




# A review of service quality: Case of the National Treasury of South Africa



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**Background:** The study rests on the idea that the National Treasury (NT) impacts direct service delivery at the country level through its budget preparation and budget implementation monitoring processes. Both processes are meant to ensure that departments are appropriately resourced, and should, therefore, be able to achieve objectives contained in their performance plans. The study focuses on the service quality provided by the NT in performing these functions.

**Aim:** To provide insights on the level of service quality provided by NT to national government departments and the role of expectations in its measurement.

**Setting:** The study was conducted in Pretoria, and respondents were employees in the Administration Division of national government departments.

**Methods:** The study followed a quantitative approach and used primary data which was collected between October and December 2019. The mean ( $\mu$ ), standard deviation (SD), gap analysis, one-way analysis of variance (ANOVA) and Scheffe's test as a post-test were the key statistical techniques used.

**Results:** Service quality was found to be appropriate based on both the SERVQUAL and SERVPERF models. More positive results are however observed when service expectations are excluded as guided by the latter. Service expectations were found to be an unstable factor in the measurement of service quality.

**Conclusion:** An online service quality review system to be established by NT in support of the New Public Management movement. The NT to ensure that external marketing media, which impact service expectations, are realistic.

**Keywords:** budget process; service delivery; service expectations; service quality; National Treasury.

## Introduction

### Orientation of the study

Mukhtar, Anwar and Llyas (2017:202) pointed out that the quality concept with respect to tangible items and consequential customer satisfaction was a key focus in industry during the 1900s. This initial focus on tangibles in marketing was underpinned by prevailing economic schools of thought which focused largely on the demand and supply of a product. The rapid advancement of economies and globalisation led to the deepening of service industries, as evidenced through its growing contribution to the gross domestic product (GDP) on a global scale.

This in turn caused quality in the services industry to gain attention. It is therefore necessary to understand value creation for service brands, which is more complex when compared to tangible brands. Skaalsvik (2017) explained two key reasons for this. Firstly, services are characterised by simultaneous production and consumption. The employee provides the service, whilst the customer uses the service. It is important to note that it is not possible to entirely predict customers' reactions. Secondly, both the customers and the employees are active participants, each with their own understanding and expectations of the service brand promise, which is not necessarily in line with what a given organisation stands for. Such active participation often occurs without the immediate presence of management to ensure that quality standards are met.

The National Treasury (NT) of South Africa is the central treasury in South Africa. It is a service providing organisation to all organs of state in terms of legislated functions as enlisted in the

Public Finance Management Act (South African Government 1999:s6), and plays a significant role in maintaining the stability and integrity of the domestic economy. The Department of National Treasury (2019:78) highlighted the importance of the service that NT provides by suggesting that the perceived reliability, independence and stability of a country's treasury are illustrated through its control of government expenditure. This aspect is amongst the key considerations in international investor markets to assess risk before committing to domestic investment ventures. Thus, a service quality study, using key legislated functions meant to ensure prudence in the manner in which government resources are allocated and spent, would be beneficial.

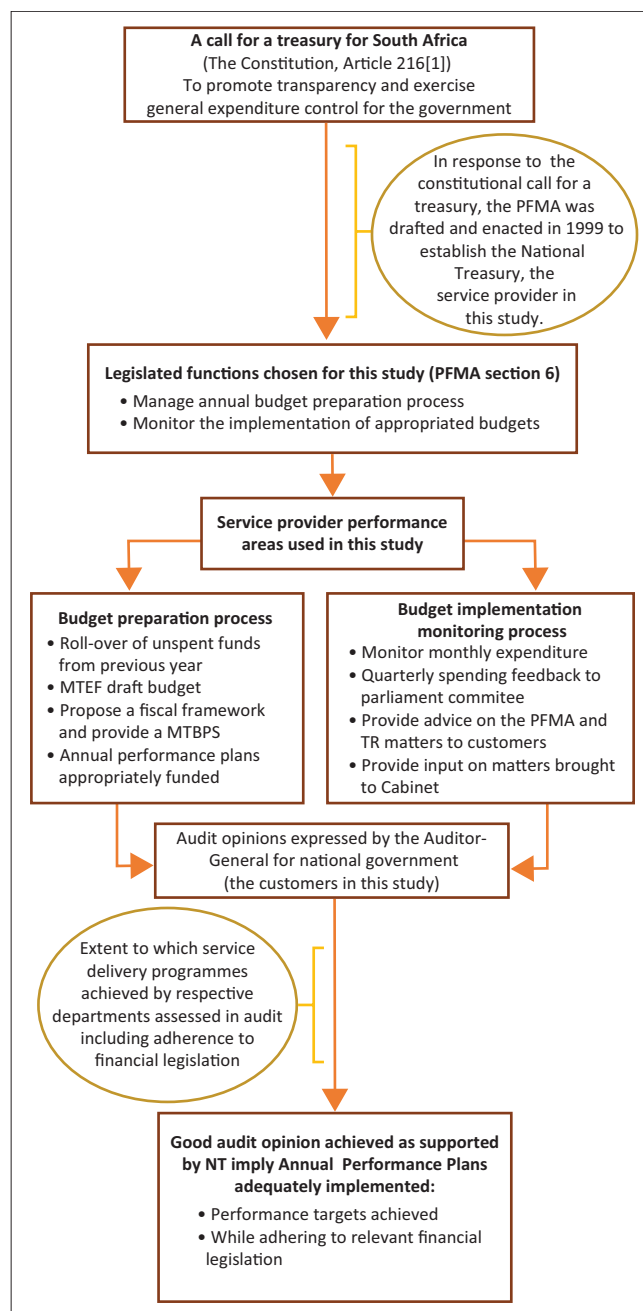
The Constitution identified the need for a central treasury to control and promote transparency of government expenditure (South African Government 1996:s216, ss1). The *Public Finance Management Act* (South African Government 1999:s5) responded to this by establishing the NT of South Africa and enlisted a total of eight mandated functions (South African Government 1999:s6). This study focuses on the following two, which are probably the most visible and easiest to conceptualise in terms of how they impact not only budget resource allocation and spending, but also service delivery:

- **Budget preparation process:** This is a lengthy process that begins in April and ends in March of the following year in line with the public sector financial year (Parliament of South Africa 2016:4). Through this exercise, budget and resources allocation decisions are made.
- **Budget implementation monitoring process:** The service provider's strategic objectives include the monitoring and analysing of public expenditure and assessing the impact on service delivery. These functions imply that support is given to government departments to ensure that realistic budgets are crafted and adequately implemented, and that allocated resources enable the given departments to provide good service delivery (Department of National Treasury 2020a:45).

In order to appreciate the significance of the chosen treasury functions in this study, one needs to understand how these feed into the annual audit opinions expressed by the Auditor-General of South Africa. Auditor-General of South Africa (n.d.) explained that an audit opinion is an expression of the degree to which appropriated budgets are executed in line with departmental annual performance plans, whilst taking into account the level of adherence with applicable financial legislation. These plans are an expression of each department's service delivery programmes as it contains detail on performance targets and indicators in line with its statutory mandate. The budget preparation process and budget implementation monitoring process are largely meant to support departments, through superior service quality, noting what the functions entail, to achieve good audit opinions. These functions require extensive cooperation, communication and knowledge on the side of NT as the service provider (Department of National Treasury 2020b:20),

and these requirements fall under the scope of a service as suggested by Hoang et al. (2016:51). Figure 1 provides a graphic representation of this premise.

The national government departments are considered as the customers of NT in performing two of its functions used in the study. The choice of this sphere of government is motivated by the fact that it not only sets and delivers national country policy, but a lot of its work also impacts the international community (Education and Training Unit 2021). The study



Sources: Department of National Treasury (2020a); Parliament of South Africa (2016); South African Government (1996); South African Government (1999). For more information, please see the reference list of Thokoa, R.L., Naidoo, V. & Herbst, T.H.H., 2022, 'A review of service quality: Case of the National Treasury of South Africa', *Africa's Public Service Delivery and Performance Review* 10(1), a567. <https://doi.org/10.4102/apsdpr.v10i1.567>  
NT, National Treasury; PFMA, Public Finance Management Act; TR, Treasury Regulations; MTEF, Medium Term Expenditure Framework; MTBPS, Medium Term Budget Policy Statement.

**FIGURE 1:** Suggested link between National Treasury functions used and service delivery programmes.

relies on the SERVQUAL and SERVPERF approaches to gauge service quality. Parasuraman, Zeithaml and Berry (1985:3), the developers of the former are proponents of the inclusion of service expectations in service quality measurement. Cronin and Taylor (1992:64), developers of the latter, held that doing so is not fair as detailed in the literature section. Accordingly, the following objectives were formulated:

- To measure the level of service quality provided by the NT during its *budget preparation process* and its *budget implementation monitoring process*.
- To determine whether statistically significant differences exist between customer expectations and their job grades. This is in an attempt to assess the stability of expectations across the chosen demographic, and is assumed to be a proxy for the reasonableness thereof for inclusion in service quality measurement. If statistically significant differences are found, this would suggest that service expectations are not entirely stable.

The apparent need for concerted focus on service quality in the public sector context is not a novel idea, although it came much later than the private sector (Lamidi, Agboola & Taleat 2016:2). Fredriksson and Pallas (2018:1) stated that there had been calls to reform public sector systems globally from as early as the 1980s to enhance its performance and to highlight the importance of a customer-orientated approach in public service delivery following its noted usefulness in the private sector context.

This was brought on by the realisation that aside from improving state performance, public service quality is one of the key determinants of a country's competitive edge along with state leadership in the face of globalisation (Adejwun 2012:130). The said reform, which carries this sentiment, became increasingly popular and was titled New Public Management (Fredriksson & Pallas 2018:1). Parahoo, Harvey and Ayyagari (2018:61) added that unlike with the case of the private sector, wherein its organisations are predominately concerned with only meeting the service needs of customers chosen through its own market segmentation process, the public sector cannot choose its customers. It is meant to provide services in a universally accessible and acceptable manner to all citizens. This directive is usually enforced by legislation, policy initiatives and regulatory bodies (Munzhedzi 2016:1). This pressure is compounded by the fact that, in a democratic state, voter confidence determines whether a ruling party will remain in power (Chitlaoarporn 2015:12). Mjaku (2020:813) suggested that service delivery and satisfaction are very closely linked such that those with the highest levels of dissatisfaction are likely to be those with the lowest perceptions of quality of services delivered. It can thus be said that poor service delivery will result in dissatisfaction, which would then translate into weakened voter confidence in the ruling party's ability to suitably manage government functions. This study, therefore, aims to add to service quality research in the context of the public sector given its undeniable importance, and considers the assertion of Parahoo et al. (2018:61) that the concept is far more researched, and better understood in a private sector context.

## Literature review

Before defining service quality, it may be useful to first consider service and quality as separate concepts. A service is commonly defined as a benefits package with a description of what is done and how it is done to create value for and to satisfy the customer (Ingaldi 2018:54). Yang (2017:4) described quality as the extent to which something is fit for use and the extent to which it conforms to specified requirements. Afthanorhan et al. (2019:15) stated that, although distinct, the concept of service quality is often synonymised with customer satisfaction in industry. Service quality is concerned with general customer attitudes towards service provision, whilst customer satisfaction relates more to such attitudes resulting from a specific transaction. Nasir (2017:244) emphasised the importance of service quality by stating that the cost of obtaining new customers is much higher than that of retaining existing customers. This is not to discount the importance of new customers, but rather highlights the importance of continuous attention to service quality. Thus, regardless of the stage that customers happen to be in, in terms of the Iceberg Model of Brand Equity, service providers need to put in the same effort invested in attracting them in the first place. The Iceberg Model of Brand Equity by Zimmermann (2001:49) essentially holds that a brand image, which is also impacted by brand experiences such as service quality (Surbhi 2018), is represented through customer beliefs and sentiments about a brand and influences the attachment with the brand. If positive, customers will be aware of the brand in the short term and start to remember relative advertising. In the longer term, the brand will start to appeal to customers, obtain their trust, and ultimately their loyalty.

Before detailing service quality models, it would be useful to note that the lack of understanding of the factors leading to service quality contributes to the difficulty in defining the concept as suggested by Agarwal and Kumar (2016:1). Mukhtar et al. (2017:214) alluded to the non-universality of these determinants as a key reason for this occurrence by stating that 'services require classifications and principles having a number of dimensions keeping in view the different market situations, conditions, characteristics, and organisational strategy of marketing'. Various service quality models have thus taken varying views on the concept. Ghotbabadi, Feiz and Baharun (2015:272) added that research on service quality is dominated by a focus on the SERVQUAL, followed by SERVPERF as some scepticism on the inclusion of expectations in its measurement is notably shared in industry. The Nordic model, although not as popular and fairly outdated, finds its relevance in the fact that SERVQUAL is an improvement of it, and thus also finds its foundation therein (Mukhtar et al. 2017:212).

## Nordic model of service quality

The Nordic model, developed by Grönroos (1984:10), follows the expectation-disconfirmation paradigm. This paradigm implies that purchases are always made based on the customer's pre-existing expectations, which then guide the quality

assessments (Khader & Madhavi 2017:4). When the service has been received, it is compared to the expectations and will lead to disconfirmation if the standard has not been met or confirmation if expectations have been met. The interaction between these two concepts, thus, determines the perceptions of the level of service quality received. The model also argues that the experienced service quality is influenced by the corporate image held by the customers. This image is moulded by two variables; firstly, *technical quality*, which refers to conclusions drawn by customers from their evaluations of outcomes emanating from the performance of a given service by a given provider. Secondly, *functional quality*, which refers to the process followed to ensure that the customer receives the product or service. Elements such as provider attitude, reliability, flexibility and trust would impact this variable. Some authors proposed *service environment* as a third variable. This was based on the observation that people tend to make comparisons between services provided by various service providers within the same industry. Marketing elements, such as word-of-mouth and marketing communication impact expectations (Harmse 2012).

Criticism against this model is that it does not provide an exact technical measure for the two variables, and that it is not adequately tested (Hamid & Yip 2016:7199). This inspired the work of Parasuraman et al. (1985:44) to develop such a measure.

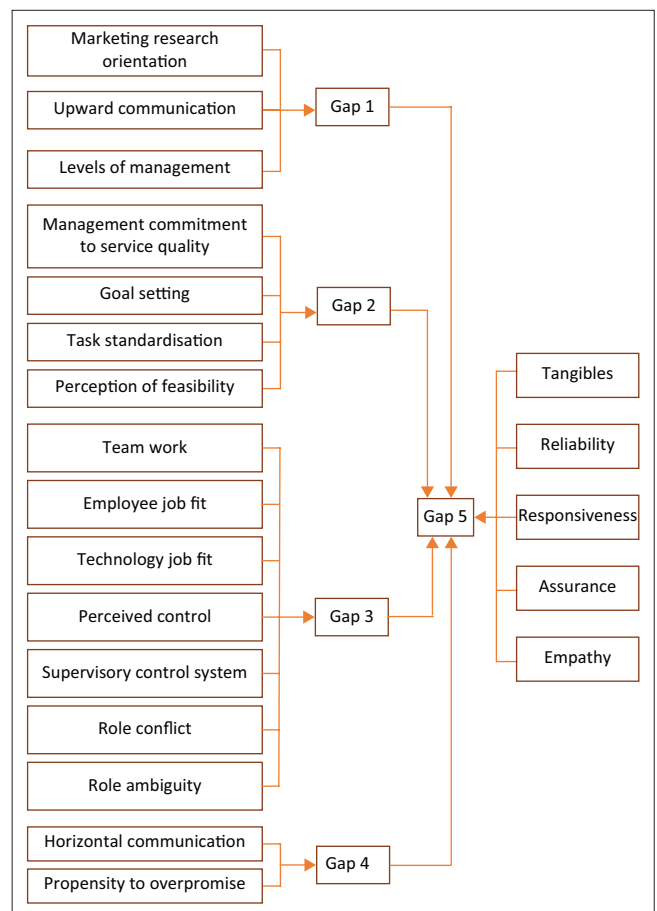
## SERVQUAL versus SERVPERF

SERVQUAL, with its stance that service quality can be gauged by assessing the difference between service expectations and perceptions of that received, is underpinned by the model of service quality gaps by Parasuraman et al. (1985:49). The model was later extended by Luk and Layton (2002:111) with the addition of the sixth and seventh gaps. Herdiyanti, Adityaputri and Astuti (2017:604) explained that the model focuses on the relationship between organisational events that impact perceptions of service quality provided to identify key links that are critical for the delivery of superior service quality as identified in gap 5 (Figure 2). In developing this model, management teams from several service organisations were surveyed (Singh 2017:36). The finding was that differences in the applied definition of service quality by management and that of customers may give rise to certain gaps in service quality. In other words, management needs to fully comprehend what customers interpret as, or expect from adequate service delivery. The model identified four key gaps, which come together to form the main and fifth possible gap in service quality (Mukhtar et al. 2017:211). It first suggests ways in which respective gaps can be managed and shows how these gaps feed into the overall ultimate gap. It also shows the five determinants of service quality.

It is useful for management teams to note that although service quality studies mainly focused on the five gaps, the assumption that management is always able to influence employees may not always be the case. Gaps 6 and 7, which is an extension of the traditional gap model, focuses more on how employees feature in service quality through their

understanding of customer expectations and the perceptions of management (Lee et al. 2016:4). The sixth gap, is similar to the first gap, but occurs when it is the actual front-line workers who do not have a good grasp of customers' expectations, and is thus concerned with customer expectations versus employee's perceptions. The seventh gap proposes a potential gap between employee perception and those of management. This follows the view that whilst management may be the custodian of organisational policies, including standard operating guidelines, it is the employees who implement such policies, and may potentially deviate from these if not appropriately understood (Lee et al. 2016:2). Kiran and Singh (2016:474) described the five traditional gaps as follows:

- *Customer expectations versus perceptions of management (Gap 1):* This gap aims to establish a link between the true expectations of the external customer and the perceptions of management on these expectations (Agarwal & Kumar 2016:2). Front-line workers are significant role players in providing services to the customers and are possibly in closer contact with the customers than management. Lee et al. (2016:2) proposed that these workers will not be able to increase the quality of service delivered if management is not clear on the customers' expectations. Management might relay an incorrect message regarding the customers' expectations based on their understanding and the



Source: Parasuraman, A., Zeithaml, V. & Berry, L.L., 1985, 'A conceptual model of service quality and its implications for future research', *Journal of Marketing* 49(4), 41–50. <https://doi.org/10.1177/00224298504900403>

FIGURE 2: Model of service quality gaps.

- employees would be obliged to follow on this message even if they know that it does not meet the customers' expectations.
- *Perception of management versus the specifications of the service (Gap 2)*: Singh (2017:37) emphasised the importance of service design, which often translates through an organisations' policies. Improper service design results largely from management's inaccurate account of customer expectations of the specifications of the desired service package. As such, the link between management's perceptions of customers' expectations on services quality specifications can have a negative impact as the shortcoming of the first gap. Chehab, Ilkhanizadeh and Bouzari (2021:1) further stated that task standardisation, non-responsiveness of the organisational goal-setting process and a lack of commitment to service quality by management increases the likelihood of this gap.
  - *Service specifications versus service delivery (Gap 3)*: Based on the importance of Gap 2, management would be required to develop policies for the standardisation of employees' tasks and for service quality specifications. Such policies could increase the probability of achieving good service quality in a consistent and uniform manner. Since organisational policies are carried out by employees, their ability and willingness to implement and adhere to set standards, are important to ensure the appropriate translation of specifications in service delivered (Chehab et al. 2021:2).
  - *Service delivery versus external communication (Gap 4)*: Bhargava and Bedi (2021:5) reiterated the importance of brand promise to be accurate and realistic. Brand promise refers to the external communication by an organisation to its customers on the conditions that will occur as a result of the application of its brand offering. Since the main function of marketing is to inform potential customers of the benefits of a product or service, it should not operate in isolation. Horizontal communication is, therefore, critical in managing this gap (Singh 2017:37).
  - *The expectations of customers versus their own perceptions of the service (Gap 5)*: The difference between service performance and expectations are studied in this gap. In other words, this is where everything essentially comes together (Agarwal & Kumar 2016:2). According to the fifth gap, customer assessments of the quality is the strength and direction of the relationship between service expectations and services received. Bhargava and Bedi (2021:8) indicated that service expectations are influenced by the customers' experiences, personal needs and communications. One way to manage this gap would be to understand these factors and use this understanding to shape and execute the service performance. Both the SERVQUAL and SERVPERF approaches for measuring service quality focus on this gap.

The SERVQUAL approach, developed during the 1980s by Parasuraman et al. (1988:12), as with the Nordic approach, rests on the expectation-disconfirmation theory (Rasyida et al. 2016:1). The idea is that service quality can be measured by assessing the extent to which expectations of services rendered differ from the perceptions of services received

using the five dimensions of service quality. This approach was considered an improvement on the Nordic model since it provided a clear measuring instrument for service quality (Hamid & Yip 2016:7200).

The dimensions of service quality that underpin SERVQUAL are: tangibles which include actual physical resources such as provider officers and the appearance of employees. Reliability refers to a provider's capability to provide specific services in an accurate and dependable manner. Responsiveness refers to the willingness to assist customers in an efficient and timeous fashion. Assurance encompasses organisational characteristics that give customers confidence that a provider may be trusted to provide the brand promise.

This includes the competence of employees. The last dimension is empathy, which refers to the extent to which a provider is ready to afford customers' personal attention (Mjaku 2020:813). The approach uses the same 22-items twice; in the first part, customers are asked to rate their expectations on each of the items and, in the second part customers are asked to provide a rating of their perceptions of service performance on each item. The difference between the first and second parts will give a determination of the service quality gap. A positive difference implies service quality exceeds expectations, a negative score implies the opposite. A nil score would imply that service expectations have been met (Kwateng, Osei & Akoto 2017:3).

The SERVPERF approach by Cronin and Taylor (1992:64) also follows the five dimensions of service quality of SERVQUAL. However, it eliminates the role of customer service expectations. Developers of this model were of the view that a performance-based measure of service quality would be superior (Agarwal & Kumar 2016:3). Ingaldi (2016:170), a proponent of the approach stated that 'this method gets rid of the subjectivity, because the customer does not specify in advance its often unreasonable expectations about the service'. In further support, Unuvar and Mursel (2016:354) highlighted that SERVQUAL faced two main points of criticism on the use of service expectations. Firstly, it may not be realistic to assume that customers may have a sense of realistic service specifications and delivery, within a given industry, before it is received. Secondly, customers themselves may not be exactly sure of what it is they want. SERVPERF was tested in the banking industry, fast food industry, cleaning industry and pest control industry. The results from these tests confirmed that this measure is also a reliable alternative to the much trusted and extensively used SERVQUAL. Jain and Gupta (2014:28) mentioned the following specific reasons why SERVPERF may be preferred over SERVQUAL:

- *The methodical approach is simpler and promotes higher response rates*: The number of items of the measurement instrument is effectively reduced from 44 items to 22 items, which generally implies better response rates.
- *The concept 'expectation' was believed to be rather vague*: The initial use of customer expectation as a norm for service quality, for instance, the assumption that current

customer expectation is the same as the ideal expectation is problematic. It was also confirmed that expectation in service quality is actually a closer function of what providers in a given industry would be able to provide as opposed to what they should provide.

- *Measurement challenges relating to the disconfirmation model:* Some researchers found a relatively low fit between the use of gap scores relative to a single scale that directly measures overall service quality. As such, gap scores were found to not add any informational value other than what was already contained in the perception component of SERVQUAL.

Research on measuring service quality such as those of Kwateng et al. (2017:1) and Ingaldi (2016:168) seem to focus on one approach at a time. Thus, the value of comparing results of a purely performance-based measure and that which includes expectations is forgone. Both approaches will thus be used in this study and the suggestion of Cronin and Taylor (1992:64), developers of the SERVPERF, that a performance-based measure would be superior given the questionable stability of service expectations will be tested.

## Methodology

### Research approach and methods

This study is quantitative in nature. It is also descriptive and cross-sectional as it aims to provide an accurate description of service quality through its measurement, using both the SERVQUAL and SERVPERF models, and determine whether there exist statistically significant differences in service expectations based on the customer's job grade at a given point in time. If such differences are found the suggestion would be that, service expectations, at least based on the chosen demographic in this study, are not particularly stable thus supporting the premise of SERVPERF. Gap analysis was performed by calculating the difference between the service expectation and service performance scores as guided by SERVQUAL. A score of between 0 and 0.99 is considered to imply that service expectations have been met since service performance scores are fairly in line with expectations. A score of at least more than 1, would imply that performance scores are exceeded by at least a unit of expectation scores, indicates that expectations are exceeded. The opposite would then apply to negative scores. The frequency distribution for service performance scores was graphically represented by means of a frequency polygon to gauge service quality on the auspices of SERVPERF. If positively skewed the polygon will peak on the left-hand side of the centre value, which would be four in the case of the 7-point Likert scale used in this study, indicating more negative scores. The opposite applies to a negatively skewed polygon implying more positive scores (Saunders, Lewis & Thornhill 2016).

The study relies on the central limit theorem and thus a check for the normality of frequency distributions was not conducted. The theorem holds that the greater the participation of sample units in a given survey, with a minimum of 30, the closer its

distribution to normal is likely to be. This occurs even if it was drawn from a population whose distribution is not normal. This study uses data collected from 522 participants and thus meets the required minimum. The central limit theorem is widely valued as it validates the use of parametric tests, which require normal data distribution, which is generally more sensitive and thus comparably more accurate than non-parametric tests, more broadly (Saunders et al. 2016:280). One-way analysis of variance (ANOVA) complemented by Scheffe's test, which are parametric tests, were calculated via Statistical Package for the Social Sciences version 25 (SPSS v25) to determine if statistically significant differences exist between service expectations by job grade. Kim (2017:22) mentioned that ANOVA measures whether the mean scores of three or more groups being compared are statistically different, such that, in the case of this study, a  $p$ -value of less than 0.05 would indicate evidence thereof using a confidence level of 95%. There are five groups compared in this study: group 1, consists of non-management staff (SL1 – SL8), group 2 junior managers (SL9 or SL10), group 3 middle managers (SL11 or SL12), group 4 consisting of senior managers (SL13) and group 5 are the top managers (SL14 – SL16). Chen et al. (2018:61) added that ANOVA is an omnibus statistical measure wherein the null-hypothesis is defined by more than one parameter (that is,  $H_0: \mu_1 = \mu_2 = \mu_3 = \mu_4 = \mu_5$  in the case of this study; and the alternative hypothesis would be that at least one of the group mean scores are not equal). If the null hypothesis is rejected, it is necessary to use another association test to locate where the actual group differences lie. Ho (2018:232) mentioned that Scheffe's test is commonly used as a post-hoc test to ANOVA for this purpose, and uses one parameter to define its null hypothesis (that is,  $H_0: \mu_1 = \mu_2$ ; and the alternative hypothesis defined as  $H_A: \mu_1 \neq \mu_2$ ). The SPSS runs various iterations of the test by comparing all groups by each other such that every one group is put against every other group. If the null hypothesis is rejected for a particular iteration, that is the location of the significant difference. This was done to determine whether service expectations are stable across the job grades of NT's customers; if differences are found this would suggest that it may be unfair to include service expectations as these are not stable, as suggested by the developers of the SERVPERF approach (Cronin & Taylor 1992:64), in measuring NTs service quality. Job grade was the only demographic used to obtain data and this was based on the views of the researchers that it is the least personal demographic compared to say gender and age, and thus mitigate the risk of discouraging participation which would negatively impact the response rates. Zou et al. (2017:1) also used ANOVA as a measure of stability where differences found would be deemed to suggest instability in their study.

A pilot study was conducted using 40 sample units from four national departments. A response rate of 75% was achieved as 30 of these employees participated. An online census survey approach was followed for the main study after good reliability results were achieved. Pertaining to the former, Cronbach Alpha's of 0.951 and 0.944 were obtained for service expectations and performance,

respectively. In the case of the main study, values of 0.978 and 0.942 were obtained. These are all above the minimum recommended indication of 0.7 for reliability (Saunders et al. 2016:451).

## Research participants

The sample units in this study are defined as employees within the Administration Divisions of all national government departments. This is because the function of this Division, which is standard across all government departments and usually consists of five sub-divisions, is to ensure that annual performance plans are adequately funded and implemented, and that all applicable financial legislation is adhered to in doing so (Department of National Treasury 2010:9). The study is based on the premise that the two selected functions of the NT are aimed at supporting the Administration Division with these functions as

**TABLE 1a:** Measuring instrument used in the study. Service expectations (Part A).

Reference code	Item
<b>Expected tangibles total</b>	
ET1	They should have up-to-date equipment.
ET2	Their physical facilities should be visually appealing.
ET3	Their employees should appear neat.
ET4	The appearance of the physical facilities of treasuries should be in keeping with the type of services provided.
<b>Expected reliability total</b>	
ERY5	When treasuries promises to do something by a certain time, they should do so.
ERY6	When line function departments have problems, treasuries should be sympathetic.
ERY7	Treasuries should be dependable.
ERY8	Treasuries should provide their services at the time they promise to do so.
ERY9	Treasuries should keep accurate records.
<b>Expected responsiveness</b>	
rER10	Treasuries should not be expected to tell line function departments exactly when services will be performed.
rER11	It is not realistic for employees of line function departments to expect prompt service from employees of treasuries.
rER12	Employees of treasuries do not always have to be willing to help employees of line function departments
rER13	It is okay if employees of treasuries are too busy to respond to the requests of line function departments promptly.
<b>Expected assurance total</b>	
EA14	Employees of line function departments should be able to trust employees of treasuries.
EA15	Employees of line function departments should be able to feel safe in their transactions with those of the treasuries.
EA16	Treasury employees should be polite.
EA17	Treasury employees should get adequate support from the relevant treasury to do their jobs well.
<b>Expected empathy total</b>	
rEE18	Treasuries should not be expected to give employees of line function departments individual attention.
rEE19	Employees of treasuries cannot be expected to give employees of line function departments personal attention.
rEE20	It is unrealistic to expect employees to know what the needs of line function departments are.
rEE21	It is unrealistic to expect treasuries to have their line function departments' best interests at heart.
rEE22	Treasury should not be expected to have operating hours convenient to all employees of line function departments.

Source: Parasuraman, A., Zeithaml, V. & Berry, L.L., 1988, 'SERVQUAL: A multiple-item scale for measuring consumer perceptions of service quality', *Journal of Retailing* 64, 12–40  
 ERY, expected reliability; rEE, expected empathy; rPE, performance empathy; EA, expected assurance; PA, performance assurance; rPR, performance responsiveness; PRY, performance reliability; PT, performance tangibles; rER, expected responsiveness; ET, expected tangibles.

articulated earlier on. The total population was estimated at 860, noting that there are 43 national government departments, on the assumption that each of the five units would typically have a junior (SL9 or SL10), middle (SL11 or SL12), senior (SL13) and top manager (SL14), although in some departments there may be some non-management staff (ranges between SL1 and SL8). A response rate of 60.7% ( $n = 522$ ) was achieved and deemed appropriate following the recommendation of Bakare et al. (2020:1318) that a minimum of 20% is needed for studies in the social and management sciences.

Most of the respondents were employees on SL13 at 25% ( $n = 128$ ), followed by those on SL9 and SL10 at 24% ( $n = 125$ ). Those on SL1 to SL8 accounted for 21.6% ( $n = 113$ ), and SL11 and SL12 for 20% ( $n = 107$ ). The participation rate of top managers of national governments, those who were on SL14 to SL16, was the lowest at 9% (49).

## Measuring instrument

The SERVQUAL questionnaire, both Part A and Part B, developed by Parasuraman et al. (1988:12) were used.

**TABLE 1b:** Measuring instrument used in the study. Service expectations (Part B).

Reference code	Item
<b>Performance tangibles total</b>	
PT1	National Treasury has up-to-date equipment.
PT2	National Treasury's physical facilities are visually appealing.
PT3	National Treasury's employees appear neat.
PT4	The appearance of the physical facilities of National Treasury is in keeping with the type of services provided.
<b>Performance reliability total</b>	
PRY5	When National Treasury promises to do something by a certain time, they do so.
PRY6	When you have problems, National Treasury is sympathetic.
PRY7	National Treasury is dependable.
PR Y8	National Treasury provides its services at the time it promises to do so.
PRY9	National Treasury keeps accurate records.
<b>Performance responsiveness total</b>	
rPR10	National Treasury does not tell you exactly when services will be performed.
rPR11	You do not receive prompt service from National Treasury's employees.
rPR12	Employees of National Treasury are not always willing to help customers.
rPR13	Employees of National Treasury are too busy to respond to customer requests promptly.
<b>Performance assurance total</b>	
PA14	You can trust employees of National Treasury.
PA15	You feel safe in your transactions with National Treasury's employees.
PA16	Employees of the National Treasury are polite.
PA17	National Treasury employees get adequate support from the National Treasury to do their jobs well.
<b>Performance empathy total</b>	
rPE18	National Treasury does not give you individual attention.
rPE19	Employees of National Treasury do not give you personal attention.
rPE20	Employees of National Treasury do not know what your needs are.
rPE21	National Treasury does not have your best interests at heart.
rPE22	National Treasury does not have operating hours convenient to all their customers.

Source: Parasuraman, A., Zeithaml, V. & Berry, L.L., 1988, 'SERVQUAL: A multiple-item scale for measuring consumer perceptions of service quality', *Journal of Retailing* 64, 12–40  
 ERY, expected reliability; rEE, expected empathy; rPE, performance empathy; EA, expected assurance; PA, performance assurance; rPR, performance responsiveness; PRY, performance reliability; PT, performance tangibles; rER, expected responsiveness; ET, expected tangibles.

SERVPERF, which only differs by excluding expectations in service quality measurement, relies on Part B of the SERVQUAL questionnaire to gauge service performance (Table 1). The questionnaire has been used extensively and its validity and reliability illustrated, and, in a sense, can be considered a standardised survey (Jain & Gupta 2014:28).

The responses obtained, as they appear in Table 3 and Table 4, for negatively worded items have been recoded for ease of analysis and are denoted with 'r' at the beginning of a reference code for the particular item. This also makes it easy to immediately compare such responses with those obtained from positively worded items as the recoding effectively makes them positive.

### Ethical considerations

Ethical clearance has been granted by a University in Gauteng. The Director-General of the NT also granted permission for the study to be conducted and information to be published.

### Limitations and recommendations for future research

The study lumped two NT functions to measure service quality, implying that the result would provide a netted out indication of service quality. It would therefore not be possible to respond to a question on what the level of service quality would be for one of the functions without the other. Negatively worded questions have been shown to deliver less positive responses when compared to positively worded questions in some cases (Kamoen et al. 2017:613). The measuring instrument used in this study has 18 negatively worded statements out of the 44 items of SERVQUAL and nine from the 22 items of SERVPERF. Thus, it is possible that the level of service quality provided may be underestimated.

Firstly, in order to increase the managerial implications value of this research for the NT's management team, it may be useful to replicate the study with the functions separated. This will provide more confidence that what seems to be good performance is not perhaps a combination of very outstanding performance in one function and poor performance in the other. Secondly, in order to ensure that the strength of the views of respondents is not perhaps biased, all items should be positively worded in conducting the recommended replication.

## Results

### Frequency distributions of data collected

The frequency distributions by item, including the mean and standard deviation (SD), are shown for service quality expectations (Table 2) and service quality performance (Table 3). The item detail is provided by reference code as listed in Table 1.

### Level of service quality using SERVQUAL approach

Gap analysis was performed: negative scores imply inadequate service quality, a positive score below 0.99 indicates adequate service quality and scores above 1.00 indicate that expectations have been exceeded (Table 4).

### Level of service quality using SERVPERF approach

The frequency distribution is graphically represented in the form of a frequency polygon in order to present the skewness of the distribution (Figure 3). In this case, a negatively skewed polygon is observed as it peaks on the right-hand side of the centre value of four which is represented by the vertical line plotted in the graph. This implies that the majority of the responses are positive.

### Results from one-way analysis of variance and Scheffe's post-test on the stability of expectations

A  $p$ -value of  $p < 0.000$ , which is below the level of significance of 0.05, was obtained from one-way ANOVA and indicates the presence of notable group mean score differences between at least one of the groups with another. Scheffe's as post-test was then used to locate exactly where the significant differences lie. Statistically significant differences were found between group 1 (SL1 – SL8) and all other groups as the  $p$ -values were below 0.000 in the cases shown in Table 5. In addition, the mean values for service expectations ascend by salary level.

## Conclusion

### Outline of results

*Research objective 1:* Based on the SERVQUAL approach (Table 4), the level of service quality provided during the annual budget preparation and the budget implementation monitoring processes was adequate. An average gap score of 0–0.99, which is defined as adequate service provision, was calculated for 77% ( $n = 402$ ) of the total responses ( $n = 522$ ). A negative gap score, which was calculated for 15% ( $n = 78$ ) of the total responses, indicated inadequate service quality as the expectations exceeded the actual service received. A gap score that exceeds 1.0 shows that service quality provided exceeds service expectations. Only 8% ( $n = 42$ ) of the respondents were of the opinion that the NT has exceeded their service performance expectations. A more positive picture is seen when using the performance-based measure, SERVPERF. It was found that on average, respondents were notably satisfied with the level of service quality received as 98.8% ( $n = 519$ ) selected the somewhat agree (5), agree (6) and strongly agree (7) response options. The mean of total responses was 6.083 which is relatively close to the numerical value of 7.0 for the highest possible positive response. This trend was also illustrated in Figure 3 wherein a negatively skewed frequency polygon is



**TABLE 2:** Results on service quality expectations.

Items (reference code)	Variable	1: Strongly disagree	2: Disagree	3: Somewhat disagree	4: Neither agree nor disagree	5: Somewhat agree	6: Agree	7: Strongly agree	Total	M	SD
ET1	Count (n)	0	0	0	2	144	325	51	522	5.814	0.596
	Row n (%)	0.00	0.00	0.00	0.40	27.60	62.30	9.80	100.00	-	-
ET2	Count (n)	0	0	0	1	142	327	52	522	5.824	0.591
	Row n (%)	0.00	0.00	0.00	0.20	27.20	62.60	10.00	100.00	-	-
ET3	Count (n)	0	0	0	1	146	320	55	522	5.822	0.601
	Row n (%)	0.00	0.00	0.00	0.20	28.00	61.30	10.50	100.00	-	-
ET4	Count (n)	0	0	0	3	148	317	54	522	5.808	0.612
	Row n (%)	0.00	0.00	0.00	0.60	28.40	60.70	10.30	100.00	-	-
<b>Expected tangibles total</b>	<b>Row n (%)</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.30</b>	<b>27.80</b>	<b>61.70</b>	<b>10.20</b>	<b>100.00</b>	<b>5.817</b>	<b>0.6</b>
ERY5	Count (n)	0	0	0	4	136	325	57	522	5.833	0.611
	Row n (%)	0.00	0.00	0.00	0.80	26.10	62.30	10.90	100.00	-	-
ER6	Count (n)	0	0	0	5	148	309	60	522	5.812	0.634
	Row n (%)	0.00	0.00	0.00	1.00	28.40	59.20	11.50	100.00	-	-
ERY7	Count (n)	0	0	0	4	147	315	56	522	5.81	0.62
	Row n (%)	0.00	0.00	0.00	0.80	28.20	60.30	10.70	100.00	-	-
ERY8	Count (n)	0	0	0	6	136	329	51	522	5.814	0.609
	Row n (%)	0.00	0.00	0.00	1.10	26.10	63.00	9.80	100.00	-	-
ERY9	Count (n)	0	0	3	3	138	323	55	522	5.812	0.64
	Row n (%)	0.00	0.00	0.60	0.60	26.40	61.90	10.50	100.00	-	-
<b>Expected reliability total</b>	<b>Row n (%)</b>	<b>0.00</b>	<b>0.00</b>	<b>0.10</b>	<b>0.80</b>	<b>27.00</b>	<b>61.30</b>	<b>10.70</b>	<b>100.00</b>	<b>5.816</b>	<b>0.623</b>
rER10	Count (n)	1	1	1	0	129	346	44	522	5.814	0.627
	Row n (%)	0.20	0.20	0.20	0.00	24.70	66.30	8.40	100.00	-	-
rER11	Count (n)	1	0	0	2	125	344	50	522	5.839	0.611
	Row n (%)	0.20	0.00	0.00	0.40	23.90	65.90	9.60	100.00	-	-
rER12	Count (n)	1	0	0	2	108	357	54	522	5.879	0.6
	Row n (%)	0.20	0.00	0.00	0.40	20.70	68.40	10.30	100.00	-	-
rER13	Count (n)	1	0	0	1	112	353	55	522	5.877	0.601
	Row n (%)	0.20	0.00	0.00	0.20	21.50	67.60	10.50	100.00	-	-
<b>Expected responsiveness</b>	<b>Row n (%)</b>	<b>0.20</b>	<b>0.00</b>	<b>0.00</b>	<b>0.20</b>	<b>22.70</b>	<b>67.00</b>	<b>9.70</b>	<b>100.00</b>	<b>5.852</b>	<b>0.61</b>
EA14	Count (n)	0	1	0	0	134	334	53	522	5.837	0.603
	Row n (%)	0.00	0.20	0.00	0.00	25.70	64.00	10.20	100.00	-	-
EA15	Count (n)	0	0	0	2	129	336	55	522	5.851	0.588
	Row n (%)	0.00	0.00	0.00	0.40	24.70	64.40	10.50	100.00	-	-
EA16	Count (n)	0	0	0	0	114	342	66	522	5.908	0.581
	Row n (%)	0.00	0.00	0.00	0.00	21.80	65.50	12.60	100.00	-	-
EA17	Count (n)	0	0	1	2	99	362	58	522	5.908	0.571
	Row n (%)	0.00	0.00	0.20	0.40	19.00	69.30	11.10	100.00	-	-
<b>Expected assurance total</b>	<b>Row n (%)</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.20</b>	<b>22.80</b>	<b>65.80</b>	<b>11.10</b>	<b>100.00</b>	<b>5.876</b>	<b>0.585</b>
rEE18	Count (n)	2	2	0	0	104	365	49	522	5.86	0.657
	Row n (%)	0.40	0.40	0.00	0.00	19.90	69.90	9.40	100.00	-	-
rEE19	Count (n)	1	0	0	0	125	345	51	522	5.849	0.602
	Row n (%)	0.20	0.00	0.00	0.00	23.90	66.10	9.80	100.00	-	-
rEE20	Count (n)	1	0	0	1	137	331	52	522	5.824	0.622
	Row n (%)	0.20	0.00	0.00	0.20	26.20	63.40	10.00	100.00	-	-
rEE21	Count (n)	1	0	0	1	102	368	50	522	5.887	0.578
	Row n (%)	0.20	0.00	0.00	0.20	19.50	70.50	9.60	100.00	-	-
rEE22	Count (n)	1	1	0	18	102	357	43	522	5.801	0.675
	Row n (%)	0.20	0.20	0.00	3.40	19.50	68.40	8.20	100.00	-	-
<b>Expected empathy total</b>	<b>Row n (%)</b>	<b>0.20</b>	<b>0.10</b>	<b>0.00</b>	<b>0.80</b>	<b>21.80</b>	<b>67.70</b>	<b>9.40</b>	<b>100.00</b>	<b>5.844</b>	<b>0.627</b>
<b>Total</b>	<b>Row n (%)</b>	<b>0.10</b>	<b>0.00</b>	<b>0.00</b>	<b>0.40</b>	<b>20.40</b>	<b>53.90</b>	<b>8.50</b>	<b>83.30</b>	<b>5.841</b>	<b>0.609</b>

ERY, expected reliability; rEE, expected empathy; EA, expected assurance; rER, expected responsiveness; ET, expected tangibles; SD, standard deviation

observed, this implies the presence of more positive responses.

*Research objective 2:* Statistically significant differences in service expectations by the job grade of customers were found. It was also found that the higher the customer's job grade, the higher their service expectations from the NT are likely to be. Therefore,

the SERVPERF suggestion that service expectations may serve as a contaminant in measuring service quality, at least based on the job grade demographic, seems quite plausible.

### Practical implications and recommendations

The following three aspects were considered in formulating this section. Firstly, the suggested link between the chosen

TABLE 3: Service quality performance.

Items (reference codes)		1. (Strongly disagree)	2. (Disagree)	3. (Somewhat disagree)	4. (Neither agree nor disagree)	5. (Somewhat agree)	6. (Agree)	7. (Strongly agree)	Total	<i>M</i>	<i>SD</i>
PT1	Count ( <i>n</i> )	0	1	0	0	49	393	79	522	6.050	0.523
	Row <i>n</i> (%)	0.0	0.2	0.0	0.0	9.4	75.3	15.1	100	-	-
PT2	Count ( <i>n</i> )	0	0	0	0	43	390	89	522	6.088	0.523
	Row <i>n</i> (%)	0.0	0.0	0.0	0.0	8.2	74.7	17.0	100	-	-
PT3	Count ( <i>n</i> )	0	0	0	1	43	376	102	522	6.109	0.539
	Row <i>n</i> (%)	0.0	0.0	0.0	0.2	8.2	72.0	19.5	100	-	-
PT4	Count ( <i>n</i> )	0	0	0	0	40	380	102	522	6.119	0.508
	Row <i>n</i> (%)	0.0	0.0	0.0	0.0	7.7	72.8	19.5	100	-	-
<b>Performance tangibles total</b>	<b>Row <i>n</i> (%)</b>	<b>0.0</b>	<b>0.0</b>	<b>0.0</b>	<b>0.0</b>	<b>8.4</b>	<b>73.7</b>	<b>17.8</b>	<b>100</b>	<b>6.091</b>	<b>0.524</b>
PRY5	Count ( <i>n</i> )	0	0	0	0	44	360	118	522	6.142	0.539
	Row <i>n</i> (%)	0.0	0.0	0.0	0.0	8.4	69.0	22.6	100	-	-
PRY6	Count ( <i>n</i> )	0	0	0	1	50	360	111	522	6.113	0.551
	Row <i>n</i> (%)	0.0	0.0	0.0	0.2	9.6	69.0	21.3	100	-	-
PRY7	Count ( <i>n</i> )	0	0	0	1	48	358	115	522	6.125	0.552
	Row <i>n</i> (%)	0.0	0.0	0.0	0.2	9.2	68.6	22.0	100	-	-
PRY8	Count ( <i>n</i> )	0	0	0	1	43	379	99	522	6.103	0.519
	Row <i>n</i> (%)	0.0	0.0	0.0	0.2	8.2	72.6	19.0	100	-	-
PRY9	Count ( <i>n</i> )	0	3	0	0	54	368	97	522	6.059	0.615
	Row <i>n</i> (%)	0.0	0.6	0.0	0.0	10.3	70.5	18.6	100	-	-
<b>Performance reliability total</b>	<b>Row <i>n</i> (%)</b>	<b>0.0</b>	<b>0.1</b>	<b>0.0</b>	<b>0.1</b>	<b>9.2</b>	<b>69.9</b>	<b>20.7</b>	<b>100</b>	<b>6.108</b>	<b>0.555</b>
rPR10	Count ( <i>n</i> )	1	1	1	1	55	386	77	522	6.015	0.597
	Row <i>n</i> (%)	0.2	0.2	0.2	0.2	10.5	73.9	14.8	100	-	-
rPR11	Count ( <i>n</i> )	1	1	0	0	54	383	83	522	6.038	0.583
	Row <i>n</i> (%)	0.2	0.2	0.0	0.0	10.3	73.4	15.9	100	-	-
rPR12	Count ( <i>n</i> )	1	1	0	1	44	369	106	522	6.098	0.604
	Row <i>n</i> (%)	0.2	0.2	0.0	0.2	8.4	70.7	20.3	100	-	-
rPR13	Count ( <i>n</i> )	3	2	0	4	42	390	81	522	6.015	0.687
	Row <i>n</i> (%)	0.6	0.4	0.0	0.8	8.0	74.7	15.5	100	-	-
<b>Performance responsiveness total</b>	<b>Row <i>n</i> (%)</b>	<b>0.3</b>	<b>0.2</b>	<b>0.0</b>	<b>0.3</b>	<b>9.3</b>	<b>73.2</b>	<b>16.6</b>	<b>100</b>	<b>6.042</b>	<b>0.618</b>
PA14	Count ( <i>n</i> )	0	0	1	2	43	378	98	522	6.092	0.543
	Row <i>n</i> (%)	0.0	0.0	0.2	0.4	8.2	72.4	18.8	100	-	-
PA15	Count ( <i>n</i> )	0	0	0	1	45	367	109	522	6.119	0.538
	Row <i>n</i> (%)	0.0	0.0	0.0	0.2	8.6	70.3	20.9	100	-	-
PA16	Count ( <i>n</i> )	0	1	0	0	36	351	134	522	6.180	0.570
	Row <i>n</i> (%)	0.0	0.2	0.0	0.0	6.9	67.2	25.7	100	-	-
PA17	Count ( <i>n</i> )	0	2	0	1	40	378	101	522	6.098	0.575
	Row <i>n</i> (%)	0.0	0.4	0.0	0.2	7.7	72.4	19.3	100	-	-
<b>Performance assurance total</b>	<b>Row <i>n</i> (%)</b>	<b>0.0</b>	<b>0.1</b>	<b>0.0</b>	<b>0.2</b>	<b>7.9</b>	<b>70.6</b>	<b>21.2</b>	<b>100</b>	<b>6.122</b>	<b>0.556</b>
rPE18	Count ( <i>n</i> )	1	4	1	0	46	391	79	522	6.017	0.654
	Row <i>n</i> (%)	0.2	0.8	0.2	0.0	8.8	74.9	15.1	100	-	-
rPE19	Count ( <i>n</i> )	1	1	1	0	44	374	101	522	6.086	0.606
	Row <i>n</i> (%)	0.2	0.2	0.2	0.0	8.4	71.6	19.3	100	-	-
rPE20	Count ( <i>n</i> )	1	1	1	0	43	384	92	522	6.071	0.592
	Row <i>n</i> (%)	0.2	0.2	0.2	0.0	8.2	73.6	17.6	100	-	-
rPE21	Count ( <i>n</i> )	1	1	1	1	36	382	100	522	6.096	0.596
	Row <i>n</i> (%)	0.2	0.2	0.2	0.2	6.9	73.2	19.2	100	-	-
rPE22	Count ( <i>n</i> )	1	1	2	20	39	368	91	522	5.994	0.719
	Row <i>n</i> (%)	0.2	0.2	0.4	3.8	7.5	70.5	17.4	100	-	-
<b>Performance empathy total</b>	<b>Row <i>n</i> (%)</b>	<b>0.2</b>	<b>0.3</b>	<b>0.2</b>	<b>0.8</b>	<b>8.0</b>	<b>72.8</b>	<b>17.7</b>	<b>100</b>	<b>6.053</b>	<b>0.633</b>
<b>Total</b>	<b>Row <i>n</i> (%)</b>	<b>0.1</b>	<b>0.2</b>	<b>0.1</b>	<b>0.3</b>	<b>8.5</b>	<b>72.0</b>	<b>18.8</b>	<b>100</b>	<b>6.083</b>	<b>0.577</b>

*M*, Mean; *rPE*, performance empathy; *PA*, performance assurance; *PT*, performance tangibles; *rPR*, performance responsiveness; *PRY*, performance reliability; *SD*, standard deviation.

functions of the NT used in this study, service quality and service delivery outcomes of line function departments as articulated in Figure 1. Secondly; the global call for strengthening the service quality in the public sector, which embodies a significant part of the New Public Management

agenda (Fredriksson & Pallas 2018:1), and should thus also play a more prominent role in the work of the NT. Lastly, the established strong positive relationship between employee performance and service quality makes it necessary to focus on the former (Dinesh & Ragel 2016:396).

TABLE 4: Gap analysis.

Expectation scores (-) Performance scores	Frequency	Percent	Cumulative percent
<b>Service quality inadequate (negative scores)</b>			
-2.00 – -1.75	0	0.0	0.0
-1.76 – -1.50	2	0.4	0.4
-1.51 – -1.25	5	1.0	1.3
-1.26 – -1.00	4	0.8	2.1
<b>-1.01 – -0.75</b>	9	1.7	3.8
<b>-0.76 – -0.50</b>	14	2.7	6.5
<b>-0.51 – -0.25</b>	7	1.3	7.9
<b>-0.26 – -0.01</b>	37	7.1	14.9
<b>Service quality met (0.00– 0.99)</b>			
0.00–0.25	250	47.9	47.9
0.26–0.50	72	13.8	61.7
0.51–0.75	36	6.9	68.6
0.76–0.99	44	8.4	77.0
<b>Service quality exceeded (&gt; 1)</b>			
1.00–1.25	22	4.2	4.2
1.26–1.50	5	1.0	5.2
1.51–1.75	9	1.7	6.9
1.76–2.00	6	1.1	8.0

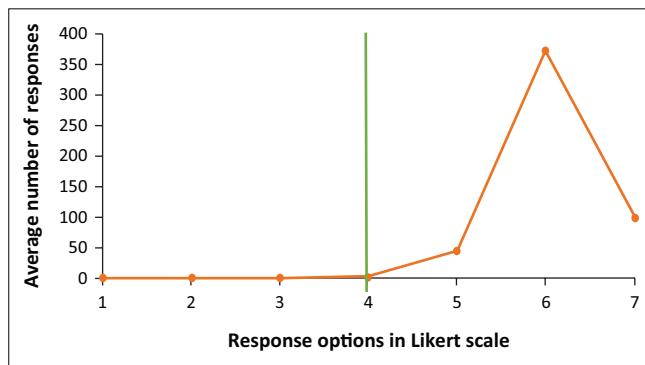


FIGURE 3: SERVPERF distribution illustrated by means of frequency polygon.

A formalised online system to assess NT's service quality wherein its customers are able to anonymously provide feedback on the service provided by a particular employee at every point of contact is suggested. This will make it possible for relevant line managers to provide what would probably be the most realistic feedback to employees regarding their performance since it would come directly from the customers they serve. This recommendation is in line with the statement of Park (2017:2) that 'performance appraisals can be regarded as important tools with which supervisors can motivate employees, improve employee performance, and distribute rewards, all of which affect both individual and organizational performances'. Such a system should be managed as a repository where customer scores on service quality are kept, including the documentation of complaints along with suggested remedial actions by line managers. This will enable the easier application of disciplinary measures, in cases of regular poor service ratings as this would imply a similar pattern of employee performance (Dinesh & Ragel 2016:396). In addition, such an approach would be a major stride towards improving consequence management in the public sector which has been stated as one of the key reasons for what seems to be bad performance outcomes of the public sector (Public Service Commission 2014:32).

TABLE 5: Scheffe's post-test results.

Comparison groups	Salary level	Mean	p-values from Scheffe's post-test
1–2	SL1–SL8	5.389	< 0.000
	SL9–SL10	5.763	
1–3	SL1–SL8	5.389	< 0.000
	SL11–SL12	5.907	
1–4	SL1–SL8	5.389	< 0.000
	SL13	5.967	
1–5	SL1–SL8	5.389	< 0.000
	SL14–SL16	6.601	

SL, salary level.

Given the instability of service quality expectations (Cronin & Taylor 1992:64; Ingaldi 2016:170), which have also been illustrated in this study and noting the diverse market that the public sector serves (Parahoo et al. 2018:61), these perhaps should not be included in the formal evaluation of service quality provided by public service sector organisations, such as NT, by regulatory bodies of the sector such as Parliament (South African Government 1996:s55, ss2). This is in the interest of objectivity and to ensure that these organisations are not unfairly accused of non-adherence to legislation, not prioritising policy initiatives and thus avoid undue retribution. A performance-based measure is suggested in this case. However, for the NT management team in managing operations, it is important to note that it may be naïve to engage customers as if they had no expectations. Supporting this view, Gebremichael and Singh (2019:2) alluded to the inevitability of expectations from the customer perspective as these stem from the 'anticipation of future consequences based on prior experience, current circumstances, or other sources of information' which humans cannot really disconnect from (Fasbender 2018:119).

Both the Nordic and SERVQUAL models noted that expectations are largely influenced by marketing elements including marketing communication (Hoang et al. 2016:51; Skaalsvik 2017). The NT should therefore be realistic with all external marketing media ensuring that it does not overreach and take careful account of its capacity in how it can support its customers. Williams (2007), in support, stated that:

[P]eople's sensory experiences are determined not only by bottom-up processes (that is, through the impact of external stimuli on individuals' sensory organs), but also by top-down processes, such as expectations and prior desires. (p. 2)

To really appreciate this recommendation, the benefit of suitably low or realistic expectations were illustrated in the study of Abou-Khalil and Aoun (2020:1) where satisfaction with a given candidate running for election was found to wholly be a function of low expectations. Additionally, based on the finding that expectations increase with a customer's job grade, it is suggested that the proven ability of an employee be commensurate with the customer's job grade such that higher-performing employees are assigned to serve customers on higher job grades.

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## Authors' contributions

R.L.T. conducted the research and wrote the article. V.N. and T.H.H.H. supervised the research and co-wrote the article

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## Data availability

Data can be shared anytime for the purpose of this publication's processes, and is available upon reasonable request from the corresponding author, R.L.T.

## Disclaimer

The views and opinions expressed in this article are those of the authors' and do not necessarily reflect the official policy or position of any affiliated agency of the authors.

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