
INFLUENCE OF SOCIO-DEMOGRAPHIC FACTORS ON THE PERCEPTION OF AUTOMATED TELLER MACHINE SERVICE QUALITY IN IKEJA, LAGOS STATE

¹Patrick, K. A. Ladipo; ²Salome, O. Ighomereho; ³Ayodele Oniku & ⁴Ismail, T. Arebi

^{1,3,4}Department of Business Administration,
University of Lagos,
Lagos, Nigeria.

²Department of Economics and Business Studies,
Redeemer's University, Ede,
Osun State, Nigeria.

Abstract

Service quality has emerged as a strategic factor which contributes to the success of e-channels. It has also become a major issue in the delivery of e-banking services especially Automated Teller Machine (ATM). To deliver quality services electronically, there is need to understand the perception of customers regarding the quality of services and the way customers evaluate them. To this end, the study examined the influence of socio-demographic factors on the perception of ATM service quality in Ikeja, Lagos State. The data were collected by means of questionnaire from 216 bank customers who use ATM in Ikeja, Lagos State. General Linear Model, t-test and Analysis of Variance (ANOVA) were employed to analyze the data. The results indicate that age, education and income influence the perception of ATM service quality. It was also found that there are differences in the experience of convenience and responsiveness dimensions of service quality among ATM users but there are no differences with respect to reliability and fulfillment. The findings suggest that there is need to develop customer-related strategies that can fulfill customer expectations of ATM based on their socio-demographic characteristics

Keyword: *service quality, perception, socio-demographics, experience, e-service.*

INTRODUCTION

Marketing literature posits demographics as an important factor affecting customer service quality perception (Grazhdani & Merollari, 2015). In the view of Stafford (1996) the first step in improving the perception of service quality is to select the customers who are most valuable and the possible method of determining those valuable customers is by utilizing customer demographics. Sakkthivel (2006) also noted that banks must consider the demographic characteristics of their customers to offer the correct range of delivery channels. In the banking industry, there are several delivery channels such as branch

banking, ATM, Internet Banking, Mobile Banking and Point-of-Sale (POS). Apart from branch banking, ATM appears to be the most popular service delivery channel (Adelowo, 2015). ATM is a computerized machine that provides the customers of banks the facility of accessing their accounts for dispensing cash and to carry out other financial transactions without the need of actually visiting a bank branch (Asabere, Baah & Odediyah, 2012; Odusina, 2014).

The extant literature indicates that the determination of the specific socio-demographic factors that influence the perception of service quality are inconsistent. While some researchers are of the view that service quality is perceived differently by customers according to their socio-demographic characteristics (Gupta & Bansal, 2011), there are also findings that socio-demographic factors do not influence the perception of service quality (Ramez, 2011). Some other studies found mixed results as only some of the socio-demographic factors were found to be significant. Against this backdrop, it becomes necessary to investigate the socio-demographic factors that may influence the perception of ATM service quality. Socio-demographic characteristics group customers on the basis of several measures such as age, sex, income, occupation, marital status and so on. Kotler (2003) classified socio-demographic characteristics into age, sex, income, occupation, education, race, religion, nationality, family size and family life cycle. These broad divisions are important to the marketer who must plan and provide the services that each group requires and to determine the segments of the market that are feasible in terms of achieving greater market penetration. However, the socio-demographic characteristics commonly investigated in the banking industry are gender, age, education, income and occupation (Gupta & Bansal, 2011; Mohammed, 2012; Narteh, 2013; Pooja, 2013; Onyedimekwu & Oruan, 2013; Renuka & Paulraj, 2014; Grazhdani & Merollari, 2015; Sindwani & Goel, 2015; Ayo, Oni, Adewoye, & Eweoya, 2016). Based on the extant literature, five socio-demographic factors were selected for investigation in this study. They include gender, age, education, income and occupation.

Research Questions

The aim of this study is to identify the socio-demographic factors that influence the perception of ATM service quality. The study intends to provide answers to the following research questions:

- i. Which socio-demographic factors influence the perception of ATM service quality in Ikeja, Lagos?
- ii. Are there differences in the experience of service quality dimensions among ATM users in Ikeja, Lagos?

LITERATURE REVIEW

Perceived ATM Service Quality

Generally, perceived service quality is defined as customers' overall assessment of the utility of a service based on the perceptions of what is received and what is given

(Zeithaml Parasuraman & Malhotra, 2000). It has also been described as customers' judgment about an entity's overall excellence or superiority (Zeithaml, 1988). It results from customers' comparison of their perceptions about service delivery process and actual outcome of a service (Lovelock & Wirtz, 2011). According to Narteh (2013) perceived ATM service quality portrays a general, overall appraisal of ATM service. In this study, perceived ATM service quality is defined as customers' overall assessment of ATM service. It is the evaluation of the service performance customers received according to whether it meets certain standards. The evaluation emanates from customers' comparison between prior expectations about the service and their perceptions after actual experience of service performance (Gronroos, 1984; Zhang & Tang, 2006; Shirshendu & Sanjit, 2011). When customers are doing such evaluations, they may refer to their feelings as well as their cognition in the service consumption process (Parasuraman, Zeithaml & Berry, 1988). Perceived service quality to a large extent, is what the customer says it is (Peters, 1999). This is because for a business to know whether it is providing service which is judged 100 percent satisfactory by 100 percent of its customers, it cannot make the judgment itself. The business need to ask, observe and find out from the customers themselves. It has been noted that to increase patronage, existing quality standards for products need to be adopted to provide means to assess, assure and improve the quality of e-services (Batagan, Pocovnicu & Capisizu, 2009). Customer perceived e-service quality is one of the critical determinants of the success of online business (Yang, Jun & Peterson, 2004).

Socio-demographic Factors and the Perception of Service Quality

A number of studies have investigated the role of socio-demographic factors in the perception of service quality in a variety of services including banking services. Ramez (2011) examined the influence of customers' socio-demographic characteristics which include gender, age, education, nationality and years of experience on the perception of service quality of Bahraini commercial banks using SERVQUAL model. The results indicated that significant relationships were not found between customer's socio-demographic characteristics and the perception of service quality. However, in the study of Gupta and Bansal (2011) on the perception of service quality of Internet Banking with respect to gender, age, occupation, education and income, it was found that there are significant differences in the perception of service quality among the socio-demographic factors. Zalatar (2012) examined gender differences in the perception of service quality of Philippine commercial banks customers. The result indicated that gender differences affect the relative importance attributed to customers' expectations and perceptions of service quality in banks. In the study of Pooja (2013) on service assurance perception and customer demography of State Bank of India, the influence of customer demographic characteristics such as gender, qualification, occupation and income on the perception of service quality was examined. It was found that qualification and occupation are the characteristics that significantly influence service quality perception while gender and income were not significant. Grazhdani and Merollari (2015) conducted a study on the relationship between

customer demographic characteristic such as gender, income, age as well as occupation and bank service quality in Albania. A significant difference was found in service quality perception by age groups whereas no significant differences were found on the bases of gender, income and occupation. The influence of demographic factors on the perception of service quality has also been investigated in the education sector and health care sector. Sein and Chey (2014) investigated the role of demographic factors in service quality evaluation of higher education service. The study included four demographic variables (gender, age, nationality and current level of study) and it was found that demography impacted on the perception of service quality with nationality and gender having the highest impact.

In the healthcare sector, Irshad, Hashmi, Hassan, Zahid and Hassan (2013) investigated the impact of demographic variables (gender, age, income and education) on service climate and customer perception of service quality of health care in Pakistan. The results of the study indicated that only income and education have significant impact on the perception of service quality while gender and age have no impact. Other studies (Joshua and Koshy, 2011; Mohammed, 2012; Bishnoi, 2013; Adelowo, 2015) noted the importance of demographics and its possible influence on adoption and perception of ATM. However, the literature reveals that the studies have produced conflicting results. It can be observed that the findings of the studies that have examined the influence of socio-demographic factors on the perception of service quality are not consistent. For example, some socio-demographic factors were found to be significant in some studies whereas in some other studies, they were found to be non-significant. This may suggest that the socio-demographic factors influencing the perception of service quality differ with the type of service being investigated and the country where the study was carried out. Since bank customers interact with and evaluate technology-based services, their perception of service quality may vary across different customer segments. Thus, it becomes necessary to examine the influence of socio-demographic factors on the perception of ATM service quality.

Socio-demographic Factors commonly investigated in the Banking Industry

There are several socio-demographic factors however, some are more critical in the banking industry. Table 1 shows the socio-demographic characteristics mostly investigated in the banking industry.

Table 1: Socio-demographic Characteristics commonly investigated in the Banking Industry

S/N	Author(s)/ Year	Study	Socio-demographic Variables Employed
1	Ayo et al. (2016).	E-banking users' behaviour: e-service quality, attitude and customer satisfaction	<ul style="list-style-type: none"> • Gender • Age • Education • Income
2	Sindwani and Goel	Technology Based Self Service Banking	<ul style="list-style-type: none"> • Gender

	(2015)	service quality evaluation: a Graph Theoretic Approach	<ul style="list-style-type: none"> • Age • Education • Occupation • Income
3	Grazhdani and Merollari (2015)	The influence of demographic factor on customer service quality perception	<ul style="list-style-type: none"> • Gender • Income • Age • Occupation
4	Renuka and Paulraj (2014)	Customers' satisfaction towards Automated Teller Machine	<ul style="list-style-type: none"> • Gender • Education • Occupation • Income
5	Onyedimekwu and Oruan (2013).	Empirical evaluation of customers' use of Electronic Banking Systems in Nigeria	<ul style="list-style-type: none"> • Gender • Age • Occupation • Education • Income
6	Pooja (2013)	Service assurance perception and customer demography: empirical study of State Bank of India	<ul style="list-style-type: none"> • Gender • Qualification • Occupation • Income
7	Bishnoi (2013)	Demographic variables and ATM services: An empirical survey.	<ul style="list-style-type: none"> • Gender • Education • Sector • Occupation • Income • Age • Area of residence
8	Narteh (2013)	Service quality in Automated Teller Machines: an empirical investigation	<ul style="list-style-type: none"> • Age • Gender • Education • Occupation
9	Mohammed (2012)	Factors affecting ATM usage in India: an empirical analysis	<ul style="list-style-type: none"> • Gender • Education • Occupation • Income
10	Izogo, Nnaemeka, Onuoha and Ezema (2012).	Impact of demographic variables on consumers' adoption of e-banking in Nigeria: an empirical investigation	<ul style="list-style-type: none"> • Gender • Marital status • Religion • Income • Age • Education
11	Gupta and Bansal (2011)	Effects of demographic variables on customers perceived internet banking service quality	<ul style="list-style-type: none"> • Gender • Age • Education • Income • Occupation
12	Ramez (2011)	Customers' socio-economic characteristics and the perception of service quality of Bahrain's commercial banks	<ul style="list-style-type: none"> • Gender • Age • Education • Nationality • Years of experience
13	Stafford (1996)	Demographic discriminators of service	<ul style="list-style-type: none"> • Gender

quality in the banking industry

- Age
 - Income
-

Source: Compiled by the researchers for this study (2017)

Apart from the studies of Ramez (2011), Izogo *et al.* (2012) and Bishnoi (2013), the other studies Ayo *et al.* (2016), Sindwani and Goel (2015), Grazhdani and Merollari (2015), Renuka and Paulraj (2014), Onyedimekwu and Oruan (2013), Pooja (2013), Narteh (2013), Mohammed (2012) as well as Gupta and Bansal (2011) investigated gender, age, education, income or occupation. Based on these previous studies, five socio-demographic factors were selected for investigation in this study.

Gender

There are two elements of gender, male and female. Both are important to the marketer because each gender has its own unique attributes which the marketer can appeal to. It is necessary therefore for the marketer to know the behaviour of one in relation to the other within the target market. Previous research on gender effects on customer perceptions of service quality indicates that the results are inconsistent. A number of studies have found gender as an important factor in the perception of service quality (Gupta & Bansal, 2011; Zalatar, 2012; Sein & Chey (2014). However, in some other studies (Ramez, 2011; Pooja, 2013; Irshad, *et al.*, 2013) gender was not found to be significant.

Age

In some previous studies (Gupta & Bansal, 2011; Grazhdani & Merollari, 2015) it was found that among all socio-demographic factors, age is the strongest variable that influences the perception of service quality. It was noted that older customers have high level of expectations about service quality. Moreover, their attitude and behaviour towards service quality is more sensitive because they want efficient and quick services. As a result, their perception of service quality is usually low. However, other researchers (Ramez, 2011; Irshad *et al.*, 2013) did not found age to be significant.

Education

Level of education is another socio-demographic factor that has been widely investigated by scholars. Irshad, *et al.* (2013) noted that highly educated group of customers have high expectations regarding service quality compared to less educated customers. Gupta and Bansal (2011), Pooja (2013) also found level of education to be a significant factor influencing the perception of service quality but in the study of Ramez (2011) education was not significant.

Income

Income has been found to be another socio-demographic factor that significantly influences the perception of service quality (Gupta & Bansal, 2011; Irshad, *et al.*, 2013). The authors noted that higher income group customers have high expectations regarding service quality compared to low income level customers because they are more conscious

of service quality. However, in the study of Grazhdani & Merollari (2015) and Pooja (2013) income was not significant.

Occupation

Customers with different occupation have also been found to have different perceptions of service quality in some studies while in some other studies it was found to be non-significant. For example, Gupta and Bansal (2011) as well as Pooja (2013) found that occupation significantly influence the perception of service quality but Grazhdani & Merollari (2015) did not found occupation to be significant.

Service Quality Dimensions and Socio-demographic Factors

Sheetal and Harsh (2004) pointed out the usefulness of segmenting customers on the basis of service quality dimensions. The authors noted that there is need to determine if distinct and identifiable service quality segments exist on the basis of customer demographics. The review of literature on ATM service quality reveals that the studies did not investigate differences in the experience of service quality dimensions with regard to socio-demographic factors. However, some studies have investigated differences in the overall perception of service quality on the basis of socio-demographic factors with respect to banking services (Ramez, 2011; Gupta & Bansal, 2011; Zalatar, 2012; Pooja, 2013). The authors did not examine the differences in terms of the dimensions of service quality. The study (Pooja, 2014) that investigated socio-demographic differences with respect to service quality dimensions examined only responsiveness dimension. The study looked at the effect of gender, qualification, occupation and income on responsiveness perception of service quality of State Bank of India. Significant differences relating to demographic characteristics such as gender and qualification were found regarding responsiveness perception. It was found that male and female vary significantly in their perception of responsiveness. It was also found that postgraduate, graduate and undergraduate customers are significantly different in their responsiveness perception.

Postgraduate customers perceive responsiveness better than the graduate and undergraduate customers. Moreover, no significant differences were found in terms of occupation and income. In some other services, differences in the experience of service quality dimensions with regard to socio-demographic factors have been investigated. For example, Hagan (2015) examined the differences in service quality dimensions with reference to hotel guests' socio-demographic characteristics in Ghana. The study was based on SERVQUAL dimensions which include tangibles, reliability, responsiveness, assurance and empathy. Using t-test and Analysis of Variance (ANOVA) only reliability was found to be different with respect to gender and education. With regard to age and occupation, no significant differences were found in the experience of service quality dimensions. Rawal, Khan and Akhtar (2015) investigated gender differences in the experience of service quality dimensions of cellular phone service in India. The study employed a modified SERVQUAL dimension scale (pricing, assurance, reliability, perceived network quality, convenience and

empathy). Independent t-test was employed to test the hypothesis that there are no gender differences with regard to the dimensions of service quality. It was found that there were no significant differences with respect to assurance and empathy but significant differences were found for pricing, reliability, perceived network quality and convenience. The review reveals that most of the studies on the banking industry examined socio-demographic differences in terms of overall service quality and not on the individual service quality dimensions. Apart from understanding socio-demographic differences in the perception of service quality, there is need to understand socio-demographic differences with respect to the individual service quality dimensions. It is on the basis of these gaps in the literature that this study is undertaken to advance an understanding of the attributes used by customers to evaluate the service quality of ATM and how such evaluations influence their perception of service quality.

METHODOLOGY

Population of the Study

The population of the study consists of bank customers who use ATM in Lagos State, Nigeria. Lagos was chosen because it is one of the most cosmopolitan States in Nigeria. It is also the most commercialized and industrialized.

Sampling Technique

Since the exact population size of ATM users is difficult to estimate due to some bank customers having more than one ATM card, non-probability sampling technique was adopted. Judgemental sampling technique was used to select Ikeja division of Lagos State. Ikeja is the capital of Lagos State. Thereafter, convenience sampling technique was employed to select ATM stands in the study area as well as the respondents. Two hundred and fifty (250) respondents were selected for the study.

Data Collection Instrument

A structured questionnaire was used to collect data for the study. The questionnaire consists of forty-five (45) items categorized into three sections. Section A consists of five (5) items on socio-demographic factors which include gender, age, education, income, occupation. Section B comprises thirty-five (35) items on service quality dimensions. Section C consists of five (5) items on perceived ATM service quality. The respondents were required to indicate their degree of agreement or disagreement with each statement in Section B and C on a five-point Likert scale in the order of strongly agree (SA), agree (A), fairly agree (FA), disagree (D) and strongly disagree (SD). The validity of the instrument was established using content validity while the reliability was tested using Cronbach's alpha. The Cronbach's alpha coefficients for each of the constructs in the study are reliability (0.893), convenience (0.782), ease of use (0.811), security (0.736), fulfilment (0.754), responsiveness (0.729) and perceived ATM service quality (0.802).

DATA ANALYSES

Out of the two hundred and fifty (250) copies of questionnaire administered, two hundred and sixteen copies (216) were returned fully completed.

Socio-Demographic Characteristics of Respondents

The socio-demographic composition of the respondents indicates that 52.3 percent of the respondents were males while 47.7 percent were females. 11.1 percent of the respondents were below 21 years, 25.0 percent were between 21-30 years, 32.4 percent were between 31-40 years, 23.6 percent were between 41-50 years and 7.9 percent were 51 years and above. Regarding the level of education of the respondents, 27.8 percent had secondary education, 41.2 percent were graduates and 31.0 percent had post-graduate education. With respect to income, 43.9 percent earned less than N100,000 monthly, 30.1 percent earned between N100,000-N300,000, 14.8 percent earned between N300,001-N500,000 and 11.2 percent earned N500,001 and above. In terms of occupational distribution, 27.3 percent were in government service, 31.9 percent were in private service, 21.9 percent were self-employed while 18.9 percent were students.

Socio-demographic Factors with respect to Perceived ATM Service Quality

Table 2: Descriptive Statistics of Socio-demographic Factors with respect to Perceived ATM Service Quality

Socio-demographic Variable		Frequency	Mean	Std. Deviation
Gender	Male	113	2.99	0.713
	Female	103	3.07	0.757
	Total	216		
Age	Below 21	24	3.60	0.706
	21-30	54	3.71	0.656
	31-40	70	3.27	0.663
	41-50	51	2.53	0.642
	51 and above	17	1.99	0.671
	Total	216		
Education	Secondary	60	3.09	0.758
	Graduate	89	3.39	0.697
	Post-graduate	67	2.67	0.719
	Total	216		
Income	Below N100,000	95	3.68	0.786
	N100,000 - N300,000	65	3.40	0.710
	N300,001 - N500,000	32	2.57	0.726
	N500,001 and above	24	2.43	0.692
	Total	216		
Occupation	Government Service	59	2.85	0.738
	Private Service	69	3.12	0.615
	Self-employed	47	2.98	0.620
	Student	41	3.03	0.683
	Total	216		

Source: Field Survey (2017)

Table 2 shows the descriptive statistics of perceived ATM service quality among the socio-demographic factors. As indicated in the table, the perception of ATM service quality is higher among females (3.07) than males (2.99). With respect to age, the perception of

ATM service quality was found to be higher among those within the age bracket of 21-30 (3.71). For education, the perception of ATM service quality is higher among graduates (3.39). With respect to income, the perception of ATM service quality is higher among those with income below N100,000 (3.68) while for occupation, the perception of ATM service quality is higher among those working in private service (3.12). The results seem to suggest that the perception of ATM service quality is higher for females who are aged 21 to 30, have graduate education, earn up to N100,000 and are in private service. To examine if the differences in the perception of ATM service quality among the socio-demographic factors are significant, General Linear Model (GLM) analysis was conducted.

Table 3: Summary of GLM Analysis of Socio-demographic Factors and Perceived ATM Service Quality

Source	Type III Sum of Squares	Df	Mean Square	F	B	t-value	p-value	R ²
Corrected Model	33.001	5	6.600	13.906			0.000	0.135
Intercept	23.635	1	23.635	49.795	1.560	7.057	0.000	
Gender	0.867	1	0.867	1.827	0.088	1.352	0.177	
Age	15.437	1	15.437	32.522	-0.242	-5.703	0.000	
Education	21.961	1	21.961	46.268	0.311	6.802	0.000	
Income	4.876	1	4.876	10.274	-0.100	-3.205	0.001	
Occupation	0.242	1	0.242	0.509	0.023	0.713	0.476	
Error	211.691	200	0.475					
Total	2133.604	216						
Corrected Total	244.692	215						

Source: Field Survey (2017)

Table 3 shows the GLM analysis of the influence of socio-demographic factors on perceived ATM service quality. The analysis indicates an R Square value of 0.135 meaning that socio-demographic factors explain 13.5 percent of the variation in perceived ATM service quality. The result of the analysis also indicates that out of the five socio-demographic factors, only age ($F=32.522$, $\beta=-0.242$, $t=-5.703$, $p=0.000<0.05$), education ($F=46.268$, $\beta=0.311$, $t=6.802$, $p=0.000<0.05$) and income ($F=10.274$, $\beta=-0.100$, $t=-3.205$, $p=0.001<0.05$) have statistical significant influence on perceived ATM service quality while gender ($F=1.827$, $\beta=0.088$, $t=1.352$, $p=0.177>0.05$) and occupation ($F=0.509$, $\beta=0.023$, $t=0.713$, $p=0.476>0.05$) have no statistical significant influence on perceived ATM service quality. This implies that some of the socio-demographic factors (age, education and income) have significant influence on perceived ATM service quality while others (gender and occupation) do not have significant influence on perceived ATM service quality. The result in Table 3 further shows that age and income have negative relationship with perceived ATM service quality. This means that the higher the age or income of a bank customer, the lower the perception of ATM service quality. Education has a positive

relationship with perceived ATM service quality. This seems to suggest that the higher the level of education, the higher the perception of ATM service quality.

Differences in the Experience of Service Quality Dimensions among ATM Users Based on their Socio-demographic Characteristics

The independent sample t-test and one way Analysis of Variance (ANOVA) statistics were used to examine the extent to which service quality dimensions vary with socio-demographic characteristics of ATM users. The independent sample t-test statistics was used for gender while ANOVA technique was used for age, education, income and occupation. Table 4 presents the t-test result on gender and service quality dimensions.

Table 4: T-test on Gender and Service Quality Dimensions

		F	Sig.	T	Df
Reliability	Equal variances assumed	1.755	0.186	0.123	214
	Equal variances not assumed			0.123	205.016
Convenience	Equal variances assumed	8.168	0.004	-0.411	214
	Equal variances not assumed			-0.408	190.019
Ease of Use	Equal variances assumed	3.102	0.079	0.031	214
	Equal variances not assumed			0.030	157.286
Security	Equal variances assumed	27.939	0.000	1.195	214
	Equal variances not assumed			1.191	203.463
Fulfillment	Equal variances assumed	0.839	0.360	0.556	214
	Equal variances not assumed			0.557	212.880
Responsiveness	Equal variances assumed	6.724	0.010	-0.826	214
	Equal variances not assumed			-0.820	190.226

Source: Field Survey (2017)

Table 4 shows the t-test analysis of gender differences with respect to service quality dimensions. The results reveal that there are significant differences in the experience of service quality dimensions with regard to convenience ($F=8.168$, $t=-0.411$, $p=0.004<0.05$), security ($F=27.939$, $t=1.195$, $p=0.000<0.05$) and responsiveness ($F=6.724$, $t=-0.826$, $p=0.010<0.05$). With respect to reliability ($F=1.755$, $t=0.123$, $p=0.186>0.05$), ease of use ($F=3.102$, $t=0.031$, $p=0.079>0.05$) and fulfillment ($F=0.839$, $t=0.556$, $p=0.360>0.05$), significant differences were not found. This means that both males and females have similar experiences with the reliability, ease of use and fulfilment of ATM.

Table 5: ANOVA Result on Age and Service Quality Dimensions

Variable		Sum of Squares	Df	Mean Square	F	Sig
Reliability	Between Groups	0.487	4	0.244	0.487	0.615
	Within Groups	224.515	211	0.500		
	Total	225.002	215			
Convenience	Between Groups	7.185	4	3.592	7.977	0.000
	Within Groups	202.190	211	0.450		
	Total	209.375	215			
Ease of Use	Between Groups	8.259	4	4.130	10.795	0.000
	Within Groups	171.765	211	0.383		
	Total	180.024	215			
Security	Between Groups	4.949	4	2.474	6.842	0.001
	Within Groups	162.362	211	0.362		
	Total	167.311	215			
Fulfillment	Between Groups	0.117	4	0.058	0.142	0.868
	Within Groups	184.704	211	0.411		
	Total	184.820	215			
Responsiveness	Between Groups	3.650	4	1.825	3.983	0.019
	Within Groups	205.725	211	0.458		
	Total	209.375	215			

Source: Field Survey (2017)

Table 5 shows the ANOVA result of the differences in service quality dimensions with respect to age. The result indicates that there are significant differences in the experience of service quality dimensions with respect to convenience ($F=7.977$, $p=0.000<0.05$), ease of use ($F=10.795$, $p=0.000<0.05$), security ($F=6.842$, $p=0.001<0.05$) and responsiveness ($F=3.983$, $p=0.019<0.05$). With respect to reliability ($F=0.487$, $p=0.615>0.05$) and fulfillment ($F=0.142$, $p=0.868>0.05$), significant differences were not found. This means that all the age groups have similar experiences regarding reliability and fulfillment.

Table 6: ANOVA Result on Education and Service Quality Dimensions

Variable		Sum of Squares	Df	Mean Square	F	Sig
Reliability	Between Groups	1.120	2	0.560	1.077	0.341
	Within Groups	233.435	213	0.520		
	Total	234.555	215			

Convenience	Between Groups	2.683	2	1.341 0.367	3.659	0.027
	Within Groups	164.628	213			
	Total	167.311	215			
Ease of Use	Between Groups	0.517	2	0.259 0.410	0.630	0.533
	Within Groups	184.303	213			
	Total	184.820	215			
Security	Between Groups	12.914	2	6.457 0.494	13.081	0.000
	Within Groups	221.641	213			
	Total	234.555	215			
Fulfillment	Between Groups	1.502	2	0.751 0.398	1.889	0.152
	Within Groups	178.522	213			
	Total	180.024	215			
Responsiveness	Between Groups	11.186	2	5.593 0.498	11.227	0.000
	Within Groups	223.675	213			
	Total	234.860	215			

Source: Field Survey (2017)

Table 6 shows the ANOVA result of the differences in service quality dimensions with respect to level of education. The result reveals that there are significant differences in the experience of service quality dimensions with respect to convenience ($F=3.659$, $p=0.027<0.05$), security ($F=13.081$, $p=0.000<0.05$) and responsiveness ($F=11.227$, $p=0.000<0.05$). With respect to reliability ($F=1.077$, $p=0.341>0.05$), ease of use ($F=0.630$, $p=0.533>0.05$) and fulfillment ($F=1.889$, $p=0.152>0.05$), significant differences were not found. This implies that all the levels of education have similar experiences regarding reliability, ease of use and fulfillment.

Table 7: ANOVA Result on Income and Service Quality Dimensions

Variable		Sum of Squares	Df	Mean Square	F	Sig
Reliability	Between Groups	2.492	3	0.831 0.368	2.258	0.081
	Within Groups	164.819	212			
	Total	167.311	215			
Convenience	Between Groups	5.806	3	1.935 0.454	4.259	0.006
	Within Groups	203.570	212			
	Total	209.375	215			
Ease of Use	Between Groups	4.345	3	1.448 0.536	2.700	0.055
	Within Groups	240.347	212			
	Total	244.692	215			
Security	Between Groups	4.657	3	1.552 0.514	3.021	0.030
	Within Groups	230.203	212			
	Total	234.860	215			

Fulfillment	Between Groups	2.080	3	0.693	1.700	0.166
	Within Groups	182.741	212	0.408		
	Total	184.820	215			
Responsiveness	Between Groups	5.635	3	1.878	3.676	0.012
	Within Groups	228.920	212	0.511		
	Total	234.555	215			

Source: Field Survey (2017)

The ANOVA result on Table 7 shows the experience of service quality dimensions with respect to income. The result shows that there are significant differences in the experience of service quality dimensions with respect to convenience ($F=4.259$, $p=0.006<0.05$), security ($F=3.021$, $p=0.030<0.05$) and responsiveness ($F=3.676$, $p=0.012<0.05$). With respect to reliability ($F=2.258$, $p=0.081>0.05$), ease of use ($F=2.700$, $p=0.055>0.05$) and fulfillment ($F=1.700$, $p=0.166>0.05$), significant differences were not found. This means that all the levels of income have similar experiences regarding reliability, ease of use and fulfillment.

Table 8: ANOVA Result on Occupation and Service Quality Dimensions

Variable		Sum of Squares	Df	Mean Square	F	Sig
Reliability	Between Groups	0.968	3	0.484	0.970	0.380
	Within Groups	224.034	212	0.499		
	Total	225.002	215			
Convenience	Between Groups	2.928	3	1.464	3.184	0.042
	Within Groups	206.447	212	0.460		
	Total	209.375	215			
Ease of Use	Between Groups	1.237	3	0.618	1.190	0.305
	Within Groups	233.318	212	0.520		
	Total	234.555	215			
Security	Between Groups	0.272	3	0.136	0.366	0.694
	Within Groups	167.039	212	0.372		
	Total	167.311	215			
Fulfillment	Between Groups	0.405	3	0.202	0.493	0.611
	Within Groups	184.416	212	0.411		
	Total	184.820	215			
Responsiveness	Between Groups	5.728	3	2.864	7.377	0.001
	Within Groups	174.297	212	0.388		
	Total	180.024	215			

Source: Field Survey (2017)

Table 8 shows the ANOVA result on the differences in the experience of service quality dimensions with respect to occupation. The result reveals that there are significant differences in the experience of service quality dimensions with respect to convenience ($F=3.184$, $p=0.042<0.05$) and fulfillment ($F=7.377$, $p=0.001<0.05$). With respect to reliability ($F=0.970$, $p=0.380>0.05$), ease of use ($F=1.190$, $p=0.305>0.05$), security ($F=0.366$,

$p=0.694>0.05$) and fulfillment ($F=0.493$, $p=0.611>0.05$), significant differences were not found. This means that the different occupational groups have similar experiences regarding reliability, ease of use, security and fulfillment. The results of the analyses reveal that among all the socio-demographic factors, there were no differences in terms of reliability and fulfillment while differences were observed with regard to convenience and responsiveness. Significant differences were observed with respect to ease of use and security in some socio-demographic factors while differences were not observed in some other socio-demographic factors. For instance, security was significant with respect to gender, age, education and income but was not significant with regard to occupation. Ease of use was significant with respect to age but was not significant with regard to gender, education, income and occupation.

DISCUSSION

This study examined the influence of socio-demographic factors (gender, age, education, income and occupation) on the perception of ATM service quality in Ikeja, Lagos. The results of the analysis show that age, education and income significantly influence the perception of ATM service quality. The relationship between socio-demographic variables and the perception of service quality has been a subject of investigation by scholars without a common conclusion. Some studies (Gupta and Bansal, 2011; Sein and Chey, 2014) found socio-demographic factors as significant factors influencing the perception of service quality while some other studies (Ramez, 2011) did not find socio-demographic factors to be significant. Some studies (Pooja, 2013; Irshad, *et al.*, 2013; Grazhdani and Merollari, 2015) found mixed results. The result of this study contradicts the finding of Ramez (2011) that age and education do not have significant influence on the perception of service quality. The result did not also support the finding of (Zalatar, 2012; Sein and Chey, 2014; Grazhdani and Merollari, 2015) that gender significantly influence the perception of service quality. The finding of this study that income and education have significant impact on the perception of service quality while gender does not have significant impact is in agreement with the finding of (Irshad, *et al.*, 2013). However, there is disagreement with respect to age as it was not found to be significant in the study of Irshad, *et al.* (2013). Some other studies (Sein and Chey, 2014; Grazhdani and Merollari, 2015) also found age to be a significant factor influencing the perception of service quality. With respect to occupation, some of the studies (Gupta and Bansal, 2011; Pooja, 2013) found it to be significant but in agreement with the study of Grazhdani and Merollari (2015), this study did not find occupation to be significant. The study also examined if there are differences in the experience of service quality dimensions among ATM users. This was based on their socio-demographic characteristics. The results of the analysis reveal that there are significant differences with respect to convenience and responsiveness while significant differences were not observed with respect to reliability and fulfillment. Differences were found with ease of use for age only while differences were not found for gender, education, income and occupation. For security, differences were found with regard to gender, age, education and income while

differences were not found with respect to occupation. The findings of this study support the findings of Pooja (2014) that responsiveness dimension vary significantly with respect to gender and education. In this study, responsiveness was found to vary with regard to income and occupation but Pooja (2014) did not found them significant. In the study of Hagan (2015) and Rawal *et al.* (2015) reliability was found to be different with respect to gender and education but in this study, significant differences were not found. In agreement with the study of Rawal *et al.* (2015), significant differences were not found with respect to convenience. This indicates that the findings of this study support some previous findings and also deviate from some previous findings.

CONCLUSION

The purpose of this study is to investigate the influence of some socio-demographic factors on the perception of ATM service quality. The inability of the study to establish the influence of gender and occupation on the perceptions of service quality has implications for developing ATM marketing strategy. It implies that ATM service quality strategies should be based on age, education and income and not on gender and occupation. It was also revealed that there are differences in the experience of service quality dimensions in terms of socio-demographic factors with respect to convenience and responsiveness but there are no differences with regard to reliability and fulfillment of ATM. Convenience and responsiveness dimensions were significant in all the socio-demographic factors. Therefore, banks need to improve on these dimensions by taking into consideration the characteristics of ATM users. Banks need to see ATM service quality from the customer's perspective so as to meet or exceed their expectations. The findings from this study can be used by bank managers to better understand the sources of customers' perceived service quality and address them appropriately. The findings of this study also suggest that there is need to develop customer-related strategies that can fulfill customer requirements according to their expectations so as to increase customers' perceptions of ATM service quality.

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