

# Mediating Effect of Customer Satisfaction on the Relationship between Service Quality and Customer Loyalty in the Ghana Banking Industry

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**Abstract:** Understanding customer satisfaction and customer loyalty in banking remains critical as banks strive to attain high performance standards to justify their existence. The aim of this paper, therefore, was to determine the mediating role of customer satisfaction between its antecedent, service quality and its consequent, customer loyalty. Quantitative research method was employed to generate 850 usable questionnaires through systematic random sampling. A mediation effect investigation was done, using regression analysis to establish the interrelationships between the three study constructs. Overall, the study empirically tested and established interrelationships between the three variables in Ghana's retail banking industry with satisfaction emerging as a strong mediator variable. Results of the study also revealed a positive and significant mediating role of customer satisfaction between service quality and customer loyalty. There were positive and significant relationships between service quality and customer satisfaction and between customer satisfaction and customer loyalty. The positive relationship between service quality and customer loyalty was insignificant. It is, therefore, concluded that, there is the need for banks to improve service quality at all levels, as the benefits to be derived are enormous, impacting strongly on customer satisfaction and weakly on customer loyalty.

**Keywords:** Banking; Service Quality; Customer Satisfaction; Customer Loyalty; Mediation

## I. INTRODUCTION

As it is common with many other industries, bank customers are getting increasingly sophisticated and, thus, expect their service providers to meet their changing needs more than ever before. Banks are therefore expected to provide excellent products and services to satisfy existing and future needs of their customers, while minimizing customer attrition. Understanding customer satisfaction and loyalty in banking therefore remains critical, as banks strive to attain high performance standards to justify their existence (Tee, 2019). Neilson and Chadha (2008); Ravichandran et al. (2010) have earlier theorized that customers today perceive very little differences between banking products. Banks are thus faced with the risk of losing customers to better endowed competitors, if they do not pay particular attention to the softer customer-related issues, such as satisfaction and loyalty. Improving service quality, therefore, remains a critical aspect of the operations of banks, as they work to ensure success under such competitive circumstances (Radomir et al., 2011).

In their study of the Romanian banking industry, Radomir et al. (2011) advised that banks should concentrate their efforts on improving service quality to ensure customer satisfaction, as a means to achieving customer retention.

Ghana's financial sector consists of the banking sub-sector, the capital market, and the non-bank financial sub-sector. The banking sector is very dynamic, and has expanded rapidly as compared to the other two segments (Tee, 2019). Researchers have, over the years, discussed the key characteristics of Ghana's banking industry, with some recent contributions from; Anabila and Dadson (2013); Banahene et al. (2018); Cudjoe et al. (2015); Okoe et al. (2013); and Tee et al. (March 2018). These researchers generally agree that the industry has evolved over time and is today characterized by heightened competition, customer sophistication, rising cost, easy availability of substitute products, stiffer regulatory and legal regimes, technological advancement, and globalization, among others.

Recent developments in the banking industry of Ghana indicate that stiff and stringent regulation alone was responsible for the collapse of nine banks, which were found to be vulnerable, with inadequate capital, high levels of non-performing loans, weak corporate governance structures, regulatory breaches, insider dealings, accounting and financial improprieties, among others, between 2017 and 2019 (Antwi, 2019; Bank of Ghana, 2018a, 2018b, 2019; Frimpong, 2018). Three others were merged with existing banks, while one was initially reclassified as a savings and loans company in 2019. These resulted in the number of existing banks reducing from 34 at the close of 2018 to 23 in January 2019 (Bank of Ghana, 2019, 2020), having reduced by two previously with the acquisition of UT bank and Capital bank by GCB bank in August 2017 (Tee, 2019).

Based on the introduction and contextual background, the dual purpose of this study is to determine the mediating role of customer satisfaction between service quality and customer loyalty as well as establish direct interrelationships between the three constructs. The findings will aid understanding of the effects of, and interrelationships between the variables in a way that furthers the existing knowledge on workable frameworks for studying customer behaviour, especially for

Africa, where literature on the subject is still scarce. This is important, as Kaur et al. (2010); Sadeghi and Hanzae (2010); Thuy and Hau (2010) earlier asserted that the theoretical models and frameworks developed to study service quality, customer behaviour and satisfaction in western contexts, may not be appropriate for studying customers in emerging markets. This calls for the need to establish models and frameworks for studying customer behaviour in Africa, notwithstanding the fact that there is abundant literature from more advanced jurisdictions, hence this paper.

Again, Agyapong (2011); Blankson et al. (2009); Cudjoe et al. (2015); Hinson et al. (2009); Narteh and Owusu-Frimpong (2011); Nimako et al. (2013); Nsiah and Mensah (2014); Ofori-Boateng and Acquaye (2020); Tweneboah-Koduah and Farley (2016) have all studied some measures of service quality, satisfaction, and loyalty in Ghana, but none of them measured the mediating role of customer satisfaction in the interrelationships from their studies. This paper, therefore, aims to extend knowledge beyond what is presently known by expanding the scope to cover the entire banking industry of Ghana.

Within the west African sub-region, Nyan et al. (2020) and Gorondutse and Hilman (2014) are among recent researchers, who have studied mediation effects of customer satisfaction, respectively in the telecommunications services industry of Ghana and the food and beverage industry of Nigeria. Similarly, Anabila et al. (2021) also conducted research into the service quality and customer loyalty in Ghana's hotel industry: the mediation effects of satisfaction and delight. Further to these, Banahene et al. (2018), on their part, studied the impact of customer satisfaction on loyalty in the Ghana banking sector; the effect of trust mediation, while Boakye and Meng (2019) did a study on the mediation effects of customer satisfaction but their work covered only ten banks in Ghana. Bearing in mind that customers' behavioural intentions are not the same for all industries, there is the need for further studies to be carried out for the financial services industry, specifically banking, where industry-wide research on the subject is not available.

Following the discussions thus far, this study seeks to determine the mediating role of customer satisfaction between its antecedent construct, service quality, and consequent construct, customer loyalty, for Ghana's banking industry. The paper will also establish interrelationships between the three study constructs and establish a framework for understanding the effects of service quality on customer satisfaction and subsequent behavioural intentions of customers in Ghana's banking industry. This paper, thus, proceeds with a thorough review of theoretical and empirical literature around three key theoretical models relevant to this study, viz; SERVPERF, SERVQUAL, and Behavioural and Financial Consequences of Service Quality. The empirical literature will be reviewed thematically with the view to identifying knowledge gaps, leading to discussions on the interrelationships between the variables and development of

hypotheses and a conceptual framework for the study. The research methodology, data analysis and results are discussed next, followed by a discussion of the study findings, implications, and conclusions.

## II. LITERATURE REVIEW

### 2.1 Service Quality

Service is defined as an activity or a series of activities in intangible form, which usually takes place between customers and service providers (Wei, 2013). There are considerable arguments among researchers on how to conceptualize service quality, as researchers generally believe that it is an elusive concept (Firdaus et al., 2011; Mukesh et al., 2010; Parasuraman et al., 1985). Service quality, nonetheless, has remained a 'critical prerequisite for establishing and sustaining satisfying relationships with customers' (Lassar et al., 2000, p. 244, p.244). Schneider and White (2004) posited that service quality is a subjective phenomenon that hinges on an individual's perceptions. This explains why there are many definitions of service quality in marketing literature (Radomir et al., 2011). The phenomenon has been variously defined as; the consumer's overall impression of the relative inferiority or superiority of a company and its services (Siddique et al., 2011), a measure of the extent to which the service delivered, fulfils the customers' expectations (Wei, 2013) and the customers' judgment about a service (Culiberg & Rojs'ek, 2010) among others.

The most widely used models for measuring service quality in the banking sector are the SERVQUAL and SERVPERF models (Shanka, 2012). The SERVQUAL framework was first developed by Parasuraman et al. (1988), based on their earlier gap model (Parasuraman et al. (1985). The researchers identified the five dimensions of service quality as; Tangibility, Reliability, Responsiveness, Empathy and Assurance. Since its introduction, SERVQUAL has been widely used by researchers in different sectors of the services industry (Adil et al., 2013; Newman, 2001) and seen some modifications over time. The SERVPERF model, for instance, was carved out by Cronin and Taylor (1992) as an improvement over the SERVEQUAL scale. The SERVPERF frame is noted for its ability to preserve all the fundamental ingredients found in the SERVQUAL, while, at the same time, addressing all key weaknesses of the latter. Making a case for SERVPERF, Jain and Gupta (2004) opined that the model is more parsimonious, utilizes just half of the SERVQUAL variables and is relatively better at explaining the service quality construct. From the foregoing, there is enough literature to back the superiority of the SERVPERF frame for contemporary studies, hence its adoption for this research.

### 2.2 Customer Satisfaction

Hsien-Ta et al. (2010) defined customer satisfaction as the gap between customer expectations and perceptions regarding service quality. Customer satisfaction, therefore, reinforces quality perception and drives repeat purchases (Lau et al.,

2013). Customer satisfaction has been gaining increasing attention from researchers and practitioners as a recognized field of scholarly study as well as a fundamental tool used by financial institutions for enhancing customer loyalty and, ultimately, organizational performance and profitability (Mohsan et al., 2011).

### 2.3 Customer Loyalty

Customer loyalty has enjoyed wide currency and usage within the field of consumer behaviour for many years (Saeed et al., 2011). The subject has, accordingly, attracted the interests of researchers in the recent past (Khan, 2012). Customer loyalty is defined as; holding very deep commitment to re-purchase or re-visit a preferred product or service regularly in the future, which will cause repeat purchase of the same brand, regardless of marketing efforts and situational influences that have potential to result in switching behaviour (Oliver, 1992). The important role customer loyalty plays in the profitability of organizations cannot be overemphasized (Tweneboah-Koduah & Farley, 2016). Loyal customers are less likely to switch to a competitor brand, just because of price and other special promotions. They bring in new customers through positive word-of-mouth and they are less expensive to maintain (Yoo & Bai, 2013). Zairi (2009) opined that prior research pointed to many benefits that organizations can derive as a result of improving loyalty levels. Reichheld and Sasser (1990) had earlier found in their study of the service industry that a 5% increase in customer retention resulted in a 125% increase in profitability.

### 2.4 Interrelationships between Study Constructs and Research Hypotheses

#### 2.4.1 Service Quality and Customer Satisfaction

One of the main determinants of customer satisfaction is customers' perception of service quality (Ngo & Nguyen, 2016). In view of this, researchers have, over the years, taken keen interest to investigate the relationships between service quality and customer satisfaction. In traditional retail banking context where the contact with customers is one of the most core business processes, customer satisfaction has become key for business success (Belás et al., 2014; Belás & Gabčová, 2014; Chavan & Ahmad, 2013). Notwithstanding the existence of ample evidence to support the relationship between customer satisfaction and service quality (Yee et al., 2011), debates are still ongoing about the causal relationship between these two constructs. Akhtar et al. (2011); Namukasa (2013); Ngo and Nguyen (2016); Suh and Pedersen (2010) are among the many researchers who hold the view that service quality is an antecedent to customer satisfaction and have thus established positive relationships between the two constructs. There are, however, contrary findings from the likes of Che-Ha and Hashim (2007); Culiberg and Rojs̃ek (2010); Sweeney and Swait (2008); Wong (2011). Based on the above, it is hypothesized for this research that;

*H<sub>1</sub>. Service quality has significant positive effect on customer satisfaction*

#### 2.4.2 Service Quality and Customer Loyalty

There are numerous studies on the relationship between service quality and customer loyalty across many industries, with no common ground on the existence of positive and significant relations between the two constructs. Lam and Burton (2006) posited that some customers remain loyal due to high service quality, whereas others are loyal due to high switching barriers, the lack of real substitutes, etc. Empirical studies by Al-Mutairi (2010); Al-Rousan and Mohammed (2010); Arun et al. (2010); and Mokhtar et al. (2011) point to the fact that perceived service quality has positive effects on customer loyalty. Similar findings have been made in many other studies, including; Al Bostanji (2013) for five star hotels in Riyadh, Khalifa et al. (2011) for hotels in the city of Aden, Yemen, Kheng et al. (2010); Osman et al. (2015) in their studies in Malaysia. Notwithstanding these, He and Jun (2010) found no obvious effect of service quality on customer loyalty in their study of railway users in China. Similarly, Desiyanti et al. (2018); and Supriyanto et al. (2021) found their separate studies that service quality did not have significant effects on customer loyalty. It is therefore hypothesised for this study that:

*H<sub>2</sub>. Service quality has significant positive influence on customer loyalty*

#### 2.4.3 Customer Satisfaction and Customer Loyalty

Customer satisfaction has been proven to serve as a link between critical customer behaviours and the tendency of an individual to consider his/her bank as one that he/she has a relationship with (Ehigie, 2006; Ndubisi, 2006). Chi and Gursoy (2009) noted that a satisfied customer turns into a loyal one and a loyal customer, in time, will lead to higher sales and therefore higher financial returns for the company. Akhter et al. (2011) found that customer loyalty is directly and positively affected by customer satisfaction, product image, trustworthiness and customer relationship. Al-Wugayan and Pleshko (2010) also found the effect of customer satisfaction on loyalty to be positive but minimal in their study of mutual fund companies in Kuwait. Ofosu-Boateng and Acquaye (2020) found a significant positive relationship between customer satisfaction and customer loyalty in the hospitality industry of Cape Coast, Ghana. Recent studies by Nshimiyimana (2020); Osman and Sentosa (2014); Patel and Desai (2016); and Tweneboah-Koduah and Farley (2016) conducted in the context of banking, also revealed positive influences of customer satisfaction on customer loyalty. It is accordingly hypothesized for this study that;

*H<sub>3</sub>. Customer satisfaction has significant positive effect on customer loyalty*

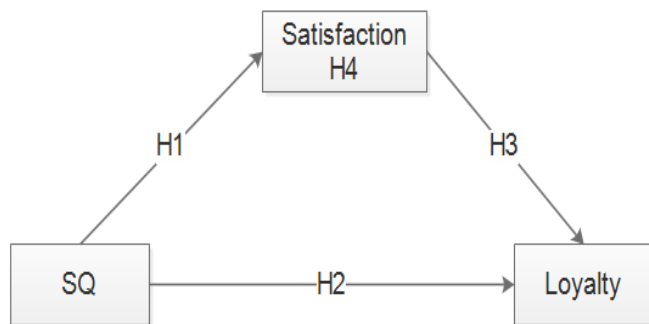
#### 2.4.4 Mediating Effects of Customer Satisfaction on Service Quality and Loyalty

Z. Osman and I. Sentosa (2013) found out, in their study of Malaysian rural tourism, that customer satisfaction plays a mediating role in the service quality and customer loyalty

relationship. Lau et al. (2013) also found that overall satisfaction of customers has a mediating effect on the relationship between service quality dimensions and bank customer loyalty. Lewis and Soureli (2006) also studied the antecedents of customer loyalty in retail banking and found that customer satisfaction acts as a mediator that bridges between service quality and customer loyalty. Similar results have been reported by Akbar and Parvez (2009), in their study of the Bangladeshi telecommunications industry, Kheng et al. (2010), in Malaysian Banking industry and Kumar et al. (2010) in their study on bank customers in India. A recent study by Nshimiyimana (2020) also confirmed the mediation role of customer satisfaction between ATM service quality and customer loyalty for the bank of Kigali. On their part, Boakye and Meng (2019) found no mediation effect of customer satisfaction on the relationship between service quality and customer loyalty in their study of the Ghana banking industry. Following these reviews, this study seeks to test this phenomenon by hypothesizing that:

*H<sub>4</sub>: Customer satisfaction significantly mediates between service quality and customer loyalty.*

Based on the discussions thus far, a conceptual framework is proposed in figure 1. The framework shows the various path relationships explained in the model development process.



SQ=service quality

Figure 1: Proposed Research Model

### III. RESEARCH METHODOLOGY

This study used quantitative research methods, in which primary data were generated by administering survey questionnaire to a study sample of 1020, out of a combined customer population of about 7.5million in a causal study. Useable questionnaire of 850 were returned, representing a significant 83% response rate. The questionnaire was pre-tested, and the results used to reword and redesign the final instrument, making it much easier to complete by respondents. Preceding the pilot study, however, were face and content validity, which were done by respectively administering the questionnaire to 15 university students and six subject matter experts. The questionnaire was administered face-to-face, using systematic random sampling for every 9th customer who had completed a transaction at the point of exiting a banking hall.

The Shapiro-Wilk’s normality test was used to confirm that the research data was normally distributed, while reliability of the construct was measured, using Cronbach’s alpha. Communalities, which are statistics associated with exploratory factor analysis (EFA) and often used for a stronger validation of constructs, in terms of reliability or internal consistency, were also used. Confirmatory factor analysis (CFA) was conducted to validate the constructs, where all items loaded above the threshold of 0.5.

### IV. DATA ANALYSIS AND RESULTS

#### 4.1 Profile of Respondent

Descriptive statistics was used to describe the participants’ personal details. The results from the respondents’ demographics showed that 56.8% of participants were male, the highest age bracket was 26 to 30 years old (22.6%) with majority (59.2%) earning incomes of up to GHS2000, approximately USD350 at the time. The highest educational attainment (67.2%) was first degree holders. A total of 850 customers were sampled from 17 public and private banks in Ghana.

#### 4.2 Exploratory Data Analysis

Table 1 shows the composite mean and standard deviation values of all three research constructs together with the five dimensions of service quality. These values reveal that majority of respondents agree more to these constructs. The mean value of composite indicator of tangibles showed the highest value (5.52), revealing that majority of the respondents agreed that their respective banks demonstrated a high level of performance regarding tangibles. The lowest score among the five service quality dimensions was reliability with a mean score of 5.09. In the same manner, overall customer satisfaction was rated the most important of the three study constructs, with a mean score of 5.5, followed by overall service quality (5.25) and overall customer loyalty (4.82), the lowest.

Table 1: Descriptive Statistic of the Studied Constructs

Construct	Mean	Std.Deviation
Tangibles	5.52	1.04
Reliability	5.09	1.11
Responsiveness	5.15	1.12
Assurance	5.39	1.05
Empathy	5.15	1.12
Overall Service Quality	5.25	0.91
Overall Customer Satisfaction	5.50	1.32
Overall Customer Loyalty	4.82	0.94
Likert Scale, 1-7		
<b>Source: Survey data</b>		

4.2.1 Test of Normality

The Shapiro-Wilk’s normality test was done for each of the three variables but the acceptance criterion of p-value >0.05 was not met for any of them, giving the indication that the data were not normally distributed. Given that the total usable questionnaire for this study was 850, it is assumed that non-normality would not be an issue in testing the research hypotheses, as Tipping and Bishop (2007) opined that a lack of normality does not pose significant problems for large sample sizes. Despite this, box plots and p-p plots were further performed to depict the normality situation of the data. The box plots depicted minimal deviation of the data from normality while the p-p plots showed a fair cluster of points around the straight lines, suggesting a low level of non-normality. The adverse effect of non-normality was minimized by removing the outliers found in the data.

4.2.2 Reliability analysis

Table 2 shows results of the Cronbach’s alpha analyses of the three constructs ranging between 0.73 and 0.81. All the Cronbach alpha values presented here exceeded the recommended value of 0.7, as suggested by Hair et al. (2010). Therefore, it is concluded that there is internal consistency among the items employed in the study.

Table 2: Factor Analysis of the Study Variables

Constructs	Loadings	Reliability	CR	AVE	√AVE
Service Quality	0.70	0.76	0.63	0.70	0.84
Customer Satisfaction	0.62	0.81	0.67	0.61	0.78
Customer Loyalty	0.90	0.73	0.72	0.90	0.94
<b>Source: Survey data</b>					
Note: SR= Square Root, AVE= Average Variance Extracted					

4.2.3 Convergent and discriminant validity

The average variance extracted (AVEs) of the service quality, customer satisfaction and customer loyalty variables all met the threshold of greater than 0.5; hence, it is established that there is good evidence of convergent validity of the constructs.

4.2.4 Discriminant validity

The square roots of the AVEs are 0.84 (service quality), 0.78 (customer satisfaction) and 0.94 (customer loyalty). Each of these is greater than the inter-construct correlation values between them as depicted on Table 3. These values give sufficient evidence that discriminant validity is present.

4.2.5 Inter-constructs correlations matrix

Table 3 shows the inter-factor correlation analysis, which was done to aid the validation of the constructs as well as identify whether the constructs used for the proposed model positively interrelate.

Table 3: Inter-correlation of constructs

Constructs	Service Quality	Customer Satisfaction	Customer Loyalty
Service Quality	1	.773**	.461**
Customer Satisfaction	.773**	1	.371**
Customer Loyalty	.461**	.371**	1
<b>Source: Survey data</b>			

The results reveal positive relationships among the constructs and significant at  $p < 0.05$ . The Pearson correlations coefficients of service quality, customer satisfaction and customer loyalty variables move in the upward directions.

4.2.6 Mediation Analysis

A mediation effect was run, using regression analysis, to establish the significant effect of customer satisfaction on service quality and customer loyalty. This supports the recommendation of Acock (2013); McClelland et al. (2006), where the direct, indirect and total effects would be established in regression analysis. Furthermore, Huber et al. (2016) explained in their lecture on mediation analysis that the direct effect or path =  $c'$ , indirect effect =  $a*b$  and total effects =  $c' + a * b$ . Following this, the mediation analysis result showed a significant and positive direct effect of service quality on customer satisfaction ( $\beta = 0.165, p < 0.01$ ), supporting H1. There is also a positive but insignificant effect of service quality on customer loyalty ( $\beta = 0.002$  and  $p = 0.01$ ), rejecting H2. This is an indication that there is a positive effect which is not significant. H3 was confirmed, with a positive and significant effect of customer satisfaction on customer loyalty ( $\beta = 0.262, p=0.001$ ). Finally, there is a positive and significant effect of customer satisfaction mediating the relationship between service quality and customer loyalty ( $\beta = 0.167, p < 0.05$ ), supporting H4. In all, the coefficient of determination reported for the tested research model accounted for 63.2% variations in customer loyalty as per Table 4.

Table 4: Hypothesis testing

Independent Variables	Response Variables	Hypothesized Path	Standardized Coefficient	R <sup>2</sup>
Service Quality	Satisfaction	H1	0.165***	41.3%
Service Quality	Loyalty	H2	0.002	
Satisfaction	Loyalty	H3	0.262***	
Test of Moderation effects				
Relationship	Mediator	Hypothesis	Coefficient	63.2%
Service Quality-Loyalty	Satisfaction	H4	0.167*	
Significant at * $p < 0.05$ and ** $p < 0.01$				

### 4.3 Results

#### 4.3.1 Measurement and structural model

The study presented the results of the measurement and structural models, as recommended by Akamavi et al. (2015). These were done in two stages. In stage 1, the measurement model was performed without the mediator, given as: ( $\chi^2=174.654$ ,  $df=192$ ,  $p=0.003$ ) root mean squared error of approximation (RMSEA) = 0.092, comparative fit index (CFI) = 0.925, Tucker-Lewis index (TLI) = 0.932 and standardized root mean squared residual (SRMR) = 0.04 revealing unsatisfied goodness of fit. In stage 2, the model was refined by introducing the mediator that produced the final statistics for the structural model as ( $\chi^2=178.224$ ,  $df=191$ ,  $p=0.002$ ), RMSEA was 0.001, CFI and TLI were 0.975 and 0.954 respectively, and SRMR was 0.001, revealing that the measurement model fits the data and had met the cut-off points (Barrett, 2007; Hu & Bentler, 1999; Steiger, 2007). The goodness-of-fit indices for the CFA analysis were within the acceptable level ( $\text{Chi-square} > 0.05$ ,  $\text{RMSEA} \leq 0.08$ ,  $\text{CFI} \geq 0.90$ ,  $\text{TLI} \geq 0.90$  and  $\text{SRMSR} \leq 0.05$ ) (Barrett, 2007; Diamantopoulos & Sigauw, 2000; Hu & Bentler, 1999; Steiger, 2007). Nonetheless, the significant chi-square test is a common finding in research and was not surprising, regarding the sample size (Bagozzi & Yi, 2012). The remaining fit indices (RMSEA, CFI, TLI and SRMR) of the model each exceeded their respective suggested thresholds.

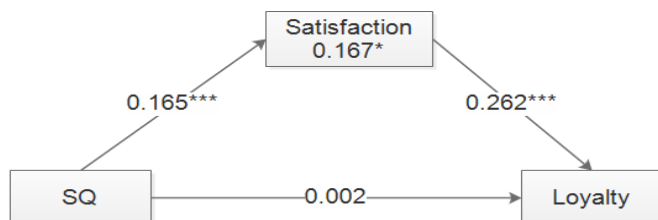


Figure 2: Tested Model

### V. DISCUSSION

The main objective of this paper was to determine the mediating role of customer satisfaction in the interrelationships between service quality and customer loyalty in the Ghana banking industry. The two central issues emanating from this main theme were; to test the causal relationships between the three study constructs, and to establish the mediating role of satisfaction. The main research objective and the four study hypotheses were identified for investigations, leading to the development of a conceptual framework, which has been tested empirically. Exploratory data analysis was done to verify whether the data satisfied basic conditions for applying the quantitative research techniques chosen.

The four research hypotheses are recalled and discussed side-by-side the findings of the study, as presented in the tested model in Figure 2 and, as depicted on Table 4. First, the direct relationship between service quality and customer satisfaction was found to be positive (0.165) and significant, in line with

the works of Akhtar et al. (2011); Anabila et al. (2021); Desiyanti et al. (2018); Namukasa (2013); Ngo and Nguyen (2016); Sulaiman et al. (2021). Secondly, the relationship between service quality and customer loyalty was also positive but insignificant, with the standardized coefficient value of 0.002. This finding disagrees with the research findings by Al Bostanji (2013); Khalifa et al. (2011); Mokhtar et al. (2011); Osman et al. (2015); Osman and Sentosa (2014). The relationship between customer satisfaction and customer loyalty was also found to be positive and significant with coefficient value 0.262, and in agreement with many other findings, including; Akhtar et al. (2011); Kingshuk Adhikari and Mounita Nath (2014); Lai et al. (2009); Ngo and Nguyen (2016). The results so far suggest that improvements in service quality will impact greatly on customer satisfaction and mildly on loyalty, while any increase in customer satisfaction will greatly promote loyalty. Finally, and most importantly, the study revealed a positive and significant (0.167) mediating role of customer satisfaction between service quality and customer loyalty. This finding supports the previous works of Akbar and Parvez (2009); Chen and Lee (2008); Olorunniwo and Hsu (2006); Z. Osman and I. Sentosa (2013). This current study makes interesting revelations, worthy of consideration by banks, as they seek to improve customer retention and loyalty rates. Also, the study has succeeded in making a huge contribution to knowledge, regarding the mediating role of customer satisfaction in the 'service quality-customer loyalty' relationship in Ghana, where the subject has not been well established on an industry-wide basis.

### VI. IMPLICATIONS

Based on the impact that service quality has on the other variables, this study is a starting point for banks to improve their marketing performance, since improvements in the five service quality dimensions are imperative, for improving satisfaction and loyalty. Also, Marketing practitioners can now minimize their overreliance on the relatively expensive hard elements of the promotional mix in favour of the cheaper human-related issues identified. Finally, the establishment of interrelationships between the three study constructs in a single study for Ghana, where there is a paucity of empirical evidence on the subject matter opens the way for further academic research. The study has, thus made a significant contribution to marketing knowledge in Ghana.

### VII. CONCLUSION

Findings from this study reveals that the three variables, service quality, customer satisfaction, and customer loyalty, are all positively interrelated, albeit at different significance levels. The need, therefore, for banks to improve service quality at all levels cannot be overemphasized, as the benefits are enormous, impacting strongly on customer satisfaction and weakly on customer loyalty. Customer satisfaction is proven as a positive mediator-variable between its antecedent construct, service quality, and the only dependent variable of this study, customer loyalty. The main research objective has

been achieved, in that, the interrelationships between service quality, customer satisfaction and customer loyalty in Ghana's retail banking industry have been well established with satisfaction also emerging as a strong mediator variable.

There is enough evidence from this study to buttress the calls by earlier researchers for further studies into the interrelationships between service quality and behavioural intentions. Baker and Crompton (2000) had earlier indicated that the relationships between the three main study variables cannot be generalized across all industries globally. Kaur et al. (2010); Sadeghi and Hanzaee (2010); Thuy and Hau (2010) also asserted a decade later that the theoretical models and frameworks developed to study these constructs in the western contexts may not be appropriate for studying customers in emerging markets.

Besides these studies, there has generally been scanty literature on the subject in Ghana. Empirical literature, and also findings from this study, are ample evidence that work remains to be done on this subject, as the few recent studies conducted on the three variables across industries in Ghana have not yielded conclusive results. Of the five most recent studies done in Ghana and cited in this paper, only three established significant positive relationships between service quality and customer satisfaction. The study by Boakye and Meng (2019) showed a negative relationship while Banahene et al. (2018) did not examine the relationship at all. Similarly, three studies found positive relationships between service quality and customer loyalty with one study establishing a negative relationship. The relationship between customer satisfaction and loyalty is the most commonly studied one, cutting across all five studies with four positive and one negative relationship established. Mediation effects of satisfaction in the relationship between service quality and customer loyalty is the least studied, especially in the Ghana banking industry and for which findings of this study come in handy. This again points to the need for further research to make meaningful contributions that will further extend knowledge beyond what is known for Africa.

#### VIII. LIMITATIONS AND FUTURE RESEARCH

As is the case with every research work, this study has some limitations that may influence the reliability of the results and restrict the extent to which the findings can be generalized. First, the study applied quantitative research methods alone, preventing further probing of respondents for details. Future researchers should consider employing mixed methods. The service quality questionnaire was limited to the standard 22 SERVPERF scale items. Future studies should go beyond these traditional five dimensions to include other important factors known to influence service quality and customer satisfaction. Also, future studies on service quality should go beyond physical bank branches alone in measuring tangibles to include digital and online banking channels as well. Respondents for future studies should be a blend of consumer and business customers to make the results more meaningful for banks. Finally, researchers should broaden the scope of

their studies to cover other cities, regions, and districts, in order to have a good mix of urban and rural views from customers, as this study was carried out in Accra, the national capital of Ghana alone.

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