Perception of library service quality, satisfaction and frequency of use of library resources

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Abstract

The aims of this paper are to assess the students' perceived levels of library service quality, satisfaction with the library service, frequency of use of library resources, and whether there are relationships among these constructs. A survey research method using LibQUAL+^{TM} instrument was used to collect data from a sample of 400 students at the National University of Lesotho (NUL). Self-administered questionnaires were distributed to students during class hours. Descriptive and inferential statistics were used to analyse data. As expected, factor analysis of LibQUAL+^{TM} items yielded 3 factors - affect of service, information control and library as a place. On average, the respondents perceived low service quality from the library staff and the extent to which library patrons can easily access and control information. The majority of respondents also rarely used the library website. There was a strong and positive correlation between all attributes of library service quality and satisfaction with the library. Even though some attributes of the library service quality had positive correlations with the use of library website, there was only a slight significant relationship between information control and the use of library website in the regression analysis. There was no relationship between satisfaction and frequency of library usage. The paper concludes that LibQUAL+^{TM} has acceptable applicability in Lesotho, and further recommends how affect of service and information control dimensions of library service quality at NUL can be improved.

Key words: Library; library resources; LibQUAL+^{TM}; satisfaction; service quality.

Introduction

Satisfaction of academic library users and their subsequent utilization of library resources are important for quality teaching, research and learning. Faced with threats of global digital environment and increasing competition (Cullen 2001), many libraries adopt a concept of service quality to better serve the user. Service quality; a term commonly defined in business and marketing from the customer perspective, has recently been a concern within library and information services sector. This is because the extent to which the library succeeds is dependent on the assessment made by the user as a judge of quality (Nitecki 1996). Aware of the need to create a culture of continuous improvement, many academic libraries use LibQUAL+^{TM} as a primary tool for fostering the culture of assessment and improvement (Hunter & Perret 2011:403).

Even though LibQUAL+^{TM} is the most popular instrument for measuring library service quality and user satisfaction, like the instrument it mirrors, SERVQUAL (Parasuraman *et al.* 1988), its applicability in an international setting, especially in developing countries, is yet to be demonstrated (Zhou 2004). Having been developed and validated in Western academic libraries, there is a possibility that the applicability of LibQUAL+^{TM} may be influenced by different cultural orientations of users in developing countries. Several criticisms have also been levelled against LibQUAL+^{TM} assessment protocol, including what its scores really measure (Roszkowski, Baky, & Jones 2005; Thompson, Cook, & Kyrillidou 2005).

On the domestic front, to our knowledge, there are no studies pertaining to the perception of library service quality, user satisfaction and frequency of use of library resources at the National University of Lesotho (NUL). This is surprising because the NUL library is the largest academic library in Lesotho.

The aim of this study is to assess the perceived levels of service quality and satisfaction with the library; the use of library resources and its website; and the relationships among these variables at NUL. We use the 'performance-only measure' of selected items of LibQUAL+^{TM} instrument to collect data from a convenient sample of 400 students at NUL.

LibQUAL+^{TM} instrument

LibQUAL+^{TM} is the most popular survey designed specifically to gauge the perception of library users regarding library service quality (Hunter & Perret 2011; Hakala & Nygrén 2010). Spearheaded by the Association of Research Libraries

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(ARL), LibQUAL+^{TM} has 22 items and three dimensions – affect of service, library as a place, and information control (Hunter & Perret 2011; Roszkowski et al. 2005). These dimensions respectively refer to the quality of service provided to library patrons by library staff; the physical location, buildings and space of the library itself; and the extent to which library patrons can easily access and control library resources on their own.

Based on the work of Parasuraman, Zeithaml, and Berry (1985, 1988), the theoretical underpinning of LibQUAL+^{TM} is the Expectation Confirmation-Disconfirmation theory (Roszkowski et al. 2005). According to this theory, customers have some pre-purchase standards (expectations) that guide their purchasing activities. After buying a product or service, a customer compares the performance of a product or service against the pre-purchase standard. If the performance of a product or service exceeds the pre-purchase standard, positive disconfirmation occurs, and this leads to satisfaction. If performance is less than the pre-purchase standard, negative disconfirmation occurs, and this leads to dissatisfaction. Confirmation results where there is a match between performance and pre-purchase standard, leading to moderate satisfaction or indifference (Roszkowski et al. 2005; Shi, Holahan, & Jurkat 2004). This implies that user satisfaction is related to the size and direction of disconfirmation (Shi *et al*. 2004).

The gap model that underlies satisfaction in SERVQUAL and LibQUAL+^{TM} has however been criticised by researchers in marketing and library information services sectors (Roszkowski et al. 2005; Zhou 2004). For instance, it has been argued that expectations are based on past experience; and if a customer experiences a discrepancy between the desired and actual performance; future expectations are likely to be revised closer to actual performance; implying that, even though nothing has actually changed; the customer will likely be satisfied next time they deal with the same service provider. If on the other hand improvements in service have been made; the customer is likely to raise their expectation; and dissatisfaction may result even though improvements have been made (Roszkowski et al. 2005). This implies the possibility of rewarding poor service with lower expectations and smaller gaps; and punishing good service with higher expectations and increased gaps (Hunter & Perret 2011). It is also argued that people rarely rate actual performance higher than the desired level, implying that it is practically impossible to have fully satisfied customers or users. This is despite the fact that people frequently report being satisfied even when their expectations have not been fully met (Roszkowski et al. 2005).

The weaknesses of the gap model (difference between expectations and product/service performance) led some researchers to use PERFQUAL, a performance-only variant of SERVQUAL to gauge customer perception of services (Brady, Cronin, & Brand 2002). In the context of libraries, the study by Roszkowski et al. (2005) established that the performance-only measure (perceived score) is the better predictor of satisfaction than the superiority gap (the gap between expectations and perceived ratings). We selected the 'performance-only measure' in this study because compared to Expectation Confirmation-Disconfirmation theory on which the LibQUAL+^{TM} is based, the former has advantages and support among many researchers (Jayasundara, Ngulube, & Minishi-Majanja 2009).

Service quality versus satisfaction

Even though service quality and satisfaction differ, there is a tendency to use the two concepts interchangeably in the evaluation of library services (Cullen 2001; Hunter & Perret 2011; Kiran & Diljit 2012; Roszkowski et al. 2005). While customer satisfaction is defined as a post-consumption evaluation or experience of a product or service (Roszkowski et al. 2005; Zhou 2004), service quality refers to the comparison between expectations of customers and their perception of the service received (Kiran & Diljit 2012; Parasuraman et al. 1985).

The difference between the two concepts is sometimes blurred. For instance, Lancaster (as cited in Kiran & Diljit 2012:185) described satisfaction as 'the difference between service expectations and perceived performance', the meaning often attached to service quality. However, some researchers argue that while service quality is the cumulative evaluation of multiple transactions over time, satisfaction is transaction specific (Roszkowski et al., 2005). Thompson et al. (2005:518) suggest that satisfaction scores describe more immediate and holistic feeling than service quality scores which tend to describe a longer-lasting perception of library service quality. There is also a widely accepted notion that service quality is an antecedent of satisfaction (Jayasundara *et al* 2009; Roszkowski et al. 2005; Shi et al. 2004).

In line with LibQUAL+^{TM} organisation (Hunter and Perret 2011), we treat service quality and satisfaction as two distinct concepts. We further treat service quality as a precursor of satisfaction. Many studies confirm a consistent positive relationship between service quality and satisfaction (Roszkowski et al. 2005; Thompson et al. 2005; Shi et al. 2004). We therefore expected overall service quality and its dimensions to relate positively to satisfaction with the library.

Hypothesis 1: Perception of overall service quality is positively related to satisfaction with the library.

Hypothesis 1a: Perception of affect of service is positively related to satisfaction with the library.

Hypothesis 1b: Perception of library as a place is positively related to satisfaction with the library.

Hypothesis 1c: Perception of information control is positively related to satisfaction with the library.

Service quality, satisfaction and frequency of usage of library resources and website

Service quality and satisfaction are often related to behavioural consequences (Zhou 2004). Based on attitude-behaviour relationship, we expected that the perception of library service quality and satisfaction with the services of the library would affect the frequency of use of library resources, including its website. The frequency of use of library resources and its website are some of the outcomes listed at the end of LibQUAL+^{TM} instrument. Even though the intended purpose of these outcome items is not stated, Roszkowski et al. (2005) assume they are placed there to check the validity of the core section of LibQUAL+^{TM} instrument. The following relationships among service quality, satisfaction and frequency of use of library resources could therefore be expected.

Hypothesis 2: Perception of overall service quality is positively related to the frequency of usage of library resources and its website.

> *Hypothesis 2a: Perception of affect of service is positively related to the frequency of usage of library resources and its website.*

> *Hypothesis 2b: Perception of library as a place is positively related to the frequency of usage of library resources and its website.*

> *Hypothesis 2c: Perception of information control is positively related to the frequency of usage of library resources and its website.*

Hypothesis 3: Satisfaction with library is positively related to the frequency of usage of library resources and its website.

Methodology

The quantitative research design deploying survey research methodology was used in this study. This research design was deemed appropriate for the purposes of addressing the hypothesized relationships outlined in this paper.

Sample, instrument and procedures

A survey research methodology using LibQUAL+^{TM} instrument was used to collect data from a convenient sample of 400 students at NUL. 15 items representing 3 dimensions of LibQUAL+^{TM,} and 5 items representing outcomes (satisfaction and frequency of library usage) were selected from the LibQUAL+^{TM} instrument for the purposes of this study. Self-administered questionnaires were distributed to students during class hours. A total of 384 usable questionnaires were returned, representing 96 percent response rate. Of the respondent sample, 50.8 % were females.

Variable measures

Unless stated otherwise, items were measured on a Likert scale ranging from (1) strongly disagree to (5) strongly agree.

Affect of service: 5 items were used to measure this construct. The sample item was: 'the library staff instils confidence in users'. One item, 'the library staff is willing to help users,' was deleted because its deletion improved the Cronbach's alpha (internal reliability) of the scale from 0.66 to 0.79.

Library as a place: 5 items were used to measure this construct. The sample item was: 'the library has space that inspires learning'. One item, 'the library has community space for group learning and group study,' was deleted because its deletion improved the Cronbach's alpha (internal reliability) of the scale from 0.64 to 0.70.

Information control: 5 items were used to measure this construct. The sample item was: 'the library has modern equipment that lets me easily access information'. The Cronbach's alpha (internal reliability) of the scale was 0.69.

Overall service quality: 13 items used to assess 'affect of service', 'library as a place', and 'information control' were used to measure the overall service quality. The Cronbach's alpha (internal reliability) of the scale was 0.83.

Satisfaction with library services: Following Thompson *et al.* (2005), 3 items were used to measure this construct. The sample item was: 'in general, I am satisfied with library support for my learning and research needs'. The scale ranging from 1(very poor) to 5(excellent) was used to measure the item: 'how would you rate the overall service provided by the library?' The Cronbach's alpha (internal reliability) of the scale was 0.72.

Frequency of use of library resources: 2 items were used to measure this behavioural concept. The respondents were asked to rate how often they use the library resources and its website. These were scored on a scale anchored as follows: 0=not at all; 1=monthly; 2=weekly; and 3=daily.

The instrument is shown in the appendix.

Data analysis

Statistical Package for Social Sciences (SPSS) was used to compute frequencies, means (standard deviations), correlations, regression and factor analyses.

Findings

Dimensionality of scale items
We conducted factor analysis (principal components, Varimax rotation) to examine the factor structure of items of LibQUAL+TM and outcomes respectively. The results are shown in Tables 1 and 2.

Table 1 Factor analysis of LibQUAL items

	Factors			
	1	2	3	4
The library staff gives individual attention to users	0.756208	0.231621	-0.00027	0.100635
The library staff instills confidence in users	0.752966	0.193302	0.067913	0.174725
The library staff has knowledge to answer users' questions	0.743692	0.116211	0.131376	-0.16826
The library staff understands the needs of users	0.720116	0.154579	0.141245	-0.01346
The library has modern equipment that lets me easily	0.11059	0.708576	0.172184	0.142106
The library has electronic information I need	0.1373	0.66367	0.260483	-0.13439
The library website enables me to locate information on	0.151419	0.639331	-0.01273	-0.08936
The library has easy to use access tools that allow me to	0.218187	0.615924	0.044858	0.156409
The library makes the information easily accessible for	0.342297	0.612119	0.19879	-0.1374
The library has space that inspires learning	0.081992	0.120261	0.85921	-0.02359
The library has comfortable and inviting location	0.271054	0.031192	0.770509	0.021765
The library is a gateway for study, learning or research	-0.08824	0.388464	0.552076	0.310132
The library has quiet space for individual learning	0.019365	0.378371	0.471334	-0.38208
The library staff is willing to help users	0.318595	0.208036	0.072994	0.629676
The library has community space for group learning and	0.309517	0.322729	0.010576	-0.49363
Percentage of variance explained	30	11	08	07

Extraction Method: Principal Component Analysis. **Rotation Method:** Varimax with Kaiser Normalization. Rotation converged in 5 iterations.

As shown in Table 1, four factors with eigenvalues greater than 1.0 emerged; namely affect of service (factor 1), information control (factor 2), library as a place (factor 3) and undefined factor (factor 4). The four-factor model explained about 56% of total variance. It will be noted that items that comprise factor 4 are those deleted from affect of service and library as a place dimensions. Thus as expected; only 3 interpretable factors emerged from factor analysis.

Table 2 Factor analysis of outcome items

	Factors	
	1	2
In general, I am satisfied with library support for my learning and research needs	0.814116	0.141587
In general, I am satisfied with the way I am treated at the library	0.792615	-0.02004
How would you rate the overall quality of the service provided by the library?	0.78979	-0.08526
How often do you use resources on library premises	-0.02595	0.812028
How often do you access library resources through a library web page	0.039826	0.776291
Percentage of variance explained	38	26

Extraction Method: Principal Component Analysis. **Rotation Method**: Varimax with Kaiser Normalization. Rotation converged in 3 iterations.

Factor analysis of outcome items (Table 2) resulted in two factors, namely, satisfaction with library services (factor 1), and frequency of use of library services (factor 2). The two-factor model explained about 64 percent of total variance. Since

the Cronbach's alpha of items in factor 2 was low (=0.52), we separate the two forms of library usage in subsequent analysis.

Descriptive Information

The means, standard deviations and frequencies of service quality dimensions and satisfaction are shown in Table 3.

Table 3 Means, standard deviations and frequency of dimensions of LibQUAL and satisfaction

Variable	Mean (Scale: 1-5)	SD	Strongly Disagree/ Disagree	Neutral	Strongly Agree/ Agree
Library as a place	3.29	0.82	30.8%	5.8%	63.4%
Information Control	3.03	0.87	40.7%	10.5%	48.8%
Affect of Service	2.67	0.87	56.0%	15.8%	28.2%
Satisfaction	2.73	0.89	58.2%	10.8%	31.0%

Table 3 suggests that many participants had above-midpoint perception of the quality of library as a place (M=3.29, SD=0.82), suggesting that among others, many participants felt that the library had a physical space that inspired learning and research; had a comfortable and inviting location; and had a quiet space conducive for learning. In terms of information and personal control, the participants scored around midpoint (M=3.03, SD=0.87), suggesting that on average, participants were neither impressed nor unimpressed about access of information on their own. The area that needs attention relates to the service provided by library staff. On average, the majority of participants (56 percent) were not happy about the quality of services provided by library staff (M=2.67, SD=0.87). Participants were equally not satisfied with the overall service they got from the library (M=2.73, SD=0.89), with over 58 percent registering dissatisfaction.

The frequencies of use of library resources including its website are shown in Table 4.

Table 4 Frequency of use of library resources

	Not all	Frequency of usage (%)		
		Monthly	Weekly	Daily
Usage of library resources	5.1	18.9	44.5	31.5
Usage of website/page	16.1	52.2	25.1	6.6

As shown in Table 4, less than half of the respondents (31.5 percent) admitted using library resources daily, with an even lower number (6.6 percent) admitting surfing the website daily. It is even more worrying to note that a significant number (16.1 percent) of participants indicated that they never used the library website to search for resources at the library.

Relationship between Variables

To initially test the hypotheses outlined in this study, we correlated independent variables with satisfaction and use of library resources. The results of correlation analysis are shown in Table 5.

Table 5 Correlation (r) of variables with satisfaction, use of resources and website

	Satisfaction	Frequency of use of resources	Frequency of use of website
Gender	-0.038	0.022	0.006
Age	-0.025	-0.183**	-0.041
Library as a place	0.590**	0.076	0.056
Information Control	0.538**	0.079	0.138**
Affect of Service	0.546**	0.009	0.106*
Overall service quality	0.719**	0.103	0.130*
Satisfaction	-	0.008	0.043

*Correlation is significant at 0.05 level (2 tailed), **Correlation is significant at 0.01 level (2 tailed)

Hypothesis 1 predicted the positive relationship between the perception of service quality and satisfaction with library services. As expected, there were strong relationships among overall service quality and satisfaction (r=0.72, p≤0.001);

affect of service and satisfaction (r=0.55, p≤0.001); library as a place and satisfaction (r=0.59, p≤0.001); and information control and satisfaction (r=0.54, p≤0.001). Thus hypotheses 1 and its components were fully supported.

Hypothesis 2 predicted a positive correlation between the perception of service quality and frequency of use of library resources and website. Frequency of use of library resources did not correlate with either perception of service quality nor with any of its dimensions. Frequency of use of website correlated slightly with information control (r=0.14, p≤0.001), affect of service (r=0.11, p≤0.05) and overall service quality (r=0.13, p≤0.05), but not with library as a place (0.06, p≥0.05). Based on correlation results, hypothesis 2 got mixed support.

Hypothesis 3 predicted a positive correlation between satisfaction and frequency of use of library resources and website. Results from Table 5 suggest no relationship either between satisfaction and frequency of use of resources (r=0.00, p≥0.05), nor between satisfaction and frequency of use of library website (r=0.04, p≥0.05). Hypothesis 3 was hence not supported.

The limitation of simple correlation analysis is that it does not control for the spurious relationships that may be caused by other variables, and this may result in erroneous relationships. We used the regression analysis in which the dependent variables were satisfaction, the frequency of use of library resources, and the frequency of use of library website to control for the possibility of spurious relationships that may be caused by related independent variables. The results of regression analyses are summarised in Table 6.

TABLE 6 Summary of regression analyses

	Satisfaction	Frequency of use of resources	Frequency of use of website
Gender	-0.085*	-0.001	0.034
Age	-0.059	-0.092	0.026
Library as a place	0.423**	0.092	0.029
Information Control	0.152**	0.130	0.167*
Affect of Service	0. 340**	-0.087	0.078
Satisfaction		-0.012	-0.91
R^2	0.528	0.038	0.037

* significant at 0.05 level (2 tailed), ** significant at 0.01 level (2 tailed), figures represent standardized betas (β)

The results from Table 6 suggest that library as a place of information control and affect of service were still significantly associated with satisfaction after controlling for the effects of other variables (β=0.42, p≤0.001, β=0.15, p≤0.001, and β=0.34, p≤0.001 respectively). This reaffirms the findings of correlation analysis. Even after controlling for the effects of other variables, no independent variable was related to the frequency of use of library resources. Information control was the only variable that emerged as the predictor of the frequency of use of library website (β=0.17, p≤0.05) after controlling for the effects of other variables.

Discussion

Rapid technological progress and changing customer preferences have made it imperative for libraries to continuously adapt and adjust their structures, systems and processes to match user needs in order to enhance satisfaction. The outdated view by librarians that their 'services are inherently des irable', and hence blame customer ignorance when their services are not used (Cullen 2001:667) cannot apply in an era where non-profits like libraries are assessed by the user as a judge of quality (Nitecki, 1996). Libraries need to either upgrade their services to fulfil expectations of library users or perish.

With the exception of library as a place, the descriptive statistics suggest that the respondents in this study did not perceive quality in terms of services provided by library staff, and the information control – the perceived strength and ease of access to library collections (Hunter & Perret 2011). Similarly, most respondents were dissatisfied with services provided by the library, and the majority hardly used its resources, especially its webpage. Despite attempts by libraries to adopt new technologies, this finding is in line with the view that students and other users prefer using non-library internet services (Kiran & Diljit 2012). While this study did not look for the reasons why students did not use library webpage to search for electronic resources, the dysfunctional nature and lack of user-friendliness of the library webpage at NUL may be to blame. For instance, web pages on dissertations and past question papers did not provide users with access to

expected information at the time of study. There was also no motivation for NUL students to use the library webpage because more than half of NUL lecturers had not integrated ICTs into their teaching (Ntemana & Olatokun 2012).

There were strong relationships among overall service quality and satisfaction; affect of service and satisfaction; library as a place and satisfaction; and information control and satisfaction. This supports prior studies indicating that library service quality is a strong correlate of satisfaction (Shi *et al*. 2004). For instance, Roszkowski *et al*. (2005) established that the perceived score (direct rating of library service quality) was a more valid indicator of user satisfaction than the gap score. Thompson *et al*. (2005) found that LibQUAL+^{TM} scores were more correlated with satisfaction than other outcomes. While this study did not examine whether superiority scores were better measures of library service quality than perceived scores, it shows that perceived scores correlated strongly with user satisfaction.

Of the library service quality dimensions, only information control had some influence on the self-reported access to library resources through the library webpage. This relationship is sensible because information control measures the extent to which users can find information on their own, and this can best be facilitated by access to the webpage. It is also in accord with the findings of Thompson *et al*. (2005) that the LibQUAL+^{TM} dimension that most correlated with outcomes was information control.

Satisfaction was not at all related to the use of library resources and webpage. This supports the findings of Hunter and Perret (2011) that LibQUAL+^{TM} data show no significant correlation between library usage statistics and user satisfaction. While these authorities attributed the lack of correlations to limitations in the LibQUAL+^{TM} method of measuring patron satisfaction, it is possible to provide another plausible reason in the case of Lesotho. Since there are no alternative academic libraries in the country, whether or not satisfied, students can only use NUL library, making it the only option for even dissatisfied students to visit. Qualitative studies are apparently needed to explain this unexpected finding.

We found that LibQUAL+^{TM} instrument tapped into expected dimensions; this makes us confident that the instrument has acceptable applicability in Lesotho. The fact that the results of this study are in line with studies elsewhere gives us further confidence that LibQUAL+^{TM} has some validity in Lesotho.

Like many studies of this nature, this one is not without limitations. First, the cross-sectional design adopted in the study makes it difficult to conclude on the causality between variables. Longitudinal and/or experimental designs are needed to show causality between variables. Second, the sampling technique based on students limits the generalisability of the results. Future studies can be based on stratified random samples of students, lecturers and other library users. Third, data were collected with self-reports of students, and this raises the possibility of same-source bias. In general, even though the assumed relationships were based on sound theories, the explanation of results should still be made with caution.

This study has some implications for NUL library management and academic researchers. First, management should improve the communication and interpersonal skills of library staff. This can be done through targeted training to all library staff. Second, library management should pay attention to the improvement of the information control dimension. More specifically, the library should improve print and electronic collections, books, electronic journals, and provide the latest information access tools (e.g. catalogue and website), remote access, web-based services, and space for group discussions. Finally the study suggests that LibQUAL+^{TM} instrument, especially the measurement of perceived score (direct rating of library service quality), can be a valid measure of students' satisfaction in Lesotho.

Conclusion

Based on a convenient survey of 400 students, the aims of this study were to assess the levels of service quality and satisfaction; the use of library resources and its website; and their relationships as perceived by one important type of library user at NUL – the student. The other aim was to examine if LibQUAL+^{TM} could successfully be applied in Lesotho to assess library service quality and satisfaction.

The results revealed that LibQUAL+^{TM} instrument had an acceptable validity in Lesotho, and therefore could be used as an instrument to collect data among library users. In general, the respondents perceived low service quality from the library staff, and the extent to which they can access and control information from the library. Most of the respondents also did not use the library website frequently. There was a strong positive relationship between the perception of library service quality and user satisfaction, but only a slight positive association between information control and the use of library website could be established. Contrary to expectations, user satisfaction with the library did not influence the frequency of usage of library resources in this study.

The above results were discussed, and the recommendations, limitations, and prospects for research were outlined.

Appendix – The instrument

Demographic Factors (Controls)

Gender (Males=1, Females=2)
Age (less than 20 years=1; 20-30 years = 2, 31-40 years = 3; 41-50 years = 4; 51-60 years = 5; Above 60 years of age = 5)

*Library service quality (*LibQUAL+^{TM})
Indicate the extent to which you agree with the following statements in relation to NUL library (1=strongly agree….5=strongly disagree)

Library as a place dimension
The library has comfortable and inviting location
The library has the space that inspires learning
The library is a gateway for study, learning and research
The library has a quiet space for individual learning
The library has a community space for group learning and study

Information control dimension
The library has electronic information I need
The library has modern equipment that lets me easily access the information
The library has easy to use access tool that allow me to find things on my own
The library makes the information easily accessible for individual use
The library website enables me to locate information on my own

Affect of service dimension
The library staff understands the needs of users
The library staff has knowledge to answer users' questions
The library staff instils confidence in users
The library staff gives individual attention to users
The library staff is willing to help users

Satisfaction with the library (1=strongly agree….5=strongly disagree)
In general, I am satisfied with the way I am treated at the library
In general, I am satisfied with library support for my learning and research needs
How would you rate the overall quality of the service provided by the library?
1=very poor, 2=poor, 3=average, 4=good, 5=excellent

How often do you use resources on library premises?
 0=not at all; 1=monthly; 2=weekly; and 3=daily

How often do you access the library resources through a library webpage?
0=not at all; 1=monthly; 2=weekly; and 3=daily

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