

Internal Processes as Determinants of Customer Perceived Service Quality: A Case of Selected Public Libraries in Botswana

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Abstract

There is increasing awareness that attaining the ideals of the United Nations 2030 Agenda for Sustainable Development Goals (SDGs) requires effective support of government. Public libraries that are well-supported and well-managed provide quality information services and have a role to play in contributing to improved outcomes of the SDGs. Public Libraries under the aegis of Botswana National Library Service (BNLS) could not be said to lack good support of Government. They ought therefore to be seen to be working towards attaining the envisioned sustainable development by providing quality information service adopting measures to attract users' positive word-of-mouth, loyalty and re-patronage behaviours. The purpose of this study was to investigate the extent to which BNLS provides quality information services from users' perspective, and to establish those internal factors that influence such users' experiences. Anchored on the Gap Theory, the study used

mixed method approach to collect data from two sets of respondents. A stratified random sampling technique identified 254 registered users, from whom quantitative data were collected through a modified self-completion SERVQUAL instrument. Qualitative data were collected from 18 frontline employees (FLEs) through face-to-face interviews and document analysis, so as to account for users' perceptions in the quantitative phase. The findings revealed that the quality of service at the BNLS branches is appreciably low on the dimensions users consider important. An average quality gap of -1.2 was realised, indicating that the quality of service delivered fell short of what customers expected. Qualitative data further revealed four factors in the service environment that contribute significantly to customers' low perception of the quality of service. The study concludes by recommending a realignment of internal processes to ensure good quality service to patrons, and in the process enhance the libraries' ability to help Botswana attain sustainable development goals.

Keywords: *Public Libraries, Sustainable Development, Service-Provider Gaps, Gaps Model of Service Quality, SERVQUAL.*

Introduction

There is increasing awareness that attaining the ideals of the United Nations 2030 Agenda for Sustainable Development Goals (SDGs) requires effective government support and prudent resource management. The SDGs, a United Nations framework of 17 Goals spanning economic, environmental and social development (Bradley, 2016), require members to pursue these goals actively to better their people's lives. Within this unfolding

global sustainable development context, libraries are essential partners as they ensure access to information across the SDGs. The International Federation of Library Associations and Institutions (IFLA) contends that libraries are integral to achieving this roadmap, in the march towards a knowledge-based society (IFLA, 2017; 2018). Public libraries that are well-supported and well-managed are likely to contribute to improved SDGs outcomes; they provide quality information services to their patrons, facilitate access to information and help people to develop the capacity to use information in decision-making, and ensure sustainable access for future generations (Bradley, 2016). Libraries aid individuals in achieving success in their education by providing the resources and an enabling environment that fosters intellectual, emotional and social development (Bamigboye, 2007). Libraries are centres for innovation and information, and cultural stewards, playing a vital role in linking society with information which may help break the cycle of poverty and support sustainable development (IFLA, 2018).

Public libraries in Botswana provide information and knowledge free of charge in its 33 branches located across the country. Since they strive to meet the knowledge and information needs of their customers, it is appropriate for the libraries to spearhead Botswana's efforts towards attaining sustainable development. To do this, they must adopt measures that help to attract external users' positive word-of-mouth and patronage behaviours. One such measure is providing service at quality levels acceptable to customers. Providing quality services has numerous payback effects: it sustains a user's confidence, attracts more new customers and few lost ones (Parasuraman, Berry and Zeithmal, 1994). Quality superiority has been found to provide significant performance-related advantages such as customer loyalty, responsiveness to demands and productivity (Petrou et al., 2006). It is therefore important that libraries incorporate high standards of customer service (Miao and Bassham, 2007). Managers who want to attract customers' positive evaluation of their services must be prepared to do a good job with their internal 'prior-to-service' processes. It involves identifying, managing and constantly assessing those internal elements that influence evaluations of the quality of the services

delivered (Schneider and Barbera, 2011; Hossain and Islam, 2012). Such assessments may enable the Botswana National Library Service (BNLS) to deliver positive library and information experiences. Studies suggest that libraries aim to provide superior quality service to the customers so as to attract their loyalty and patronage, but they often fail to fully recognise the connection between customer experiences and the internal functioning of such libraries in a library-service quality implementation framework. Despite the visible presence of public libraries in Botswana dating from 1968 to date, there is a dearth of scholarship, assessing the interconnection between the effect of the internal environment quality on customer perceptions of the quality of library services and internal processes and practices. This study evaluated the overall service quality conditions of three selected public libraries located in Gaborone, Lobatse and Ramotswa using the Gaps Theory.

Statement of the Problem

The United Nations 2030 Agenda for Sustainable Development Goals, is a framework of 17 goals spanning economic, environmental and social development. These goals, challenge member states to focus their energy on poverty eradication, climate change and human resource development. In this context for global sustainable development, libraries are considered key partners and active contributors towards meeting this grand challenge as they provide access to information services which may impact social development. Service is a concept that is fundamental to libraries, and library users are the focal point of that service (Miao and Bassham, 2007). The processes and practices behind the scenes as well as employees' activities on the frontline, connect the library to its customers. This makes customer's perceptions of service quality important to its overall service strategy (Musaba, Musaba and Hoabeb, 2014). Thus, the quality of these processes, intended to attract customers' positive word-of-mouth, must therefore be constantly monitored, and measured. Customer perceptions of service quality and the internal functioning of the library are intimately tied to each other. Extant literature shows that customer perceptions of the quality of service rendered is as a function of the quality of the internal processes.

However, this interconnectedness between the two has not been properly researched in the context of public libraries in Botswana. The authors therefore set out this study to address this identified void in the literature using the Gaps Model of Service Quality, proposed by Parasuraman, Berry and Zeithmal (1985).

Objectives of the Study

The central focus of this study was to assess the extent to which the internal environment practices in selected public libraries in Botswana influence the quality of service delivered to their customers. The study aimed to:

- a) Assess library users' prior-to-service expectations against their post-service perceptions, through the use of an adapted SERVQUAL instrument;
- b) Establish the gaps in the internal functioning of the libraries that might account for users' service experiences;
- c) Propose suggestions to the BNLS on service quality management that may help libraries drive towards attaining the United Nations 2030 Agenda for Sustainable Development.

Literature Review

A universal definition of 'service' is still hard to find (Coetzee et al., 2013). Kotler (2008) defined it as a performance provided by one party to the other which fundamentally is not materialised and does not result in ownership over things. Shahin and Janatyan (2011) perceived it as a series of activities of a less intangible nature, taking place in interactions between customers and employees. Parasuraman, Berry and Zeithmal (1990) also defined it as a product of an interactive process aimed at meeting or exceeding a customer's expectations on a consistent basis.

In order to differentiate services from goods, certain characteristics are employed, which are equally applicable in the library contexts. For instance, services are *intangible*; they are performances and cannot be distinguished by the same senses like goods can (Ladhari, 2009; Zeithaml

et al., 2013). They cannot be seen, touched, held, stored (Schneider and White, 2004) or counted, measured, tested, verified and inventoried in advance of sale (Siddiqi, 2011). Secondly, their production and consumption are *inseparable* during delivery (Ladhari, 2009; Zeithaml et al., 2013): customers are often in the factory, observing and evaluating the production process (Schneider and White, 2004). So also, services are generally *heterogeneous*. The performance of services often varies from one provider to another, from one customer to another, and from one day to the other (Schneider and White, 2004) and can rarely be standardised to ensure uniformity and consistency (Gheysari et al., 2013). These characteristics are applicable in any people-intensive environment, and a library is no exception.

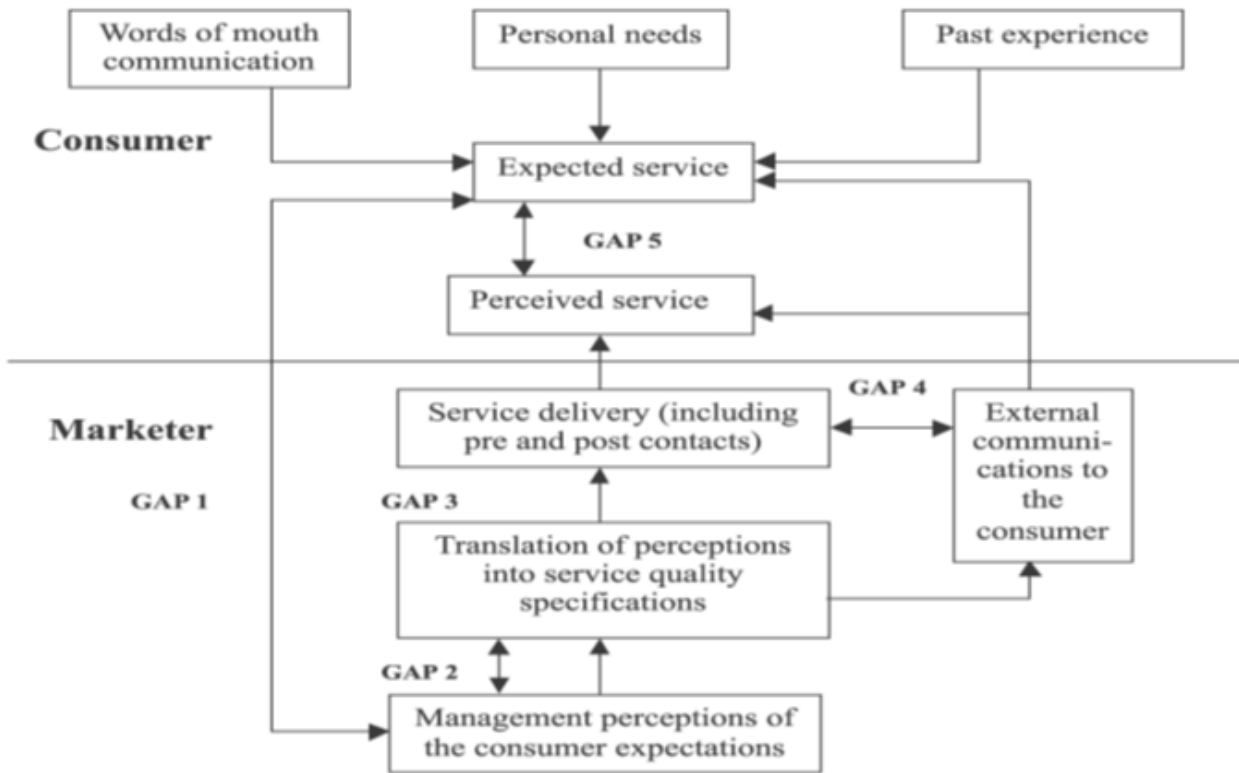
Conversely, Quality is a perplexing concept to define or to measure (Sallis, 2005; Shahin, 2010). Leaders of thought suggested three approaches to defining quality; the *philosophical* approach holds that quality is synonymous with innate excellence (achieving superiority and desirability) and can't be defined any further; the *technical approach* contends that quality is the extent to which a product conforms to predefined technical standards (Kasper et al., 1999), and can be measured in terms of the number of deviations from pre-set standards, or of the defects observed. The *user-based* approach, however, takes the view that quality is subjective and hinges on the perceptions of an individual customer. Given that one defining characteristic of services is heterogeneity across people and time, an approach that reflects this variability is essential in defining service quality (Schneider and White, 2004). Quality defined in terms of user perceptions is thus attractive to assess quality of library services.

On the basis of the attributes aforementioned, service quality is consequently defined as a global judgement or attitude related to the superiority of a service (Parasuraman, Berry and Zeithmal, 1985, 1988, 1990); the difference between customer expectations of service and perceived service (Shahin and Samea, 2010; Lewis and Mitchell, 1990), or the outcome of an evaluation process, whereby the consumer compares his expectations with the service performance (Gronroos, 1984; Patterson, 1993).

Theoretical Framework: The Gaps Model of Service Quality

The framework that guided this study is the Gaps Model of Service Quality (GMSQ). This framework simultaneously incorporates internal organisational functioning and the external customer. This theory proposes that positive customer outcomes are achieved through viewing the internal world of a library as not separate or distinct from the external world it serves and that these worlds are conceptually and empirically linked. It further posits that service quality is a function of the discrepancy between a library user’s *expectations* and *perceptions*, a situation caused by a series of internal organisational

behaviour factors (Parasuraman, Berry and Zeithmal, 1990). The framework also postulates that by paying attention to the proper functioning of internal elements in the service system (Hallowell et al., 1996), customer perceptions of quality can be influenced. Designed to pinpoint the outcome of a customer-service provider interaction and the role of the internal conditions in service delivery, the model proposes that if a library values quality, first it establishes the proper set of internal foundation conditions, whereupon, an environment likely to yield positive customer experiences then emerges (Schneider and White, 2004). The Gaps model is shown in Figure 1:



Source: Parasuraman et al. (1985)

Figure 1: The Gaps Model of Service Quality

The most important gap is Gap 5 (*Customer Gap/ Service Quality Gap*), defined as library users’ subjective evaluation of the comparison between their expectations(what should happen) and their perceptions (experiences) of the service delivered (Shahin, 2010; Shahin and Samea, 2010). PZB (1990) suggested that the library’s ultimate goal is

to close this gap by meeting or exceeding customers’ expectations. To close *Gap 5*, the four internal gaps (*service provider gaps*) there is need to attend to those internal issues prevailing in the library’s internal environment (Parasuraman, Berry and Zeithaml, 1990; Zeithaml et al, 2013). Each gap, representing a potential cause of quality shortfall is discussed later.

Measuring the Customer Gap: The SERVQUAL Methodology

Following extensive research based on a set of focus group interviews of consumers and in-depth interviews with executives in four nationally-recognised service firms, Parasuraman, Berry and Zeithaml (1985; 1988; 1990) noted that customers use five dimensions to evaluate the overall quality of the service they have received. Their findings revealed that the *Customer Gap* (Gap 5) is a function of the discrepancy between customer expectations and their perceptions along a set of five criteria namely:

- Tangibles:* Appearance of the library's physical facilities, physical appearance of employees, equipment and communication materials – service physically
- Reliability:* Delivering the promised service dependably and reliably.
- Responsiveness:* Willingness of employees to provide prompt service and help customers.
- Assurance:* The ability of the employees to inspire trust and confidence through their knowledge of the product and courteous behaviour.
- Empathy:* Personalised attention given to individual library users.

On the basis of their findings from the focus group interviews, Parasuraman, Zeithaml and Berry (1985, 1988) developed SERVQUAL, a psychometric instrument that operationalises, across the five aforementioned dimensions, service quality as a function of the difference between *Expectations* and *Perceptions*.

Despite facing intense criticism by researchers and practitioners, SERVQUAL has enjoyed wide research application in a consortium of industries, including retailing (Phiri and Mcwabe, 2013; Al-Alak and El-refae, 2012), banking (Meybodi, 2012; Rahaman et al., 2011), healthcare services (Ramez,

2012), and in libraries (Somaratna and Peiris, 2011; Zakaria et. al., 2010; Hossain and Islam, 2012).

The Role of Internal Processes and Practices in the Quality of Service Delivery

Literature in service marketing contends that the quality of a service experienced by the external customer is inseparable from the internal functioning of a given library (Schneider and White, 2004; Yagil, 2008). Studies supporting the link between internal functioning and the level of customer perceived quality posit that to deliver excellent quality service, a library must first pay attention to the effectiveness of the internal elements that produce it (Schneider and White, 2004; El-Samen and Al-Shurideh, 2012). Inevitably, what happens inside a library in terms of employee support through tools, policies and procedures and resources to deliver service, has been shown to relate to the quality of the service experienced by customers (Schneider and White, 2004; El-Samen and Al-Shurideh, 2012). From extensive research, PZB (1985, 1987; 1990) determined that certain internal issues were impediments to delivery of service, calling these gaps, according to their Gap Theory. These internal gaps are explained as follows:

Gap 1: The *knowledge gap* is the difference between consumers' expectations and management's perceptions of those expectations, i.e. management assume they know what consumers want. This gap is widened by management's failure to set out on information-gathering initiatives.

Gap 2: The *service specifications gap* is the difference between management's perceptions of consumer expectations and service quality specifications, i.e. setting standards and specifications that do not address customer requirements, i.e. lack of customer-driven standards.

Gap 3: The *service delivery gap* is the difference between available, established service quality specifications and service actually delivered, i.e. the service performance gap, resulting from employee uncertainty about what

supervisors expect from them; mismatch between employees skills and their jobs; inadequacy of tools and technology; inappropriate evaluation and reward systems; and lack of teamwork.

Gap 4: The *communications gap* is the difference between service delivery and communications to consumers about service delivery, i.e. when promises made during advertising do not match delivery. Promises may be done through the appearance of the aesthetics of the buildings or through verbal accounts during publicity campaigns.

The situations represented by the four gaps account for the variations that service delivery experienced by library users during service interactions To close the service quality gap (external customer gap, or Gap 5), human, financial and other resources must be mobilised and appropriately managed to deal with issues pertaining to the four internal gaps first. Further, being a people-intensive undertaking, a library must embrace customer-centric organisational cultures if they are to successfully market their services (Parasuraman, 1987). Such value systems may include a unified focus on customer satisfaction, willingness to be flexible, respect for employees and developing and nurturing a customer-oriented culture.

Methodology

This study assessed the overall level of library service quality within the Botswana National Library Service

(BNLS) branches of Gaborone (city), Lobatse (town) and Ramotswa (major village), and investigated issues responsible for quality shortfalls that may be noted in the system. Informed by the Gaps Model, this study used a mixed method approach to collect data in two phases. In Phase 1, a stratified random sampling technique helped to identify registered library users, from whom quantitative data were collected. The survey instrument was a modified self-completion SERVQUAL instrument, comprising 22 service statements ‘*Expectations*’ and ‘*Perceptions*’ on a 6-point Likert scale. Results generated in this phase, were carried over to Phase 2 where a census approach was used to collect qualitative data from 30 targeted frontline employees (FLEs) working in the three branch libraries. These comprised officers of various designations: senior librarians, principal library officers, library assistants, library attendants and officers on Government Internship programme.

The study used a survey approach to collect data from two sets of respondents. First, a stratified random sampling technique was used, with the help of service employees, 455 registered users were identified from whom quantitative data were collected, using a customised self-completion SERVQUAL instrument. Internal consistency of the SERVQUAL items was determined by computation of Cronbach’s Alpha Coefficient at 0.924 for Expectations items and 0.908 for Perceptions items, indicating good reliability of the questionnaire Two hundred and fifty-four (254) respondents returned the questionnaire.

Table 1: Calculation of Cronbach’s Alpha coefficient by dimension

Variable	No. of study cases	Items per variable	Cronbach's Alpha	
			Expectations	Perceptions
Tangibles	254	4	0.831	0.774
Reliability	254	5	0.806	0.681
Responsiveness	254	4	0.735	0.837
Assurance	254	4	0.721	0.728
Empathy	254	5	0.793	0.757
		22	0.923	0.908

Source: Field data compiled on SPSS

The aggregate Expectations and Perceptions values are greater than the necessary value of 0.70 proposed by Nunnally and Bernstein (1994) for theory testing. Further, qualitative data were collected from 18 of the targeted 30 FLEs through one-on-one, face-to-face interviews. Observation and document analysis techniques were also used. This phase was necessitated by the need to account for users' perceptions noted earlier. Data gathered from this qualitative phase were subjected to content analysis.

Findings

The targeted subjects of this investigation comprised 455 registered library customers who responded to the SERVQUAL questionnaire and 30 centre

employees interviewed. As shown in Table 2, a return rate of 254 users, representing 55.8% was achieved. Of these, 42.5% (n=108) were female while 57.5% (n=146) were male. The majority of the user community were aged 15-35, representing 84.7% (n=214) while those who aged above 35 years, categorised as elder, accounted for 15.3% (n=40). Of the 30 Centre employees meant to be interviewed, only 18 eventually participated giving a response rate of 60 percent. As shown in Table 2 (Staff), the study subjects included a Senior Librarian, 2 Principal Library Officers, Library Assistants (2), Library Attendants (4), Office Cleaners (3), Gatekeeper (1), Gardner (1) and Internship officers (4). Details are that 2 (11.1%) were male and 16 (88.9%) were female:

Table 2: Demographics of study respondents

	Category	Description	GPL	LPL	RPL	Total	
Gender	Library users	Male	47	33	28	108 (42.5%)	254
		Female	66	48	32	146 (57.5%)	
	Staff	Male	0	2	0	2 (11.1%)	18
		Female	6	4	6	16 (88.9%)	
Age (years)	Library users	15-35	85	76	53	214 (84.7%)	254
		36+	28	5	7	40 (15.7%)	
	Staff	20-25	1		1	2 (11.1%)	18
		26-30	0	3	0	3 (16.6%)	
		31-35	0	1	0	1 (5.5%)	
	36+	5	2	5	12 (67.7%)		

Table 3 shows the qualifications of employees tasked with dispensing service at the three branch libraries. Of the 18 employees who were interviewed, 6 (33.3%) had qualification in

librarianship comprising 1 (5.6%) professional librarian and 4 (27.7%) paraprofessionals, while the majority (n=12), accounting for 66.7% did not possess any form of training in librarianship.

Table 3: BNLS Employees' job qualifications

	Qualification	GPL	LPL	RPL	TOTAL	%
Librarianship	Master's/PhD	0	0	0	0	0.0
	Bachelor's Degree	1	0	0	1	5.6
	Diploma	0	1	1	2	11.1
	Certificate	1	1	1	3	16.7
					6	33.3
Non-library qualification	Diploma	1	3	0	4	22.2
	Certificate	0	0	0	0	0.0
	BGCSE	1	0	1	2	11.1
	JCE	2	1	1	4	22.2
	PSLE	0	0	2	2	11.1
					12	66.7

It is also noted that the majority of users 134 (52.8%) were those who visited the library twice or more in a week, followed by 62 (24.4%) who visited more

than once per month. Table 4 below shows the patterns of the use of the library by the surveyed customers:

Table 4: Use of the public library

	Description	GPL	LPL	RPL	Total	%	% cumulative
Frequency of use	Once per week	8	15	11	34	13.4	13.4
	Twice or more per week	66	40	28	134	52.8	66.2
	Once per month	14	8	2	24	9.4	75.6
	More than once per month	25	18	19	62	24.4	100.0
Length of use	1 – 3 months	14	9	0	23	9.1	9.1
	More than 3 months – 1 year	25	17	13	55	21.7	30.8
	More than 1 year – 3 years	29	22	14	65	25.6	56.3
	More than 3 years - 6 years	30	10	14	54	21.3	77.6
	More than 6 years – 10 years	6	9	5	20	7.9	85.5
	More than 10 years	9	14	14	37	14.6	100.0

Source: Field data (2015)

The Quantitative Findings

The first objective of this study was to establish the extent to which branch libraries provide quality service, from their customers' perspective. Assessment of customer experiences across the five identified dimensions (tangibles, reliability,

responsiveness, assurance and empathy) considered critical in quality evaluations is shown in Table 5. The aggregate service quality gap score of **-1.2** across the five attributes signals general dissatisfaction with overall quality of service in the libraries under study, as calculated in Table 5:

Table 5: Library customers' overall service quality scores (P-E) for individual libraries

Service Dimension under assessment	Service items assessed	GPL			LPL			RPL			Overall Performance		
		E	P	P-E	E	P	P-E	E	P	P-E	E	P	P-E
Tangibles	4	5.2	3.4	-1.8	5.2	3.6	-1.6	5.5	4.3	-1.2	5.3	3.8	-1.5
Reliability	5	5.2	4.2	-1	5	4.1	-0.9	5.3	4.5	-0.8	5.2	4.3	-0.9
Responsiveness	4	5.4	4.6	-0.8	5.3	4.2	-1.1	5.6	4.6	-1	5.4	4.5	-1.0
Assurance	4	5.5	4.6	-0.9	5.3	4.3	-1	5.5	4.6	-0.9	5.4	4.5	-0.9
Empathy	5	5.2	3.8	-1.4	5.2	3.6	-1.6	5.4	3.9	-1.5	5.3	3.8	-1.5
Total	22	5.3	4.1	-1.2	5.2	4.0	-1.2	5.5	4.4	-1.1	5.3	4.2	-1.2

GPL=Gaborone Public Library; LPL=Lobatse Public Library; RPL=Ramotswa Public Library

E = Expectations and P = Perceptions Source: Field data

For the *tangible features* of service, the findings revealed an overall service quality Gap Score of **-1.5** derived from assessing the four service items making up the *Tangibles* dimension. Customers' expectations with regards this dimension were that each public library i) has modern, up-to-date and visually-appealing physical structure; ii) study desks, chairs and periodical shelves are adequate, comfortable and in good condition; iii) the libraries have modern-looking and dependable equipment – computers, printers, photocopiers, scanners, microreaders, and projectors; and, iv) materials associated with the service (newspapers, pamphlets, periodicals) are visually-appealing and in an excellent condition. Findings indicate that respondents had expected the libraries to have modern-looking and visually appealing physical structures. This score means that the physical features of service: specifically, the building as physical evidence of service, the adequacy and condition of desks, shelves

and books, newspapers and magazines were below expectations.

Concerning the *Reliability* dimension (the ability to perform as promised, widespread consistently (Phiri and Mcwabe, 2013; Zeithaml et al. 2013), a set of five (5) questions were designed around the understanding that services that are not dependable or reliable, may lead customers to developing switching behaviours. Customer expectations were assessed on five comprising this dimension, including staff of the library insist on error-free records; ii) when employees of the library promise to do something by a certain time, they do it; iii) when a library user has an information-related problem, the staff shows a sincere interest in solving it; iv) the library staff performs the required service right the first time; and, v) staff provides their service at the time they promised to do so. Users gave this dimension an overall quality score of **-0.9**. The negative rating here is indicative of users'

dissatisfaction at the three public libraries, and this may affect their loyalty and patronage intentions.

With regards to the *Responsiveness* dimension, a set of four (4) questions were raised around the understanding that in order to attract positive word-of-mouth, a service needs to be responsive to users' needs. The service items assessed under this dimension were: i) employees of the library always inform users exactly when a service will be available; ii) employees of the library always give prompt service to users; iii) employees are always willing to help users; and, iv) employees of the library are never too busy to help users. Users rated this responsive service negatively. An average SERVQUAL score of **-1.0** was obtained. Users' expectations were still higher than their perceptions of performance. The ability of the libraries to perform as promised, with speed and, consistently (Zeithaml et al. 2013) was below expectation.

Concerning employees' display of knowledge and courtesy during service encounters and their ability to convey trust and confidence (*Assurance*), an average overall gap score for the three libraries was **-0.9**, a situation still signalling quality shortfall. The service attributes under scrutiny included: i) the behaviour of staff always instils trust and confidence; ii) library users always feel save when dealing with library staff; iii) employees of the library are consistently courteous; and, iv) employees of the library always have the knowledge to answer a variety of information related questions. Calculation of these yielded an average score of -0.9.

Also showing quality shortfall was another dimension, normally considered a pivotal quality attribute in library users' assessment of the quality of a service—*Empathy*. This attribute examined the extent of the caring and individualised attention that library employees' should give to customers. An overall gap score of **-1.5** was recorded, showing that ability to provide a caring and individualised attention service atmosphere, where each user is treated as an individual was perceived low. Users' perceptions were low across the three libraries on the service items comprising this dimension, namely: i) staff gives users individual attention; ii) opening hours are convenient to customers; iii) library hires employees who give users specialised attention; iv) employees have the users' interest at heart and, v) staff makes every effort to understand the specific needs of each individual customer. Calculation of these returned an average gap score of -1.5.

So far, this study has quantitatively measured the Customer Gap presenting a set of universally-recognised criteria that underlie customer perceptions of quality. An overall gap score of **-1.2** for the participating library facilities, derived from calculating overall customers' experiences, showed quality shortfalls across the three libraries as shown in Table 5. The -1.2 figure, calculated through the formula: Perceptions *minus* Expectations (**P-E**) for each dimension, is the average of the five overall performance scores on the five service dimensions assessed in each of the three libraries. A more simplified version is shown in Table 6:

Table 6: Calculation of the overall service quality score for the three public libraries

Service dimension under assessment	No. of attributes per dimension	GPL	LPL	RPL	Overall Performance
Tangibles	4	-1.8	-1.6	-1.2	-1.5
Reliability	5	-1	-0.9	-0.8	-0.9
Responsiveness	4	-0.8	-1.1	-1	-1.0
Assurance	4	-0.9	-1	-0.9	-0.9
Empathy	5	-1.4	-1.6	-1.5	-1.5
					-1.2

GPL – Gaborone Public Library; LPL – Lobatse Public Library; RPL – Ramotswa Public Library

Source: Field data

To understand the impediments responsible for these quality experiences, the *Gap Theory* further proposes that reasons for the existence of these quality shortfalls be investigated. Consequently, a qualitative phase was undertaken to investigate the internal issues that may be held responsible for identified quality shortfalls.

Findings from the Qualitative (Interview) Phase

The Role of Work Environment Practices in Customers' Evaluations of Service Quality

The second objective of this study, necessitated by the findings of the previous phase, was to establish the influence of those factors in the internal environment on external customers' perception of service quality. Ten semi-structured questions were developed, informed by the four gaps of the framework to collect qualitative data through in-depth, one-on-one, face-to-face interviews with service personnel deployed at the three centres.

The findings revealed that library management lacked knowledge of customer expectations and their perceptions. The study findings confirmed the existence information-gathering mechanisms, though these were not well-managed. Staff noted the suggestion box as the most prevalent form of dialogue with the user community, though 33.3% (n=6) of staff reported was very unreliable because: usually no specific time frame was set to refresh the boxes; the boxes were empty for long periods; they were positioned in obscure locations. Other forms of purposeful information-gathering were complaint registers and internal surveys, which regrettably had since been terminated. Frontline employees (FLEs) also reported inadequate upward communication, with 61% revealing that they did not meet top management as regularly as could enable exchange of information about customers' experiences, yet they had abundant information about customers, especially as they came into contact with the customers on daily basis. Some 11 (61%) members of staff said they never met their top management at all, while only 4 (16.6%) indicated seeing senior members just once over the two years of their attachment to the library. Lack of information on customer needs could create Gap 1 as espoused by the Gaps Model of Service Quality

(GMSQ). When Gap 1 (the Knowledge Gap) exists, it will always reflect in the Customer Gap.

The study further established the presence of instances of the *management perceptions of customer expectations-service quality standards gap*. The result revealed that Management was unable to design service performance standards that translate customer experiences into service quality specifications that employees could execute, due to lack of information on the user community. A total of 9 (50%) employees said they were using their Ministry's generic service standards, cascaded from their Permanent Secretary - a process which centres on the system's internal performance objectives rather than those based on user requirements. Employees revealed the inadequate resources to facilitate service delivery: with 2 (11.1%) specifically lamenting the outdated and inadequate book stock, acute shortage of personnel, shortage of transport to undertake outreach services, the use of the manual circulation system and frequent malfunctioning of the item-detecting machine. Researcher observation further revealed that the Lobatse and Gaborone public libraries had poor partitioning, restrooms outside the library buildings, crowded entrances and lack of office space for staff. These scenarios showed inadequate organisational commitment to service quality, an antecedent to Gap 2 of the framework. When Gap 2 (Service Specifications Gap) exists, it will always reflect in customers' experiences.

The study also established a third gap, the *service performance gap*, emanating from a number of human and other resources management. Employees reported they did not have adequate and relevant training as shown on employees' qualifications in Table 3 above. However, staff conceded to being sent to attend some workshops periodically, although they reported that the content of some of the short courses training is sometimes not relevant to their daily duties. During the interviews, 5 (27.8%) staff members stated they did not know of any document spelling out their job descriptions, but were only informed orally what their job entailed; 18 (16.7%) indicated their job descriptions were spelt out in the Balanced Score Card (BSC) document, while 3 (16.7%) said they just knew what was expected of them as public officers - no job descriptions. Members of staff (n=3

– 16.7%) also reported not being appropriately compensated, rewarded or recognised for outstanding customer service performance. Some employees reported the last time they received a once-off monetary incentive was more than a decade ago, but were unable to tie the incentive to any systematic reward for performance because the gesture was extended to everybody in the workplace.

The investigation also revealed the presence of a fourth gap – *the discrepancy between promises and the service delivered*. It was revealed that after raising customers' expectations through external advertising, the service delivered did not match those promises. The findings revealed that 13 (72.2%) members of staff agreed that their libraries did not fulfil what they promised customers, while 6 (33.3%) singled out provision of inadequate computer and Internet as a major source of user dissatisfaction. A further 6 (33.3%) revealed that the computer training programme was not running as smoothly as publicised due to shortage of computers. It was observed that three user-trainees would share a computer during training sessions. When service promised did not match service delivered - Gap 4 results. The presence of this gap is a sure recipe for the customer gap.

Discussion

This study assessed the extent to which the three selected BNLS branch libraries provide quality experiences to users and establish issues in their internal functioning that might account for users' service experiences.

Assessment of data from the customer instrument revealed that the *tangibles* (desks, shelves, appearance of personnel and electronic equipment) scored lower expectations than perceptions. A score of **-1.7**, signalled that the physical aspects of the service negatively influence customers in their evaluation of quality. Zeithaml et al., (2013) had noted that library managers must understand that users form impressions of the level of service they receive through contact with the physical manifestations of the service. In order to take care of this, Hooper et al., (2013) suggested that these tangibles should not be neglected as they may diminish users' perceptions and evoke feelings of dissatisfaction.

Assessing the *reliability* aspect of service - ability to perform the service as error-free as promised, 'right the first time' and with care and consistently - the participating libraries accrued an overall score of **-0.9**. Customers' expectations for an excellent library service were not met on the attributes investigated. Bitner's (1990) and Cho et al.'s (2004) investigations concluded that customers who are satisfied complain less; those that are dissatisfied become disloyal to the service provider. The authors agreed on the notion that when a library makes mistakes, or does not do what it said it would do, customers lose confidence in its reliability. Regarding employee *responsiveness*- the willingness and ability of employees to provide prompt service and help customers, the overall service score was **-0.9**. Once again, customers had higher expectations for employees' *responsiveness* towards their needs. This score suggests that the library system needs to enhance employees' interactive skills as espoused by Zeithaml et al. (2013). Hoffman and Bateson (2001) also revealed that employees' responsiveness levels are usually affected by frustration and dissatisfaction with their job. This seemed to have been endorsed by staff, who lamented lack of promotion, training and remuneration. Issues here are therefore responsible for the size of the customer gap.

With respect to the *assurance* aspects of service -employees' knowledge and courteous behaviour when addressing users' information queries, a score of **-1.0** was realised. Zabava (1995) asserts that assurance may influence users' willingness to recommend the service to friends or to display re-visit behaviours. Customers therefore had higher expectations of employees to show knowledge and courteous behaviour. Such would also influence their trust and confidence in the system. It is important that service providers are knowledgeable, technically and interactively if they are to enhance users' perceptions of quality. Training frontline employees (FLEs) in librarianship issues would be essential in promoting a customer service philosophy.

Given that libraries are high-contact environments, staff needs to give users caring and individualised attention. It is from this, that users formulate evaluations of the quality of the service rendered. Accordingly, each library user is a unique

individual, with unique needs and characteristics and expect to be treated as such. This attribute was referred to as *empathy* by the proponents of the Gap Model. The overall score for this dimension was **-1.5**. The negative report in disparity could be attributed to lack of requisite attitude towards service and orientation to serving customers and fellow employees.

The SERVQUAL dimensions scores accumulated to an overall service Customer Gap score of **-1.2** indicating that library users experienced service encounters that are lower than what they expected. The *Customer*

Gap as noted in this study may also be an indicator that the public library system in its present state in the Botswana context may need to do more to contribute effectively to the attainment of the United Nations 2030 Agenda for Sustainable Development or to the envisioned knowledge economy. Consequently, key internal issues contributing this to score warrant an investigation which is the second phase of this study. The qualitative study set off to understand the reasons behind the *Customer Gap* confirmed the internal gaps in the service system identified by Parasuraman, Berry and Zeithaml (1990) are impediments to service excellence during the interviews of the personnel deployed in the three information centres.

The first internal gap contributing to Gap 5 was observed to result from lack of management's knowledge of what users expect or think about service. Results revealed: lack of comprehensive user research orientation; rather minimal interaction between top management and FLEs at base; and absence of clearly established complaints-handling systems in some libraries, or its monitoring where necessary. A number of authors have observed that lack of information on what the customer thinks about the service is a major guarantor of service quality shortfall (Parasuraman, Berry and Zeithaml, 1990; Zeithaml et al., 2013; Blešič et al., 2011). These findings show that libraries are operations-oriented rather than being customer, confirming earlier findings which concluded services are designed around management thinking (Tekle, 2005) and lack of continuous study of the service communities' changing needs as noted by researchers (Ramachandran, 1995; Mwandoloma,

1993; Nkabinde (1988). These issues constitute Gap 1 of the Gaps Model.

The second internal factor responsible for quality shortfall in the library service is lack of strategic management of resources, specifically inability to design customer-oriented service specifications, procedures and standards in the workplace to address quality issues. Conspicuously noted was the use of service standards and procedures which were not congruent with customers' expectations, despite employees possessing a wealth of information about users' needs by virtue of being in constant daily contact with them. Other factors observed include lack of frequent contact between employees and supervisors; inadequate resources committed to ensure service excellence; and the services capes whose designs, maintenance and partitioning do not meet the needs of the internal and the external customers. Results revealed that libraries did not translate employee knowledge of customer experiences into service quality specifications that employees understand and can execute. These deficiencies in strategic management of resources will always guarantee Gap 2. As long as this Gap 2 exists, the Customer Gap will be a certainty.

The third major internal factor noted to contribute to quality shortfall at the BNLS is the inability to deliver to the level of the service designs and standards already in place. Three causes of this as reported in the study include employees not inadequately trained to interact with users or handle situations that require expertise; employees inadequately compensated or rewarded for exceptional customer service performance, diminishing their level of morale. These causes seem to confirm the causes identified by Parasuraman, Berry and Zeithaml (1985; 1990) in their pioneer study. The *fourth* major internal factor contributing to quality shortfall is the system's inability to deliver service as promised, after heightening their expectations through publicity. Promises made during kgotla (gathering of the people of a village or community to discuss important issues) meetings, in publicity campaigns or school visits were not met. Staff acknowledged this deficiency. Performance that does not match promises made constitutes Gap 4 of the Gaps Model of Service Quality (GMSQ). Thus far, it maybe

concluded that the four factors described were responsible for the overall -1.2 service quality Customer Gap score generated from the customer survey, indicating shortfalls experienced by library customers.

Conclusion

Excellent customer service enables libraries to grow, to continue to be relevant to their customers and to meet the demands of the UN 2030 Agenda for Sustainable Development. To attain the requirements of the UN 2030 Agenda, libraries need a greater understanding and responsiveness to users' needs. Assessment of library service quality helps in identifying weak and strong areas. This study evaluated library service quality through the Gaps Model of Service Quality and its derivative SERVQUAL instrument. It could be concluded that public libraries are failing to meet their customers' expectations. The results of this study show that customers experience quality shortfalls in the three selected branch libraries of BNLS. There are gaps that need to be closed if these libraries are to meaningfully assist Botswana attain the UN 2030 Agenda for Sustainable development. When customers' expectations exceed their perceptions of library performance, dissatisfaction results and such customers may be lost. The Public Libraries Division of human resources management strategies need to be re-aligned so as to enable internal processes to support and encourage efforts towards delivering quality service.

Recommendations

For the public libraries in Botswana to effectively respond to the demands of the UN 2030 Agenda for Sustainable Development, and contribute maximally to a knowledge-based economy, the following recommendations emanating from the findings of this study are proposed:

- The Public Libraries Division must employ evidence-based library management approaches, including establishing: a responsive and efficient complaints-handling system; transaction-based user surveys, customer expectations-perceptions studies and critical incident techniques.
- The system must communicate quality through its physical facilities including the building, shelves and study chairs; they must be attractive aesthetically, be spacious, be appropriately-partitioned and be well-furnished.
- The system must manage its human resources prudently by developing its employees through training in technical and interactive skills; creating a service environment in which employees take pride in their work by providing the tools, demanding, encouraging and measuring internal service and rewarding exceptional performance.

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