

User's Perceptions of Libraries Physical Infrastructure Facilities in United Arab Emirates and India: A Comparative Study

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ABSTRACT

This study presents a comparative analysis of the physical infrastructure of university libraries in India and the United Arab Emirates, focusing on user satisfaction in reference sections. Data were collected through structured questionnaires at Visvesvaraya Technological University (VTU), India, and the University of Wollongong in Dubai (UOWD). Findings reveal that users at UOWD report higher satisfaction levels compared to VTU. Key areas of satisfaction include seating (89.7%), study spaces (81.4%), welcoming environment (87.2%), seminar rooms, Wi-Fi (82.7%), power outlets (85.1%), and lighting (89.0%). Overall, users expressed positive views on the libraries' physical infrastructure.

Keywords: Physical Infrastructure, Library Facilities, Comparative Study, Universities, UAE, India

INTRODUCTION

This study compares the physical infrastructure of reference sections in university libraries in India and the UAE. Both libraries offer quality facilities such as seating, study areas, seminar rooms, lighting, and Wi-Fi. The physical environment is essential to academic libraries as it influences learning, research, and user satisfaction. Guided by the LibQUAL framework, libraries are seen as dynamic spaces for knowledge generation, preservation, and access. As social institutions, libraries fulfill the human need for shared learning spaces. Upgrades in physical infrastructure have been linked to increased usage and improved service delivery.

LITERATURE REVIEW

Downs (1965) noted that many libraries lack adequate resources, facilities, and staff, affecting service quality. The reputation of a university is closely tied to the quality of its library infrastructure (Ogbuiyi & Okpe, 2013). Essential components include power supply, ICT tools, furniture, and purpose-built buildings (Omeluzor, 2018). Facilities such as seating, toilets, catalog systems, lighting, and ventilation also enhance usability (Iwhiwhu & Okorodudu, 2012). Library effectiveness depends on the availability and functionality of its infrastructure (Omeluzor et al., 2018), which also supports long-term sustainability. Nitecki (2011) emphasized that a library's design and services must align with its intended function.

Objective

Library as a social institution is a reflection of an urge inherent in human beings to record and preserve for wider dissemination of new knowledge acquired through observation, discussion, experimentation and deep thinking. The ongoing search throughout the history in the adoption of new medium for recording knowledge is an indication of desire in mankind to find a medium which is capable of survival and at the same time which could reach a wider public expeditiously. An equally if not more important need was to put these records at a place where it was accessible to people. The place now called library has thus played a significant role in generation, preservation and in dissemination of new knowledge Library as a social institution is a reflection of an urge inherent in human beings to record and preserve for wider dissemination of new knowledge acquired through observation, discussion, experimentation and deep thinking. The ongoing search throughout the history in

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- Describe the Facilities for Seating.
- Determine the Study Areas That Encourage Learning and Provide a Friendly Environment
- Describe the seminar spaces for the group discussions and Wi-Fi Accessibility
- Emphasize Which Power Plugs Are Appropriate for Laptop Adapters and Lighting

Scopa and Limitations

The primary goal of the current study is to assess the physical infrastructure facilities of university libraries. No other services offered by the libraries of Visvesvaraya Technological University (VTU) in India and the University of Wollongong in Dubai (UOWD) have been examined in this study.

METHODOLOGY

The survey method was used by the investigator. Only data from the two universities were gathered for the study via a questionnaire survey. A specially created questionnaire was intended to gather feedback solely from users at the two universities. After validation questionnaires were distributed to 1600 library users, 1102 responses, or 68.87% of the total, were received. The questionnaires were pretested at university libraries. The purpose of the survey was to determine the trend of physical infrastructure facilities by collecting large amounts of data. Following receipt, the questionnaires were examined in relation to the specified goals. The S.P.S.S program was used to adopt the necessary statistical techniques and methods for analysing the research data.

Dataanalysis And Interpretation

According to the respondents' gender breakdown, 47.6% of the respondents are female, and the bulk of respondents (52.4%) are male. "The Chi-Square test, gender significantly correlates with the age group and universities attended ($X^2=4.181$; $P=.046$). Compared to University of Wollongong in Dubai (UOWD), Visvesvaraya Technological University (VTU) has a larger percentage of female students".

Table 1 : Seating Facilities:

University				
S/N	Opinion	University of Wollongong in Dubai	Visvesvaraya Technological University	Total
1	Satisfied	362 (63.0)	176 (33.4)	538 (48.8)

2	Highly Satisfied	184 (32.0)	267 (50.7)	451 (40.9)
3	Neutral	29 (5.0)	59 (11.2)	88 (8.0)
4	Dis-satisfied	00 (0.0)	11 (2.1)	11 (1.0)
5	Highly Dissatisfied	00 (0.0)	14 (2.7)	14 (1.3)
Total		575 (100)	527 (100)	1102 (100)
X²=112.931; p=.001				

At reference to the sitting at their libraries, 48.8% respondents reported being "satisfied," followed by 40.9% who reported being "highly satisfied", 08.0% who reported being "neutral", 01.3% who reported being "highly dissatisfied" and just 01.0% who reported being "dis-satisfied". "The chi-square test showed a strong correlation between universities and satisfaction levels with sitting facilities (X²=112.931; P=.001), with users of University of Wollongong in Dubai (UOWD), reporting higher levels of satisfaction than users of Visvesvaraya Technological University (VTU)".

Table 2 : Satisfied of Study Areas Conducive for Learning

University				
S/N	Opinion	University of Wollongong in Dubai	Visvesvaraya Technological University	Total
1	Satisfied	337 (58.6)	177 (33.6)	514 (46.6)
2	Highly Satisfied	147 (25.6)	258 (49.0)	405 (36.8)
3	Neutral	89 (15.5)	70 (13.3)	159 (14.4)
4	Dis-satisfied	02 (0.3)	16 (3.0)	18 (1.6)
5	Highly Dissatisfied	00 (0.0)	06 (1.1)	06 (0.5)
Total		575 (100)	527 (100)	1102 (100)
X²=97.481; P=.001				

There are 514 respondents say are "satisfied" with the study areas conducive for learning in the libraries. This is followed by 405 respondents who say they are "highly satisfied", 159 respondents who say they are "neutral," 18 users who say they are "dis-satisfied," and just 6 users who say they are "highly dis-satisfied". "Users of University of Wollongong in Dubai (UOWD), are more satisfied with their perception of study spaces that are conducive to learning than users of Visvesvaraya Technological University (VTU), the Chi-square test, which found a significant correlation between satisfaction with these spaces and universities (X²=97.481; P=.001)".

Table 3: Library is an Inviting Space

University				
S/N	Opinion	University of Wollongong in Dubai	Visvesvaraya Technological University	Total
1	Satisfied	383 (66.6)	172 (32.6)	555 (50.4)

2	Highly Satisfied	149 (25.9)	256 (48.6)	405 (36.8)
3	Neutral	30 (5.2)	69 (13.1)	99 (9.0)
4	Dis-satisfied	07 (1.2)	10 (1.9)	17 (1.5)
5	Highly Dissatisfied	06 (1.0)	20 (3.8)	26 (2.4)
Total		575 (100)	527 (100)	1102 (100)
X²= 130.075; p=.001				

There are 544 respondents (50.4%) indicated that they are "satisfied" with their university libraries' "The Library is an Inviting Space." 405 respondents who are "highly satisfied," 99 users who state they are "neutral," 26 users who state they are "highly dissatisfied," and a mere 17 users who assert that they are "dis-satisfied." "Researchers found a significant correlation between university satisfaction and the perception of the library as an inviting space ($X^2=130.075$; $P=.001$). Users of University of Wollongong in Dubai (UOWD), are more satisfied with their perception of the library as an inviting space than users of Visvesvaraya Technological University (VTU)".

Table 4: Seminar Rooms for Group Discussion Wi-Fi Accessibility

University				
S/N	Opinion	University of Wollongong in Dubai	Visvesvaraya Technological University	Total
1	Satisfied	344 (59.8)	157 (29.8)	501 (45.5)
2	Highly Satisfied	171 (29.7)	239 (45.4)	410 (37.2)
3	Neutral	50 (8.7)	92 (17.5)	142 (12.9)
4	Dis-satisfied	05 (0.9)	16 (3.0)	21 (1.9)
5	Highly Dissatisfied	05 (0.9)	23 (4.4)	28 (2.5)
Total		575 (100)	527 (100)	1102 (100)
X²=108.948; p=.001				

501 of the 1102 respondents are "satisfied" with the seminar rooms for group discussions Wi-Fi accessibility in their universities library, compared to 410 who are "highly satisfied," 142 who are "neutral," 28 (2.5%) who are "highly dissatisfied," and just 21 who are "dissatisfied". "Users of University of Wollongong in Dubai (UOWD) are more satisfied than users of Visvesvaraya Technological University (VTU) with regard to seminar rooms for group discussion Wi-Fi connectivity, according to the results of the Chi-Square test, which showed a significant relationship between satisfaction levels regarding seminar rooms for group discussion Wi-Fi connectivity and universities ($X^2=108.948$; $P=.001$)".

Table 5 : Wi-Fi Connectivity

University				
S/N	Opinion	University of Wollongong in Dubai	Visvesvaraya Technological University	Total
1	Satisfied	350 (60.9)	116 (22.0)	466 (42.3)

2	Highly Satisfied	178 (31.0)	249 (47.2)	427 (38.7)
3	Neutral	38 (6.6)	104 (19.7)	142 (12.9)
4	Dis-satisfied	05 (0.9)	23 (4.4)	28 (2.5)
5	Highly Dissatisfied	04 (0.7)	35 (6.6)	39 (3.5)
Total		575 (100)	527 (100)	1102(100)
X²=194.474; p=.001				

The table includes the degree of Wi-Fi connectivity satisfaction in libraries. Out of 1102 responses, 466 (46.6%) are “satisfied”, 427 (38.7%) are “very satisfied”, 142 (12.9%) are “neutral”, 39 (3.5%) are “highly dissatisfied” and only 28 (2.5%) are “dissatisfied”. “Users of University of Wollongong in Dubai (UOWD) have higher levels of satisfaction with their Wi-Fi connectivity than users of Visvesvaraya Technological University (VTU), according to the Chi-Square test, which found a significant correlation between universities and satisfaction levels with Wi-Fi connectivity (X²=194.474; P=.001)”.

Table 6: Sufficient Power Plugs for Laptop Adaptors

University				
S/N	Opinion	University of Wollongong in Dubai	Visvesvaraya Technological University	Total
1	Satisfied	374 (65.0)	164 (31.1)	538 (48.8)
2	Highly Satisfied	158 (27.5)	242 (45.9)	400 (36.3)
3	Neutral	37 (6.4)	86 (16.3)	123 (11.2)
4	Dis-satisfied	02 (0.3)	13 (2.5)	15 (1.4)
5	Highly Dissatisfied	04 (0.7)	22 (4.2)	26 (2.4)
Total		575 (100)	527 (100)	1102 (100)
X²=137.830; p=.001				

Regarding the appropriate power plugs for laptop adaptors in universities library, 48.8% respondents are "satisfied", 36.3% respondents are "highly satisfied," 11.2% respondents are "neutral," 02.04% respondents are "highly dissatisfied," and only 01.4% respondents are "dissatisfied". “Universities and satisfaction levels with regard to having enough power plugs for laptop adaptors were found to be significantly correlated (X²=137.830; P=.001) by the Chi-Square test, with University of Wollongong in Dubai (UOWD) users reporting higher levels of satisfaction than Visvesvaraya Technological University (VTU) users”.

Table 7: Lighting Facilities

University				
S/N	Opinion	University of Wollongong in Dubai	Visvesvaraya Technological University	Total
1	Satisfied	381 (66.3)	181 (34.3)	562 (51.0)

2	Highly Satisfied	151 (26.3)	268 (50.9)	419 (38.0)
3	Neutral	41 (7.1)	65 (12.3)	106 (9.6)
4	Dis-satisfied	01 (0.2)	04 (0.8)	05 (0.5)
5	Highly Dissatisfied	01 (0.2)	09 (1.7)	10 (0.9)
Total		575 (100)	527 (100)	1102(100)
X²=115.608; p=.001				

The aforementioned table shows that, regarding Lighting Facilities university libraries, 51.0% respondents reported being "satisfied", 38.0% respondents reported being "highly satisfied", 09.6% respondents reported being "neutral", 00.9% respondents reported being "highly dissatisfied," and of the respondents, only 0.9% said they were "dissatisfied". "The Chi-Square test results indicate a significant correlation (X²=115.608; P=.001) between lighting facility quality and university satisfaction. This shows that compared to Visvesvaraya Technological University (VTU), users at University of Wollongong in Dubai (UOWD), are happier with the lighting facilities".

T-Test for Satisfied of Physical Infrastructure

Table 8: Satisfied of Physical Infrastructure

S/N	University	N	Mean	Std. Deviation	Std. Error Mean	't' value	P value
1	UOWD	575	29.2522	3.46773	.14461	-.007	.994
2	VTU	527	29.2543	6.25715	.27257		

The "T" analysis of independent samples demonstrates that the mean difference between UOWD and VTU users is not statistically significant (t=-.007; p=.994). "The overall mean scores for University of Wollongong in Dubai (UOWD) and Visvesvaraya Technological University (VTU) were 29.2522 and 29.2543, respectively".

CONCLUSION AND FINDINGS

Findings and Conclusions Based on initial findings, several factors need to be looked into to compare university users' satisfaction with the physical infrastructure facilities of reference libraries in India and the United Arab Emirates. The current study examined how satisfied users were with comparative Users of the University of Wollongong in Dubai (UOWD) are happier with the physical infrastructure facilities provided by their libraries than are users of Visvesvaraya Technological University (VTU). It was discovered that libraries offer features such as seating areas, study areas that are conducive to learning, inviting spaces, seminar rooms for group discussions, and Wi-Fi connectivity. Additionally, they emphasize the availability of sufficient power plugs for laptop adapters and lighting facilities. There is a relationship between library services and patron satisfaction with the physical infrastructure.

Overall, feedback from all user categories indicates that university library users are actively working to enhance the physical infrastructure of the libraries. Users of University of Wollongong in Dubai (UOWD) are more satisfied than users of Visvesvaraya Technological University (VTU) with regard to the physical infrastructure of libraries. This is based on the results of the Chi-Square test, which indicated that all physical infrastructure facilities are significant. It was found that seating facilities (X²=112.931; P=.001), study areas conducive to learning (X²=97.481; P=.001), inviting spaces (X²=130.075; P=.001), and seminar rooms for group discussions are among the most popular features among UOWD users. Internet access (X²=108.948;

P=.001), Internet access ($X^2=194.474$; $P=.001$), it was discovered that laptop adaptor power plugs ($X^2=137.830$; $P=.001$) and lighting facilities ($X^2=115.608$; $P=.001$) were more common than VTU users.

Overall, however, patron response to the physical infrastructure facilities of libraries was consistently positive, with significant of sufficient to physical infrastructure facilities based on user's satisfaction levels. This paradox might arise from the fact that university library patrons evaluate their current offerings using predetermined criteria that help them gauge their level of satisfaction.

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