The impact of perceived service quality dimensions on customer satisfaction in the airline industry in Ghana

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ABSTRACT

The purpose of this study is to survey the relationship between service quality and customer satisfaction and the main objective is to discuss the impact of perceived service quality dimensions on customer satisfaction in the airline industry in Ghana. The data were collected with self-administered questionnaire and interview. Perceived service quality was measured using modified SERVQUAL model. The Questionnaires were distributed to only international airline passengers at Kotoka international airport, Accra, Ghana at both arrival and departure Terminal. Descriptive analysis, reliability and validity analysis and correlation analysis, were performed to analyze the data. The findings revealed that all five dimensions of perceived service quality, namely responsiveness, reliability, empathy, Assurance, and tangibles had a significant and positive relationship with customer satisfaction. These results indicate in the airline industry, service quality is indeed a significant predictor of customer satisfaction. Improving airline service quality would result in higher passenger satisfaction. Failure to provide quality services to passengers may damage the airline image and cause negative impact on passenger's behavioral intentions.

Key words: *Service Quality; Customer Satisfaction; Airline industry; Ghana.*

1.0 Introduction

The purpose of this study is to investigate the relationship between the determinants of service quality on customer satisfaction among airline passengers. The most common definition of service quality is

the "comparison customers make between their expectations and perceptions of the received service" (Parasuraman et al., 1988).The relationship between service behavior and service quality has proven its role and importance in management/marketing (Heskett and Sasser, 2010; Hutchinsona et al., 2009). The concepts of service quality and service satisfaction have been highly considered and used in marketing texts and activities, during previous decades.

On the other hand, service loyalty is one of the most important structures in service marketing; due to its final effect on customers' repeated purchases, and in fact, those loyal customers who purchase repeatedly are considered as the base of any business (Caruana, 2002). The improvement of service quality, perceived value, and satisfaction ensures customers' loyalty (Kuo et al., 2009; Lai et al., 2009; Wu and Liang, 2009). Gronroos (2000) refers to three dimensions of output; technical quality, service performance quality, and organization's mental picture. Also, Lehtinen and Lehtinen (cited in Harrison, 2000) have referred to dimensions of physical quality, interactive quality, and organizational quality as three dimensions of service quality.

2.0 Methodology and Techniques Used

2.1 Service Quality

Service quality in management and marketing literature is the extent to which customers' perceptions of service meet and/or exceed their expectations Bowen & David, (2005) Thus service quality can intend to be the way in which customers are served in an organization which could be good or poor. Service quality, from the clients‟ or the customers‟ point of view, appears as a multidimensional concept (Levesque, 2000; Sureshchandar et al., 2002; Kang and James, 2004; Hakis et. al., 2000; Bigne et.al, 2003).

SERVQUAL model in the evaluation of service quality cited by Zeithaml et al (2006), stated that "service quality is a focused evaluation that reflects the customer's perception of reliability, assurance, responsiveness, empathy, and tangibles" (Zeithaml et al., 2006) they added that among these dimensions, "reliability" has been shown consistently to

be the most important dimension in service quality (Zeithaml et al., 2006) .The idea was that, consumers make service evaluations based on the technical dimension that is what is delivered and on the functional dimension that is how, why, who, and when it is delivered. (Laroche et al., 2004).Originally, SERVQUAL developed by (Parasuraman et al., 1988) showed ten dimensions. Later in 1988, these ten dimensions were cut down to five dimensions:

2.1.1 Responsiveness

SERVQUAL described responsiveness as "willingness to help customers and provide prompt service" (Parasuraman et al., 1988; Zeithaml et al 2006: Sureshchandar et al., 2002) this dimension is viewed as the `service time` for air passengers and when the customers expects the services to be completed. Responsiveness from SERVQUAL was also viewed as ´air hoisters assistance´ to passengers in obtaining what they need whiles on board, directing customers towards the items they need. Responsiveness is related to provisions of `accurate materials such as ear phone, pillow and cloth Audio – Video on Demand (AVOD) On – Board catering Inbound – Outbound theatres, updating airline website.

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2.1.2 Empathy

SERVQUAL described empathy as "caring, individual attention the firm provides to customers" (Parasuraman et al., 1988; Zeithaml et al 2006: Sureshchandar et al., 2002). This dimension was viewed as `welcoming passengers at the airport, checking inn and directing passenger to their seat paying attention and providing relevant answers. It also includes .baggage allowance charges and discounts / offers.

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2.1.3 Reliability

SERVQUAL describes reliability as "ability to perform the promised service dependably and accurately" (Parasuraman et al., 1988; Zeithaml et al 2006: Sureshchandar et al., 2002). This dimension was viewed as `Accurate service` for Passengers. Passenger view services provided reliable or perfect or bad. Reliability is also viewed as `time consciousness. Reliability was also viewed as ´less queuing and `handling of delayed flights.

2.1.4 Assurance

SERVQUAL describes assurance as "knowledge and courtesy of employees and their ability to inspire trust and confidence" (Parasuraman et al., 1988; Zeithaml et al 2006: Sureshchandar et al., 2002). This dimension was viewed as online seat booking, updating airline website and reservation / cancellation.

2.1.5 Tangibles

SERVQUAL describes tangibles as "physical facilities, equipments, and staff appearance. (Parasuraman et al., 1988; Zeithaml et al 2006: Sureshchandar et al., 2002) This dimension was viewed as cleanliness of cabin, seat comfort, crew friendliness /Language skills, cuisines provided, in – flight child care / bassinets newspapers and airline magazines.

2.2 Customer Satisfaction

Many researchers including (Robertson, 2001; Lovelock, Martey (2014) Patterson and Walker, 2001) conceptualize customer satisfaction as an individual's feeling of pleasure or disappointment resulting from comparing a product's perceived performance (or outcome) in relation to his or her expectations. Generally, there are two general conceptualizations of satisfaction, namely, transaction-specific satisfaction and cumulative satisfaction (Jones and Suh, 2000; Yi and La, 2004).Transaction-specific satisfaction is a customer's evaluation of his or her experience and reactions to a particular service encounter (Boshoff and Gray, 2004), and cumulative satisfaction refers to the customer's overall evaluation of the consumption experience to date (Johnson, Anderson and Fornell, 1995).

There are overwhelming arguments that it is more expensive to win new customers than to keep existing ones (Hormozi and Giles, 2004). This is in line with Athanassopoulos, Gounaris and Stathakopoulos‟s (2001) arguments that customer replacement costs, like advertising, promotion and sales expenses, are high and it takes time for new customers to become profitable. For many years customer satisfaction has been a major goal of business organizations, since it has been deemed to affect customer retention and companies‟ market share (Hansemark and Albinsson, 2004). Traditionally, satisfied customers have been thought of as less price sensitive, less influenced by

competitors, buying additional products and/or services and staying loyal longer (Zineldin, 2000).

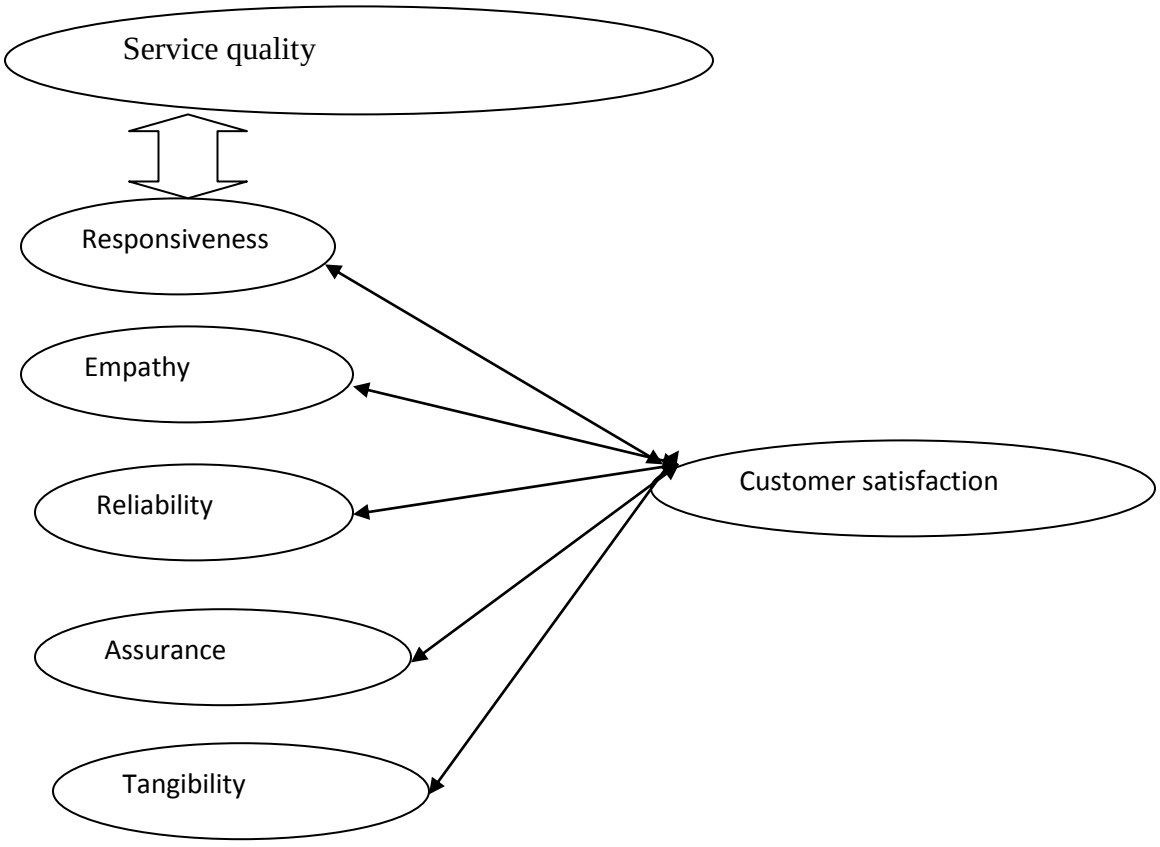
2.3 Link between Service Quality and Customer Satisfaction (The relationship between Service Quality and Customer Satisfaction).

A study conducted by Agbor (2011) on the topic, 'the relationship between service quality and customer satisfaction on a sample of 100 students on three service sectors in Umeå, revealed a positive relationship between customer satisfaction and service quality at P-value = 0.002 which is significant at p-value < 0.05.The Ho was rejected. Similarly, Archana and Subha (2012) conducted a study on service quality and passenger satisfaction on Indian airlines, on a sample of 270 passengers from Chennai international terminal of TamilNadu also revealed that Airline service dimensions have significant and positive influences on airline image and passengers" satisfaction intentions. The research suggested that failure to provide quality services to passengers may damage the airline image and cause negative impact on passengers" behavioral intentions. Regarding the relationship between customer satisfaction and service quality, Oliver (1993) first suggested that service quality would be antecedent to customer satisfaction regardless of whether these constructs were cumulative or transaction-specific. Some researchers have found empirical supports for the view of the point mentioned above (Spreng & Macky 1996); where customer satisfaction came as a result of service quality.

2.4 Research frame

Research frame work based on literature review

Fig1: Link between Service Quality and Customer Satisfaction



2.5 Research Hypotheses

Based on the above review, and research frame work hypotheses designed as the following:

H1: There is a significantly positive relationship between responsiveness and customer satisfaction.

H2: There is a significantly positive relationship between reliability and customer satisfaction.

H3: There is a significantly positive association between empathy and customer satisfaction.

H4: There is a significantly positive relationship between assurance and customer satisfaction.

H5: There is a significantly positive association between tangibility and customer satisfaction.

2.6 Objectives of the study

The purpose of this study is to investigate the relationship between the determinants of service quality on airline passenger's satisfaction .The specific research objectives of the study are;

- To assess the relationship between responsiveness and customer satisfaction.
- To investigate the relationship between reliability and customer satisfaction.
- To assess the relationship between empathy and customer satisfaction.
- To identify the relationship between assurance and customer satisfaction.
- To investigate the relationship between tangibility and customer satisfaction.

2.7 Problem of the study

Passengers of airlines are frequently very demanding for service quality this is due to the high level of risk involved when travelling by air. Their perception and expectation on high quality services grows day in day out, making it a big challenge for airline services to meet. Any airliner that meets passengers' expectation wins their trust. In the airline industries, customers choose to register their dissatisfaction about services they receive through complaining to the service provider or advice themselves of future relationship with the airline in question. Others decide to complain to an overarching regulatory agency in an attempt to bring light to a particularly egregious case of service failure. Passengers do what pleases them. This makes service quality a vital element to airlines operator. Besides Passengers satisfaction is based on the level of service quality provided by the airliners" (Saravana & Rao, 2007; Lee et al., 2000).Aside various researches have conflicting view about whether the relationship between service qualities is direct or inversely to customer satisfaction. In view of these, the researcher found it necessary to run each of the determinants of quality service against customer satisfaction to ascertain the true picture on the ground.

3.0 METHODOLOGY

A quantitative and qualitative design survey method was used in the empirical segment of the study (Terre Blanche, Durrheim & Painter 2006).The suitable sampling technique for this study is non-probability technique using convenience sampling. This is due to the difficulty in determining the specific list of passengers

3.1 Participants

The target population comprised various airline passengers who used the Kotoka international Airport, Accra, Ghana terminal during the period of May and June 2013. Selected passengers were randomly interviewed at different times of the day, on every day of the week, over a four week period. A sample of 353 passengers returned their questionnaires.

3.2 Data collection

Data were collected through the use of a structured questionnaire. The questionnaire was divided into five sections. Section A elicited general and biographical information about respondents. Section B elicited information on Responsiveness. Section C sought information on Empathy. The questions in Section D elicited information on Reliability The section E sought information on Assurance. The questions in Section F elicited information on Tangibility and Section G sought information on customer loyalty Likert scales anchored by strongly disagree (1) and strongly agree (5) were used.

3.3 Data analysis

The data is collected and entered into a computer using SPSS. The following statistics were used: Pearson correlation (r) to determine the relationship between service quality and customer satisfaction. According to Sekaran (2003) the correlation between two variables is considered a perfect positive correlation when it is close to +1, or perfect negative correlation when it close to -1. "Pearson correlation only shows the strength and direction of relationship.

Table 2. Supporting literature for measurement scales.

Dimension	scales
Responsiveness(RP)	[42,54]
Empathy(E)	[36,45]
Reliability (R)	[49,56]
Assurance (A)	[48,59]
Tangibility (T)	[49,56]
Customer satisfaction(C)	[42,56]

All of the measurement scales used, as indicated in **Table 2**, were based on previous research. Assuring the validity and reliability of the measures required supporting literature to validate the scales which were used in the research constructs. The service quality construct was measured using the scales and indices included in the work of ((Parasuraman et al., 1988; Zeithaml et al 2006: Sureshchandar et al., 2002) used the following variables to determine the construct of service quality service quality construct were measurement scales adapted from previous studies.

Table 3. Values of Cronbach's alpha for the research dimension

Dimension	value
Responsiveness(RP)	0,734
Empathy(E)	0,713
Reliability (R)	0,721
Assurance (A)	0.741
Tangibility (T)	0.754
Customer satisfaction(C)	0.721

A reliability test was carried out using Cronbach's alpha, which measures the internal consistency of a construct. The recommended minimum acceptable limit of reliability measure, as reported by (Sekaran, 2003) is 0.60. As shown in Table 3, all the constructs passed the reliability test.

Table 4. Descending means of the constructs service quality

Dimension	Mean	**Standard deviation**
Responsiveness(RP)	4.246	0,734
Empathy(E)	4.124	0,713
Reliability (R)	4.034	0,721
Assurance (A)	4.942	0.741
Tangibility (T)	4.021	0.754
Customer satisfaction(C)	4.067	0.721

The result shown in Table 4 indicates frequency and descriptive statistics used to determine the relative importance of each of the dimension. The service qualities shown in Table 4 have a mean above 4. Therefore it

concludes that all of constructs are of significant importance to the study.

Table 5. Skewness and Kurtosis for research constructs. Variable

Variable	Skewness	Kurtosis
Packaging	−0.345	−0.504
Price	−0.254	−0.07
Brand awareness	−0.532	−0.65

(Source field work, 2013)

From Table 5, Kurtosis and Skewness values were used to check the normality of each variable used in the research. Skewness values larger than (+1) or smaller than (−1), as suggested by Hair.Babin, Money. and Samouel. (2003*)* indicate a substantially skewed distribution.

Demographic information

Table 6; Demographic information

Variables	Frequency	Percentage
Gender		
Female	149	42.2
Male	204	57.8
Total	353	100.0

Besides according to Hair., Anderson., Tatham and Black. (1998) added that a curve is too peaked when the Kurtosis exceeds (+3) and is too flat when it is below (−3). This means Skewness values within the range of (−1) to (+1) and Kurtosis values within the range of (−3) to (+3) indicate an acceptable range. As shown in Table 5, the values of Skewness and Kurtosis for each variable indicate that the research constructs fell within the acceptable range.

4.0Result and Discussion

Following the guidelines indicated in the research methodology section, we collected data in 2013.

Age		
18-28	59	16.7
29-39	106	30.0
40-59	156	44.2
60-69	19	5.3
70-99	13	3.8
Total	353	100
International Airlines		
Egypt Air	38	10.8
Turkey Air	35	10.0
KLM	37	10.5
British Airways'	72	20.3
Emirate	17	4.9
Swissair	21	6.1
South African Airways	33	9.3
Alitalia	17	4.8
Namibia Air	13	3.6
Ethiopian airways	23	6.5
Kenya Airways	34	9.6
Air Morocco	13	3.6
No. of times on board		
Below 5 times	163	46
Between 6 to 10	156	44
More than 11	34	10
Total	353	100

Survey results, 2013

A detailed demographic analysis of respondents is presented in Table 2. Personal and face-to-face interviews of passengers waiting for their flights were conducted at Kotoka international airport, Accra Ghana Questionnaires were distributed to the passengers who had travelled at least once on international flight in the past 2 years. 353 completed questionnaires were collected from the respondents. Among the sample data: 57.8%

respondents are male. This means more men use the airlines than women. Also, 44.2% are in the 40 – 59 age groups, this represent the modal age. Besides, 20.3% respondents are British airways (BA) passengers, these shows that BA is the highest patronized airline.

Correlations Analysis

Table 7; Correlations analysis

	RP	**E**	**R**	**T**	**A**	**C**
RP	**1**	014(.761)	.318(**).000	003(.655)	126(**).002	.113(**).003
E	014(.761)	**1**	.099(*).027	.013(.771)	143(**).001	.100(**).004
R	.318(**).000	.099(*).027	**1**	.120(.662)	170(.118)	.104(**).004
T	003(.655)	.013(.771)	.120(.662)	**1**	042(.621)	.1.01(**).002
A	.126(**).002	143(**).001	170(.118)	042(.621)	**1**	.-145(**).002
C	.113(**).003	.100(**).004	.104(**).004	1.01(**).002	145(**).002	**1**

** Correlation is significant at the 0.01 level (2-tailed).

(Source field work, 2013)

Relationship between Responsiveness and customer satisfaction

The Pearson correlation in Table 7 shows that there is a positive and significant relationship between responsiveness and customer satisfaction r = 0.003, p < .01). Therefore, the research hypothesis 1 is accepted and proven to be true. This means an increase in responsiveness level would increase customer satisfaction.

Relationship between Empathy and customer satisfaction

The Pearson correlation in Table 7 shows that there is a positive and significant relationship between empathy and customer satisfaction r = 0.004, p < .01). Therefore, the research hypothesis 2 is accepted and proven to be true. This means an increase in empathy would lead to increase in customer satisfaction.

Relationship between Reliability and customer satisfaction

The Pearson correlation in Table 7 shows that there is a positive and significant relationship between reliability and customer satisfaction r = 0.004, p < .01). Therefore, the research hypothesis 3 is accepted and proven to be true. That's mean any increase in reliability will be followed by increase in customer satisfaction.

Relationship between Assurance and customer satisfaction

The Pearson correlation in Table 3 shows that there is a positive and significant relationship between assurance and customer satisfaction r = 0.002, p < .01). Therefore, the research hypothesis 4 is accepted and proven to be true. This means an increase in the level of assurance will be followed with increase in customer satisfaction.

Relationship between Tangibility and customer satisfaction

The Pearson correlation in Table 3 shows that there is a positive and significant relationship between tangibility and customer satisfaction r = 0.002, p < .01). Therefore, the research hypothesis 5 is accepted and proven to be true. This means an increase in tangibility would lead to an increase in customer satisfaction.

Discussion

The study examines the relationship between service quality and customer satisfaction among airlines passengers in Ghana. Investigation conducted revealed that all the hypotheses formulated after a reviewed literature were accepted. This is in congruent with the findings of Agbor (2011) that customer satisfaction relates positively with service quality. This implies that airliners that invest resources into service quality satisfy her customers. (Archana. and Subha M.V. 2012). Many authors have agreed to the fact that service quality determines customer satisfaction. Parasuraman et al., (1998) in their study, proposed that high perceived service quality leads to increased customer satisfaction. Customer satisfaction is based on level of service quality that is provided by airliners.(Saravana & Rao, 2007; Lee et al., 2000). Other researchers has proven a relationship between customer satisfaction and service quality exist. (Sivadas & Baker-Prewitt, 2000; Wang et al., 2002; Kuo-, 2003, Liang & Zhang, 2009 ; Gera, 2011, ; Sureshchandar, et al., 2002).

Oliver (1993) suggested that service quality is an antecedent to customer satisfaction. According to (Anderson & Sullivan, 1993; Fornell et al 1996; Spreng & Macky 1996) customer satisfaction came as a result of service quality.

Conclusion and Recommendation

Airline service dimensions were found to have significant and positive influences on airline image and passengers‟ satisfaction intentions. Satisfied passengers consider building a relationship. Failure to provide quality services may damage the airline image and cause negative impact on passenger's behavioral intentions.

Airlines operator should channel resource in to improving customer service to reduce the number of complaints from passengers to avoid been branded as a worst airliner. Besides, customer determines quality; operators must create a sound relationship with passenger, to ascertained and deliver their needs. A passenger that pays more expects higher service quality. (Business Class)

Employees should be trained to assist and or response to clients in difficulties especially; clients that miss or cancel or rescheduled flight. Refund should be paid promptly whiles clients transiting more than six hours must be fed. Employees should exhibit empathy before boarding, during boarding and at arriving. Extra luggage charges should not bet exorbitant. Besides minimize or prevent situations where passengers arrive ahead of their luggages. Last minute cancelling of flight should be a cost to passengers.

Airlines must perform what they promise dependably and accurately to gain clients trust. 'Check in Attendants' should be time conscious as passenger might have waited far too long already and need to be attended to quickly to avoid long queue. Employees should have what it takes to inspire trust and confidence in the passenger's. Airlines must stop cancelations of valid reservation without the knowledge of their prospective clients. Clients look out for clean cabin, comfort seats, friendly crew, versatile language skills capability, flight child care / bassinets newspapers and airline magazines must be the priorities of any air carrier.

Limitation of the study

The decision about the size of the sample was taken considering time and cost, the need of precision and a variety of further considerations. Due to the limit of time and costs, the population was narrowed international airlines passengers alone .This study is also limited to few service quality

construct other existing construct were excluded in the study.

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