Studies the behavioral aspects of territorial practice - the evolution, nature and factors of territorial behaviour in library usage among University students. Structured questionnaire was used to elicit appropriate behavioral response while chi-square statistic was used to determine significant differences in the study variables. It was found out that territorial behaviour had assumed a high proportion in the University of Port Harcourt Library due to inadequate reading spaces, coupled with high population density.

INTRODUCTION

The three psychological needs, viz., identity, security and stimulation are as important as physical drives have long been realised and shown by ethologists [3]. It has also been pointed out that an optimum relation with place is essential to mental well-being and development of identity, and that a sense of place is a reinforcement to identity. Thus, the concept of territoriality evolved in the social sciences out of the need to understand man's craving for identity.

Territoriality is the process and mechanism by which living organisms lay claim to mark and defend their territory against rivals [4, 5]. The original ideas of territoriality was drawn from research by ethologists on non-human subjects but, today, it has been argued that the same principles are applicable to man [1, 5, 6, 7].

Many authorities have applied the concept of territoriality to spatial units of the size of the region or nation [8, 9]. As far as human beings are concerned, territoriality varies in size and intensity; as there are different scales of territoriality [10]. Territoriality takes two forms - the fixed, spatially delimitated personal territories and personal space [5, 10]. The first type of territoriality is motivated by physiological needs while the second is an essential ingredient in the internal dynamics of groups in which personal contact is avoided. On the basis of pervasiveness, personal involvement, duration and centrality to the everyday life of a person or group, Altman [11] distinguished territories into three - primary, secondary and public territories. Primary territories are socially recognised territories owned and used exclusively by individuals or groups, and for which invasion is not permitted; secondary territories have semi-public quality and are less closely identified with individual and less exclusive; while public territories have a temporary quality and may be used by almost anyone provided that they conform to basic social norms and standards. Public territories are, therefore, not owned by individuals but may be claimed by physical occupancy for a short period of time.

For the purpose of this work, the concept 'territory' is restricted to the micro-level and as defined by Gold [5], it is a "transitory and temporary occupation of space". This is important as university library is only public to the university community in which it is located.

Lorenz [2] argued that territoriality was more or less an expression of the aggressive nature in man, and represent both a product of the urge to gain and control of a particular portion of territory. Thus, defence has always been an element of territoriality providing the resistant mechanisms for those considered intruders. In the library situation, Kando [12] has observed that what needs to be defended is reading space to which an individual can lay temporary claim. In doing this, mark-
ers are sometimes left behind to indicate ones claim [12, 13] while at times neighbors are made to inform potential intruders of temporary vacation of seats [13]. In other studies, Altman [11] and Gold [5] have shown that temporary occupants of places in libraries and parks make use of surrogates such as, bags or newspapers to indicate physical occupation.

The rationale for the study of territorial behaviour in a library situation is the relevance to our understanding of human behaviour in the use of space. This becomes more relevant where a large population of users are not matched by appropriate facilities to make for a conducive study atmosphere. There is a general tendency therefore for users to seek territory through territorial behaviour and intense space use. The University of Port Harcourt library where this study was carried out exhibits the above characteristics.

The University of Port Harcourt was established as an affiliate college of the University of Lagos in 1975 and became a full-fledged university in 1976. Since then, the university has been operating in a temporary library waiting for the completion of the main library. The construction work on the library started in 1981 was scheduled for completion by 1984 but was abandoned in 1983. As a result, the temporary library has 583 person's reading spaces for a present population of over 7,000 full time students. Most Nigerian university libraries, especially the third and fourth generation universities, suffer from the problem of inadequate reading spaces, as is in the University of Port Harcourt. This trend seems to be a general one in almost all libraries in Nigeria. This inadequate facilities was pointed out by Obokoh and Arokoyu [14] in a study of the geographical location and use of public libraries in the city of Port Harcourt. Thus, the study of territorial behaviours in all types of libraries in Nigeria seems to be important not only because the knowledge gained from such a study can equip librarians with the tool of handling territorial behaviours in libraries but will also go a long way in enhancing the library administrator's bargaining power while making request for expansion of existing facilities due to increased demand.

CONCEPTUAL FRAMEWORK OF THE STUDY

In the endeavour to explain the incidence and evolution of territorial behaviour within a library context the work of Brown [15] has been used. He presented an analytical model for explaining the evolution of diversity in Avian territorial systems.

Fig. 1: Theoretical framework of library territorial behaviour*

* (Modified after Brown [15]).
The above analytical model conceives that competition is at the centre of territorial behaviour. It argues that competition is engendered by the perception of the library as providing the best requisite for effective learning, the absence of alternate reading location and high population density. The higher the perception of the importance of library to academic attainment, the higher the cost users are willing to bear and the level of competition for available library reading spaces. The higher the competition for library reading spaces the higher the perceived economic defendability, and the aggression employed in the acquisition and maintenance of reading territory. These ultimately define the type of evolutionary trend of territorial behaviour in the library. Since the requisite for which competition exists (in this case the university library) is economically defendable in terms of unhindered study advantages, in the absence of other equally conducive locations a continuous reinforcement of the use process involved remain necessary so as to maintain the status quo and prevent entrance.

**METHODOLOGY OF STUDY**

Data for the study was obtained from the University of Port Harcourt library users by means of a structured questionnaire. The questionnaire (Appendix) was designed to determine the causal factors in the evolution of territorial behaviour of the student in the use of the university library. The questionnaire was administered during a peak period with the help of six library assistants. Thirty minutes were given to the respondents to complete the questionnaire. Assistance was provided for problems in the completion of the questionnaire.

**DATA ANALYSIS**

The statistical method employed in the study was basically the chi-square analysis. The chi-square tests for significant differences in the determination of causal factors in the distribution of territorial behaviour in the use of the library among university students.

The first hypothesis states that, the high incidence of territorial behaviour among university students is not related to availability of adequate reading spaces.

To determine the reasons why students exhibit territorial behaviour in using a public facility like the library, and even go on to back it up with aggressive behaviour, the students themselves were made to provide the answers:

<table>
<thead>
<tr>
<th>Reasons for territorial behaviour</th>
<th>Responses</th>
</tr>
</thead>
<tbody>
<tr>
<td>Competition for reading spaces</td>
<td>306 (70.7%)</td>
</tr>
<tr>
<td>A more convenient place to read</td>
<td>98 (22.5%)</td>
</tr>
<tr>
<td>Preference for a particular seat</td>
<td>24 (5.5%)</td>
</tr>
<tr>
<td>Desire to seat close to friends</td>
<td>7 (1.6%)</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>435 (100%)</strong></td>
</tr>
</tbody>
</table>

As the table indicates, about seventy percent of the 435 University of Port Harcourt students users are of the view that competition for reading spaces is responsible for territorial behaviour in library usage. Three other reasons given for this incidence seem to exert no serious influence as competition for reading spaces. Thus, territorial behaviour evolved from the struggle for use of limited reading spaces.

The second hypothesis states that, the various settlement locations of students show no significant variation in their perception of the importance of territorial behaviour in the use of University library.

The flow of students to the library from their various settlement locations is compared with their perception of the importance of territorial behaviour. There are three University campuses, namely, Choba Park, Delta Park and University Park. There are students staying off university campuses, in the villages around the University, namely Choba, Aluu and Alakahia. The average walking distances from the three parks and villages are computed as follows:
To determine the effects of these locations on students perception of the importance of territorial behaviour the contingency table analysis is employed.

As the table indicates, there is a general tendency for library usage to decrease with increasing walking distance of the settlement locations of the students. Also, there is a tendency for students with longer walking distances from the library to show more positive perception to territorial behaviour than those with shorter walking distances. A test of significance on Table 3 using the chi-square

Table 3
Settlement locations and students perception of the importance of territorial behaviour in library usage

<table>
<thead>
<tr>
<th>Settlement locations</th>
<th>Positive</th>
<th>Negative</th>
<th>Indifference</th>
<th>Total Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Villages</td>
<td>33 (71.7)</td>
<td>5 (10.9)</td>
<td>8 (17.4)</td>
<td>46 (100)</td>
</tr>
<tr>
<td>University Park</td>
<td>51 (73.9)</td>
<td>7 (10.1)</td>
<td>11 (16.0)</td>
<td>69 (100)</td>
</tr>
<tr>
<td>Delta Park</td>
<td>46 (41.1)</td>
<td>37 (33.0)</td>
<td>29 (25.9)</td>
<td>112 (100)</td>
</tr>
<tr>
<td>Choba Park</td>
<td>103 (49.5)</td>
<td>67 (32.2)</td>
<td>38 (18.3)</td>
<td>208 (100)</td>
</tr>
<tr>
<td>Total</td>
<td>233 (53.6)</td>
<td>116 (26.7)</td>
<td>86 (19.7)</td>
<td>435 (100)</td>
</tr>
</tbody>
</table>

indicates that the calculated value of 31.3 is much greater than the critical value of 12.6 (at six degrees of freedom and 95% confidence limit).

The implication, therefore, is that significant variations exist in the perception of the importance of territorial behaviour in relation to settlement locations in the use of university library.

The third hypothesis states that, the perception of the importance of territorial behaviour in the use of the library is not significantly related to year of study. This hypothesis is tested using information supplied by the respondents in relation to their year of study and perception of the importance of territorial behaviour in library usage.

The Chi-square test indicates that at 95% confidence limit the critical chi-square value of 12.6 (at six degrees of freedom) is much lower than the calculated value of 48.86. This indicates that significant variation exists in the perception of the importance of the territorial behaviour in relation to the year of study.
Table 4
Year of study and students' perception of the importance of territorial behaviour

<table>
<thead>
<tr>
<th>Year of study</th>
<th>Positive (%)</th>
<th>Negative (%)</th>
<th>Indifference (%)</th>
<th>Total (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Year I</td>
<td>28 (33.3)</td>
<td>46 (54.8)</td>
<td>10 (11.9)</td>
<td>84 (100)</td>
</tr>
<tr>
<td>II</td>
<td>65 (59.1)</td>
<td>24 (21.8)</td>
<td>21 (19.1)</td>
<td>110 (100)</td>
</tr>
<tr>
<td>III</td>
<td>53 (51.5)</td>
<td>28 (27.2)</td>
<td>22 (21.3)</td>
<td>103 (100)</td>
</tr>
<tr>
<td>IV</td>
<td>87 (63.0)</td>
<td>18 (13.0)</td>
<td>33 (24.0)</td>
<td>138 (100)</td>
</tr>
<tr>
<td>Total</td>
<td>233 (53.6)</td>
<td>116 (26.7)</td>
<td>86 (19.7)</td>
<td>435 (100)</td>
</tr>
</tbody>
</table>

The fourth hypothesis states that, students with no reading spaces outside the library tend to exhibit territorial behaviour than those with reading spaces outside the library. The Chi-square test was applied to the following data to determine if significant differences do exist.

Table 5
Reading spaces availability and territorial behaviour

<table>
<thead>
<tr>
<th>Reading spaces</th>
<th>Exhibition of territorial behaviour</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Exhibited (%)</td>
</tr>
<tr>
<td>Library only</td>
<td>123 (57.7)</td>
</tr>
<tr>
<td>Library and Hostel</td>
<td>110 (49.5)</td>
</tr>
<tr>
<td>Total</td>
<td>233 (53.6)</td>
</tr>
</tbody>
</table>

The calculated chi-square value of 2.93 is lower than the critical value of 3.8 at one degree of freedom and 95% confidence limit. This indicates the absence of significant difference.

The fifth hypothesis states that, the distribution of territorial behaviours in the use of the library is not significantly different among the sexes.

This hypothesis was tested using information from the respondents and their sexes.
Table 6

**Sex and exhibition of territorial behaviour in the library**

<table>
<thead>
<tr>
<th>Sex</th>
<th>Exhibition of territorial behaviour</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Never (%)</td>
</tr>
<tr>
<td>Male</td>
<td>42 (15.7)</td>
</tr>
<tr>
<td>Female</td>
<td>35 (21.0)</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>77 (17.7)</td>
</tr>
</tbody>
</table>

At 95% confidence limit, the critical chi-square value of 3.8 (at one degree of freedom) is higher than the calculated value of 1.94. This indicates the absence of significant variation among the sexes in their exhibition of territorial behaviour.

The sixth hypothesis states that, the distribution of aggressive behaviours in the use of the library is not significantly different among the sexes. This hypothesis was tested with Chi-square.

Table 7

**Sex and disposition to infringement of territorial space**

<table>
<thead>
<tr>
<th>Sex</th>
<th>Disposition</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Affront (%)</td>
</tr>
<tr>
<td>Male</td>
<td>201 (75)</td>
</tr>
<tr>
<td>Female</td>
<td>96 (57.5)</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>297 (67.8)</td>
</tr>
</tbody>
</table>

The Chi-square test shows that the calculated value of 14.54 is higher than the critical value 3.8 at one degree of freedom and 95% confidence limit. This shows that there is significant variation among the sexes in their consideration of infringement to territorial space as more males tend to consider it as affront.

The chi-square test on the 297 respondents who consider the infringements of their territorial space as an affront inspite of the use of surrogates indicates (Table 8) that at 95% confidence limit, the critical chi-square value of 6.0 (at two degrees of freedom) is much lower than the calculated value of 17.66. This indicates that the distribution of aggressive behaviour in the defence of territory is significantly different among the sexes. While female students tends to show aggression through abusive words, the male on the other hand tend to show aggression through physical attack or threat of attack.
Table 8

<table>
<thead>
<tr>
<th>Sex</th>
<th>Distribution of aggressive behaviour</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Use aggressive words</td>
</tr>
<tr>
<td>Male</td>
<td>60 (34.7)</td>
</tr>
<tr>
<td>Female</td>
<td>69 (55.6)</td>
</tr>
<tr>
<td>Total</td>
<td>129 (43.4)</td>
</tr>
</tbody>
</table>

CONCLUSION

This study indicates that there is a considerable inadequately reading spaces in the University of Port Harcourt. This inadequacy is the major cause of the high incidence of territorial behaviour which is of grave concern to users in the university library. As the library provides the best requisite for effective learning, the high population density which breeds scrambling for available reading spaces makes students who walk longer distances to the library to perceive territorial behaviour as very important in their bid for effective use of the library, and thus make their long walking distance economical. Also, it was found out that older students in the University tend to perceive territorial behaviour as very important in their use of the library. This might be related to the amount of work they have to do making use of the library and their acquired boldness resulting from their experience of coping with inadequate reading spaces. Somehow, survival of the fittest tends to be their watch-word.

As regards the roles of gender in the employment of territoriality in library usage, male and female students show no significant variation in the exhibition of territorial behaviour. However, there is significant variation in the disposition of the sexes to infringement of acquired territory in the library. Also, there is significant variation in the type of aggressive behaviour employed by the sexes in their defence of library reading spaces.

The essence of the findings is that a social vice called territoriality has become socially acceptable among the student populace of the University of Port Harcourt. One often finds a situation in which in spite of many ‘empty spaces’ in the library one would still not be able to use any. This is quite embarrassing as surrogates are employed to keep possible users away.

This suggests of an urgent need for the University and the Federal Ministry of Education through the National University Commission to complete the main University library under construction. This is also the contention and plea of over 80 percent of the respondents. To heed this call is to begin to improve the reading habits of the students and to reduce an important area of conflicts.

REFERENCES


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QUESTIONNAIRE ON TERRITORIALITY AND TERRITORIAL BEHAVIOUR IN THE LIBRARY

Please answer the following questions.

Year of Study
Sex
Discipline
Park (If on Campus)
Village (If off Campus)

1. Which of these makes students colonise seats in the Library?
   a) Competition for reading spaces.
   b) Preference for a particular seat.
   c) A more convenient place to read with concentration.
   d) Seat close to friends.

2. You have been reading in a particular seat. You want to go to eat or go to lecture or to ease yourself; Which of the following do you resort to keep your seat?
   a) Open your book to indicate your presence.
   b) Ask a student next to you to take care in case an intruder comes.
   c) Leave other personal property to show you are around.

3. If the seat is occupied despite any of the above, how would you regard this action?
   a) Infringement of your reading territory or space.
   b) An acceptable action.

4. To assert your territory in the library which of the following comes to your mind first?
   a) Report intruder to library security personnel.
   b) Appeal to the intruder to leave the seat.
   c) Force the intruder out of the seat.

5. Which of the following aggressive behaviours do you resort to while defending your reading territory in the library?
   a) Drag the intruder out of the seat.
   b) Prevent the intruder from reading.
   c) Use aggressive words.
   d) None.

6. Could you say that defending your territory in the library is worth the trouble and so economical?
   □ Yes □ No

7. Would you say that seat colonization in the library is a good social behaviour?
   □ Yes □ No

8. If you can get a reading space anytime you go to the library, would you still engage in seat colonization?
   □ Yes □ No

9. Give two suggestions of what could be done to reduce territorial behaviours in Uniport Library.
   a) ..............................................................
   b) ..............................................................