DOES QUALITY ASSESSMENT MATTER IN AN ACADEMIC LIBRARY? A CASE STUDY OF THE UNIVERSITY OF NAMIBIA LIBRARY

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ABSTRACT: Reliable tools for measuring service quality and demonstrating the impact of services are becoming more and more important in library sector development. Measuring quality is not only an administrative factor. In-depth quality assessment is also needed for a library to inclusively identify and respond to current and emerging needs of its stakeholders and various user groups. In this context, the paper analyses quality assessment methods used in the University of Namibia (UNAM) Library from 2012 – 2019 with the main focus on the international standardised customer satisfaction LibQUAL+ survey, carried out in 2012 and 2014. The paper provides an analytical assessment of the use of LibQUAL+ at UNAM library, describing challenges, benefits and outcomes of the use of the method. The authors conclude that LibQUAL+ proved to be a very informative tool providing critical information for strategic planning. The use of a scientifically developed standardised tool had the additional advantage that the institution's management trusted the results. The paper further discusses the practical implications of how the results of LibQUAL+ informed strategic planning and improvement of services, presents an analysis of the reasons for discontinuation the use of LibQUAL+ instrument, and concludes with a brief description of complementary methods that can be used to assess aspects that customer satisfaction-based methods do not cover, namely external quality reviews and benchmarking. The purpose of the paper is to provide an analytical view of challenges and benefits of quality assessment processes in one academic library for the benefit of strategic planning processes in other libraries

KEYWORDS: quality assurance, LibQUAL+, customer satisfaction surveys, service quality, academic libraries.

INTRODUCTION

Demonstrating quality and accountability is an integral part of higher education institutions. Higher education institutions are currently competing aggressively through competitive advantages and high quality to attract students, prominent academics and funding. The assessment of service quality is essential in providing evidence on the effectiveness of educational plans and improvement programmes Cardona and Bravo (2012). Economic realities in higher education funding systems have also brought in new requirements for accountability. International developments and requirements have resulted in many countries establishing national and institutional quality assurance agencies responsible to monitor and evaluate the quality and performance of higher education institutions (HEIs). In Namibia, the Namibia Qualifications Authority (NQA) is responsible for setting up and administering the National Qualifications Framework (NQF), while the National Council for Higher Education (NCHE) is responsible for accrediting academic programmes and higher education institutions.

Academic libraries provide critical services to the parent institutions, supporting teaching, learning, research, innovation and resource mobilisation activities. They are also required to demonstrate the value and quality of their services by aligning their mission, vision and strategic initiatives to those of the mother institution. Atkinson (2017) The conventional roles of academic libraries have transformed through the advancement of information and communication technology (ICT), which changed, and continue to change, the way information is published, accessed and used. It also changed the modes of learning, teaching, assessment and the communication of research. As a result, reliable tools for measuring service quality and demonstrating the impact of services has become more important in library sector development. Measuring quality is, however, not only an administrative function. A more in-depth objective for a library's quality assessment is to inclusively identify and respond to current and emerging needs of its stakeholders and various user groups. The effectiveness and quality of academic library services rely on close interrelationships between various entities of the university, such as library staff, academics, students and other professional support staff.

This paper analysed quality assessment methods used at the University of Namibia (UNAM) Library from 2012-2019, focusing on the international standardised customer satisfaction survey, LIBQUAL+, carried out in 2012 and 2014. The purpose of the paper is to provide an analytical assessment of the use of LIBQUAL+ at the UNAM Library, describing challenges and benefits in the process of collecting and analysing the data and the results and outcomes from the use of the instrument. An analysis of the reasons for discontinuation the use of LibQUAL+ instrument is also presented. The paper concludes with a brief description of complementary methods used to assess aspects that customer satisfaction-based methods do not cover, namely external quality reviews and benchmarking. The goal of the paper is to provide an analytical view of the challenges and benefits of quality assessment methods in one academic library. It took on the form of a case study based on library quality assurance processes at UNAM.

The paper is based on data provided by LibQUAL+ survey results during assessments carried out at the University of Namibia Library. These overall and campus based reports are the result of surveys carried out in 2012 and 2014 Cook, Heath, Thompson, Green, Kyrillidou, and Roebuck (2012); Mitonga (2013); Cook, Heath, Thompson, Kyrillidou, Roebuck and Yeager (2014); Yule, Uutoni and Niskala (2016); Niskala, Gorases, Iilonga, Iipinge, Leonard, Mumanyi, Mwiyale, Ngandu and Ngula (2018), as well as reports of the library's quality review organised and supervised by the university's Centre for Quality Assurance and Management (CEQUEM) from 2018 to 2019 University of Namibia: CEQUEM (2018); Niskala et al. (2018); University of Namibia library and CEQUEM (2019) and a benchmarking exercise in 2019 Ndinoshiho, Mumanyi and Leonard (2019). To this can be added the authors' own experiences as active members of the library's quality assurance teams on data analysis and reporting, training workshops and meetings between library staff and management as well as consultative presentations and discussions with stakeholders and the UNAM's quality assurance unit, CEQUAM.

THE CONCEPT OF SERVICE QUALITY IN ACADEMIC LIBRARIES

Evaluation of service quality in libraries is not a new phenomenon. It has been a topic of analysis for decades Ali and Raza (2017). Different measures can be used to evaluate service quality. In the library context, traditional quantitative measures such as collection size, numbers of visitors, issuing and returning statistics, budget size, quantity of staff are used as a basis to measure service quality Morales, Ladhari, Reynoso, Toro and Sepulveda (2011); Gothani and Van der Walt (2019). However, these input-based measures have been assessed to be inadequate to measure service quality. This created a need for libraries to develop and adopt more diverse and in-depth methods to evaluate quality, including the stakeholder's perspective of service quality Sahu (2007).

The recent developments have brought service quality characterisation to focus on the overall assessment of service by either a customer or any other stakeholders to pass judgement as to whether the service met their expectations or not Eshghi, Roy and Ganguli (2008). In addition, Morales et al. (2011) define service quality as a gap analysis between users' perception of actual received services and the expectations about the service. A negative gap indicates that the service performance is below the level of expected service, while a positive gap is an indication that the service performance has fulfilled or exceeded the expected service Morales et al. (2011). With this, measuring service quality moved away from a service input perspective and focus now on service quality as perceived by stakeholders. Quantitative and qualitative methods have, therefore, been developed to address gaps in the evaluation of service quality. These include tools such as SERVQUAL, LibQUAL+ +, SERVPERF, E-SERVQUAL (E-S-QUAL), E-RecS-QQUAL and Lib WebSQ that are mainly used for quantitative assessment of service quality. To complement the quantitative measures, evaluation tools such as external quality reviews/peer reviews, accreditation, benchmarking and library standards are used to provide a comprehensive view of service quality.

In this context, the accreditation of programmes and institutions are critical quality assurance processes for academic institutions. However, observed that librarians are not fully integrated into the quality assurance and accreditation of programmes in higher education institutions Popescu (2017). Studies that investigated the involvement of librarians in these programmes revealed that the librarians' involvement in these evaluation processes in higher education institutions is just a formality. They are not fully engaged in the processes Bowker (2017); Wu and Senior (2016). Both studies observed the need for the improvement of proactive library participation in faculty collaboration and reporting for accreditation and programme reviews.

Atkinson (2017) emphasised the need that service quality measurements of academic libraries should encompass activities such as strategy and planning, collaboration, engagement with customers, management and leadership. Hiller and Kyrillidou and Self (2007) found that there may be serious weaknesses in quality assessment processes in relation to actual impact to decision making and service improvement. Their findings emphasize that leadership direction and support combined with customer-centred organizational culture are the critical foundations for efficient service quality assessment culture in libraries.

SERVICE QUALITY EVALUATION TOOLS: LIBQUAL AND SERVQUAL

The literature review conducted for this study indicated that LIBQUAL and SERVQUAL are currently the primary tools used to evaluate service quality in library and information services. SERVQUAL, developed by Parasuraman, Zeithaml and Berry (1985) is an accepted model of service quality evaluation that has been thoroughly tested and widely adopted as a reliable assessment tool Trevedi and Bhatt (2019, 147). According to Parasuraman, Zeithaml and Berry (1991) SERVQUAL originally consisted of ten dimensions to cover important issues when assessing service quality. After a revision, only five dimensions remained: tangible, reliability, responsiveness, assurance and empathy. These measures were improved to include a three-level rating consisting of the desired level, the minimum level and the perceived level Parasuraman, Zeithaml and Berry (1994). The application of SERVQUAL in libraries provided insight into customers' intellectualization of what a service should deliver and how well the service meets their expectations Gothani and Van der Walt (2019); Marimon, Mas-Machuca, Berbegal-Mirabent and Llach (2019); Mwiya, Siachinji, Bwalya, Sikombe, Chawala, Chanda and Kaulungombe (2019). Despite its popular application, some scholars observed shortcomings at the conceptual and operation level Marimon Mas-Machuca, Berbegal-Maribent, and Llach (2019); Buttle (1996). In the library context, it was observed that the five dimensions of SERVQUAL are not comprehensive for the library environment and additional dimensions of quality that were not covered by SERVQUAL model were recommended (Cook and Thompson 2000). This critique led to the development of a new tool called LibQUAL.

LIBQUAL+ is a web-based survey instrument that evolved from a conceptual model based on the SERVQUAL instrument. LibQUAL+ measures library users' minimum, perceived and desired level of service across three dimensions: affect of service, information control and library as a place Association of Research Libraries (2019). The three dimensions represent key areas of library service quality and are described as follows:

- **Affect of service** measures the quality of the staff, assessing the interpersonal dimensions of library service, such as empathy, responsiveness, assurance and reliability as well as the knowledge, skills and professional expertise of the staff.
- **Information control** measures library service quality in terms of the scope, content and access to information resources: adequacy of print and electronic collections, easy-to-use access tools; ICT technologies; convenience and ease of navigation on the library website; timeliness; availability of modern equipment; self-reliance when accessing information and ICT facilities.
- **Library as a place** measures library buildings and library space, assessing how the physical environment is perceived both in pragmatic, utilitarian, and symbolic terms encompassing aspects of the library as a "safe haven", that is a comfortable, inviting and reflective space that inspires study, learning and research.

LibQUAL uses the gap theory of service quality to ascertain what the users expect from the library service as well as how they perceive the quality of the service received. It conceptualises service quality as the service gap, which is the difference between the expectation of service quality from an excellent service provider and the perception of service quality from the current service provider.

Standardised customer satisfaction survey models such as SERVQUAL and LibQUAL have been widely used by academic libraries to measure their value and user satisfaction. Longitudinal studies on the implementation of LibQUAL surveys in the USA and Europe support the functionality of the instrument for the identification of improvement needs, strategic planning and benchmarking with other libraries but also identify shortcomings that would need to be addressed. Dennis, Greenwood and Watson (2013); Greenwood, Watson and Dennis (2011); Voorbij (2012); McCaffrey (2013). Scholars such as Dahan, Taib, Zainudin and Ismail 2016; Lange, Miller-Nesbitt and Severson 2016 used service quality surveys to inform policy formulation. Dahan et al. (2016) also customized a new measuring tool for service quality and the perspectives of library users. The LibQUAL survey model appears to serve as a guide for effective decision-making regarding administration and resource allocation to ensure the attainment of the library's vision and mission.

According to the Association of Research Libraries (2019), LibQUAL has since 2004 been used as a quality assurance instrument in 25 higher education and research institutions in five African countries: Egypt, Malawi, Tanzania and Namibia with one university in each country, and the rest in South Africa. In 11 of the institutions the survey has been carried out once in others twice or multiple times. Published case studies reflect either satisfaction with the instrument Moon (2007) or limitations of LibQUAL, which have led to the development and use of a customised user satisfaction survey complemented with qualitative methods Becker, Hartle and Mhlauli (2017). Gothani and Van der Walt (2019) adopted SERVQUAL to investigate the level of service quality at Aga Khan University in Kenya. Their findings supported the value of the instrument to identify shortcomings and plan improvements.

THE UNIVERSITY OF NAMIBIA: INSTITUTIONAL PROFILE

UNAM is one of the two public universities in Namibia established by an Act of parliament, University of Namibia Act, Act No. 18 of 1992, governed as a semi-autonomous higher education institution and funded through government subsidy and tuition fees.

UNAM has grown since its establishment geographically, in student numbers and as an academic institution. In 1992, when it was founded, the institution started with about 3,600 students on one campus with a limited number of undergraduate programmes. Since then, the university has progressed into a multi-campus higher education and research university which offers 27 diplomas, 58 undergraduate degrees, 58 masters' and 44 doctoral degrees. UNAM is the largest national institution of higher education in the country, with 12 campuses and seven regional distance education centres countrywide. Student enrolment has been increasing steadily to the current +30,000 students. UNAM employs 1549 academic and 952 administrative staff.

UNAM's new strategic plan for 2019-2024 emphasises the role of research and innovation, internationalization and alterative financial flows to secure sustainability and relevance to the society and to be able to tackle complex 21st-century challenges and technologies University of Namibia (2019).

THE UNAM LIBRARY

The UNAM library functions as an academic library, as well as a national information centre and is open to the public. It provides services through campus libraries at all UNAM's 12 campuses. The library also maintains collections in the university's seven regional centres which support the university's open and distance education programmes and which, in addition to digital library resources, brings access to physical library collections into almost all of the 14 regions (provinces). UNAM library is also responsible for UNAM's institutional records management function and hosts the institutional records centre and archives. The library staff consists of 35 professional staff (librarians and archivists) and 68 semi-professional staff –library and archives assistants – of which the latter also attained either diplomas or degrees in library or information studies or related fields. This makes the staff component academically well qualified.

The library functions with a reasonable annual book and e-resources/periodicals budget and aims to ensure relevant and up-to-date academic library information resources to support teaching, study, innovation and research in the diverse fields of study and research at the institution. In 2019 the overall book collection consisted of +300,000 volumes against more than 180,000 titles. Access to global electronic resources is in our view currently at international level. The diversity of resources covers all subject areas and allows the use of the latest global information sources for research and teaching. Requested and identified new resources are evaluated annually and compared to existing sources. To achieve this, the library has since 2010 evaluated and gradually motivated and ensured budget increases to increase its subscriptions from about 5 to +20 global and regional electronic information resources and identified accredited credible open sources resources. Current subscribed scientific and professional databases include Emerald, Springer Link, Scopus, Science Direct, Taylor & Francis; Wiley, Ebsco-host, SA E-Publications, Juta Law, MIMS, Cochrane systematic reviews, Hein Online, IEEE, Knovel engineering database and limited access to Research4Life databases (See http://www.unam.edu.na/library/e-resources).

WHY DID UNAM LIBRARY ADOPT LIBQUAL+?

International and national quality assurance requirements in higher education led UNAM to establish the Centre for Quality Assurance and Management (CEQUAM) in 2010. During the institutional discussions leading to the establishment of CEQUAM the library management realised the need to study quality assurance methods and tools that would apply to academic libraries. Such methods and tools were deemed necessary to contribute meaningfully to the institutional quality assurance and accreditation processes as well as to be able to align the library's services and procedures with the strategic direction of the institution. Without scientifically acknowledged quality assessment tools the library would not be in the position to provide reliable data for strategic planning as a contributor to the strategic objectives of the institution. It was also realised that in the new environment of accountability and quality measurement, the library would need

reliable data to demonstrate its impact and the gaps in its services and facilities that may need financial and human resource investment.

In 2010-2011the library established a team led by Chenjerai Mabhiza, the head of the User Services Department, to identify and evaluate tools for library quality assurance processes. As a result, the international LIBQUAL + survey instrument, maintained by the Association of Research (ARL) Libraries in USA, was identified as a reliable tool to measure library quality from the point of view of all stakeholders that use or might need to use UNAM's libraries, whether physically or digitally. The main reason for adopting LibQUAL+ was that it was a scientifically developed tool to specifically assess library service quality, based on a market research assessment evaluation tool, SERVQUAL, which is used in other ambiguous areas to assess quality.

As part of considerations supporting the decision to use LibQUAL+ it was recognised that a library is clearly an ambiguous service from customers' point of view, and it is often difficult for a library's clientele to assess what to expect from library services and resources. It is equally difficult to determine whether what they are getting is what they were expected to get. That is specifically true in developing countries, where the library systems are often scarcely resourced and not widely available. In Namibia there is a public library network, but it covers mainly urban areas. Most school libraries are limited to storeroom type facilities with irrelevant donated book collections. Against this background it is quite probable that library users would not have library experience that could provide a basis for assessing the quality of the academic library services. This ambiguity lead to situations, where library services can receive very high satisfaction ratings in surveys, even when realistic observation and complaints would have indicated that customers were not satisfied. The strength of LibQUAL+ was that it was developed through scientific analysis and testing to inclusively cover the essential dimension of library service. The validity of the tool was also supported by CEQUAM. UNAM library subscribed to LIBQUAL+ and has carried out two surveys using this instrument in 2012 and 2014.

IMPLEMENTING THE LIBQUAL+ SURVEY AT UNAM

UNAM Library conducted the first LibQUAL+ customer satisfaction survey in 2012, considered it a pilot and limited it to the main campus Cook et al. (2012); Mitonga (2013). This paper here focusses on the 2014 survey.

The 2014 survey started in mid-August and was planned to run for one month but continued until the end of the academic year in the beginning of December to reach representative response rates. The survey targeted the whole population of UNAM. Response rate statistics could be followed through the ARL LibQUAL administrative system. The survey was promoted using posters, leaflets and postings through student portal and staff email list. When it was realised that the initial response rate was however very low, the library's LibQUAL team mobilized the library staff from different campuses to develop and apply motivational methods, including promotional stands in the faculty areas, personal emails to academic and administrative staff and collaboration with lecturers for students to be allowed and encouraged to fill in the survey during computer lab classes. At some campuses, cool drinks and sweets were added as additional incentives. The overall response rate reached 11%, meeting the established 10% response rate considered representative and satisfactory. Some campuses reached a 30-50% response rate. The response rate of one campus as well as that of postgraduate students and academic and administrative staff fell below the target, but due to the lower overall number of the population, were still considered representative. (See Figures 1 and 2). The total number of respondents was 2,363 (n=20,764): 2,213 students (n=19,506), 98 academic and administrative staff (n=1,765) and 57 library staff (n=110). In the LibQUAL+ survey model, the questionnaire is also filled by library staff to assess self-perceptions of the quality of the service. Staff data is analysed separately to not affect the customer satisfaction results.

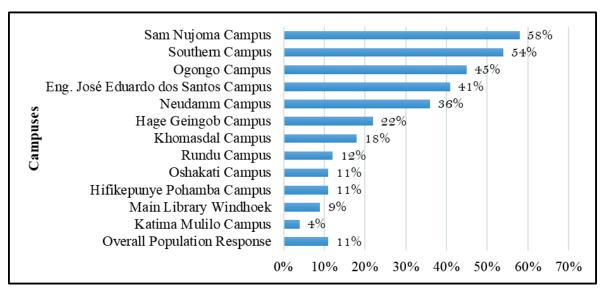


Figure 1: LibQUAL 2014 survey response rates per campus

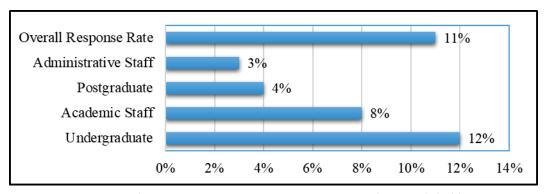


Figure 2: LibQUAL 2014 survey response rates per academic stakeholder

SUMMARY OF THE FINDINGS OF THE UNAM LIBRARY 2014 LIBQUAL SURVEY: "UNDERGRADUATE LIBRARY"

The data used in the description of findings is based on the 2012 and 2014 UNAM library LibQUAL+ ARL reports and customised local reports with additional analysis of the qualitative data. Cook et al (2012); Cook et al. (2014), Mitonga (2013); Yule et al. (2016).

In the 2012 survey, the alarming finding was that all the three main service dimensions of the library services as defined by LibQUAL+, were rated below the minimum level of acceptable service quality. In the LibQUAL+ terminology the adequacy means, meaning the gap between minimal required service level compared to the actual service level, was below zero for all three dimensions of library service. The UNAM library service had thus overall been rated below the minimal acceptable level. Consequently, the library management set up the objective to reach at least an acceptable level of service in all aspects of services.

According to the 2014 results, customer satisfaction ratings improved bringing the overall rating in all three library service dimensions just above satisfactory. Upon more detailed observation the adequacy means, for all except four of the standard 22 questions and two of the five local questions, was at satisfactory level: above zero.

Analysis of results from different users' groups, however, revealed that the targeted satisfactory level of service quality was reached in the ratings by undergraduate students, indicating that the library was meeting their needs relatively well. Postgraduate students and academic staff assessed all dimensions of library service significantly below the minimum level of acceptable quality.

LIBQUAL+ uses radar charts to demonstrate the overall satisfaction ratings based on the adequacy mean (difference between the minimal acceptable level and the perceived actual service level in each question) and superiority mean (difference between the optimal desired level and the actual level of service). The respondents' minimum, desired and perceived levels of service quality are plotted on each axis of the radar charts. The resulting "gaps" between the three levels are shaded in blue, yellow, green, and red. A radar graph shaded blue and yellow indicates that users' perceptions of service fall within the "zone of tolerance": the distance between minimum expectations and perceptions of service quality indicating satisfactory level of service is shaded in blue, and the distance between their desired and perceived levels of service quality is shown in yellow. If the distance between users' minimum expectations and perceptions of service delivery is represented in red, it indicates a negative service adequacy gap score meaning service quality below minimal acceptable level. Green shading indicates high, above desired level of service. Association of Research Libraries (2014). The radar charts in Figures 3 and 4 below demonstrate the clear difference between the overall library service quality as rated by UNAM undergraduate students and academic staff.

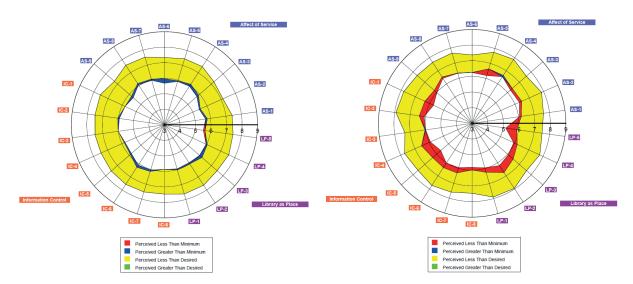


Figure 3: UNAM library LibQUAL 2014: undergraduate students (Cook et al 2014, 46)

Figure 4: UNAM library LibQUAL+ 2014: Academic staff (Cook et al 2014, 74)

The undergraduate's consistent blue (dark) colour line demonstrates the overall satisfaction rating as slightly above the minimal required level. That applies to all questions except for the question indicating lack of group workspace on library buildings. Unfortunately, this overall rating excludes five local questions of which also two subject specialist assistance and print/scan/photocopy facilities were rated below the minimal acceptable level. The results indicated clearly that the library service, in the view of undergraduate students, is at a satisfactory level, even if not at the optimal desired level. This can be seen in the area shaded in yellow (light) on the gap between actual and desired level of service (Figure 3).

The second radar chart, Figure 4, demonstrate the service quality assessment by academic staff and is dominated by red (dark), meaning the perceived level is less than the minimum level of acceptable service quality in all dimension of library service: attitudes and skills of staff, collections, ICT tools and buildings. Equally, all areas reflected by the five local questions were rated below the minimum acceptable level. The

lowest rating was given to capacity/lack of capacity for subject specialist assistance. The same below minimum acceptable level of services in all aspects was indicated by postgraduate students.

It must be mentioned that charts in Figures 3 and 4 reflect the overall results from all campuses, while there were significant variations between campuses. On one campus also the perceptions of undergraduate students were below the acceptable service level in all dimensions of library service and on another campus, the academic staff's perceptions were at a satisfactory level. From three of the 12 campuses responses were only received from students.

The conclusion drawn from the LIBQUAL+ 2014 survey was that UNAM libraries functioned at a satisfactory level for undergraduate students, but did not respond to the needs of postgraduate students and academics. This key finding challenged the library's management to respond to the library service requirements of academic staff and postgraduate students. An analysis of the responses from the one free text question included in the survey did not provide any specific reason for the low-quality experience of these user groups. That placed the need for additional methods on the table.

Evidence on discrepancies of service level at different campus libraries was another significant finding of the 2014 survey. It was identified as another key issue to be further analysed and addressed.

In the UNAM data analysis and reporting process, a lack of expertise in using qualitative analytical tools made it difficult to make use of the data collected from the one open question where respondents can raise any pertinent issues. After both surveys, a research consultant was appointed to analyse and report the findings. The results were rewarding and provided rich information, including new information that the normal survey questions did not highlight.

In addition to the above mentioned two major findings namely generic dissatisfaction to library services by lecturers, researchers and postgraduate students and differences in service levels between campuses, the following areas summarised from both quantitative and qualitative data needed improvements:

- A major finding correlates with McCaffrey's 2013 observations that one of the areas where LibQUAL+ provides valuable information is the assessment of the physical library environment. The importance of a library as a conducive study and research space for the UNAM communities was quite evident from both sets of data.
- In relation to library buildings, the findings raised the issues of increasing student numbers, which
 had not been reflected in the library space and lack of conducive places for working in groups. Other
 explicit problems specified in the qualitative data included deficiencies in air-conditioning and toilet
 facilities and noise in the library.
- Inconvenience and security problems caused by the rule to not allow library clients to bring their bags into the library was frequently mentioned.
- Minor issues raised by users like not allowing headphones and water bottles in the library were immediately solved by adjusting these rules. In the main campus, toilet facilities were also improved immediately by reducing the number of staff toilets and in this way providing more public toilets.
- ICT related problems consisted of the following specific issues: Insufficient number and low quality of public use computers and low and irregular internet connection preventing the efficient use of electronic resources. Frequently mentioned were also problems in scanning/copying/printing facilities, e.g. clumsy payment systems; log-in based printing system preventing outside users to print/copy/scan; slow maintenance of copy machines; scanning not available for students.
- In relation to library collections qualitative data clearly indicated lack of adequate provision of prescribed textbooks as a common problem. Comments did not provide specific issues to explain below satisfaction ratings on electronic collections and journals from academic staff and postgraduate students.

ADOPTING LIBQUAL SURVEY FINDINGS FOR PRACTICAL SOLUTIONS AND STRATEGIC PLANNING

While planning the presentation and discussions of results with the university's management, campuses and generally user communities, it was realised that the presentation formats provided by ARL reports do not directly speak to the user groups. That is why the library's LIBQUAL+ team transferred the data into graphical charts. In that process, the dimensional distribution of the LibQUAL format was also amended. This was not based on scientific testing, but on practical assessment of how to provide specific results that can assist to identify problems and improve issues more specifically.

"Affect of Service" questions assessing the library staff provided significantly different ratings when divided into questions that reflect on the one hand customer-oriented attitudes and practices and on the other hand professional competencies. Staff can appear to be very helpful but a lack of required expertise problematize complicated assistance. Extracting the professional skills aspect from the overall staff quality dimension provided useful information for follow-up actions like training and mentoring needs.

Questions in the "Information control" dimension logically reflect satisfaction of two significantly different aspects of library service: firstly, the quality and relevance of collections and secondly, ICT tools and devices including support for independent library use, which in these questions focussed on ICT based tools.

Dividing the LibQUAL+ survey's three dimensions to five dimensions helped, in our view, to plan the required strategic actions to improve library services and assess users concerns much better than the three-dimensional approach. In presentations and discussion on results, we also replaced the LibQUAL+ theoretical concepts for service dimensions with generic terminology like customer care and professional skills instead of "Affect of Service". Instead of "Information Control" we used two dimensions - "Collections/Library Resources" and "ICT (equipment and internet connectivity, and tools for independent library use)", to facilitate discussions.

Figure 5 provides a summary of the quantitative results of undergraduate and postgraduate students and academic staff presented in this locally applied format of five dimensions of the library services including ratings for the five "local questions". The satisfaction rating by undergraduate students indicates acceptable levels of library service as values above zero except for professional skills, which does not meet the minimum acceptable level. This is quite a serious problem for the library, which is, in essence, the professional information service entity of the university. Ratings by postgraduates and academic staff are below zero (0), thus below minimal acceptable level of quality of service in all five dimensions. A lack of adequate collections is felt most seriously by postgraduate students and a lack of professional expertise are experienced most seriously by academic staff.

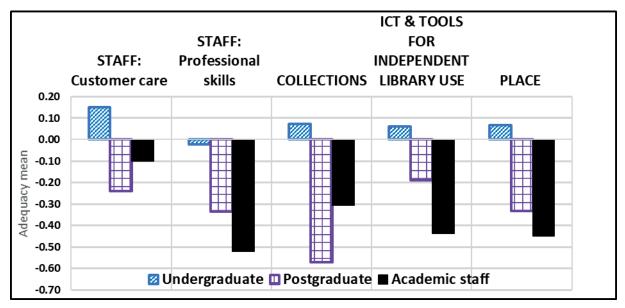


Figure 5: Satisfaction rating (adequacy mean) comparison between undergraduate students, postgraduate students and academic staff according to the 5-dimensional library service format (Questionnaire - see annexure 1).

The LibQUAL+ results were presented to library staff, management, academics, and students using a reformulated graphical representation formats in addition to radar charts. This approach proved fruitful and created a lot of discussions, including new information on specific problems as well as suggestions for improvements.

Findings were communicated to the UNAM academic communities through many platforms including relevant university committee meetings and consultative meetings at most campuses. Library staff meetings were organised to make sure that the results and action plans are known and internalised. Wider distribution of results, using the posters and social media, as motivation for participation in future surveys indicating that surveys have a real impact, was planned. The message that was to be communicated was: "This is what you asked, and this is what we did". In the end it was not carried out due to staff constraints.

IMPROVEMENTS BASED ON THE LIBQUAL+ SURVEY

LibQUAL+ survey results combined with the results of consultative engagements were developed into a detailed improvement plan Niskala et al. (2018, 105-122) which has been used as reference in the library's strategic plans since 2015. It was replaced with the self-improvement plan based on the results of the external quality review in 2019 University of Namibia library & CEQEM (2019).

Some of the plans were probably over-ambitious and have taken long to progress. An additional obstacle was created by the continuing national economic downturn since 2016, which has significantly reduced government's funding to the university. Following is a summary of improvements that have been implemented related to findings from the LibQUAL + surveys.

"AFFECT OF SERVICE": USER-ORIENTED SERVICE CULTURE AND PROFESSIONAL SKILLS

The 2014 LibQUAL+ survey found that the subject specialist services for academics and postgraduate students were seriously below satisfactory level. The library used benchmarking as a mechanism to learn from other institutions on skills needed for serving academics and postgraduate students. The Cardiff University and UNAM's Phoenix collaboration provided an opportunity for capacity building on information literacy

instructing and systematic reviews. Four library staff were also provided with an opportunity for professional internship at Cardiff University library from three to four weeks focusing on the collaborative development of new services. Both authors of this paper have been involved in the development of research support services, a new service area at UNAM library that is addressing the needs of both UNAM management and academics. A new position, a research support librarian, was established and filled in 2018.

The main intervention before the 2014 survey had been addressing the low rating in customer care, supported by very explicit qualitative data on lack of helpfulness by library staff, with customer care and emotional intelligence training reaching almost all library staff. This aspect clearly improved in the 2014 survey findings supported by observations on the ground. However, according to the observations and unsystematic interviews by the authors of this paper establishing a truly customer-oriented service culture throughout UNAM libraries remained a challenge.

"INFORMATION CONTROL": COLLECTIONS

An analysis of the complaints about lack of textbooks revealed real gaps as well as weaknesses in the acquisition processes. These aspects have since been addressed followed by the prioritization of textbooks in acquisition processes. The library collection should now cover all titles mentioned in course outlines as prescribed textbooks. Collection Development Policy took the results and recommendations related to library resources from the LibQUAL+ surveys into account, providing an up-to-date user-focussed framework for collection development.

The indication about the lack of adequate electronic resources and journals was, upon further analyses, not compatible with UNAM's comparatively high quality of electronic resource subscriptions coverage and was interpreted to mostly reflect a lack of promotion and information literacy competencies in the use of changed provision of journals from print to electronic, both by academics and students. A technical problem was also rectified upon analysing the reasons for this result by changing the off-campus access mode which required that a user had to activate an e-proxy link by selecting "off campus" even if a user is on campus. This was especially a problem for the satellite campus. To address possible problems in the use of e-resources subject librarians have been encouraged to proactively approach lecturers and researchers to establish that they are aware and know how to use relevant resources. In relation to students, the library has started the formal process of incorporating into all curricula embedded information literacy (IL) instruction for first-year students and for both undergraduate and postgraduate students, who are starting their research projects, to replace the ever changing, negotiated and ad-hoc IL systems.

Discussion related to the dissatisfaction of academic staff related to library resources brought about the realization that it could take up to two years to receive library material from the suppliers. To address this, the library conducted a supplier performance assessment and established a defined delivery timeframe attached to an order together with an efficient claiming system after placing an order. These actions have sped up the ordering process by 50%, decreasing waiting for stock from an average of 6 months to a year to about two months.

"INFORMATION CONTROL": ICT AND TOOLS FOR INDEPENDENT LIBRARY USES

Complaints concerning the photocopying, scanning and printing machines in the library across campuses were verified to be based on real problems that affected academic performance. This is an outsourced service at UNAM and the library took an active stand in direct high-level negotiations with the service provider. This resulted in an increased number of photocopying and printing facilities across campuses and improvements in the maintenance service. Scanning for students proved to be a technically solvable problem, one that the library management was not aware of before the survey. Deficiencies still exist, but new tenders for a service

provider, which is now in process, hopefully, will include and fulfil requirements presented by the library based on the customers' requirements of service quality.

Replacing out-off lifespan public use computer stock took time due to financial constraints. In 2020 finally all UNAM libraries received new PCs for all library IT training rooms and public use computer areas. The quality and speed of internet connectivity have been improved significantly in all campuses. These improvements have been greatly supported by the evidence from the LibQUAL+ survey on the importance of the library ICT facilities to students.

"LIBRARY AS A PLACE"

In relation to space, the plans for new buildings and extensions with diversified areas for research and study had to be set aside due to national economic downturn affecting the university's funding deeply and, in essence, freezing most capital projects since 2016. Addressing increasing student numbers with additional study space was, however, provisionally addressed by moving shelving closure and securing a storage area so that no additional space would be needed while collection grows. The centralised print journal collection in the main campus was also significantly reduced to create space, although the support was not fully secured due to concerns about its historical value.

Conducive space for postgraduate students and researchers was addressed with very positive feedback from users by establishing modest but functional "Research Commons" facilities in two campuses. A dedicated "Research Commons" area is also in progress on a third campus.

Further analysis of the reasons for noise having been considered as a major problem leading to the realisation that collaborative work had become a common way of studying. UNAM library buildings consist of large halls with limited provision for discussion rooms. Coinciding with economic constraints, the situation proved to be challenging, but a functional solution was implemented in the multi-storey main campus building by zoning the floors to discussion and quiet study areas.

Library management agreed with students that the tradition of requiring users to leave their bags outside the library in diverse systems of bag counters contributed to security problems and was, in fact, very uncomfortable. The plan to change the system by improving security through CCTV camera systems with effective monitoring has taken long. One library has, since a few years ago, been covered with an effective CCTV system and allows users to bring along their bags. Two smaller libraries do that, anyway, trusting the small size of population. The main campus CCTV system was completed in 2020 – and negotiations with the university's security department continue to make arrangements to allow users to keep their bags when entering the library.

WHY DID UNAM DISCONTINUE USING LIBQUAL+

In the process of presenting the LIBQUAL+ data, it was clearly noticed that using a standardised scientifically recognised quality framework tool was highly regarded by the institutional management, especially the quality assurance and strategic planning units as well as other academic stakeholders. It provided a tool to get institutional support for actions recommended by the results of the survey. This aspect strongly supported the continuation of the use of the instrument as the main tool to assess library service quality. The results of the LibQUAL+ surveys were also acknowledged by the library management to be very informative and relevant.

It was apparent, however, that there was a problem understanding LibQUAL+ data and reporting formats and making use of them for management information and planning. It proved to be challenging and time-consuming. The main problem emerged, however, when presenting the results of the questionnaire. Only a

small core team in the library understood the methodology and the formats of the quantitative results in the ARL LibQUAL+ reports. This situation raised adversity amongst library staff and made it difficult to motivate them to act upon the results and to prepare for the planned next survey. It was a challenge to reformulate the results into a format that would be easy for the library staff and university management to understand without additional interpretation. As we could not find a suitable model from the literature, we ended up using graphical presentations replacing the radar charts and other tools in the ARL reports. This approach provided positive feedback but caused delays that challenged the impact of the survey as a quality assurance method. At the same time, the dearth of competencies to analyse the qualitative data led to additional substantial delays in presenting the results. That, of course, is not related to LibQUAL alone, but a customer satisfaction survey is required to include at least one open-ended question to ensure sure that unexpected issues can be raised.

After additional analytical work, adjusting reporting to more a familiar format of presentation and incorporating qualitative data meaningfully into reporting and consultations, the attitude towards the survey amongst the library staff changed to positive and there was real action in implementing the improvements based on the results. The follow-up process to write comprehensive base-line campus-based customer satisfaction reports based on the identified five-dimensional formulation of findings, however, proved to be too time-consuming for the limited number of staff, who had mastered the LibQUAL+ methodology. Only four detailed campus reports were completed.

When it was time to plan for the next survey for 2016, the mistrust in the tool was still profound amongst library staff and management. The discussions during the preparation of the next survey questioned the questionnaire: repetitions of questions, ambiguity and difficulties to interpret the questions in an environment where English is the second language. One of the areas of mistrust was, from the very beginning, whether the gab theory logic of rating the minimum, perceived and desired levels of service on a scale of 1-9, could be understood by respondents. The study by Natesan and Aerts (2016), to assess whether library users distinguish between minimum, perceived and desired levels of service quality supported the validity of this aspect of the LibQUAL instrument, but also indicated the need for further research. According to the interpretation of the library's LibQUAL team, practical evidence appeared to support the same interpretation, demonstrated by the fact how well especially the campus level detailed LibQUAL+ findings concurred with observations and information from other sources like un-official and official complaints and commendations and suggestion box comments. In the minds of the UNAM library LibQUAL team, comparing findings with practical experience and observations translated to trust in the instrument.

However, even with general recognition of the informative value of the results, main contra-arguments continued about the overall challenge of understanding the survey methodology and understanding and communicating the survey results.

The additional factor, which might have been overcome if there was general support for continuation, was the cost of the survey instrument. LibQUAL+ requires an annual membership fee, which was reasonable, but the cost increased significantly when a multi-campus university like UNAM required 12-13 campus-specific reports. The 13th report would be to combine data that reflect the service quality in the regional centres to make the findings meaningful by indicating significant differences between campuses.

These challenges resulted in the decision to discontinue using LibQUAL+ as a library service quality assessment instrument in 2016. It was to be replaced with a customised survey instrument that would be easier to manage, focusing on locally relevant issues. The library's management opted for developing and employing a Likert scale, customised customer satisfaction survey. It was agreed that in developing the localised survey scientific research on dimension that form the content for library satisfaction would be used and the survey would be formulated based on dimensions identified in the LibQUAL research as components of library satisfaction: staff (customer care and professional skills and services); library resources; ICT applications

and tools to support independent library use as well as space/physical facilities. The key problem that would be overcome this way would be time and human resource constraints and that survey results would be presented as management and information source much sooner and without need for additional time-consuming interpretation.

UNAM LIBRARY'S CUSTOMISED CUSTOMER SATISFACTION SURVEY

The pilot questionnaire for a localised customer satisfaction survey was developed by a team of the library's User Services Department and administrated as a web-based survey in 2017 and 2018. Main dimensions learned from the LibQUAL literature and problematic areas as found during earlier surveys of LibQUAL by UNAM formed the basis for the questionnaire. The formulation and principles of how to incorporate and weigh dimensions identified by LibQUAL development and other related studies proved to be challenging. While the benchmarking results from the 2014 LibQUAL+ survey were recognized as very informative and reliable, the results from the customized pilot surveys did not manage to provide comparable data to measure the changes when compared to the baseline. Additional problems were that the response rates in these surveys were too low especially at the campus level, to be considered representative. The experiment was repeated the following year but not continued after that.

Lack of a specific library quality assurance tool posed a serious problem due to the fact that customer satisfaction rating is used as the key indicator of service quality in the institutional balance scorecard to monitor strategic planning at UNAM. The library is required to provide satisfaction ratings for the internal stakeholders of the academic community as evidence of its contribution to the strategic objectives of the university. After discontinuing to conduct customer satisfaction surveys, the library has settled on a few library focussed questions in the annual institutional stakeholder satisfaction survey.

WHAT ELSE HAS UNAM LIBRARY DONE TO ASSESS QUALITY?

The UNAM library has after LibQUAL surveys been part and applied other quality assurance methods used by higher education institutions observed to be important to maintain relevance, identify service gaps and address user needs.

LIBRARY AND THE ACCREDITATION OF PROGRAMMES AT UNAM

UNAM library plays an integral role in the programme accreditations and reviews. Although the national higher education accreditation agency, the National Council for Higher Education, does not set specific criteria of what is expected from the library, usually the library provides a detailed report of what that library has in its collections, facilities and services, which presents an opportunity to identify gaps in the collections and services required for the specific programmes. Through this process, the library gets input concerning gaps in resource and services in specific subject fields and addresses them as part of an accreditation review report monitoring process.

QUALITY REVIEW AND BENCHMARKING

While recognizing the informative nature and strategic importance of the customer satisfaction survey, the UNAM library has also identified and succeeded in using other tools to identify and measure quality aspects, especially in areas where measuring customer perceptions does not appear to be successful.

Under the leadership of the UNAM Centre of Quality Assurance and Management (CEQUAM), the library underwent a full-scale Quality Review by an external panel in 2018. The review was carried out by a panel comprised of both national and international experts in all aspects of library management and service, including library services, procedures and administration, library ICT solutions and archives and records management. The panel concluded, that in general both academic staff and university management,

expressed satisfaction with the library's services and operations. The review noted, however, that satisfaction reflects traditional library services, while there appear to be lack of flexibility and innovativeness in addressing new emerging service and skills areas. Specifically mentioned were the needs to develop research support services, bibliometric skills and address issues like research impact evaluation and the improvement of records management by urgently introducing an electronic records management system. Other key issues identified included the need to review the library's staffing structure to reflect the changes in the higher education environment and the trends in academic libraries. Improved academic qualifications of library assistant-level staff is also not reflected as more professional job content and description. The need to improve the library's digital presence and the extension and transformation of library facilities to reflect increasing student numbers as well as the changing learning, teaching and research modalities were also identified. The importance of the quality review proved to be, in essence, the identification of requirements to respond to new trends in the higher education environment, scholarly publishing, research evaluation and funding and academic library development, which do not come about in customer satisfaction surveys, which by their nature reflect problems in the existing reality.

The library, in collaboration with CEQUAM, developed a 3 to 10-year self-improvement plan based on the results of the Quality Review, which has now become the main point of reference for strategic planning. It incorporates the previous results of customer satisfaction surveys as part of sources of information for the Quality Review. (University of Namibia and CEQUEM 2018; University of Namibia Library and CEQUEM 2019).

In the process of practical implementation of the Quality Review findings, the library management realised that while the review identifies needs for new service and operational areas, it does not provide practical tools on how to implement them. The viable next steps appeared to be benchmarking visits as well the continuation of international collaboration to share and learn from the experiences of other libraries and to be able to implement key service issues identified in the library quality review. The benchmark learning and capacity development programme was organised with three universities in South Africa: the University of Cape Town, Stellenbosch University and Cape Peninsula University of Technology. The benchmarking focused on the following areas: research data management, digitization processes and infrastructure, institutional repository workflow and impact tracking, bibliometric analysis and research performance and impact analysis, research trends analysis and tools, library publishing services and research support services. The key impact of the benchmarking is that the UNAM library, in collaboration with the University of Cape Town library, established a publishing platform for UNAM published journals using the experiences gained from benchmarking, followed by locally relevant new solutions and capacity building programmes.

CONCLUSION

The purpose of the paper was to analyse and describe library quality assurance processes employed at the University of Namibia, with the focus on the use of LibQUAL+, an internationally recognised standardised tool to measure service quality in libraries.

LibQUAL+ proved to be a reliable tool that can provide very informative comprehensive data that can be used to inform strategic decisions, policy development and resource allocations. Our observations corroborate with the conclusions made by Dahan et al. (2016) and Lange, Miller-Nesbitt and Severson (2016) that LibQUAL provided meaningful findings used to implement strategic improvements and inform policy development. However, it was also observed that findings of customer satisfaction surveys like LibQUAL+ cannot be used as the only tool to measure the quality of services. Qualitative measures such as focus group discussions, quality reviews by external panels of experts and academic programme accreditation reviews should be used to provide data that cannot be collected from surveys. We observed that the LibQUAL+ survey could not be used as the only means of measuring service quality as based on customer views on existing services it does not provide data on new trending issues in HEIs and librarianship. Our conclusion further corroborates with the recommendation made by Atkinson (2017) that reliable library service quality data is important for

strategic planning, change management and leadership. It is also evident from our experience that a key aspect to succeed in quality assessment is the research capacity of the library, having competencies and provision of time to conduct evidence-based research, analyse data and write and share research reports.

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Appendix 1: UNAM Library LibQUAL 2014 questionnaire: Core and local questions

| Affect of service | | Re-formulated dimension |
|--------------------|---|--|
| 1 | Library staff who instill confidence in users | Customer care: User oriented service culture |
| 2 | Giving users individual attention | |
| 3 | Library staff who are consistently courteous | |
| 4 | Readiness to respond to users' enquiries | |
| 5 | Library staff who deal with users in a caring fashion | |
| 6 | Willingness to help users | |
| 7 | Dependability in handling users' service problems | |
| 8 | Library staff who have the knowledge to answer user questions | Professional skills and |
| 9 | Library staff who understand the needs of their users | competencies |
| Info | ormation control | |
| 1 | The printed library materials I need for my work | Collections |
| 2 | The electronic information resources I need | |
| 3 | Print and/or electronic journal collections I require for my work | |
| 4 | Making electronic resources accessible from my home or office | ICT &ICT & support for independent library use |
| 5 | A library Web site enabling me to locate information on my own | |
| 6 | Modern equipment that lets me easily access needed information | |
| 7 | Easy-to-use access tools that allow me to find things on my own | |
| 8 | Making information easily accessible for independent use | |
| Library as a place | | |
| 1 | Library space that inspires study and learning | Library as a place |
| 2 | Quiet space for individual work | |
| 3 | A comfortable and inviting location | |
| 4 | A haven for study, learning, or research | |
| 5 | Space for group learning and group study | |
| Add | ditional local questions | |
| 1 | Availability of subject specialist assistance | Professional skills |
| 2 | Access to archives, special collections | Collections |
| 3 | Efficient interlibrary loan / document delivery | Collections |
| 4 | Helpfulness in dealing with users' IT problems | ICT & support for |
| 5 | Providing me with the printing/ photocopying/ scanning technology I need for my work or study | independent library use |