MODELLING PERCEPTIONS OF COMMUNITY INFORMATION CENTRES: EXPERIENCES FROM ZIMBABWE

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Abstract

The purpose of the research study was to determine the quality of the services provided at Community Information Centres (CIC) in Zimbabwe. The research is premised on Parasuraman, Zeithaml and Berry's (1998) Gaps model. It used a cross-sectional survey of a purposively selected sample of 475 respondents in three sampled centres. Structural Equation Modelling (SEM) was used to identify the relationships between the SERVQUAL dimensions (tangibility, responsiveness, reliability, empathy and assurance) and the latent service quality. Confirmatory Factor Analysis (CFA) was used to assess construct validity of the SERVQUAL dimensions. The results show that the SERVQUAL dimensions were positively related to service quality. Furthermore, there was validity in the SERVQUAL constructs. Results confirmed that there are gaps between the expectations and experiences of the community in all five dimensions of the SERVOUAL. It can be concluded that there is a level of satisfaction among CIC users with the services

provided at CICs. The study recommends that CIC service quality needs to be consistently evaluated to inform quality improvements over time.

Keywords: Community Information Centres (CIC), Confirmatory Factor Analysis (CFA), Service quality, SERVQUAL model, Structural Equation Modelling (SEM).

INTRODUCTION

The management of service quality is a commitment from top management for continuous improvement (Kapondera & Hart, 2016). Services are goods created, provided and managed to support productive and reproductive societal activities and to contribute to human dignity, quality of life and sustainable livelihoods (Chatiza, Makanza, Paradza, Chakaipa, Mukoto, Kagoro, Ndlovu & Mushamba, 2013; Rao, 2008). Service quality is an approach to managing business processes in order to ensure the full satisfaction of customers; and to increase the competitiveness and effectiveness of an industry (Tsiga, 2016; Methu, 2015). For organisations to be able to design quality means of services, the views of customers need to be understood. The customers subjective perception of quality places them as the ultimate judge of quality (Tsiga, 2016; Karnstedt & Winter, 2015; Kapondera & Hart, 2016). However, a gap usually exists between what the service is expected to offer and what is offered in practice (Hirmukhe, 2012; Pena, Silva & Tronchin, 2013; Naidu, 2009).

The SERVQUAL instrument is a service quality tool that measures customer experience of services rendered against customer expectations (Saraie & Amini, 2012; Kakourius & Finos, 2016). It has five dimensions, namely, tangibility, reliability, responsiveness, assurance and empathy. Tangibility includes equipment, appearance of service staff and visually appealing materials; reliability refers to rendering services as promised and giving error free information; responsiveness involves providing prompt services and willingness to help; assurance includes instilling confidence and having people feel safe about their transactions; and empathy involves caring, individual attention and understanding customer needs (Twinomurwizi, Zwane & Debusho, 2012; Parasuraman, Zeithaml & Berry, 1998). The SERVQUAL model can be used in the service evaluation process, which is an appropriate tool for measuring the service quality and identifying and analysing available gaps between service expectation and the perception of experience.

Community Information Centres (CICs) in Zimbabwe play a major role in integrated service delivery in the various communities. CICs act as mode of service delivery, where people, especially in rural communities, can partake in government's decision-making processes. Such centres can be the delivery points for e-government services, e-participation and e-ecommerce, amongst others. They can also lead to better local administration and improved government/citizen/ business interface, leading to improved reach, transparency, responsiveness, accountability, efficiency, effectiveness, citizens' empowerment and participation. CICs can modernise and improve effectiveness in the delivery of services to the people (Van Bell & Trusler, 2005; Buhigiro, 2012).

In Zimbabwe, service delivery is a challenge that needs to be addressed, given the low quality of service provision and the tenacious needs of the people, more especially those who reside in rural areas (Zunguze, 2009). CICs are still in their infancy in Zimbabwe and the need for evaluation of the quality of services rendered in the centres encouraged this study. Evaluations are crucial for organisations in order to gain an understanding of the needs and perceptions of the users. For the CIC to perform better, the quality of existing services provided should be improved. Mtega and Malekani (2009) point out that this is a strategic procedure that involves the development of human resources and facilities at the CICs. Financial stability is also key in the improvement of quality services and recommendations. Current CIC services should expand and include a variety of services that can aid in attracting and retaining users. Expansion of services can also increase the revenue for the CICs. It therefore becomes mandatory that the Zimbabwean government, when embarking on such projects, evaluate the quality of the services they offer in the CICs

if they are to compete with other role players in the sector.

Hence, the SERVOUAL model has been adopted for the study, to gain insight into users' expectations and perceptions of experiences of the CICs. Evaluation results can be used to improve the quality of services in CICs as they are implemented in districts. Measuring service quality in organisations guides employees on service delivery, which will in turn affect the delivered service. In Zimbabwe there has been a tendency to focus on providing access to CICs in communities without taking note of their proper maintenance thereafter. For continued use of the CICs, access to them is not enough. The available technology needs to be enhanced and innovated, which can only be realised if the quality of services offered at centres is measured (Al-Ibrahim, 2014). In the same vein, centres need to offer quality services that, in turn, can attract and retain users in the long run. This calls for a balanced enterprise and pro-active approach on the part of centre employees and management. This study, therefore, attempts to determine how customers rate the quality of the service that they expect to receive at Community Information Centres in Zimbabwe, compared to how they rate the quality of the service they are currently receiving.

Theoretical Underpinnings

Service providers have an obligation to meet the demands of customers in such a way that they are satisfied. This is done through the identification of customer needs through a communication process. In this context, the Integrated Marketing Communication approach is used for the study. Organisations need to market their services to customers. Marketing informs, persuades and reminds customers of market offerings, which influence the behaviour of the target market. The service provider's objective is to provide offerings that satisfy customer needs for its continued economic survival. Service providers will need to understand how customers evaluate the quality of the service offering – therefore, how they choose one organisation in preference to another. Customer satisfaction is central to the customer-centric paradigm and has become a key means of attaining quality improvement in services (Al-Ibrahim, 2014; Line, Runyan & Gonzalez-Padron, 2017).

The study focuses on the customer-centric approach, which forms an integral part of organisational functioning. Customer orientation emphasises customer satisfaction, which is also crucial to governments. Governments are required to offer high quality services that meet the expectations of the customers. To meet these expectations, there is a need to adopt a customer-oriented approach, as well as to monitor employee performance and quality measurement. Customer orientation has a positive impact on employee motivation and performance. In-depth knowledge about the customer is also vital and can be drawn from demographic data. Innovations and continuous improvement are furthermore essential for the sustainability of public sector transformation. Against this background, communication between an organisation and its customers has been a foundation of good customer service. Customers expect services to be accessible at any time and place.

Inversini, De Carlo and Masiero (2020) assert that the concept customer-centric focuses on deeply embedded mindsets and norms that prioritise customer relationships in an organisation. With this concept, employees are encouraged to engage with customers with the objective of creating value for them and for the organisation. Organisational success exists in the differential value the organisation is able to offer to its customers. Customer orientations in all aspects of an organisation will also build effective customer relationships that contribute to value creation for the customers and result in their ultimate positive behaviour.

Value can be understood as the complete assessment of utility offerings according to perceptions of what is received and what is given. In the customer-centric approach, customer value is understood as the capacity of organisations to engage effectively with customers in providing the preferred experiences and weighing and handling the customers' evaluations (Inversini, De-Carlo & Masiero, 2020). The quality of services should be evaluated by customers and their needs taken into account. Continuous and constant measurement of a reliable tool is also strongly supported by Chatzoglou, Chatzoudes, Vraimaki and Diamantidis (2013). Generating value in customers is important and the Service-Dominant Logic of Marketing, included in the theoretical framework, elaborates further on this.

Governments, through the public sector, are expected to provide services that meet the citizens' demands, and for this, the New Public Management (NPM) theory was used as one of the theories for the study. The concept of customer-centrism is specifically dealt with in theories of relational marketing, the customer-centric and Expectation-Disconfirmation paradigm and NPM. Technology acceptance furthermore plays a role in the implementation of CICs in communities and the Technology Acceptance Model (TAM) and Diffusion of Innovation (DOI) theories address issues of acceptance and adoption of technology in this study. The DOI aims to analyse the characteristics of technology adopters.

Methodology

The study used the quantitative research methodology approach. A survey design was used to measure the variables of the quality of services delivered at three CICs in Zimbabwe. Random sampling was used to select a sample of 475 respondents from a purposively selected sample of three CICs. The selected centres are located in Mashonaland West (Murombedzi Community Centre), Central Zimbabwe (Muzarabani Community Information Centre) and Manicaland (Rusape Community Information Centre) provinces.

A modified SERVQUAL questionnaire was used as the data collection instrument. Data collected was based on the users' expectations and perceptions of experiences of the quality of service delivery in CICs. The SERVQUAL questionnaire is based on five dimensions; tangibility, reliability, responsiveness, assurance and empathy. A Likert scale was used in the measurement instrument. Data analysis encompassed two statistical techniques, whereby the initial data was analysed using the Statistical Package for the Social Sciences through a descriptive analysis and factor analysis. Structural Equation Modelling (SEM) using AMOS v24 was used to test the postulated hypothesised model.

SEM was used to estimate the relationship between the SERVQUAL constructs and the perceptions of the customer. Prior to estimation of the structural model, the data was initially purified through Principal Component Analysis (PCA). Factors with low loadings (<0.4) and high cross loading (>0.4 with other factors) were excluded from subsequent analysis to guarantee convergence and discriminant validity. PCA transforms a complex set of relations to a simple canonical form, with the purpose of economising on the number of variables (Jolliffe, 2002). Cronbach's alpha was used to test for factor reliability. After the PCA, a SEM was conducted with the factors identified in the PCA acting as latent variables. SEM analyses interrelationships among latent as well as manifest variables (Bollen, 1989). The model is defined by the following system of three equations in matrix terms:

The structural equation model: $\eta = \eta B_n + \xi \Gamma + \varsigma$ (1)

The measurement model for $x : x = \eta \Lambda_x + \delta$ (2)

The measurement model for $y: y = \eta \Lambda_y + \varepsilon$ (3)

where η is an $m \times 1$ random vector of endogenous latent variables; ξ is an $n \times 1$ random vector of exogenous latent variables; B is an $m \times m$ matrix of coefficients of the η variables in the structural model; Γ is an $m \times n$ matrix of coefficients of the ξ variables in the structural model; ζ is an $m \times 1$ vector of equation errors (random disturbances) in the structural model; x is a $q \times 1$ vector of predictors or exogenous variables; Λ_x is a $q \times n$ matrix of coefficients of the regression of x on ξ ; δ is a $q \times 1$ vector of measurement errors in x; y is a $p \times 1$ vector of endogenous variables; Λ_x is a $p \times m$ matrix of coefficients of the regression of y on η ; ε is a $p \times 1$ vector of measurement errors in y.

In evaluating fit of the model, the Goodnessof-fit Index (GFI), Root Mean Square Error of Approximation (RMSEA), the Standardised Root Mean Square Residual (SRMR), the Comparative Fit Index (CFI) and the Coefficient of Determination (CD) were used. The CFI should be above 0.90, while the RMSEA and SRMR must be below 0.08 for an acceptable fit of the measurement model (Bollen, 1989).

Results and Discussion

Descriptive Statistics

A total of 475 respondents completed the questionnaires from the three selected CICs. Murombedzi had the highest number of respondents (43%), Muzarabani had 40% and Rusape had the least, with 17% of the total population. The Murombedzi Community Information Centre was one of the pioneer CICs to be launched in 2014, and as such, it has gained popularity with the respondents, while Rusape (launched late 2016) had not gained much popularity with the community at the time of data collection.

The majority of the respondents were males at 53%; while for females it was 47%. Males frequent the CICs more than females, which could be attributed to the cultural values and educational background of the respondents.

Age is expected to influence the use of the services in CICs (source) and as a result this the study assessed the distribution of respondents by age. The age groups of the respondents ranged from less than 20 years

to above 50 years. Two age groups were identically represented, namely, the 30-39 (40.5%) and 20-29 years (40.5%), and were the overwhelming majority (80.9%). These age categories constitute age groups that fall under the workforce and job seeking young adults. Those less than 20 years constituted only 13.3% of the respondents and were mostly of school-going age. It was observed that when this group visits the CICs, they would play video games. The age group 40-49 years (5.4%) and those above 50 years (0.4%) constituted the minority. The latter age cohort included elderly people, who in most cases, sought to be assisted with their pensions.

Inferential Statistics

Figures 1, 2, 3 and 4 shows the Structural Equation Modelling (SEM) for expectations and experiences. The fit statistics show that the data did not fit the model adequately. Moreover, very high covariance values (in the case of the first order model) between the five SERVQUAL constructs and very high standardised regression weights (i.e. structural path coefficients) in the case of the second order models imply multicollinearity and thus poor discriminant validity. Hence, Exploratory Factor Analysis (EFA) was conducted to examine the underlying factor structure of the data.

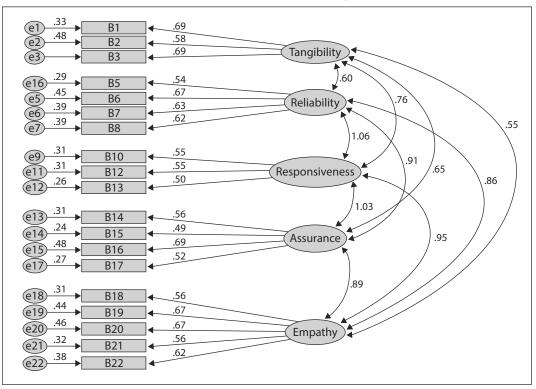


FIGURE 1: First Order CFA for Expectation

Source: Authors

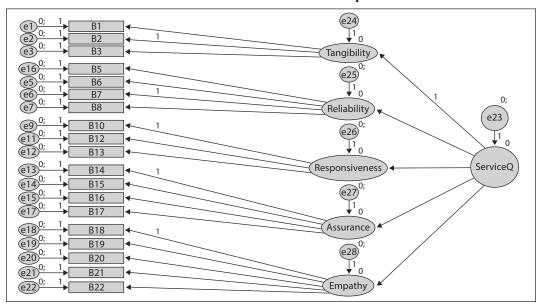
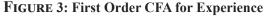
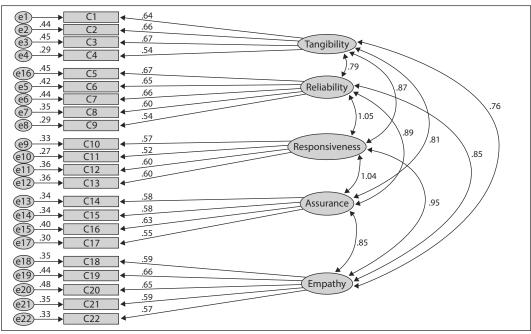


FIGURE 2: Second Order CFA for Expectation

Source: Authors





Source: Authors

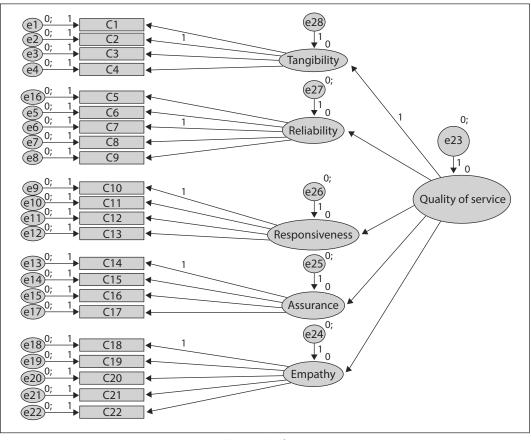


FIGURE 4: Second Order CFA for Experience

Source: Authors

The Confirmatory Factor Analysis model fitness can be explained by several indices such as NORMED CHI-SQUARE (CMIN/DF), Comparative Fit Index (CFI), the Goodness of Fit Index (GFI), Incremental Fit Index (IFI), Tucker Lewis Index (TLI) and Root Mean Square of Error Approximation (RMSEA). An acceptable fit for data can only be accepted when CFI, GFI, NFI and TLI are equal to or above 0.9, CMIN/DF smaller than 3 and when RMSEA value is below 0.08. Reported in Table 1 on the following page are the goodness of fit indices for the first and second order model for the respondents' expectations and experiences of the CICs, the values of CFI, TLI, IFI and RMSEA are 0.76, 0.72, 0.72, and 0.093 for the first order expectation; 0.79, 0.75, 0.76 and 0.094 for the second order expectation; 0.77, 0.74, 0.78 and 0.098 for the first order experience and 0.78, 0.75, 0.78 and 0.097 for the second order experience respectively. All normed chi-square values were above 3. Since the values are not very close to the threshold values indicated in the last row of Table 1, the models do not represent an acceptable fit.

Model Goodness of Fit Indices	CFI	CMIN/DF	IFI	TLI	RMSEA
Expectation first order	0.795	5.331	0.797	0.755	0.096
Expectation second order	0.794	5.202	0.796	0.762	0.094
Experience first order	0.774	5. 532	0.776	0.739	0.098
Experience second order	0.775	5420	0.776	0.746	0.097
Indicate acceptable fit	≥0.9	< 3	≥0.9	≥ 0.9	<0.08

TABLE 1: CFA Model Fitness

Source: Authors

TABLE 2:	CFA M	odel Fitness
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Model	TLI	IFI	CFI	RMSEA	CMIN/df
Goodness of fit indices 1 st Order	0.876	0.909	0.907	0.057	2.531
Goodness of fit indices 2 nd Order	0.886	0.911	0.909	0.054	2.405
Indicate acceptable fit	≥.9	≥.9	≥.9	≤.08	<3

Source: Authors

Figure 5 and 6 on the following page show the SERVQUAL gap first and second order SEM conceptual model fitted to the data. The items used were the result of the difference between the expectation and experience rating for each of the 22 items. The endogenous variable ServiceQ was modelled using latent constructs Tangibility measured by four items (L1, L2, L3 and L4); Reliability measured by three items (L5, L6 and L8); Responsiveness measured by three items (L10, L11 and L12); Assurance measured by three items (L14, L16 and L17); and Empathy measured by two items (L20 and L22).

The SEM first order model goodness of fit indices indicate 0.876 for TLI, 0.909 for IFI, and a value of 0.907 for CFI for the second order model, whereas 0.886 for TLI, 0.911 is reported for IFI, and a value of 0.909 for CFI for the second order model. In both models, these indices' values are above the acceptable threshold of 0.90 apart from TLI, whose value is a little below 0.90 (i.e. 0.876 and 0.886). The model also shows a RMSEA value of 0.057 and 0.054 for the first and second Gap model respectively, which is below the acceptable threshold of 0.08. These values indicate an acceptable structural model fit for service quality. An additional measure for the goodness-of-fit, is the CMIN/df value of 2.531 and 2.405 for the first and second model respectively, which is below the acceptable value of less than 3. It must be noted that two error covariances, between statements L8 and L14, and between L11 and L20, were added for improved fit. These additional covariances can be theoretically justified as there have been significant correlations.

The second order model's results have been used for hypothesis testing purposes as the target coefficient is 199.986/201.995 = 0.99, which is above 0.90.

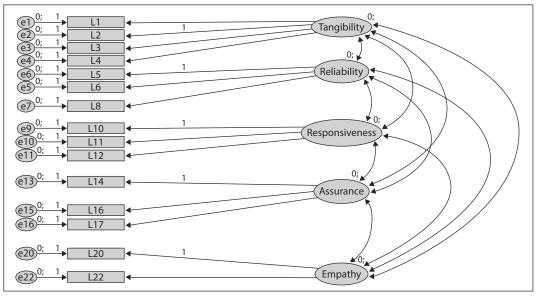
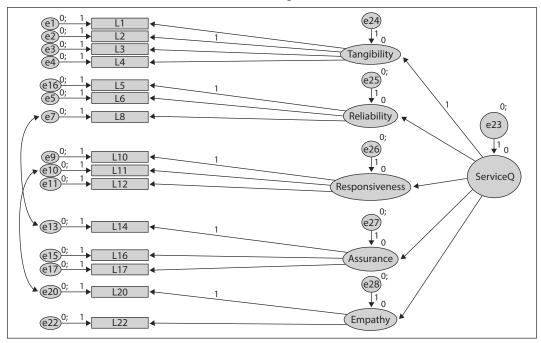


FIGURE 5: SERVQUAL Gap First Order Model

Source: Authors





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Source: Authors

Table 3 shows the regression weights for the SEM on the expectation and experience gap. The standardised regression weights indicate high positive weights for tangibility, reliability, responsiveness, assurance and empathy. The table shows that responsiveness had the highest weight, followed by reliability, assurance, tangibility and empathy, respectively. The hypothesis that tangibility, reliability, responsiveness, assurance and empathy have an effect on service quality is thus accepted because of the high positive, statistically significant regression weights, thus affecting the gap between experienced and expected service quality. Results in Table 3 indicate that there is a high standardised regression weight of 0.749 that is statistically significant at the 0.001% level between tangibles and service quality. This, therefore, means that H0 is rejected as a strong positive relationship exists between tangibles and the service quality dimension. There is evidence of tangibility positively relating to service quality.

Results indicate that there is a high standardised regression weight of 0.967 that is statistically significant at the 0.001% level between reliability and service quality. This, therefore, means that H0 is rejected as a

Service Quality Dimensions		Unstandardised Regression Weights				Standardised Regression Weights	
			Estimate S.E. C.R. P				Estimate
Tangibility	<	ServiceQ	1.000				0.749
Reliability	<	ServiceQ	1.016	0.134	7.576	***	0.967
Responsiveness	<	ServiceQ	1.406	0.157	8.985	***	0.973
Assurance	<	ServiceQ	1.028	0.130	7.903	***	0.898
Empathy	<	ServiceQ	0.624	0.128	4.856	***	0.552
L6	<	Reliability	1.337	0.160	8.348	***	0.592
L10	<	Responsiveness	1.000				0.641
L16	<	Assurance	0.840	0.120	6.976	***	0.443
L14	<	Assurance	1.000				0.567
L4	<	Tangibility	0.925	0.093	9.903	***	0.597
L2	<	Tangibility	1.000				0.649
L3	<	Tangibility	0.784	0.087	8.972	***	0.524
L1	<	Tangibility	1.090	0.098	11.128	***	0.661
L8	<	Reliability	1.129	0.144	7.821	***	0.536
L11	<	Responsiveness	0.633	0.078	8.087	***	0.455
L12	<	Responsiveness	0.693	0.084	8.242	***	0.465
L5	<	Reliability	1.000				0.494
L17	<	Assurance	0.780	0.121	6.460	***	0.399
L20	<	Empathy	1.000				0.488
L22	<	Empathy	1.602	0.296	5.406	***	0.785
Significant at ***10	%						

 TABLE 3: Regression Weights for Gap SEM

Source: Authors

strong positive relationship exists between reliability and the service quality dimension. There is evidence of reliability positively relating to service quality.

Results indicate that there is a high standardised regression weight of 0.973 that is statistically significant at the 0.001% level between responsiveness and service quality. This, therefore, means that H0 is rejected as a strong positive relationship exists between responsiveness and the service quality dimension. There is evidence of responsiveness positively relating to service quality.

Results indicate that there is a high standardised regression weight of 0.898 that is statistically significant at the 0.001% level between assurance and service quality. This, therefore, means that H0 is rejected as a strong positive relationship exists between assurance and the service quality dimension. There is evidence of assurance positively relating to service quality.

Results indicate that there is a high standardised regression weight of 0.552 that is statistically significant at the 0.001% level between empathy and service quality. This, therefore, means that H0 is rejected as a strong positive relationship exists between empathy and the service quality dimension. There is evidence of empathy positively relating to service quality.

Positive relationships were found to exist between tangibles, reliability, responsiveness, assurance and empathy and service quality. Based on the path coefficients and the regression results, the null hypothesis was rejected in each case. Findings confirmed significant positive relationships between the

SERVQUAL constructs and the service quality dimension. The findings are in line with Twinomurwizi, Zwane and Debusho's (2012) study, which focused on the SERVQUAL and Thusong Service Centres (TSC) in South Africa. Similarities have been observed between Twinomurwizi, Zwane and Debusho's (2012) study and the current study, as the findings indicate that the five SERVQUAL dimensions have a statistically significant effect on the quality of service. The null hypothesis was rejected in each case and confirmation was obtained that there is a causal relationship among the SERVQUAL dimensions and the quality of services rendered in the TSC (Twinomurwizi, Zwane & Debusho, 2012:97).

The current study furthermore agrees with Agbor's (2011) study on the relationship between customer satisfaction and service quality in three sectors in Umea. The main purpose was to examine the relationship with respect to service dimensions. The results are in tandem with this study domain, as they indicate a relationship between reliability, responsiveness, empathy and the service quality dimension. The study domain also complies with Wang and Lo (2002), who used the SERVQUAL model in measuring service quality by testing hypotheses for relationships between service quality dimensions and service quality. The results indicated that there is also a relationship that exists between the constructs and the service quality dimension. Saraei and Armin (2012) indicate where the hypothesis elements of the SERVQUAL model were scientifically associated with the service quality dimension. This was observed in a study that measured the service quality in CICs in Iran. Saraei and Armini (2012) further indicate that SERVQUAL can be used to determine the quality of services offered by CICs in rural areas of Iran.

Exploratory factor analysis is used to identify a potential underlying factor structure for a set of variables. In this study, the confirmatory factor analyses conducted showed, through using the set of fit statistics for expectations and experience, that the data did not fit the model adequately. Results indicate very high covariance values (in the case of first order model) between the five constructs and very high standardised regression weights (structural path coefficients in the case of second order models), therefore indicating multicollinearity and thus poor discriminant validity. It was therefore decided to conduct EFA to determine the underlying factor structure of the data for this study.

Exploratory factor analysis was conducted using principal axis factoring as extraction method and promax as rotation method. Hair *et al.* (2006:154) state that "the appropriateness for conducting factor analysis is assessed with the Kaiser-Meyer-Olkin (KMO) measure and Bartlett's sphericity test". For expectations and experience, the KMO measure, which was above 0.6, shows adequacy for factor analysis.

The Bartlett's Test of Sphericity where p statistically significant, showing that the data is appropriate for factor analysis. In the case of expectations, four factors were identified from the data with Eigen values of more than 1, with a cumulative percentage

Service Quality Dimensions	1	2	3	4	
Factor 1: Responsiveness					
Materials associated with the service (pamphlets or statements) will be visually appealing to an excellent CIC	0.562				
Excellent CICs will provide the service at the time they promise to do so	0.516				
Employees of excellent CICs will give prompt service to customers	0.566				
Employees of excellent CICs will never be too busy to respond to customer's needs	0.730				
Employees of excellent CICs will have the knowledge to answer customers questions	0.625				
Excellent CICs will have their customers' best interest at heart	0.645				
Factor 2: Reliability					
An excellent CIC will do what they promise to do by a certain time		0.537			
Employees of excellent CICs will tell customers exactly when services will be performed		0.710			
The behaviour of employees in excellent CICs will instil confidence in customers		0.756			
Factor 3: Tangibles					
In general, excellent CICs will have modern looking equipment			0.640		
The physical facilities at excellent CICs will be visually appealing			0.512		
Employees at excellent CICs will be neat in appearance			0.578		
Factor 4: Empathy					
Excellent CICs will have employees who give customers personal service				0.692	
The employees of excellent CICs will understand the specific needs of their customers				0.330	
Factor Correlation					
1 Responsiveness	1.000	0.483	0.330	0.528	
2 Reliability		1.000	0.428	0.578	
3 Tangibles			1.000	0.287	
4 Empathy				1.000	

TABLE 4: Exploratory Factor Analysis (Expectations)

Source: Authors

Service Quality Dimensions	1	2	3	4
Materials associated with the service (such as pamphlets or statements) are visually appealing at the CIC	0.656			
The CIC provides its service at the time it promises to do so	0.581			
Employees in the CIC are never too busy to respond to my request	0.719			
I feel safe in conducting transactions with the CIC	0.541			
Employees in the CIC have the knowledge to answer my questions	0.653			
The CIC has operating hours convenient to all its customers	0.526			
The CIC has my best interests at heart	0.719			
When the CIC promises to do something by a certain time, it does so		0.647		
Employees in the CIC tell me exactly when the services will be performed		0.608		
The behaviour of employees in the CIC instils confidence in me		0.664		
The CIC gives me individual attention		0.676		
The CIC has employees who give me personal attention		0.507		
The employees of the CIC understand my specific needs		0.610		
The CIC that you visit regularly has modern looking equipment			0.690	
The CIC's physical features are visually appealing	0.521		0.509	
The CIC's reception desk employees are neat in appearance			0.419	
The CIC performs the service correctly the first time				0.497
The CIC insists on error free records				0.414
KMO and Bartlett's Test				
Factor Correlation				
1 Assurance	1.000	0.542	0.401	0.434
2 Responsiveness		1.000	0.540	0.468
3 Tangibles			1.000	0.345
4 Reliability				1.000

TABLE 5: Exploratory	Factor Analysis	(Experiences)
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Source: Authors

variance explained of 52.51%. The four factors identified are responsiveness, reliability, tangibles and empathy, with factor loadings of more than 0.3 (as shown in Table 4 on the previous page). There is a satisfactory association between the four factors responsiveness, reliability, tangibles and empathy. The factor loading results are presented in the tables above, with the results between bold lines showing the loadings for each factor. Four factors could be identified from the data for experience, with Eigen values of more than 1, with a cumulative percentage variance explained of 55.23%.

The KMO measure, which is above 0.6, and the Bartlett's Test of Sphericity, for which p < 0.05 is statistically significant, show that the data is adequate for factor analysis, see Table 5. Four factors could be identified

from the data with Eigen values of more than 1, with a cumulative percentage variance explained of 55.23%.

Four factors could be identified from the data with Eigen values of more than 1, with a cumulative percentage variance explained of 55.23%. The KMO measure, which is above 0.6 and the Bartlett's Test of Sphericity for which p < 0.05 is statistically significant, show that the data is adequate for factor analysis. Four factors could be identified from the data with Eigen values of more than 1, with a cumulative percentage variance explained at 55.23%.

Using Cronbach's alpha, the internal reliability for the four factors was found to range between 0.604 and 0.839, which is deemed to be acceptable (Tsiga, 2016), thus reliability was considered satisfactory. Tsiga (2016) states that coefficient alpha values are pegged at 0 and 1.0 and that the cut-off point that indicates a reliable alpha value is at 0.7. She further elaborates that in effectiveness tests on alpha below 0.7, a value of about 0.6 is acceptable. Grobler *et al.* (2012:8) point out that the coefficient conveys important information regarding the proportion of variance contained in a scale.

CONCLUSION AND RECOMMENDATIONS

Findings indicate that respondents have high expectations with regard to tangibles and this makes the appearance of materials used in the CICs of great importance if one is to attract and retain customers for the centres. This also indicates the importance of maintaining the appearance and status of the physical facilities at CICs. Thus, an increase in modern-looking technical equipment, suitably dressed and neat CIC staff and visually appealing pamphlets will induce an increase in perceived tangibility. Reliability is found to be positively related to experiences about the quality of service rendered in the CICs.

Clients of the CIC expect a reliable service to be offered at the centre. A reliable service can boast the usage of the CICs and attract more users to the facilities. This can be complemented by prompt service delivery, emphasising attentiveness and flexibility in customising customers' needs. It is also concluded that the majority of the respondents, with regard to responsiveness in CICs in Zimbabwe, have high expectations in relation to the construct. Therefore, employees in the CIC should be equipped and capable of delivering timely and substantive responses to clients' inquiries and complaints to meet the expectations from the clients.

The majority of the respondents indicated that they are satisfied with the responses they receive in the CICs. Customers need to feel satisfied with a service and in the case of CICs, having satisfied clients can increase usage. Results from the study indicate that the CICs are labelled as safe places in which to conduct business. The lack thereof can lead to inefficiency in the provision of services. Thus, the significance of staff training is paramount. They further state that in their study there was a lack of enough competencies from staff in the sampled area, which is a key ingredient in the efficiency of the centres. Lack of competency can lead to clients' mistrust. Moreover, it is crucial to employees in the CIC to demonstrate courteous and friendly behaviour when delivering services to clients in order to raise their contentment

towards the CIC as reliable – services have a strong impact on a client's judgement.

Findings from the study indicate that the employees are courteous in dealing with the clients. They view assurance as one of the most important factors of service quality, as customers want to deal with people they can trust. It therefore becomes imperative that organisations find ways that can help them earn trust from customers. There is a high level of expectation with regard to empathy that could be attributed to the fact that the majority of people in the rural areas need assistance with the use of the services offered in CICs. Thus, they would expect employees to be empathetic towards them and their needs. However, there is also a satisfaction level of responses from the respondents with regard to the construct empathy.

References

- Agbor, J.M. 2011. The relationship between customer satisfaction and service quality: A study of three Service sectors in Umeå.1-92. Available at: https://www.diva-portal. org/smash/record/jsf. Accessed 18 June 2017.
- Al-Ibrahim, A. 2014. Quality management and its role in improving service quality in public sector. *Journal of Business and Management Sciences*, 2(6):123-147.
- Bollen, K.A. 1989. Structural equations with latent variables. New York: John Wiley.
- Buhigiro, S. 2012. The Role of CICs in Promoting Socio-Economic Development in Rwanda. Available at: http:// wiredspace.wits.ac..za/bitstream/handle/. Accessed 12 September 2014.
- Chatiza, K., Makanza, V., Musekiwa, N., Paradza, G., Chakaipa, S., Mukoto, S., Kagoro, J., Ndlovu, K. & Mushamba, S. 2013. Capacity Building for Local Government and Service Delivery in Zimbabwe. *Harare: Development Governance Institute*.
- Chatzoglou, P., Chatzoudes, D., Vraimaki, E. & Diamantidis, A. 2013. Service quality in the public sector: The case of the Citizen's Service Centers (CSCs) of Greece. *International Journal* of Productivity and Performance Management, 62(6):583-605.
- Grobler, A., Joubert, Y.T., Rudolph, E.C. & Hajee-Osman, M. 2012. Utilisation of the expectation disconfirmation model: EAS rendered in the SAPS. *Journal of Contemporary Management*, 9(1):324-340.
- Hair, J.F., Black, W.C., Babin, B.J., Anderson, R.E. & Tatham, R.L. 2006. Multivariate data analysis 6th Edition. Pearson Prentice Hall. New Jersey.

- Hirmukhe, J. 2012. Measuring internal customers' perception on service quality using SERVQUAL in administrative services. *International Journal of Scientific and Research Publications*, 2(3):1-6.
- Inversini, A., De Carlo, M. & Masiero, L. 2020. The effects of customer-centricity in hospitality. *International Journal of Hospitality Management*, 86:102436. Available at: https:// doi.org/10.1016/j.ijhm.2019.102436.
- Jolliffe, I.T. 2002. Principal component analysis for special types of data. New York: Springer.
- Kakuoris, A. & Finos, P. 2016. Applying SERVQUAL to the banking industry. *Journal of Economics and Business*, 19(2):57-71.
- Kapondera, S.K. & Hart, G. 2016. The use of multipurpose community telecentres and their services in Malawi: The case of Lupaso Community Telecentre. *South African Journal of Libraries and Information Science*, 82(1):13-25.
- Karnstedt, A. & Winter, J. 2015. Defining and measuring service quality in a manufacturing company. (Doctoral dissertation, Master thesis, Department of Technology Management and Economics, Chalmers University of Technology, Available at: http://publications.lib.Chalmers.se/records/full text/218424/218424. Pdf. Accessed 18 June 2017.
- Line, N.D., Runyan, R.C. & Gonzalez-Padron, T. 2019. Multiple stakeholder market orientation: a service-dominant logic perspective of the market orientation paradigm. AMS Review, 9(1-2):42-60.
- Methu, M.A. 2015. Data feedback mechanisms and quality of service delivery: A case study of artificial insemination

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services in cattle in central Kenya. African Journal for Project Planning and Management, 1(1):75-98.

- Mtega, W. & Malekani, A. 2009. Analysing the usage patterns and challenges of telecenters among rural communities: Experience from four selected telecenters in Tanzania. *International Journal of Education and Development Using ICT*, 5(2):68-87.
- Parasuraman, A., Zeithaml, V.A. & Berry, L.L. 1998. SERV-QUAL: A Multiple-Item Scale for measuring consumer perceptions of service quality. *Journal of Retailing*. 64(1):12-40.
- Pena, M.M., Silva, E.M.S.D., Tronchin, D.M.R. & Melleiro, M.M. 2013. The use of the quality model of Parasuraman, Zeithaml and Berry in health services. *Revista da Escola de Enfermagem da USP*, 47(5):1227-1232.
- Phiri, M.A. & Mcwabe, T. 2013. Customers' expectations and perceptions of service quality: The case of Pick n Pay supermarket stores in Pietermaritzburg area, South Africa. *International Journal*, 3(1):96-104.
- Rao, R.G. 2008. Social development in Indian Rural Communities. Adoption of telecentres. *International Journal of Information Management*. 28(6):474-482.

- Saraei, S. & Amini, A.M. 2012. A study of service quality in rural ICT centers of Iran by SERVQUAL. *Telecommunications Policy*, 36(7):571-578.
- Tsige, G.A. 2016. Ensuring the quality of student support services in Open Distance Learning. PhD Thesis. University of South Africa.
- Twinomurwizi, H., Zwane, M.G. & Debusho, L.K. 2012. SERVQUAL as a socio-technical approach to measuring e-Government service quality and guiding e-Governance strategies. *The African Journal of Communication*, 12: 84-108.
- Wang, Y. & Lo, H-P. 2002. Service quality, customer satisfaction and behaviour intentions – evidence from China's Telecommunication Industry, *The Journal of Policy*, 4(6): 50-60.
- Zunguze, M. 2009. Contextualising ICTs for development in Zimbabwe, Thetha Regional ICT Discussion Forum Project. Available at: www.thetha.org. Accessed 18 June 2017.

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