PHYSICAL LEARNING ENVIRONMENT IN SRI LANKAN STATE UNIVERSITIES

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ABSTRACT
This study was conducted to find out the external and internal physical learning environment of Sri Lankan state universities and its effect on student performance and learning outcomes. It is very important to create and maintain a conducive physical learning environment for the students. As the student intake exceeding the capacity of the state universities students have to face difficulties with regard to their physical learning facilities. Objectives of the study were: to identify the nature and problems of the existing physical learning environment and the effect of this environment on the teaching-learning process in state universities. To achieve these objectives the survey method was used. Sample of the study was six hundred and sixty students, selected from three conventional universities. Six hundred students were given questionnaires and sixty students were interviewed. Data were analyzed using descriptive statistics and quantitative (specify) data analyze technique. According to the findings there were two major problems in hostels, insufficient space and unavailability of good food even though the majority of students who stay in the university hostels were happy about their hostel facilities. Insufficient spaces in classrooms were identified as the major problematic physical facility within the university.

Keywords: Physical Learning Environment; Sri Lanka; Universities

INTRODUCTION
Apex body of the Sri Lankan university system is the University Grants Commission (UGC) of Sri Lanka. Many state universities are under the direct control of the UGC. In addition to that there are a few state universities which are not under the UGC. For instance The General Sir John Kotelawala Defense University functions under the Ministry of Defense (www.ugc.ac.lk). As Sri Lanka has free education policy, all these state universities provide free education up to the first degree, except The Open University of Sri Lanka (OUSL).Even though the conventional government universities are playing a major role in the Sri Lankan higher education system, private universities are also available in Sri Lanka, as well as foreign universities are established through their agents. Government universities have competitors, should maintain the quality and other facilities as their competitors have. Physical learning environment is one of the important aspects among them. A large number of students are coming to these government universities from rural areas which are these far away from Colombo. Although students were given hostel facilities at the lowest these are insufficient to meet for the demand of students. Most of the students do not have adequate facilities to meet their needs and wants. As a result, many students have no proper physical learning environment to study in their hostels.

Survey method was used for this study. Population of this study was undergraduates of state conventional universities. Three conventional universities around Colombo were selected and one Faculty from each university. Faculty of Arts – University of Colombo, Faculty of Management – University of Sri Jayewardenepura and Faculty of Engineering – University of Moratuwa. 600
students were given questionnaires and 60 of them were interviewed. Descriptive data analyze method was used for this study.

Conclusions & suggestions of this study were; government universities in Sri Lanka have provided hostel facility for the students but they are failing to provide this facility for all students who need that facility. Universities have to increase its hostel facility and should upgrade the available facilities of the existing hostels. If not students should be given financial support to live in a good private hostel. Students were worried about their hostels with regard to the space and unavailability of a good environment for learning activities. Therefore government should pay special attention to solve these problems. Students are looking for a better hostel than the existing one and good foods (as they were given foods by the canteen which are difficult to eat) if so Mahapola or Bursary scholarship should be increased. Using of technical instruments for the teaching learning process is a good sign but Arts Faculty also should increase using of these instruments for the teaching learning process. Students need good hostel facility, foods and necessary educational instruments for better learning. Classrooms also should be upgraded (With enough space and necessary equipment) for the smooth functioning of the teaching – learning process. Warm, well run classrooms begin with the room’s physical layout (Shalaway, 2015)

**Problem Statement**

As noted above, the Sri Lankan state universities need to develop facilities and quality of their programmes. Many state universities are located in Colombo or around it. A large number of students come to these universities from areas far away from Colombo and many of them from low or middle income families (Sudarshana, 2013). Although these students were provided with hostel facilities at a low cost it is needed to look at the quality of these hostels. On the other hand, hostels are insufficient to meet the demand of the students. So that, many students have to stay in private hostels with low facilities. Many students have no proper physical learning environment to study in their university or private hostels. In this study, the hostel was considered as an external physical learning environmental factor.

Students need to have a sufficient amount of money to spend on their educational activities. Many students face a lot of difficulties with regard to their physical learning environment as they do not have a sufficient amount of money to spend. Even though the Mahapola and bursary scholarships provided to many students by the government, the amount is not sufficient to fulfill the needs of students. So that students cannot buy necessary instruments and other learning resources they need. In addition to this, in some instances students do not have sufficient space and equipment like microphones, projectors, computers etc. in their classrooms. This classroom environment encompasses a broad range of educational concepts (Miller & Cuninghame, 2011). These factors are very important to create a good learning environment for the students. Above mentioned external and internal physical environmental factors could have a negative effect on students’ learning process and learning outcomes as they are not up to the expected level. Classroom physical environment affects morale and student learning (Philips, 2014)

**REVIEW OF RELATED LITERATURE**

A study conducted by Blackmore et al. in 2003, among the university students focused on their innovative learning environment to improve cognitive, affective and social learning skills. It also investigated how teachers, students and the community were using innovative learn environments, particularly for new learning spaces. Further, this study expected to what extent have schools consolidated and evaluated the effectiveness of new learning and teaching practices in innovative learning environments. The study revealed that students’ attention on innovative learning environments contribute to change their behavior and pedagogical practices.

Another study conducted by Lizzio, Wison, Simons in 2010, focuses on university students’ perceptions of the learning environments and academic outcomes. Study revealed that students’ perceptions of their current learning environment were a stronger predictor of learning outcomes at
university than prior achievement at school. If students have a good perception about their learning environment it may lead students for better learning outcomes.

METHODOLOGY

Survey method was used for the study. Undergraduates of the state conventional universities were there as the population of this study. Three conventional universities around Colombo, namely University of Colombo, University of Sri Jayawardanepura, University of Moratuwa were selected for the study. For the convenience of the study one Faculty form each university was selected. Selected Faculties are Faculty of Arts – University of Colombo, Faculty of Management – University of Sri Jayawardhanepura and Faculty of Engineering – University of Moratuwa. Stratified random sampling method was used to select the sample. Six hundred students (200 students from each Faculty) were selected to give questionnaires. In addition to this 60 of them were interviewed (20 from each university) by using the structured interview method. Interviewed sample was also selected by stratified random sampling methods. Sample was selected only from 2nd, 3rd and 4th year’s students. First year students were excluded simply because they do not have much experience to answer the questions in the questionnaires or at interviews. The tools used in the research for the data collection were a self-administrative questionnaire and structured interview schedule. Before using those tools for data collection they were piloted. According to the results of the pilot tests necessary changes were done for the both tools. In addition to this both tools were shown to two experts in the field and were adjusted according to their instructions for the appropriateness and easy use in the study.

The questionnaire was divided into 3 sections. The first section of the questionnaire was designed to collect general information. Under this section, university, department, academic year & age were included. The second section was designed to collect the data related to the external physical learning environment, This section found out students residence places such as university, private hostel, relatives house, own house or other places. Furthermore, inquired the students’ perceptions about their residence and available facilities. The third section was designed to found out difficulties faced by the students as they do not have sufficient income to fulfill their needs and wants. Under this section students’ facilities were studied Faculty wise with regard to learning instruments, hostel, food and other.

Descriptive data analyze method were used. Tables and percentages were used to display the analyzed data.

OBJECTIVES OF THE STUDY

The purpose of this study was to explore the nature of existing physical learning environment in Sri Lanka state universities. In this research the term “environment” is defined as classroom facilities (internal) and hostel facilities (external-especially for study purposes). In addition to that the students’ ability to buy things which they need for studies and other needs (foods, clothes & transports etc.) were also explored.

Specific objectives were

1. To identify the nature of the physical learning environment
2. To identify the problems faced by students with regard to the physical learning environment within the institution
3. To identify the problems faced by students related to the physical learning environment out of the institution.
4. To examine the effect of physical learning environment on students’ learning process
RESULTS AND DISCUSSION

Tables of this section (table No. 01 to 04) were prepared based on data collected from the questionnaires. Data was coded and converted into percentages for easy understanding. Percentages were tabulated under the different aspects given below.

Table 1. Students’ perceptions about available facilities at the universities

<table>
<thead>
<tr>
<th>Faculties</th>
<th>Classroom—Space &amp; ventilation</th>
<th>Library facilities</th>
<th>Computer lab facility</th>
<th>Open areas for study</th>
<th>Availability of resources in classrooms</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>H (Happy)</td>
<td>A (Average)</td>
<td>D (Dissatisfied)</td>
<td>H (Happy)</td>
<td>A (Average)</td>
</tr>
<tr>
<td>Engineering</td>
<td>10%</td>
<td>38%</td>
<td>52%</td>
<td>40%</td>
<td>50%</td>
</tr>
<tr>
<td>Management</td>
<td>10%</td>
<td>35%</td>
<td>55%</td>
<td>41%</td>
<td>52%</td>
</tr>
<tr>
<td>Arts</td>
<td>00%</td>
<td>29%</td>
<td>03%</td>
<td>38%</td>
<td>35%</td>
</tr>
</tbody>
</table>

Note: H- Happy, A- Average, D- Dissatisfied

Table No. 01, was devoted to find out about the internal physical learning environment of the selected universities. According to this table, major problem was lack of space and ventilation in classrooms. It was a common issue for all three Faculties. The second important issue was availability of resources in the classroom. The students of the Arts Faculty were highly affected in this sphere. Other facilities such as computer labs, libraries were at average level.

Table 2. University students’ residential places

<table>
<thead>
<tr>
<th>Faculty of Engineering</th>
<th>Faculty of Management</th>
<th>Faculty of Arts</th>
</tr>
</thead>
<tbody>
<tr>
<td>University hostel</td>
<td>Relations</td>
<td>Private hostel</td>
</tr>
<tr>
<td>Total</td>
<td>98</td>
<td>6</td>
</tr>
<tr>
<td>Percent - age</td>
<td>49%</td>
<td>3%</td>
</tr>
</tbody>
</table>

Table No 02, was devoted to find out about the nature of students residences with regard to the external physical learning environments. According to this table, majority of students of Engineering and Arts Faculties are staying in university hostels while majority of Management Faculty students are staying in private hostels. Majority of students stayed at university hostels. Second majority of the students stayed in the private hostels. The third majority stayed at their houses. A small number of students stayed in relatives’ houses. It is clear that many of them had come to universities far away from their homes as many students stay at university and private hostels. As students are away from their homes, they need to have a good place to stay and do their academic activities easily.

Table 3. Students’ perceptions on their hostels and insufficient facilities

<table>
<thead>
<tr>
<th>Students’ satisfactory level of the available facilities at hostels</th>
<th>Insufficient facilities in hostels</th>
</tr>
</thead>
<tbody>
<tr>
<td>Very happy</td>
<td>Happy</td>
</tr>
<tr>
<td>Faculty</td>
<td>Engineering</td>
</tr>
<tr>
<td>Total</td>
<td>46</td>
</tr>
<tr>
<td>Percent - age</td>
<td>23</td>
</tr>
</tbody>
</table>

Table No. 3 was devoted to find out the students’ perceptions of their hostel facilities with regard to the external physical learning environment. According to this table, majority of the students were happy about their hostel facilities but the major problem faced by the students was insufficient space. Second problem was the insufficient facilities at hostel for the educational activities. It is very important to have a good learning environment in hostels as many students are living away from their homes. Otherwise it may have a bad effect on the student’s learning outcome.
Table 4. Non fulfillment of needs of students owing to insufficient income

<table>
<thead>
<tr>
<th>Faculty of Engineering</th>
<th>Faculty of Management</th>
<th>Faculty of Arts</th>
</tr>
</thead>
<tbody>
<tr>
<td>Instruments</td>
<td>Foods</td>
<td>Other</td>
</tr>
<tr>
<td>Total</td>
<td>34</td>
<td>50</td>
</tr>
<tr>
<td>Percentages</td>
<td>17%</td>
<td>25%</td>
</tr>
</tbody>
</table>

Table No. 04 is devoted to finding out information on food, instruments including consumables (papers, calculators etc.) and other facilities such as transport and communication facilities which were related to both external and internal physical learning environment. The students need good food. Nutritious food is very important for good physical and mental health which contributes to effective learning. Another insufficient facility was instruments which students needed for their educational activities. Without having necessary instruments it is difficult to expect good learning outcomes from the students.

Interviews were also planned to identify the factors related to the questionnaires. The results of the interviews prove the findings of questionnaires. In the interviews, students said that they have no appropriate environment to learn in their hostels. Furthermore they stated that they need a proper learning environment in their hostels to read and other educational activities like browsing internet for educational purposes, assignment writing etc. because they have no time to do all these activities in day time at the university. Many students said that they do not have a sufficient amount of money to spend on their educational activities, especially to buy necessary instruments and to have good food.

In these interviews students were told to differentiate their learning environment into two parts as external and internal learning environment. They mentioned hostel as an external learning environmental factor as they have to engage in their academic activities even in hostels. Classrooms and its equipments, university computer labs, other labs related to science and good library facilities and other open areas to study leisurely were mentioned by the students as internal learning environmental factors. Furthermore students mentioned that due to insufficient income, they cannot buy necessary equipment needed for the learning process. This problem was specially mentioned by the engineering faculty students. Insufficient or low quality food was also identified as a barrier for the good learning environment. They also mentioned that, even though they were given scholarships such as Mahapola or Bursary, it was not sufficient to fulfill their needs. Above mentioned equipment and foods were recognized by the students as factors which need to be improved related to the both internal and external environments.

At the interview students were asked questions about the effect of the physical learning environment on their learning process. Majority of the students said that physical environment affected their learning. Their view was that, the available physical learning environment does not support them as they expected. Students strongly believe that, if it is possible to develop the available physical environment furthermore it would be useful to them to learn in a more effective manner.

Blackmore (2003) revealed that innovative learning environments contribute to changes in behavior and Lizzio, in 2010, had revealed that students’ perceptions of their current learning environment were a stronger predictor of learning outcomes at university. If students have a good perception about their learning environment, it may lead them to better outcomes of learning. According to the present study Sri Lankan university students do not have good perceptions about their learning environment, so that it may not lead students towards better learning outcomes.

CONCLUSION

In this study physical learning environment is divided into two parts as external and internal. According to the data analysis, the major problem related to the internal physical learning environment was lack of space and ventilation in the classrooms. Another aspect related to the internal learning environment was equipment which available in the classrooms was not sufficient or they did not work
properly/ accurately. It may affect on students learning process negatively. Library and computer lab facilities also need to be improved.

Government universities in Sri Lanka have provided hostel facility for the students but they failed to provide this facility to all the students who need this facility. Students are worried about their hostels with regard to the space and unavailability of a good environment for the learning activities. There is no good food for the students as they were given canteen food which is difficult to eat)

This research revealed that some students are struggling without necessary instruments. A large number of students in the Arts Faculty were among them.

SUGGESTIONS

Classrooms should be upgraded with proper ventilation. Necessary instruments should be provided and maintained in classrooms. Existing library and computer lab facilities also should be improved to meet the students’ needs and wants

Universities should expand their hostel facilities and should be upgraded the available facilities of the existing hostels. Especially, a good physical learning environment should be provided for the students’ learning activities. Otherwise, students should be given financial support to live in good private hostels.

There should be a proper mechanism to make sure that the food sold by the canteen is up to expected quality and quantity. In addition to that Mahapola or Bursary scholarship should be increased at least up to Rs. 7000. It would be facilitate for the students to buy necessary instruments for their academic activities.

For better education, students should be given good hostel facilities, suitable food, necessary educational instruments, appropriate classrooms and good library and lab facilities.

REFERENCES


