the females in the study. Inferably, these are not as strictly allocated to women as the previously listed tasks. However, the task with the highest negative index for female was cutting grass (-1.1), followed by cleaning gutters (-0.7); both of which also had negative indices (-0.4) for males. This means that these tasks were rarely done by women in the study area, and although one would expect positive values for males; these findings indicate that even males rarely perform these tasks. It could be that housing situations warranting such activities are rare (e.g. the absence of green landscaping and open gutters) or that such tasks are contracted to cleaners. Meanwhile, repairs around the house (1.0) had the highest positive gender role index among the male respondents in the study area. This was followed by paying electricity bills (0.5), caring for children (0.4) running errands for the family (0.3) and cleaning inside the house (0.2). These findings indicate that the frequency at which males perform domestic tasks was lower compared to females. Results also indicate that cleaning gutters and picking children from school were rarely done by male respondents, these chores had the highest negative gender role index among the men (-0.4).

Information presented in Table 3 shows that there were similarities and differences between men and women in the type of domestic tasks which they perform and the frequency of occurrence. Cleaning inside the house, cooking, cleaning up after cooking, laundry, fetching water, taking children to school, picking children from school, shopping for food and shopping for other domestic needs were mainly done by women, while repairs around the house, cleaning the surrounding, caring for the elderly, paying electricity bills, paying hospital bills and paying other family bills were mainly done by men. However, both males and females were involved in cutting grass, cleaning gutters, caring for children, paying rent, paying school fees and running errands for the family. Certain housing attributes are required to facilitate the various domestic tasks which individuals undertake. Since domestic tasks tend to be gendered, it is expected that responses to the housing attributes associated with these domestic gender roles will also be gendered. This will be investigated and established further in the study.

Domestic Space Utilisation in relation to Gender Identity

Having established that 1.3% of the staff were masculine, 36% feminine while 62.7% were androgynous, further analysis revealed that 2.2% of male respondents were masculine, 28.9% were feminine while 68.9% were androgynous. On the other hand, none of the female respondents was masculine, 43.9% were feminine while 56.1% were androgynous (See Table 2). Respondents were grouped based on their respective gender identities as follows: Males-Masculine (MM), Males-Feminine (MF), Males-Androgynous (MA), Females-Feminine (FF) and Females-Androgynous (FA). The domestic gender roles and the frequency with which individuals performed them were then identified, and the mean value (X) and deviation from the mean (D) were computed. While a positive deviation value indicates high frequency of performing a given domestic task, a negative deviation value indicates low frequency.

Table 4 Summary of domestic gender roles by gender identity

SN.	Domestic Gender Roles		Deviation (D)			
			Males		Females	
		MM	MF	MA	FF	FA
i	Cleaning inside the house	1.8	0.5	-0.1	1.4	1.2
ii	Cooking	-0.2	0.5	-0.3	1.4	1.4
iii	Cleaning up after cooking	-0.2	0.4	-0.3	1.4	1.3
iv	Repairs around the house	0.8	0.4	0.3	-0.3	0.1
V	Laundry	-0.2	0.5	-0.1	0.9	0.7
vi	Fetching water	-0.2	-0.2	-0.5	0.0	0.4
vii	Cutting grass	-1.2	-0.6	-0.3	-1.4	-0.9
viii	Cleaning gutters	-2.2	-0.4	-0.4	-0.8	-0.8
ix	Cleaning the surroundings	-1.2	0.1	0.0	0.4	0.0
X	Taking children to school	-2.2	-0.5	-0.1	0.4	0.0
xi	Picking children from school	-2.2	-0.5	-0.3	0.3	-0.1
xii	Shopping for food	-0.2	0.2	-0.2	0.8	0.6
xiii	Shopping for other domestic needs	0.8	0.2	0.0	0.7	0.5
xiv	Caring for children	-2.2	0.3	0.4	1.0	0.3
XV	Caring for the elderly	-0.2	0.5	0.4	0.8	0.1
xvi	Paying rent	0.8	0.1	0.1	-0.5	-0.4
xvii	Paying electricity &water bills	0.8	0.1	0.6	-0.1	-0.1
xviii	Paying school fees	0.8	-0.1	0.6	-0.4	-0.2
xix	Paying hospital bills	0.8	-0.3	0.6	0.4	0.5
XX	Paying other family bills	-2.2	0.0	0.4	-0.3	-0.2
xxi	Running errands for the family	0.8	0.5	0.3	0.3	0.3

Key: Male-M = Male Masculine Male-A = Male-Androgynous

Male-F = Male-Feminine Female-A = Female-Androgynous Female-F = Female-Feminine

Table 4, provides clearer detail with respect to who performs what task. For instance, some domestic tasks appeared to be performed mainly by females when categorization was simply into male and female, however when further categorized by gender identity, it was found that males of certain genders also performed the tasks quite frequently. Various domestic gender roles were found to be performed with differing frequencies among the different gender categories. Generally, cleaning inside the house was found to be the most frequently performed domestic role by males and females alike with Male-Masculine, Female-Feminine and Female-Androgynous having deviation from the mean (D) of 1.8, 1.4 and 1.2 respectively; indicating that the task is in fact not strictly done by women. On the other hand, cleaning gutters and cutting grass were the least frequently done by both males and females across all gender identities (with deviation scores of MM = -2.2, FA= -0.8 and MM= -1.2, FF= -1.4 respectively)

Findings also show that among the males, males that are masculine took the lead in domestic tasks such as cleaning inside the house (D= 1.8), shopping for other needs, repairs around the house, paying of rent, electricity bills, school fees, hospital bills, and running errands (each with deviation scores of 0.8. On the other hand, they lagged behind in domestic roles such as cleaning gutters, taking children to school, picking children from school, caring for children, paying other bills (each with deviation scores of -2.2), cutting grass, cleaning surroundings (D= -1.2), cooking, cleaning up after cooking, laundry, and shopping for food (D= -0.2). Whereas, feminine males took the lead in roles such as cooking, laundry, caring for the elderly (D= 0.5 each), cleaning up after cooking

(D= 0.4), shopping for food (D= 0.2), cleaning the surroundings (D= 0.1) and cleaning gutters (D= -0.4). While they lagged behind in paying rent, electricity bills, school fees (D= 0.1) and paying hospital bills (D= -0.3).

Furthermore, androgynous males most frequently performed duties such as caring for children, paying other bills, taking children to school, picking children from school and cutting grass, (D= 0.4, 0.4, -0.1, -0.3 and -0.3 respectively); while they lagged behind in fetching water (D= -0.5), cleaning inside the house (D= -0.1), repairs around the house, running errands for the family (D=0.3 each), caring for the elderly (D=0.4), shopping for other needs (D=0). Evidence from the study shows that within the female gender group, feminine females had the highest frequency for performing the following roles: cleaning inside the house, cleaning up after cooking (D= 1.4 each), caring for children (D= 1), laundry (D=0.9), shopping for food, caring for the elderly (D=0.8 each), shopping for other needs (D=0.7), cleaning the surroundings, taking children to school (D=0.4 each), picking children from school (D=0.3) and paying rent (D=-0.5). However, they had the least frequency for paying hospital bill (D= 0.4), fetching water (D= 0), repairs around the house, paying other bills (D= -0.3 each), paying school fees (D= -0.4) and cutting grass (D= -1.4). Whereas androgynous females did the following tasks more frequently than other females: paying hospital bill (D=0.5), fetching water (D=0.4), running errands (D=0.3), repairs around the house (D=0.1), paying school fees, paying other bills (D=-0.2 each) and cutting grass (D= -0.9); while they lagged behind other females in cleaning inside the house (D=1.2), cleaning up after cooking, laundry (D=0.7), shopping for other needs (D=0.5), caring for children (D=0.3), picking children from school, caring for the elderly (D=0.1 each), cleaning the surroundings, taking children to school (D=0 each), paying rent (D=-0.4) and shopping for food (D=-0.6).

It is worthy of note that while none of the females had masculine gender identity, those that were in the Female-Feminine and Female-Androgynous categories performed some tasks with equal frequency: cooking (D= 1.4), running errands for the family (D=0.3), paying electricity bill (D= -0.1) and cleaning gutters (D= -0.8).

In summary, although there were some domestic tasks which were mainly performed by men and others mainly by women, the results show that there were some deviations from the norm defined by society. Overlaps were found between men and women in the domestic space utilisation the frequency with which they perform these activities. This was as a result of the variations in individual gender identities whereby some males possessed feminine traits and some females possessed masculine traits. Striking similarities were found between some male and female gender categories in the type and frequency of undertaking some domestic gender roles. Only males having feminine gender identity behaved similar to all females in performing tasks such as cooking, cleaning up after cooking, shopping for food, paying school fees and laundry. Similarly, only females with androgynous gender identity behaved similar to all males in tasks such as repairs around the house and picking children from school. This implies that housing issues pertaining to domestic tasks which are generally viewed as feminine will in actuality concern some men depending on their specific gender identities and vice versa. This shows that beyond gender (i.e. being male or female), individual gender identities are important to the concept of domestic space utilisation.

5. CONCLUSION

Results of analysis of information on domestic gender roles of staff show that although some domestic tasks were mainly done by men and others by women, some typically masculine tasks were also performed by some females with similar frequency and vice versa based on variations in individual gender identities. For example, striking similarities in pattern were observed between males with feminine gender identity and the females in some types of domestic tasks (such as cooking, shopping for food and laundry) and the frequency of occurrence. Likewise, there were such similarities between females with androgynous gender identity and the males in some cases such as repairs around the house and picking children from school. These highlight the link between individual gender identities and the type and frequency of performing domestic tasks (domestic gender roles). Therefore, the role of gender in the frequency and type of domestic tasks that individuals perform exceeds mere classification into male and female; rather it encompasses variations in individual gender identities, the importance of which cannot be over emphasized. In the light of this, it is important to holistically consider both feminine and masculine needs for the purpose of adequately meeting diverse individual needs with regards to housing design.

REFERENCES

- 1. Eagly, A. H. and Wood, W, Social role theory of sex differences. The Wiley Blackwell Encyclopedia of Gender and Sexuality Studies, 1-3, 2016
- Archer, J. and Lloyd, B,Sex and gender. Cambridge: Cambridge University,2012. World Health Organisation,What do we mean by "sex" and "gender"?Geneva, World Health Organization, 2011. http://www.who.int/gender/whatisgender/en/index.html)
- 4. Kan, M. Y., Sullivan, O. and Gershuny, J."Gender convergence in domestic work: Discerning the effects of interactional and institutional barriers from large scale data" in Sociology, Vol.45:2011,pp. 234–251
- 5. Asiyanbola, R.A, "Gender and urban Infrastructural poverty experience in Africa: A preliminary survey in Ibadan city, Nigeria" in International Journal of Development and Sustainability, Vol.1, (3),2012.
- 6. Shrestha, G, Gender Relations and Housing: A Cross- Community Analysis, Gender, technology and development, Vol.4(1), Sage publications.2000.
- 7. Ozkan, T. and Lajunen, T,"Masculinity, Femininity and the Bem Sex Role Inventory in Turkey" in Sex Roles Vol.52(1/2),2005.
- 8. Cuddy, A.J.C., Crotty, S., Chong, J. and Norton, M.I., Men as cultural ideals: how culture shapes gender stereotypes. working paper, Harvard Business School,2010.
- Risman BJ,"Gender as a social structure: Theory wrestling with activism"in Gender and Society, Vol.18(4):2004,pp. 429–51.
- Short, J. P, The Urban Order: An introduction to cities, culture and power. Blackwell, U.S.A., 1996.
- 11. Connell, C,"Doing, undoing, or redoing gender? Learning from the workplace experiences of transpeople"in Gender and Society, Vol.24(1),2010,pp. 31-55.
- Deutsch, F. M, "Undoing gender" in Gender and Society, Vol. 21(1), 2007, pp. 106-127.
- 13. Butler, J, Undoing Gender. New York, Routledge, 2014.
- 14. Topuz, C. and Yildibas, F. The examination of graduate students' gender roles in relation with demographics, Procedia-Social and Behavioural Sciences, Vol.159,2014, pp.565-569
- 15. Asiyanbola, R.A,"Urban Housing Experience and Gender: An Empirical Study in Ibadan, Nigeria" in Journal of Geography and Geology, Vol 5(1), 2013.
- 16. Shawki, H.S, Gender related differences in housing preference- a qualitative approach. An Unpublished Ph.D. dissertation in the graduate school of Ohio State University, USA. 2007.
- 17. Manyire, H. Gender and Housing Development in the Low-Income Suburbs of Jinja Municipality, Uganda, Gender Issues Research Report Series, 17. Organization for Social Science Research in Eastern and Southern Africa. 2002.
- Miraftab, F," Risks and Opportunities in Gender Gaps to Access Shelter: A platform for intervention"in International Journal of Politics, Culture, and Society, Vol 15(1), 2001, pp. 143-160.
- Guney, Y.I. and Kubat A.S, Gender and urban space: case of Sharjah, UAE. Proceedings of the 10th International Space Syntax Symposium, 13-17 July, 2015, www.sss10.bartlett.ucl.ac.uk

- 20. Amole, D,"Gender differences in user responses to students housing" in Procedia: Social and Behavioral Sciences, Vol.38, 2012, pp.89 99.
- Roberts, J., Hodgson, R. and Dolan, P. It's driving her mad: gender differences in the effects of commuting on psychological well-being; Working paper, Department of Economics, University of Sheffield, in Sheffield Economic Research Paper Series 2009,pp009
- Venter, A. and Marais, L," Gender and housing policy in South Africa: policy and statistics New Zealand, Tatauranga Aotearoa, Wellington, New Zealand Practice in Bloemfontein"in Journal of Family Ecology and Consumer Sciences, Vol. 34, 2006.
- Alder, S.C,"The experience of home: gender and activity differences in attachment, sense of control, and affect, in *Private Places*, EDRA, 27,1996.
- 24. Hyde, J.S. "Gender similarities and differences" in Annual Review Psychology, Vol. 65: 2013,pp.373-98
- Spence, J. T., Helmreich, R., & Stapp, J. "A short version of the attitudes toward women scale (AWS)" in Bulletin of the Psychonomic Society, Vol.2(4),1973, Pp.219

 –220. https://doi.org/10.3758/BF03329252
- Bem, S.L. "The measurement of psychological androgyny" in Journal of Consulting Clinical Psychology, Vol. 42:1974,pp. 155-162. doi:10.1037/h0036215.
- Campbell, T, Gillaspy, J.A. Jr. and Thompson, B. The factor structure of the Bem Sex Role Inventory (BSRI): "Confirmatory analysis of long and short forms" in Education Psychology Measures, Vol. 57, 1997, pp. 118-124. doi:10.1177/0013164497057001008.
- 28. Fernández, J, and Coello, M.T, "Do the BSRI and PAQ really measure masculinity and femininity? "in Spanish Journal of Psychology, Vol. 13, 2010,pp.1000-1009. doi: 10.1017/S113874160000264X.
- Rezeanu, C. "The relationship between domestic space and gender identity: Some signs of emergence of alternative domestic femininity and masculinity" in Journal of Comparative Research in Anthropology and Sociology, Vol. 6(2), 2015.
- 30. Academic Planning Unit, Osun State University, Osogbo, 2018.
- 31. Bem S.L., A manual for the Bem Sex Role Inventory. Palo Alto: Consulting Psychologist Press,1981.
- 32. Carver, L.F., Vafaei, A., Guerra, R., Freire, A., and Phillips, S.P." Gender differences: examination of the 12-Item Bem Sex Role Inventory (BSRI-12) in an older Brazilian population", 2013,doi:10.1371/journal.pone.0076356
- 33. Gale-Ross, R., Baird, A. and Towson, S. "Gender role, life satisfaction, and wellness: androgyny in a south-western Ontario sample" in Canadian Journal of Aging Vol.28: 2009,pp.135-146,doi:10.1017/S0714980809090187. PubMed:19860972.

KORIŠĆENJE PROSTORA U DOMAĆINSTVU I RODNI IDENTITET KOD OSOBLJA DRŽAVNOG UNIVERZITETA OSUN U OSOGBU, NIGERIJA

Rodni identiteti su izrazi muške ili ženske prirode i tumačeni su unutar socio-kulturnog konteksta. U ovoj studiji identifikovani su i analizirani rodni identiteti, korištenje prostora u domaćinstvu i rodne uloge među osobljem Državnog univerziteta Osun, Osogbo, Nigerija. Uz pomoć prethodno testiranih upitnika, primarni podaci su prikupljeni korištenjem višestepene tehnike uzorkovanja od 222 od 675 članova osoblja Osun State University Osogbo. Sekundarni podaci dobijeni su od Jedinice za akademsko planiranje Univerziteta i Državnog Ministarstva za zemljište i prostorno uređenje Osun. Za analizu dobijenih podataka korišćene su deskriptivne statistike kao što su tabele učestalosti i procenta, unakrsna tabela i Bem androginski model. Nalazi o individualnom rodnom identitetu pokazuju da je 1,3% ispitanika muško, 36% žensko, dok je 62,7% ispitanika androgeno. Većina muškaraca i žena bili su androgini, međutim neki muškarci su bili ženstveni, iako nijedna žena nije bila muška. Zanimljivo je da je samo 2,2% muškaraca bilo muško. Ovi nalazi dalje potvrđuju da većina pojedinaca posjeduje kombinaciju ženskih i muških osobina poznatih kao androginost, te da rodni identiteti pojedinaca ne odgovaraju nužno njihovom biološkom spolu. Rezultati su također pokazali da korištenje domaćeg prostora i domaće rodne uloge variraju u zavisnosti od individualnog rodnog identiteta, a ne samo pola (muško ili žensko). Studija je zaključila da su rodni identiteti važni za koncept rodno integrisanog dizajna stanovanja. Stoga treba ohrabrivati rodno odgovorno stanovanje dizajnirano da ravnopravno zadovolji potrebe muškaraca i žena.

Ključne reči: korišćenje prostora u domaćinstvu, rodni identite, rodno-integrisano projektovanje stanova, rodna ravnopravnost, Nigerija.