

Evaluation of passengers' perceptions on service quality in South African owned airlines

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Abstract

The principal aim of this study was to evaluate passengers' perception on service quality in South African owned airlines. The Servqual and Gaps models were the theoretical concepts underlying this study. The method used for this study was quantitative research leaning on cross-sectional analysis (sample survey). Primary data was collected from 700 passengers at O.R. Tambo International Airport in Johannesburg and King Shaka International Airport in Durban. In all, 684 questionnaires were completed and returned by respondents', therefore the data-collection response rate was 97,7%.

The findings of the study revealed that: First, passengers expected high standard service quality from South African owned airlines. Second, significant statistical gaps existed between passengers' expectations and perceptions of service quality delivered to passengers. Third, service delivery by South African owned airlines in the area of staff empathy towards passengers was weak and needing some improvement. Fourth, passengers were satisfied that South African owned airlines operated in an accident-free and safe environment, thus boosting passengers' confidence to continue flying with these airlines despite significant gaps in the service delivery.

Managerial implications of the study and recommendations to close service quality gaps in South African owned airlines are highlighted in this study.

Key phrases

airline industry; quality, satisfaction; Servqual

1. INTRODUCTION

Airline companies play a crucial role in the transport value chain by ferrying passengers and goods globally. The air transportation value chain over the past decades has supported countries in the areas of tourism, trade and commerce, globalisation, integration, and international relations. Society relies heavily on an air transport system, and the airlines have had a tremendous influence on every segment of the human race. The dependence by modern society on aircraft in recent years has grown exponentially to the extent that human activities cannot easily be accomplished without airlines. Whether in recessionary or economic boom times, people will travel by air for convenience, proximity, comfort, and speed.

1.1 Problem investigated

Globally, airlines rely heavily on passengers as a core source of revenue and profitability; passengers being the nucleus of stakeholders in the air-transport industry. Since the passenger is the driving force behind the formation of airline companies, delivering top service quality to passengers should be of extreme importance to airlines. In South Africa it is uncertain whether airline service delivery is measuring up to passengers' expectations and, if not, where are the gaps, and how can South African owned airlines meet these expectations? The uncertainty surrounding the performance of South African owned airlines with regard to providing the perceived and expected service quality delivery to passengers and the dearth of research in this area from the South African perspective necessitated this empirical study.

1.2 Research objectives

In an attempt to find solutions to the research problem and to provide direction to this study, the following research objectives were formulated:

- To measure the level of expectations of passengers towards the service quality provided by South African owned airlines.

- To measure the passengers' perceptions towards service quality of South African owned airlines.
- To establish whether there is a significant gap between expectations and perceptions of passengers on the service quality provided by South African owned airlines.

These objectives were intended to evaluate the passenger service quality of South African owned airlines and to highlight the importance of passenger service quality in the airline industry.

The significance of this study is that it brings cognitive information on the subject to all stakeholders namely: passengers, airlines, staff, managers, practitioners, academics and society in general.

2. LITERATURE REVIEW

Fundamentally, South African air passengers, the mainstay of the air-transport value chain, expect excellent service quality from South African owned airlines. Strategically, service quality is becoming a common means for airline companies to win competitive advantage, with airline companies adopting diverse strategies to outmanoeuvre one another (Chen 2013:152; Namukasa 2013: 520-532; Shanka 2012:173).

2.1 Brief overview of South African owned airlines

The South African air-transport industry was deregulated in July 1991, with the intention of encouraging competition in the airline industry, reducing prices, and increasing efficiency (among many other factors) (Luke & Walters 2013:1-11). Following deregulation, the South African owned airlines were operational in South Africa as low cost airlines (LCA) and traditional airlines (TA).

At the time of this study these airlines were identified as (1) Airline G (LCA), operating on domestic and regional routes (2) Airline X (LCA/TA), operating on global, regional and domestic routes (3) Airline C (LCA), operating on domestic routes (4) Airline T (LCA) operating on domestic and regional routes (5) Airline Y(TA) operating on global routes and (6) Airline Z(LCA/TA) operating on domestic and regional routes (Luke & Walters 2013:1-11).

2.2 Airline service quality in South Africa

Academic research into service quality in the airline industry in South Africa has been minimal. However, prior academic research from the South African perspective has been conducted on some aspects of the airline industry (Campbell & Vigar-Ellis 2012:97-119; De Jager, Van Zyl & Toriola 2012:19-21; De Meyer & Mostert 2011:42-49; Lubbe, Douglas & Zambellis 2010:224-227; Luke & Walters 2013:1-11, amongst others).

Therefore this study has contributed to filling the research gap within the area of airline service quality in South Africa.

2.3 Impact of airline service quality

In the airline services' sector, the level of quality service(s) provided by airlines to a large extent determines the performance of the airline firm (Shanka 2012:173). This is because competition in the airline services' sector is extremely high Chen (2013:152; Kim 2015:32) and the continued existence of airline firms depends on excellent delivery of quality service to passengers (Shanka 2012:173).

This stance is supported by many researchers who have long viewed service quality-linked constructs as paramount within the airline industry (Chikwendu, Ejem & Ezenwa 2012:117-126). In order to meet the core imperatives for the survival of airlines, namely, achieving corporate goals/business objectives, generating sustainable revenue, improving profitability, sustaining growth and withstanding competitive pressures; service quality to customers cannot be ignored by airlines (Archana & Subha 2012:51; Shanka 2012:173).

The requirement for airlines to provide service quality arises because passengers expect value for money, and are continually making new service quality demands on airlines (Wang, Hsu, Lin & Tseng 2011:419; Wattanacharoensil & Yoopetch 2012:286). Passengers expect the service provision from airlines to meet expectations and provide satisfaction.

Therefore, providing exceptional service quality for the fulfilment of customers is an important issue confronting the service industry as a whole, which includes the airline companies (Janawade, Bertrand, Léo & Philippe 2015:279; Pakdil & Aydm 2007:229-237; Shanka 2012:173; Wattanacharoensil & Yoopetch 2012:286).

2.4 Thoughts on service quality

The most frequently used definition of service quality is the degree to which a service provision satisfies the customers' requirements or expectations (Wang *et al.* 2011:437). Additionally, service quality is defined in other literature as the dissimilarity between customer expectations of service and perceived service. Where expectations are superior to performance, perceived quality is acceptable, and customer satisfaction occurs (Parasuraman, Zeithaml & Berry 1985:41-50).

The conceptualisation of service quality in literature is viewed from many angles by researchers. The unique features of service(s) such as: intangibility, heterogeneity, inseparability, perishability and ownership (Fitzsimmons & Fitzsimmons 2011:20; Lovelock & Wirtz 2011:43) all complicate service quality determination compared with the finished product on quality, making evaluation of service quality complicated (Prakash & Mohanty 2013:1051).

Early researchers asserted that the way in which the consumers evaluate a service is deduced from the overall opinion and prediction of the customer with regard to the service (Parasuraman *et al.* 1988:12-40). Parasuraman *et al.* (1988:12-40) identified the key elements of constructs on service quality as being based on five dimensions, namely tangibility, reliability, responsiveness, assurance and empathy. However, Grönroos (2007:73) suggested a two-dimensional component of service quality comprising technical and functional components. Technical components refer to the tangible aspects of the service delivery, while the functional components refer to the performance of the service. Delivery of service at these levels provides for the overall judgement of the consumer on service quality (Grönroos 2007:73).

2.4.1 Air passengers' expectations

The foundation for providing service quality in the airlines, is management's aptitude for understanding what customers' desire and expect (Arif, Gupta & Williams 2013:1). Indeed, understanding or appreciation of customers' expectations by management is crucial in defining and delivering high-quality service (Grönroos 2007:13). The expectation for acquisition of products or services may be thought of as a prior assessment and future anticipated performance of the product or services, which may influence the decision of the passenger (Aksoy, Atilgan & Akinci 2003:343).

The severe competition in the airline industry and the incessant demand (Peppers & Rogers, 2011:171) and expectations from passengers (Allard & Moura 2015:251–277) complicates matters in airline management's identifying exactly what passengers really want in terms of service expectations (Han, Ham, Yang & Baek 2012:1103-111). Consequently, airlines are under extreme pressure to perform efficiently on service quality delivery, or stand the risk of losing passengers to more efficient airline companies (Han *et al.* 2012:1104). However, there is a debate on what is perceived to be pleasing and acceptable to the passenger since passengers have varied needs and expectations.

2.4.2 Air passengers' perceptions

Passengers expect value from airlines when acquiring services (Kim 2015:17; Timm 2008:3). Prior studies consider perceived value as generally the customer's assessment of a product or service with individual judgement made on its performance (Baker 2013:68; Kim 2015:17). Although a customer's perceived value may be subjective, it has a far-reaching impact on customer satisfaction, loyalty and impending behaviour such as future patronage and re-purchases (Janawade *et al.* 2015:279; Kim 2015:17; Wittmer & Rowley 2014:23).

2.5 Why measure service quality gaps?

The critical question to be addressed is: why should airlines measure service quality? In view of the fact that the airline industry is highly competitive, it is critical for airline to measure the level of their service quality offering against their competitors. The lack of measurement of service quality by managers may lead to a situation in which managers would not know whether gaps exist in the service delivery (Naidoo & Mutinta 2014:219-229).

2.5.1 Measuring service-quality gaps in the airlines

From the airline perspective, the following causes validate service quality measurement.

- First, measuring high quality service by airline companies promotes competitive advantage and profitability (Baker 2013:68; Erdil & Yıldız 2011:1232; Wu & Cheng 2013:13-22) to the airline company over its rivals in the industry.
- Second, service quality measurement enables airline companies to set clear standards which become the basis for future service delivery (Chikwendu *et al.* 2012:119).

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- Third, measuring service quality is a competitive marketing strategy tool (Arif *et al.* 2013:2; Wattanacharoensil & Yoopetch 2012:280) for enhancing the airline's ability to compete favourably in the marketplace.
 - Measuring service quality provides airline companies with vital information to effectively formulate a formidable marketing strategy (Arif *et al.* 2013:1).
 - Fourth, measuring service quality makes it possible for airlines to match the ever-sophisticated expectations of passengers as increasingly; passengers are demanding many types of service from airlines (Wu & Cheng 2013:13-22).
 - Fifth, by understanding the expectations of passengers, airline management is able to allocate resources for improvement of service quality to their passengers (Aydin & Yildirim 2012:220).
 - Sixth, prior research has established a close connection between customer satisfaction and corporate performance (Naumann 2011:21).

2.5.2 Airline service and processes

Service quality in the airline industry is focused on delivering efficient and satisfactory services to the passenger. Service delivery in the airline industry is centred on certain procedures and processes, in addition to tangibles such as the facilities the airline company uses in delivering services. According to Chiou & Chen (2012:407), unlike other transport modes, the airline service procedures/processes for travelling are much more complex.

Consequently, Chiou & Chen (2012:407) identify eight areas in the airline service-delivery process environment in which passengers expect quality service delivery. These processes are: seat reservation, ground service, flight operation, cabin facilities, meal service, cabin service, baggage delivery, and complaint response.

Additionally, Chiou & Chen (2012:407) are of the opinion that customer satisfaction in one of these services may impact the other services at later stages of the process, since services in the airline industry, like many service industries, are simultaneously produced and consumed (Kotler & Keller 2012:381; Tolpa 2012:62; Wei-Chuan 2015:4). Furthermore, other researchers have identified various processes by which airline companies could evaluate service delivery. Namukasa (2013:520) identified three airline services as central to air passengers, namely, pre-flight, in-flight, and post-flight services. Nonetheless, Tolpa

(2012:62) provides nine process areas in which passengers require quality-service delivery. These comprise ticket purchase, pre-flight services, check-in, airport services, departure, in-flight services, arrival, baggage handling and post-arrival services.

2.5.3 Service quality and passenger intentions

According to Wattanacharoensil & Yoopetch (2012:287), service quality evaluation studies have had a significant impact on passenger decisions. The issue of service quality cannot be underrated in the airline industry in view of the intensely competitive environment in which airlines operate (Chen & Hu 2013:1084; Erdil & Yıldız 2011:1232). Recruiting and retaining passengers under intense competition is a ceaseless battle for airline companies (Archana & Subha 2012:50; Chen & Hu 2013:1084).

Consequently, airlines deploy various strategies, including price, as vital weapons of choice. However, pricing strategy alone for competitive advantage in the airline industry is unsustainable, because rival airlines respond quickly to counter such schemes (Chen & Hu 2013:1084). Although progressive pricing strategies may to some extent yield results, combining price with improved service quality may prove more valuable (Harvey & Turnbull 2015:311). Delivering superior service quality to passengers places service firms in a better position to gain the competitive advantage, customer patronage, retention, market share, loyalty and increased profitability (Archana & Subha 2012:51; Chen & Hu 2013:1084).

3. RESEARCH METHODOLOGY

A survey-based research technique was adopted for this study using a descriptive research approach focusing on cross-sectional analysis (sample survey). This study is therefore quantitative in nature, using primary data. A five-point Likert-scale-type questionnaire (instrument) was developed with influences from the Servqual and Gaps models for conducting the survey (Parasuraman *et al.* 1985:41-50; 1988:12-40). The instrument consisted of both closed and open statements (Chikwendu *et al.* 2012:117-125; Parasuraman *et al.* 1985:41-50; 1988:12-40).

3.1 Ethical requirements

Prior to commencement of this study the instrument was approved for clearance by the University of KwaZulu-Natal's Research Ethics Committee. The gatekeeper's letter of

approval for this study was obtained from the management of Airport Company of South Africa (ACSA). The study was conducted in compliance with the University of KwaZulu-Natal's research requirements on anonymity, confidentiality, independent work and plagiarism.

3.2 Target population

The target population for this study consisted of seventeen-million four-hundred-thousand passengers (both domestic and international), (ACSA 2014:114) who travelled through the O.R. Tambo International airport in Johannesburg and King Shaka International airport in Durban from January to December, 2014 .

3.3 Sampling method

The sampling method used for this study was the non-probability convenience sampling - a type of non-probability sampling in which people are sampled because they are "convenient" sources of data for the researcher (Battaglia & Lavrakas 2008:1; Sekaran & Bougie 2013:252). In order to avoid double counting at both OR Tambo and King Shaka airports of passengers the researchers' advised respondents not to complete the questionnaires if they had previously done so in the respective airports. There was only one incident where the researchers' sampled a respondent at King Shaka and the respondent was met again at OR Tambo. The respondent was honest and owned up, thus the double counting was avoided. Therefore double sampling was avoided in this study.

3.4 Sampling and response rate

The sample for this study was seven hundred passengers selected from the target population based on the non-probability convenient sampling method. "In convenience sampling the representativeness of the sample is generally less of a concern ... a researcher may want data collected quickly using a low-cost method that does not involve scientific sampling" (Battaglia & Lavrakas 2013:149). This method was selected in response to time, budget and cost constraints.

Additionally, prior studies in South Africa on airline passengers' surveys had used a non-probability convenience sampling method (Campbell & Vigar-Ellis 2012:97-119; Mostert, De Meyer & van Rensburg 2009:118), therefore the earlier studies guided this new study. The

sample size was determined using the above-mentioned method. In all, seven hundred questionnaires were directly distributed at O.R. Tambo International airport in Johannesburg, and King Shaka International airport in Durban. The response rate for the data collection was 97,71%. In all, six hundred and eighty four questionnaires were duly completed and returned. Sixteen (2,29%) of the seven hundred distributed questionnaires, were not returned. Therefore these were excluded from the data analysis.

3.5 Validation and reliability

The instrument was first subjected to validation and reliability processes through an internal consistency review. Secondly, Cronbach's alpha testing, pilot testing and content validation were conducted on the instrument. Thirdly, expert opinions on the validity of the instrument were obtained from academics and industry experts.

In this study the overall Cronbach's alpha coefficient test was calculated as 0,900(90%). Similarly the Cronbach's alpha was calculated as 0,810 (81%) for data reliability. These results were within the expected levels of 0.000 to 1.000 (Raut & Veer 2014:68; Sekaran & Bougie 2013:228).

4. FINDINGS & IMPLICATIONS

The findings of this study are discussed under this section, starting with the evaluation of information relating to service quality expectations from South African owned airline passengers.

4.1 Evaluation of service quality expectations

The study adapted the Parasuraman *et al.* (1988:12-40) Servqual instrument for evaluating service quality expectations and perceptions in the South African airline industry. This instrument was used in a similar research environment in the airline industry and proved to be reliable (Chikwendu *et al.* 2012:117-126; Tolpa 2012; Shanka 2012:173-180).

This study listed 36 service-attribute statements (Table1), classified under the five Servqual dimensions of Parasuraman *et al.* (1988:12-40) namely, tangibility, reliability, responsiveness, assurance and empathy.

All the attribute statements were plotted on a 5-point Likert-type scale. Respondents were asked to indicate their service quality expectations and perceptions on a scale of one to five with one indicating strongly disagreed and five indicating strongly agree. Table 1 depicts the Mean scores for the attributes for expectations (E) and perceptions (P):

TABLE 1: Mean scores of service quality expectations (E) and perceptions (P)

Service quality dimensions	Code	Attribute statements	Mean scores (E)	Mean scores (P)
Tangibility	AS1	South African owned airlines have brand corporate images that are appealing	4.525	3.594
	AS2	South African owned airlines have appealing offices	4.497	3.506
	AS3	South African owned airlines have convenient terminal facilities	4.615	3.538
	AS4	South African owned airlines have neatly dressed staff	4.670	3.617
	AS5	South African owned airlines have materials associated with their services, e.g. pamphlets or statements, to guide passengers	4.572	3.396
	AS6	South African owned airlines have clean seats in the aircrafts.	4.667	3.48
	AS7	South African owned airlines have efficient Information Technology systems to deliver efficient services to passengers	4.662	3.174
	AS8	South African owned airlines have in-flight entertainment (newspapers, books and magazines)	4.575	3.341
	AS9	South African owned airlines have in-flight communication facilities (internet/email/fax/phone)	4.525	3.034
	AS10	South African owned airlines provide good quality food on board aircrafts	4.564	3.127
	AS11	South African owned airlines offer on-board shopping with a wide selection of products	4.392	3.069

	AS12	South African owned airlines have facilities for physically impaired persons	4.626	3.263
	AS13	South African owned airlines do not have poor hygienic environment in the aircrafts	4.703	3.314
Reliability	AS14	When South African owned airlines promise to do something by a certain time, they do so	4.636	3.184
	AS15	South African owned airlines perform the service right the first time	4.621	3.216
	AS16	South African owned airlines flights depart and arrive on schedule as promised	4.615	3.32
	AS17	South African owned airlines provide accident free/safe aircraft	4.671	3.711
	AS18	Staff of South Africa owned airlines are courteous during the flight	4.675	3.357
	AS19	In case of delay, South African owned airlines make immediate announcements and provide all necessary information to passengers	4.663	3.184
	AS20	South African owned airlines competently handle lost/theft baggage problems perfectly well	4.668	3.073
	AS21	South African owned airlines do not delay the delivery of passengers' baggage at the point of destination	4.668	3.148
	AS22	South African owned airlines charge reasonable fees for excess baggage	4.596	2.871
Responsiveness	AS23	Staff of South African owned airlines do tell passengers exactly when services will be performed	4.652	3.095
	AS24	Online booking websites of South African owned airlines are user-friendly for ticket bookings	4.674	3.148
	AS25	Staff of South African owned airlines provide prompt booking services to passengers at the check-in terminals	4.675	3.161
	AS26	Staff of South African owned airlines are always willing to help passengers	4.702	3.094

	AS27	Staff of South African owned airlines do not send passengers from one staff to another without solving the problem	4.677	2.987
	AS28	Staff of South African owned airlines are never too busy to respond to passengers complaints	4.661	3.015
Assurance	AS29	Passengers feel safe in conducting business transactions with South Africa owned airlines	4.665	3.111
	AS30	Staff of South African owned airlines have the knowledge to answer passengers' questions	4.683	3.044
	AS31	South African owned airlines have a rewarding loyalty program	4.604	3.007
	AS32	South African owned airlines are generally more efficient than other international airlines	4.64	2.868
	AS33	Staff of South African owned airlines give personal attention to passengers	4.683	2.991
Empathy	AS34	South African owned airlines have operating hours, which are convenient to their passengers	4.678	3.006
	AS35	South African owned airlines have the passengers' best interests at heart	4.702	2.993
	AS36	Staff of South African owned airlines show empathy to passengers in case they miss their flight	4.646	2.658

Source: Mantey 2016: 142

In this study the mean score for all the expectations were more than four, ($M = >4$) for all the dimensional variables - tangibility, reliability, responsiveness, assurance and empathy. The $M = >4$ means that passengers of South African owned airlines had high expectations for service quality. The results revealed that participants (air passengers) were positive about their service quality expectations. Conversely, the perceptions mean scores were more than three ($M = >3$) for all the dimensional variables - tangibility, reliability, responsiveness, assurance, and empathy.

The interpretation of the mean score ($M = >4$) is that passengers expected the service quality level to be $M = 4$ or above that level. However, in respect of perceptions the mean score was

$M = >3$ meaning that passengers' perception was rated below the expectation level. The statistical finding was that while passengers of South African owned airlines expected positive high service quality from the airlines, the perception was low.

Therefore, from the statistical analysis a hypothesis is established that:

H1 *There is a statistically significant high service quality expectation by passengers of South African owned airlines.*

The statistical finding of this study (Table 1) confirms service quality expectation by passengers of South African owned airlines. The passengers' high expectation of service quality was in line with the similar expectation of airline passengers reported by Aydin & Yildirim (2012:219-20), Chikwendu *et al.* (2012:122); and Shanka (2012:173-180).

The underlying literature for this study has also proved that air passengers globally expect a high level service quality from airlines. The $M = >4$ for service quality expectation measurement as shown in this study, is hovering around the same levels in similar studies in the world (Aydin & Yildirim 2012:219-20); Chikwendu *et al.* 2012:122; Shanka 2012:173-180.

In a study conducted by Chikwendu *et al.* (2012:117-125) on service quality evaluation in the Nigerian airline industry using the Servqual model, mean scores for passengers' expectations were $M=3$. Similarly, the service quality expectation evaluation in Turkey's domestic airlines by Aydin & Yildirim (2012:219-220), also using the Servqual model, yielded mean scores from $M=3$ to $M=4$.

A study conducted in Ethiopian Airlines by Shanka (2012:173-180) resulted in the same level. Many scholars in the airline industry have mentioned that passengers have high expectations of service quality (Archana & Subha 2012:51; Shanka 2012:173; Wang *et al.* 2011:419; Wattanacharoensil & Yoopetch 2012:286). When passengers' expectations are met, passengers will be satisfied and show loyalty to the airline as confirmed by prior studies (Johnson, Sivadas & Garbarino 2008:353; Namukasa 2013:530).

Therefore, service quality expectation levels, as revealed in this study, are the normal levels or parameters that passengers would expect airlines to provide. Consequently as per the empirical evidence of this study and supported by the literature hypothesis, *H1* is accepted.

4.2 Evaluation of South African owned airlines - service quality Gaps

The service quality gap is evaluated by the equation: Service Quality (Q) = Perceptions (P) - Expectations (E) (Fitzsimmons & Fitzsimmons 2011:116; Lovelock & Wirtz 2011:406; Naidoo 2015:43. The summary of the gap scores for perceptions and expectations are shown in Table 2.

TABLE 2: Summary of quality gaps scores: expectations and perceptions

Dimensions	Attributes/Codes	Standard deviation (Std dev)	Expectations Mean (M)	Perceptions Mean (M)	Service quality (Q)=(P-E)
					M (P-E)
Tangibility	AS1-AS13	11.63	59.593	43.453	-16.140
Reliability	AS14-AS22	7.94	41.813	29.064	-12.749
Responsiveness	AS 23-AS28	6.03	28.041	18.500	-9.541
Assurance	AS 29-AS33	5.08	23.275	15.021	-8.254
Empathy	AS34-AS36	3.44	14.026	8.657	-5.369

Source: Mantey 2016:241

It was found that the gap score for tangibility, reliability, responsiveness, assurance and empathy were M=-16.14, St Dev =11.63; M=-12.74, St Dev =7.94; M=-9.54, St Dev =6.03; M= -8.23, St Dev =5.08 and M=-5.38, St Dev =3.44 respectively. This data analysis revealed that the tangibility dimension has the largest gaps score, followed by reliability, responsiveness, assurance and empathy in that order. This is a finding revealing that passengers were dissatisfied with services at South African owned airlines. The statistical implication of this finding in reference to Table 2 is that identifying gaps in airline services quality allows airlines to find solutions to the specific area in which the gaps exist.

Based on the statistical analysis (Table 2) the following hypothesis is proposed:

H2 *There is a statistically significant gap in service quality to passengers of South African owned airlines.*

In service quality gaps evaluations, in which the expectation values are higher than perception, the quality of service rendered to the customer is unacceptable: the customer will be displeased or unfulfilled. Conversely, where perception exceeds expectation the service provider has performed satisfactorily, to the gratification of the customer (Fitzsimmons & Fitzsimmons 2011:116; Naidoo 2015:43; Lovelock & Wirtz 2011:406). This study's data analysis summary (Table 2 above) shows that service quality performance in the South African owned airlines was unacceptable; passengers' perceptions of the services received did not match up to the expectations of the services rendered.

Similarly, in a plethora of studies conducted in the airlines industry round the globe using the Servqual model as in this study, it is common to find gaps in service quality delivery between expectation and perception attributes. Some examples of these studies are: Baker (2013:67-77) conducted in the USA; Shanka (2012:173-180) conducted in Ethiopia; Chikwendu *et al.* (2012:117-125) conducted in Nigeria; Aydin & Yildirim (2012:219-230) in Turkey; and Campbell & Vigar-Ellis (2012:97-119) conducted in South Africa, to mention a few. In all these studies passengers' expectations towards service quality were not fully met. Therefore, it is not surprising that service quality performance in the South African owned airlines was also found to be weak and unacceptable. Consequently, the hypothesis *H2* is accepted based on the statistical analysis and the empirical finding in Table 2 and in existing literature.

4.3 Evaluation of service quality perceptions

In view of the fact that there were generally gaps in all dimensional variables (as per Table 2) it was necessary to conduct further evaluation focusing specifically on passenger perceptions on the attributes. The essence was to identify which specific perceptions needed more attention for remediation. Therefore, the five highest perceptions were first identified and ranked, followed by the five lowest perceptions. Based on Table 1 which formed part of the questionnaire for this study, the following ranking evaluation was conducted.

4.4 Ranking of the perceptions

The air passengers' perceptions of service quality delivery to passengers of South African owned airlines were ranked from 1 to 5 using the mean and standard deviation values to

determine which of the passenger perceptions were evaluated better or worse in reference to Table 1.

4.5 Individual perception variables and rankings

The top and lowest five individual variables with their rankings are depicted in Table 3 and Table 4.

TABLE 3: Highest five individual perception mean scores and rankings

Dimensions	Code	SD	D	N	A	SA	Mean (M)	Std dev	Rank
Reliability	AS17	1.3	10.5	34.9	22.2	31.0	3.711	1.0567	1
Tangibility	AS4	1.5	9.8	35.7	31.7	21.3	3.617	0.9738	2
Tangibility	AS1	1.5	7.3	39.0	34.8	17.4	3.594	0.9079	3
Tangibility	AS3	1.8	11.4	36.8	31.3	18.7	3.538	0.9785	4
Tangibility	AS2	0.9	9.4	44.0	29.8	15.9	3.506	0.8998	5

SD= Strongly disagree, D= Disagree, N=Neutral, A=Agree, Strongly agree

Source: Mantey 2016:240

Table 3 reveals that AS 17 under the reliability variable scored the highest passenger perception mean score (M = 3.711, St Dev = 1.0567). This variable referred to whether South African owned airlines provide accident-free and safe aircraft for passengers. The highest mean score among the all the attributes is a finding that passengers had a satisfactory perception of South African owned airlines in terms of safety/accident-free record.

The second-highest variable which scored at M=3.617, St Dev =0.9738, was under tangibility AS 4. The statement to respondents was whether South African owned airlines have neatly dressed staff. Respondents rated this variable highly, and second to variable AS 17, as the most satisfactory perception of South African owned airlines service quality.

The next three satisfactory perception variables were all under tangibility, recording mean scores as: Variable AS1 ($M=3.5940$, $St\ Dev = 0.9079$), variable AS3 ($M=3.5380$, $Std\ Dev = 0.9201$) and variable AS2, ($M= 3.5060$, $St\ Dev = 0.8998$). The variable AS1 referred to a statement in connection with appealing corporate image of South African owned airlines. The variable AS3 referred to a statement on convenience of terminal facilities for South African owned airlines. A statement about appealing offices was asked under variable AS2.

From the highest perception rankings as per the empirical evidence (Table 3) a hypothesis may be postulated as follows:

H3 *There is statistical significance that passengers have high ranking perception on accident free/safe airline operation in South African owned airlines.*

The empirical evidence of this study (Table 3) and finding give credence to this hypothesis. Prior studies also confirm the above hypothesis, that air passengers in South Africa ranked air safety as a critical element of airline service quality delivery (Campbell & Vigar-Ellis 2012:97-119; Jiang 2013:20-24). The Campbell & Vigar-Ellis (2012:97-119) study was conducted within the South Africa airline industry environment, similarly to the current study. In that previous study, passengers ranked safety, punctuality/reliable flights, and low price as the most important considerations in their selection of and differentiation between domestic airlines in South Africa (Campbell & Vigar-Ellis 2012:97). While the Campbell & Vigar-Ellis (2012:97-119) study focused on prioritising or ranking the most important services to the passenger, this new study places the emphasis on identifying the gaps in the service delivery offering and providing solutions to address the deficiencies. The Campbell & Vigar-Ellis (2012:97-119) study ranked safety issues as a top priority to South African domestic airline passengers and supports *H3*. Therefore based on the statistical evidence (Table 3) and literature, the hypothesis *H3* is accepted.

Table 4 evaluates the lowest perception rankings for South African owned airlines.

The lowest perception on the rankings in Table 4 was empathy, variable AS 36, which recorded a mean score of $M=2.658$, $St\ Dev = 1.0902$. The variable AS 36 statement referred to staff empathy towards passengers. The low mean score results indicated that passengers were not happy or satisfied with regard to staff attitudes towards them. This is a significant finding as airline passengers expect empathy from airline staff at all times.

TABLE 4: Lowest five individual perception mean scores and rankings

Dimensions	Code	SD	D	N	A	SA	Mean (M)	Std dev	Rank
Empathy	AS35	5.6	25.4	41.5	19.2	8.3	2.993	1.0014	5
Assurance	AS33	5.1	24.4	44.7	17.7	8.0	2.991	0.974	4
Reliability	AS22	8.6	25	43	17.4	6.0	2.871	0.9968	3
Assurance	AS32	5.3	28.2	46.6	14.2	5.7	2.868	0.9201	2
Empathy	AS36	15.1	30.9	33	15	6.0	2.658	1.0902	1

SD= Strongly disagree, D= Disagree, N=Neutral, A=Agree, Strongly agree

Source: Mantey 2016:240

The second-lowest ranking mean score (M=2.868, St Dev =0.9201) was in respect of variable AS 32 under assurance. This variable statement compared the general service quality delivery of the local airlines with their international counterparts. The low perception ranking means that the local airlines' service quality delivery fell below what some international airlines offer. The third-lowest ranking mean score (M= 2.871, St Dev =0.9968) variable, AS 22, fell under reliability. The variable statement elicited from passengers their opinion on the cost of excess baggage charged by South African owned airlines - whether prices were reasonable or otherwise. The perception was that the cost for excess baggage was high.

The remaining two variables which scored low means, AS33 (M=2.991=0.974, St Dev =0.974) and AS 35 (M=2.993, St Dev =1.0014) fell under assurance and empathy respectively. AS 33 was in respect of whether passengers are given personal attention by the staff of South African owned airlines. AS 35 was a perception question on whether staff members have passengers' best interests at heart. From the lowest perception rankings as per this empirical evaluation (Table 4), a hypothesis is postulated as:

H4 *There is statistical significance that passengers have low ranking perception on empathy in South African owned airlines.*

Empathy is about showing compassion, caring and individualised attention to the customer (Fitzsimmons & Fitzsimmons 2011:116). Consequently, lack of empathy by South African owned airlines towards passengers' means that these airlines may likely lose passengers to their competitors. Based on this statistical evaluation and the finding (Table 4), *H4* is accepted. However further studies need to be conducted from literature to fully support this hypothesis.

In the service-centric enterprises environment (including airlines), companies should strive to create and sustain a culture of service excellence (Asif & Gouthier 2014:511; Gilbert-Jamison 2005:10) without which these companies may struggle to exist. According to Gilbert-Jamison (2005:10), service companies should move from offering customer services to offering service quality excellence.

Empathy towards customers is critical in meeting service quality expectations as mentioned by scholars (Aydin & Yildirim 2012:219-230; Asif & Gouthier 2014:511-531). The solution for boosting staff empathy towards airline passengers is by training staff not only in the area of empathy, but also in other aspects of service quality delivery (Yavas, Karatepe & Babakus 2011:304–314). Lack of training and corresponding reward for airline staff may defeat staff training and empowerment measures (Yavas *et al.* 2011:304). Training and empowering staff should cover every segment of the service firm in order to meet the service delivery expectations of customers (Karatepe & Vatankhah 2014:115; Yavas *et al.* 2011:304). Given that there was weakness in the area of staff empathy towards passengers, the South African owned airline staff training should concentrate in this area.

5. MANAGERIAL IMPLICATIONS

The managerial implication of this study is that, strategically, there is a need for South African owned airlines to review the deficiencies in the service quality areas in order to improve services. Therefore, it is in the best interests of South African owned airlines to adapt to change, thus warding off competitors. South African owned airlines must move ahead, proactively adopting service quality strategies to meet passengers' service-expectation demands. A key area that this study may have on a strategic implication is in the area of differentiation of service delivery among South African owned airlines. It appears all the airlines have the same service offerings and South African air passengers have limited options.

Strategically, South African owned airlines could differentiate themselves by adopting a unique branding strategy for excellent service to passengers. As part of their unique branding strategy, the airlines could provide additional unique services based on what the passenger requires, with options for the passenger to pay for such services. This would ultimately increase the airline's revenue and profitability while at the same time satisfying passengers' requirements, and promoting passengers' loyalty to the airlines.

This study also provides opportunity to management to establish measures allowing passengers to speedily address their complaints and concerns. In order to improve service quality further, management should listen to passengers' complaints. Complaint-feedback processes are critical in determining whether passengers are satisfied with the services they are receiving.

Management should consider using electronic applications and other emerging technologies such as social-media portals that would allow passengers to provide feedback to the airlines on a real-time basis regarding unsatisfactory services received from South African owned airlines. Another implication for this study is in the area of value creation for the air passenger through service quality, which will ultimately increase passengers' loyalty and continuous patronage of the airlines.

Finally, service quality begins with the service vision of the organisation, therefore this study provides an opportunity for management to create and sustain a culture and environment of service excellence in the overall vision and mission of the airline companies.

6. RECOMMENDATIONS

The researcher's findings, based on this study, provide the following recommendations to close the gaps between passengers' expectations and perceptions in all areas namely: tangibility, reliability, responsiveness, assurance, and empathy.

6.1 Closing the tangibility gaps

Most of South African owned airlines attributes on tangibility were ranked highly (second in the perception rankings) for service quality; however, there is still room for improvement in following areas:

- South African owned airlines should have clear promotional material/statements and pamphlets, which guide passengers on service offerings.
- South African owned airlines should continue to maintain clean seats, creating a hygienic environment in the aircrafts.
- In-flight entertainment should be improved by providing the latest reading materials, newspapers, magazines, and books, latest movies/films - especially for passengers on long international flights. Improvement of services to these passengers will enhance their flying experience.

6.2 Closing the reliability gaps

Reliability recorded the highest mean score, especially in respect of South African owned airlines having an accident-free and safe-aircraft record. This study shows that, generally, South African owned airlines are reliable or dependable when it comes to air safety.

However, South African owned airlines should close the service-quality gaps in the following areas under reliability:

- South African owned airlines should endeavour to deliver services as promised the first time, and promptly.
- Staff of South African owned airlines should be courteous towards passengers when serving them at the front desk, in-flight and on arrival at the destination.
- South African owned airlines should make proper announcements (concise information) to passengers should there be technical or flight delays.

6.3 Closing the responsiveness gaps

- Staff of South African owned airlines should be trained in order to solve the basic problems of passengers instead of escalating them endlessly on to others and not resolving the problem timeously.
- Staff should provide prompt service at the check-in terminals.
- South African owned airlines should provide an effective and efficient customer feedback system (CFS) so that passengers' problems are solved promptly.

6.4 Closing the assurance gaps

- South African owned airlines should continue to provide efficient quality service, and at the same time promote and encourage passengers to fly with the local airlines.
- South African owned airlines should continually improve service quality delivery in every area, meeting or exceeding international airline standards. This could be achieved through benchmarking.
- Staff should be trained in handling passengers' privacy and confidential information so that passengers are more secure when conducting business with the airlines.

6.5 Closing the empathy gaps

Empathy was the lowest ranked in the service quality gap within the South African airline industry environment. It is recommended that the management of South African owned airlines should make a conscious effort to improve service quality in these areas:

- Staff should be trained on how to give personal attention and empathy to passengers.
- Staff should be trained on handling passengers, especially when they miss their flights. Missing a flight can cause emotional and mental pain: passengers expect some empathy and support from airline staff.
- Staff should be trained to handle such situations in an exemplary manner, paying individualised attention to passengers.

7. LIMITATIONS AND FUTURE RESEARCH

The first limitation is that this study was unable to measure the service quality of each of the airlines to make a comparative analysis. This was owing to a lack of cooperation and information from management of South African owned airlines, who declined to participate in this study.

The second limitation for this study was financial constraints, which hampered the data collection from the two sites, O.R. Tambo International and King Shaka International airports. It was necessary to collect data from the two sites in order to provide a broader perspective of the respondent opinion. However, the data collected was sufficient to support the credibility of this study. Future research may consider a comparative analysis study on

South African owned airlines to determine precisely which of the airlines owned by South Africa provides either the best or poorest service quality.

Future researchers should also consider service quality as a strategic tool, and the extent to which it may be incorporated into business models of South African owned airlines.

8. CONCLUSION

This study set out to measure South African owned airlines service quality in South Africa. This study, while filling the research gap, has also examined the extent to which South African owned airlines provide service quality to passengers. Based on the empirical outcome of this study, management of South African owned airlines could develop service quality strategies to gain competitive advantage, while at the same time providing value for money and satisfying passengers' service quality expectations in the areas mentioned in this study.

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