Psychometric Properties of a Bank Loyalty Measurement Model in a South African Context

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Abstract
Retail banks must effectively measure and enhance customer loyalty to secure a competitive edge in the market and attract and retain more customers. Understanding the drivers of bank loyalty necessitates a validated model of the factors that influence bank loyalty. Therefore, this study's purpose was to assess the psychometric properties of a bank loyalty measurement model, including the factors of customer loyalty, customer involvement, service quality, service attributes, perceived value, bank image, customer commitment, trust, switching cost, and customer satisfaction that can be used as a valid and reliable measure of bank loyalty in path analysis. A quantitative research design was used to assess these properties, with a self-report survey administered to 271 South African Generation Y banking customers. Using AMOS, the data analysis included confirmatory factor analysis, reliability and validity analyses, correlation analyses, and collinearity diagnostics. The results indicate that the 10-factor model demonstrates strong discriminant, convergent, and construct validity and exhibits internal consistency and composite reliability. The model fit indices also indicate a well-fitting model. Given its robust psychometric properties, retail banks can use this model to gain insights to develop better strategies that align with the banking needs and preferences of South African Generation Y customers, ultimately improving customer satisfaction and bank loyalty.

Keywords
Bank loyalty; bank marketing; measurement model; retail banks; South Africa.

Introduction

According to Sharma (2024), the business landscape of the banking industry is becoming increasingly competitive and challenging due to the ever-changing expectations of customers, increased competition between banks, technological innovations, and ever-growing regulatory compliance. Rasheed, Khalid, Khizar, Sajid, Shahid, Ahmad, and Khan (2015, p. 239) indicate that the emergence of banking channels, such as internet banking, telephone banking, mobile banking, and the like, has increased competition among banks, which stresses the importance of banks to explore the influence of customer loyalty. Building strong customer loyalty can be achieved through loyalty programs and effective marketing strategies, which assist organizations in retaining valuable customers in a competitive landscape, such as the banking industry (Narciso, 2023). As of 2024, the Generation Y cohort represents approximately 41 percent of the population within South Africa (Statistics South Africa, 2024). Tas such, these individuals represent a large portion of the future consumers of South Africa and its economy (Strydom et al., 2021, p. 8). This highlights the importance of studying the factors that influence bank loyalty among these consumers for banks to gain insights to develop better strategies that align with the banking needs and preferences of these customers, ultimately improving customer satisfaction and bank loyalty. Therefore, this study's purpose was to assess the psychometric properties of a bank loyalty measurement model, including the factors of customer loyalty, customer involvement, service quality, service attributes, perceived value, bank image, customer commitment, trust, switching cost, and customer satisfaction that can be used as valid a reliable measure of bank loyalty in path analysis. This study also adds to the customer loyalty theory, which typically focuses on key factors such as trust, satisfaction, and switching costs. The factors included in the measurement model are discussed next.

Literature review

The exploration of customer loyalty within the banking sector has garnered significant attention, given its critical role in driving long-term business success. Customer loyalty is not merely a result of transactional satisfaction; it encompasses a complex interplay of trust, commitment, perceived value, service quality, and other key factors that shape consumer behavior. In a competitive marketplace where consumers face a multitude of choices, understanding the determinants of customer loyalty is imperative for banks aiming to maintain and expand their customer base. This literature review delves into various dimensions of customer loyalty, highlighting essential themes such as customer involvement, perceived value, service quality, brand image, customer commitment, trust, switching costs, and customer satisfaction, collectively contributing to loyalty in the banking industry.

Customer loyalty

Ganaie and Bhat (2021, p. 7) postulate that customer loyalty develops through an amalgamation of customer trust, satisfaction, and commitment to purchasing the same services from the same service provider despite changes in competitor product and service offerings, and prices. Dangiso (2024, p. 1) proposes that customer loyalty is vital for organizations to develop and maintain, not only to survive but to grow and succeed. As such, customer loyalty remains a challenge for banks today (Sharma, 2024). Severoni (2022) theorizes that building customer loyalty in the banking industry can only be achieved by enriching customers' perceptions of a brand through positive associations. Sharma (2024) suggests that banks wishing to build customer loyalty must innovate their services and enhance their digital experiences.

Customer involvement

Masud's (2024) theories that customer involvement can produce insightful data that can be used to enhance product development, advertising campaigns, and customer support, highlighting the importance of customer involvement for every organization that wishes to succeed in the highly competitive banking industry. Organizations like banks can boost customer satisfaction and repeat business by involving customers in decision-making. This fosters a sense of loyalty and trust among customers. As such, Huang, Liu, Hu, and Su (2017, p. 341) found a significant relationship between customer involvement and loyalty.

Perceived value

Kancherla (2024) defines perceived value as the overall assessment of the worth or benefit that a customer believes they will receive from a product or service. It considers both tangible and intangible things, including quality, functionality, price, brand reputation, and post-purchase support. Furthermore, it plays an important role in attracting and retaining customers. Kim, Jindabot, and Yeo (2024, p. 1) found that perceived value often and significantly influences customer loyalty in the banking industry. Anis, Haque, Mustofa, and Islam (2023, p. 121) found that perceived value has a considerable positive impact on customer loyalty.

Service quality

Sharma (2024) highlights the importance of building customer loyalty in banks to cultivate long-term customer retention and deliver high-quality, tailored services that meet customers' subsequent needs. Severoni (2022) postulates that when offering services to customers in the banking industry, banks must communicate these services clearly, fairly, and transparently while ensuring that customers can enjoy the services provided smoothly and frictionlessly. Sharma (2024) suggests that banks can enhance service quality by analyzing customer behavior and facilitating easy transactions, including online payments, to complex interactions, such as buying a new car or home. Additionally, banks can digitize their services, making processes simpler and more convenient for customers, which will go a long way toward improving service quality. Consequently, service quality significantly influences customer loyalty within the banking industry (Rasheed et al., 2015, p. 239). Zakiy and Haryanto (2020, p. 29) also highlight the positive influence of service quality on loyalty.

Service attributes

Banks need to ensure that all customer interactions are productive and meaningful. When banks understand the reasons customers reach out and address their concerns promptly, it indicates to customers that the bank is committed to knowing and understanding them as individuals, which will play a significant role in enhancing the overall banking experience and improving customer loyalty (Murcia, 2023). Additionally, banks can endeavor to offer quality products or services, focusing on providing exceptional customer service experiences and demonstrating social responsibility. When banks consistently deliver on these attributes, they are more likely to build trust and loyalty among their customer base (Chakrabarty, 2024).

Bank image

Brand image constitutes customers' perceptions of a brand, which is shaped by numerous factors, including marketing, advertising, customer service, or product and service quality (Zorgel, 2023). Phong and Anh (2023, p. 2652) articulate that a bank's image effectively establishes differentiation among competing banks and ensures future success. Chakrabarty (2024) adds that bank image plays a significant role in attracting and retaining customers. As such, Phong and Anh (2023, p. 2652) found that a bank's image directly impacts customer loyalty in relation to commercial banks.

Customer commitment

Zeng (2024) postulates customer commitment as the ability of organizations to keep customers loyal to their products or services by delivering value. It involves organizations' processes or actions to build strong relationships with their customers. From loyalty programs to customer support services, organizations need to keep the customer experience in mind— from customer acquisition to post-purchase service. Consequently, Kim et al. (2024, p. 1) indicate that customer commitment often and significantly influences customer loyalty in the banking industry.

Trust

Aripin, Kosasih, and Paramarta (2023, p. 10) indicate that trust is an integral component in building long-term relationships between banks and customers. In addition, Phong and Anh (2023, p. 2652) identify trust as a key factor influencing consumers' willingness to engage in transactions with a particular bank and their subsequent loyalty toward a particular bank. Furthermore, trust has been found to significantly influence customer loyalty among banking customers (Dangiso, 2024, p. 1; Rasheed et al., 2015, p. 239). As such, trust is vital for organizations to build with and among their customers if they wish to develop customer loyalty (Dangiso, 2024, p. 4). By increasing customers' trust, banks can build customer loyalty, where customers are more likely to recommend the bank to others while reducing the risk of losing customers to competing banks. This highlights the need for banks to continuously strive to develop customer trust by providing transparent, reliable, and superior services (Aripin et al., 2023, p. 10).

Switching cost

Ganaie and Bhat (2021, p. 12) identify switching costs as the monetary and non-monetary costs that customers incur when leaving an existing relationship with a service provider and the costs incurred to begin a new relationship with a new service provider. Zakiy and Haryanto (2020, p. 29) indicate that switching costs positively affect customer loyalty, reducing the likelihood that customers will switch to alternative service providers. Consequently, Dangiso (2024, p. 4) articulates the importance of addressing switching costs to retain customers. Furthermore, Willys (2018, p. 1022) found a significant relationship between switching costs and customer loyalty.

Customer satisfaction

Dangiso (25024, p. 4) highlights the importance of customer satisfaction in driving customer loyalty in the banking industry. Spooner (2023) argues that retaining customers and ensuring customer satisfaction is key to ensuring success. Dangiso (2024, p. 4) proposes regularly using customer surveys and feedback to improve and enhance customer satisfaction and loyalty. Spooner (2023) adds that when customers are satisfied, it goes a long way in developing loyalty among customers, who will be more inclined to purchase products and services and positively represent a brand while encouraging other customers to try the products and services and brand (Spooner, 2023). As such, Dangiso (2024, p. 1) and Rasheed et al. (2015, p. 239) found that customer satisfaction significantly influences customer loyalty towards banks.

Research question

The research question this study aims to answer: Is bank loyalty a 10-factor model that includes customer loyalty, customer involvement, service quality, service attributes, perceived value, bank image, customer commitment, trust, switching cost, and customer satisfaction?

Methodology

The research objective of this paper was to assess the psychometric properties of a bank loyalty measurement model in terms of validity, reliability, and model fit in the South African context. This model encompassed ten factors, namely customer loyalty, customer involvement, service quality, service attributes, perceived value, bank image, customer commitment, trust, switching cost, and customer satisfaction. With a validated bank loyalty scale, further analysis can be done using path analysis.

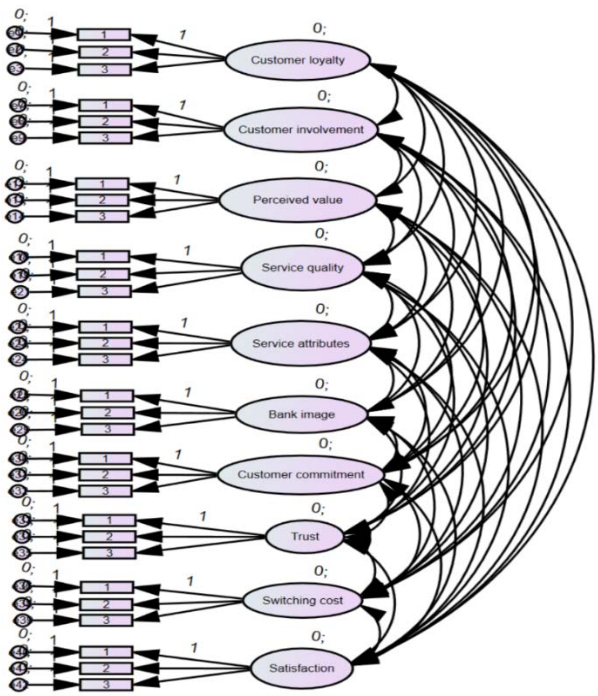

Figure 1. Measurement model

To achieve the study's objective, a quantitative (descriptive) research design was used. To validate the bank loyalty scale, data were collected from a convenience sample of

271 South African Generation Y customers aged 18 to 24 using a self-report survey. As part of the survey, participants' demographic information was collected, along with their responses to the 10 factors included in the measurement model. Fieldworkers, using the mall-intercept method, were deployed to distribute surveys to the specified target population in public places, informing participants that survey completion is voluntary. The survey's cover letter also included an informed consent statement that participants had to sign before continuing with the questionnaire. The informed consent statement read as follows: "I have read the above description of this research study. I have been informed that it is a low-risk study, and I am aware of its purpose. I voluntarily agree to take part in this study, and by continuing and completing this questionnaire, I consent to the information being used in aggregate form."

The scales used in the survey were adapted from two studies that previously assessed the psychometric properties of the scales, namely the Lewis and Soureli (2006) consumer loyalty in retail banking scale and the Veloutsou, Daskou, and Daskou (2004) bank brand loyalty study. To measure participants' responses to the scale items, a 6-point Likert-type scale was used, with higher scores indicating stronger agreement.

The gathered data were analyzed using IBM SPSS and AMOS. Principle components analysis, Spearman's correlation analysis, confirmatory factor analysis, reliability and validity analysis, and collinearity diagnostics formed part of the statistical measures implemented.

Results and discussion

From the demographic data analyzed, the age distribution shows that the highest percentage of participants is 20 years old (25.1%), followed by 19 years old (24.0%). Ages 18 and 21 follow, with 15.4% and 13.7% respectively. The smallest age group is 24 years old, making up only 3.3%. Although all 11 South African language groups are included in the sample, Sesotho is the most represented, accounting for 29.2%. The next most common language groups are isiZulu (13.7%) and Sepedi (10.0%). While each of South Africa's nine provinces is represented in the sample, participants residing in Gauteng dominate, accounting for 53.9 percent. Limpopo (18.5%) and Free State (10.3%) are also notable but much smaller in comparison. The vast majority of the sample is from the Black race group (88.6%), with some representation from the White (8.8%), Coloured (1.5%), Indian (0.7%), and Asian (0.4%) race designations. The gender distribution is almost balanced, with males at 52% and females at 48%.

After profiling the sample, the study proceeded with factor analysis. To explore the dataset's underlying structure, a principal component analysis (PCA) was conducted on factors related to consumer behavior and perceptions in a bank loyalty context. The study aimed to identify key components that summarize the data's variability while reducing its dimensionality, and to assess component items with cross-loadings. The Kaiser-Meyer-Olkin test returned a value of .927, and Bartlett's Test of Sphericity produced a significant chi-square ($\chi 2$) value of 5059.757, df 435, $p \leq 0.001$, thereby validating the data set's suitability for PCA (Pallant, 2020). The results of the PCA are summarized in Table 1. This table presents the factor loadings, communalities, eigenvalues, and explained variance for the items under study.

Table 1. Principle components analysis (Source: Authors' compilation)

Item	Component										Communalities
	1	2	3	4	5	6	7	8	9	10	
Cus_Loy	.788										.822
Cus_Loy	.797										.847
Cus_Loy	.768										.827
Cus_Inv							.847				.804
Cus_Inv							.830				.761
Cus_Inv							.599				.730
Per_Val									.589		.686
Per_Val									.536		.680
Per_Val									.587		.755
Ser_Qual			.709								.711
Ser_Qual			.824								.772
Ser_Qual			.758								.700
Ser_Att								.727			.787
Ser_Att								.673			.685
Ser_Att								.754			.718
Bank_Ima										.521	.645
Bank_Ima										.720	.825
Bank_Ima										.501	.655
Cus_Com		.853									.830
Cus_Com		.750									.802
Cus_Com		.809									.819
Trust					.669						.811
Trust					.751						.826
Trust					.564						.775
Swi_Cost						.799					.805
Swi_Cost						.770					.789
Swi_Cost						.583					.735
Cus_Sat				.594							.839
Cus_Sat				.631							.811
Cus_Sat				.574							.733
Eigenvalues	12.031	2.255	1.935	1.510	1.249	.979	.955	.727	.683	.662	
Variance %[a]	40.103	7.517	6.451	5.032	4.165	3.265	3.182	2.423	2.278	2.206	

[a]Total variance = 76.621%

Note: Cus_Loy = customer loyalty; Cus_Inv = customer involvement; Per_Val = perceived value; Ser_Qual = service quality; Ser_Att = service attributes; Bank_Ima = bank image; Cus_Com = customer commitment; Swi_Cost = switching cost; Cus_Sat = customer satisfaction