

ENHANCING AIRLINE PASSENGERS' SATISFACTION THROUGH SERVICE QUALITY: THE IMPORTANCE OF THE "HUMAN FACTOR"

Maria Salamoura
University of the Aegean, Chios, Greece

Ioannis Chaniotakis
Piraeus Bank, Papagou, Greece

Constantine Lympelopoulous
University of the Aegean, Chios, Greece (Retired)

ABSTRACT

The aim of this paper is to investigate the effect of service quality dimensions to overall satisfaction in the Greek airline industry. Data were collected through field research among 300 respondents, who have used a specific airline industry recently. Data analysis using structural equation modelling suggests that the performance of in-flight attendants and ground-service personnel are important factors in determining perceptions of service quality and overall satisfaction, together with reliability and satisfactory pricing arrangements. These "human factors" are shown to play a role both directly and indirectly in determining customer satisfaction in the airline context.

Key words: Customer Satisfaction, Airline Service Quality, Greek Airline Industry, Structural Equation Modeling (SEM).

Dr Maria Salamoura: Department of Business Administration, University of the Aegean, Greece. Email: m.salamoura@aegean.gr (Corresponding Author)

Dr Ioannis Chaniotakis: Piraeus Bank, Greece. Email: ichaniotakis@yahoo.gr

Professor Dr Constantine Lympelopoulous: Department of Business Administration, University of the Aegean, Greece. Email: klimper@aegean.gr

1. INTRODUCTION

The highly competitive environment of the contemporary airline industry means that there is an ongoing need for airlines to achieve customer satisfaction through service quality. As An and Noh (2009: 294) observe "... the fact that the airline industry traditionally has a high level of competition, makes airline companies strive to find ways to improve their service quality to gain competitive advantage". In a similar way, Bogicevic et al. (2013: 3) claimed that "considering the complexity of the airport industry service palette, it is important to identify which air travel factors are distractors and which factors are enhancers of passenger satisfaction".

The importance of customer satisfaction and service quality in this industry has been widely recognised. For example, Chen (2008) contends that the key to sustainable development in a climate of continuous change and uncertainty in this industry is the ability to satisfy customers through high-quality service. Similarly, Lapré & Scudder (2004) argue that airlines expand market share (both regionally and globally) primarily through consumer satisfaction, while Ostrowski et al. (1993) claim that competitive pressure is the main reason for the delivery of high-quality service among air carriers. Morash and Ozment (1994) argue that the provision of high-quality service to airline passengers is the key to customer patronage, market share, and (ultimately) profitability. In a similar vein, the relationship between service quality and market share in the airline industry was the key element of the model proposed by Suzuki et al. (2001).

Customer satisfaction and service quality are both functions of a comparison between customers' prior expectations of the service they will receive and their subsequent perceptions of the actual service performance (Berry et al., 1988). This general proposition has been confirmed in the case of airline passengers, whose perceptions of service quality have been shown to be largely based on their perceptions of the services offered compared with the ideal service level (Liou and Tzeng, 2007; Robledo, 2001). In a related study, Saha and Theingi (2009) confirm that positive relationships exist among the constructs of service quality, satisfaction, and behavioural intentions in passengers of low-cost carriers.

In accordance with these findings, Chang and Yeh (2002) contend that service quality, as perceived by passengers, is the most important factor in establishing an airline's competitive advantage. Therefore, Chiu and Lin (2004) argue that airlines must attempt to understand what passengers really need, and then deliver the appropriate level of service accordingly. In a similar vein, Pakdil and Aydin (2007) argue that a new structure of airline service-quality

dimensions might be required if airlines are to understand their customers' needs and expectations, and then deliver the most convenient service to meet those needs. In this regard, Wirtz et al. (2008) contend that appropriate human-resources management practices are required if an airline is to achieve a sustainable competitive advantage through the delivery of consistent service excellence.

Against this background, the purpose of the present study is to examine the relationship between overall satisfaction and service-quality dimensions in an airline service context—with emphasis on the role of “human factors” (i.e. staff performance) in this relationship. As Olorunniwo et al. (2006) claimed, “service managers are recommended to devise operations and marketing strategies that focus on the dominant SERVQUAL dimensions to enhance satisfaction”. Similarly, Brodie, Whittome and Brush (2009) suggest that “when a problem is dealt with effectively, there is a strong impact on customer satisfaction and subsequently customer loyalty”. The remainder of the paper is organised as follows. The next section presents a review of the relevant literature on studies of airline service quality. The conceptual framework is then presented along with the methodology of the empirical study. The results of the study are then presented. The paper ends with a summary of the major conclusions, managerial implications, limitations, and suggestions for further research.

2. LITERATURE REVIEW

2.1 Measuring Airline Service Quality with the Use of the SERVQUAL-based Models

Although a wide variety of service-quality dimensions have been used by scholars to measure service quality in airlines, most studies have utilised modifications of the SERVQUAL model (Parasuraman et al., 1988). The original SERVQUAL instrument consisted of five dimensions ('tangibles', 'reliability', 'responsiveness', 'assurance', and 'empathy'), but Grönroos (1988, 1990, 2001) subsequently suggested that 'recovery' should be added as a sixth dimension. In a later contribution, Kang and James (2004) contend that service quality should be measured in three dimensions: (i) functional quality (as described by SERVQUAL); (ii) technical quality (referring to the outcome); and (iii) the company's corporate image (which was acknowledged as a dimension that is more difficult to define and measure).

The importance of SERVQUAL-based models in studies of airline service quality and/or passengers' satisfaction is apparent from the numerous articles that have utilised SERVQUAL-derived dimensions: scholars generally agree that the higher the customer-perceived service quality is, the more satisfied customers should feel. As Chen and Chang (2005, qtd. in:

Bogicevic, 2013: 5) noted "in air travel sector service quality has been examined independently in airport service setting and in-flight service setting". Tsauro et al. (2002) developed a five-dimensional instrument for measuring airline service quality based on the SERVQUAL dimensions of 'tangibility', 'reliability', 'responsiveness', 'assurance', and 'empathy'; among the 15 criteria within these five dimensions, the most important were 'courtesy of attendants', 'safety', 'comfort', 'cleanliness', and 'responsiveness of attendants'. Park et al. (2005) and Park (2007) examined perceptions of 11 key factors of airline service quality that influenced customers' buying behaviour; although different segments of air passengers emphasised in different factors, the more prominent were 'in-flight service', 'airport service', 'employee service', 'perceived price', 'passenger satisfaction', and 'overall service quality'. Gilbert and Wong's (2003) model included 26 attributes of airline service quality, which were distributed among the dimensions of 'reliability', 'assurance', 'facilities', 'employees', 'flight patterns', 'customisation', and 'responsiveness'; according to their findings, the most important attributes of airline service quality were: 'being prompt/responsive', 'willing to help', and 'having a courteous attitude'.

Liou and Tzeng (2007) develop a non-additive model for the evaluation of airline service quality to overcome their presumption of the interdependence of service-quality dimensions. They concluded that 'employee's service' was the important dimension in the evaluation of service quality, and that 'complaint handling' was the most important attribute within that dimension. Pakdil and Aydin (2007), who measure airline service quality using SERVQUAL scores weighted by loadings derived from factor analysis, report that 'responsiveness' was the most important dimension of airline service quality, with the most important items in this dimension being related to employee actions: 'speed of handling requests', 'response to unexpected situations', and 'willingness to help'. Kiatcharoenpol and Lasirihongthong (2006), who used the SERVQUAL model to assess the antecedents to airline service quality, found that 'culture change', 'commitment of management', and 'employee involvement' all increased airline customer satisfaction and the competitiveness of the airline company. An and Noh (2009), who used a research model mainly based on the SERVQUAL instrument to investigate the impact of in-flight service quality on airline customer satisfaction and loyalty, conclude that 'responsiveness' and 'assurance' were important factors of in-flight service quality for both 'prestige' class seats and 'economy' class seats. Xiaoli et al. (2006) also found that 'responsiveness' (as well as 'pricing structure') was an important determinant of perceived service quality, customer satisfaction, and customer loyalty. Nejati et al. (2009: 247), who used a questionnaire based on the SERVQUAL model, found that the most important factors

in airline service quality were "...flight safety, good appearance of flight crew, and offering highest possible quality services to customers 24 hours a day".

2.2 The Role of "Human Factor", Price and Reliability in Airline Service Quality

It is obvious from the first part of the literature review that many SERVQUAL variables pertaining to the "human factor" have already been analysed. "Employees who are perceived as reliable, responsive, and caring", or "as friends, as they have the ability and desire to provide excellent service" (Parasuraman, Zeithaml & Berry, 1988) "friendliness and helpfulness of the cabin crew" (Zins, 2001), "courtesy of attendants" or "responsiveness of attendants" (Tsaor et al., 2002), "role of employees" (Gilbert & Wong, 2003), "quality customer care" (Bamford & Xystouri, 2005) "employee involvement" (Kiatcharoenpol & Lasirihongthong, 2006), "employee's service" (Park, 2007; Liou & Tzeng, 2007), "commercial friendship" (Han et al., 2008), and "employee trust" or "productive employees" (Brodie, Whittome and Brush, 2009) have been found significant and important in many studies. Furthermore, the importance of the role of employees was demonstrated by Abdlla et al. (2007), who used a SERVQUAL model to demonstrate that flight attendants played a key role in the relationship between tourists' needs/expectations and their perceptions of service quality. Gursoy et al. (2005) also shows that the role of employees (especially in handling customer complaints) was an important service-quality dimension in their 15-attribute model of airline service quality. Similarly, Babbar and Koufteros (2008) find that 'personal touch' (constituted by individual attention, helpfulness, courtesy, and promptness) was a significant determinant of airline service quality and customer satisfaction. Ekinici and Dawes (2009) also concluded that higher levels of consumer satisfaction were associated with enhanced customer-employee interactions because of positive personal characteristics among frontline employees.

Regarding the price factor, it has already been noted that several authors (Park et al., 2005; Park, 2007; Xiaoli et al., 2006) have reported that the price structure is an important factor in customer satisfaction among airline customers. More specifically, Balcombe et al. (2009) concluded that passengers are willing to pay a relatively large amount for enhanced service quality – especially in-flight service provision and level of comfort – when deciding to purchase a flight. Myungsook & Yonghwi (2009) investigated the impact of the in-flight service quality on airline customer satisfaction and loyalty, by analyzing data from passengers of two classes: prestige (business) and economy. Furthermore, Han, Kwornik & Wang (2008) investigated customers' judgment about the trade-off between benefits and costs, by measuring

customers' overall judgment of "worth what paid for". Finally, reliability plays an important role to airline service quality and customer satisfaction, as a basic variable of the SERVQUAL models (Gilbert & Wong, 2003; Park, 2007; Liou & Tzeng, 2007; Pakdil & Aydin, 2007; An and Noh, 2009).

It is clear from the above findings that airline service quality is a multidimensional construct. As An and Noh (2009: 296) noted, service quality is somewhat more complex in airlines than in other service industries because it "... involves a variety of processes by many entities such as airport authority, catering companies etc."

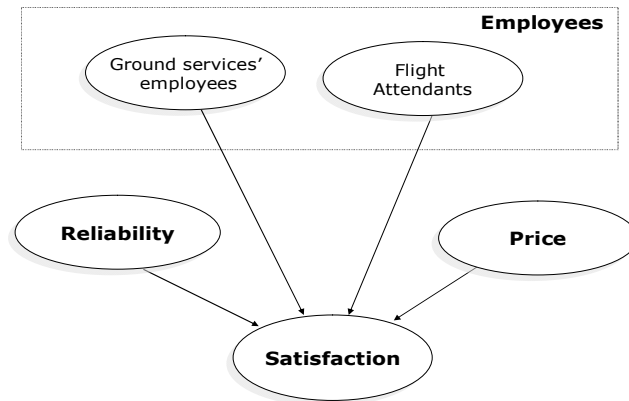
Despite abundance of the related research, what this paper adds to extant literature is that it addresses this complexity by investigating the construct of airline service quality, in terms of certain variables that reflect the characteristics of the Greek airline industry. More specifically, the present study examines both: (i) the "human factor" (both ground-service personnel and in-flight service attendants); and (ii) the more prominent dimensions of airline quality identified in the literature review – such as reliability and price.

3. THE CONCEPTUAL FRAMEWORK

Figure 1 shows the research model for the present study, which was based on: (i) the main findings of the literature review described above; and (ii) in-depth interviews conducted with both airline passengers and employees in Greece. Using this model, an empirical study was conducted to investigate the relationships among certain service-quality dimensions and their effect on customer satisfaction in the airline industry in Greece. As shown in Figure 1, the dependent variable included airline customer satisfaction, representing the level of their overall satisfaction within the specific airline, while the main independent variables included:

- *employees*: representing the "human factor" in airline service quality (including both ground-services personnel and in-flight service attendants);
- *price*: representing an increasingly important factor in the airline industry during the past decade as so-called 'low-cost' airlines have become more common; and
- *reliability*: representing the most important non-tangible factor of airline service quality identified in the literature review.

Figure 1: The model



4. METHODOLOGY

4.1 Data Collection and Sample

As mentioned earlier, the first part of our study involved in-depth interviews with 10 respondents, both airline passengers and employees. The content of the initial questionnaire was then pre-tested on 15 respondents - pilot testing - leading to a few minor alterations to improve our instrument. The revised questionnaire was finally administered to 300 respondents in Athens International Airport and Chios Airport from 1.05.2016 to 31.06.2016. The target population was adult men and women, of various ages, who were passengers of local Greek flights. The combination of such demographic criteria as sex and age are commonly used in the most airline customer satisfaction surveys mentioned in the literature review.

Table 1 summarises the demographic characteristics of the respondents who completed the questionnaire. A sample of 300 is considered adequate for performing data analysis using structural equation modelling (SEM) (Hair et al., 1998; Hoe, 1998).

Table 1: Respondents' profile

	Sample Demographics (%)
Gender	
<i>Male</i>	51.7
<i>Female</i>	48.3
Age	
<i>Up to 24</i>	40.0
<i>25 – 30</i>	18.0
<i>31 – 36</i>	11.3
<i>37 – 42</i>	10.0
<i>43 – 49</i>	9.0
<i>50 – 56</i>	5.0
<i>57+</i>	6.7
Education	
<i>Up to secondary education</i>	21.3
<i>Secondary education</i>	26.4
<i>University</i>	52.0
<i>Postgraduate</i>	13.3
Monthly family income (€)	
<i>Up to 500</i>	12.3
<i>501 – 1,000</i>	19.7
<i>1,001 -1,500</i>	15.3
<i>1,501 -2,000</i>	12.0
<i>2,001 -2,500</i>	13.0
<i>2,501 -3,000</i>	8.7
<i>More than 3,000</i>	19.0

4.2 Measurement Scales

The scales used in previous studies presented in the literature review along with the consumers' views, as these were expressed in the qualitative research, provided the basis for developing the measurement scales for the model variables. Following this, 'flight attendants' (FA) and 'ground services employees' (GSE), as two new latent variables, were measured using five and four indicators respectively. The items used in the operationalisation of these

variables can be found in Table 2 (in the 'Results' section, below). For the measurement of "price", a new scale related to "price satisfaction" (Matzler, Wurtele & Renzl, 2006) had to be established. Using in-depth interviews as a basis, "price satisfaction" was measured as a latent model variable, including three items. In addition, "reliability", which represented the fourth latent variable of the model, was measured with four indicators (see Table 2). Finally, for the measurement of consumer "satisfaction" (S) three indicators were used.

In summarizing, we could therefore say that to measure service quality, some items of SERVQUAL were modified, added or deleted when developing the survey instrument. Therefore, the final service quality was identified to four (4) dimensions (flight attendants, ground services employees, price satisfaction, and reliability), consisting of 16 statements, instead of five dimensions. Respondents were presented with these statements and were asked to express their agreement/disagreement with them, using a seven-point Likert-type scale (1 = 'strongly disagree' to 7 = 'strongly agree').

5. RESULTS

The descriptive statistics generated from SPSS analysis are shown in Table 2. In general, the results indicate that respondents felt quite satisfied with the services provided – as shown by the fact that the mean scores of all indicators were above average (3.50), rating from 4.07 for "a fair price for the airline ticket" to 5.49 for "courteous airline's flight attendants". As expected, all the airline service quality variables correlated with airline customer satisfaction. More specifically, flight attendants and reliability are the variables with the higher average scores (5.49 and 5.22 respectively) leading thus to most satisfied respondents. Cronbach's alpha coefficient was calculated to assess the reliability of the measurement scales. The results revealed that all scales were reliable (FA = 0.8768; GSE = 0.8795; PS = 0.8436; R = 0.7777; S = 0.7871). To assess goodness of fit, SEM was performed using Amos 20.0 software. The results, which are presented in Table 3, show that all the important indicators of model fit, as suggested by Hoyle (1995), had acceptable values. The final model (Figure 2) was thus acceptable. Several relationships were found to be statistically significant in the proposed model:

- FA had a direct positive effect on S; moreover, FA had indirect effects on S through GSE, R, and PS;
- GSE had a direct positive effect on S, and an indirect effect on S through PS; and

- R and PS both had direct effects on S.

The only relationship in the final model that was not statistically significant was that between GSE and PS. The implications of these findings are discussed below.

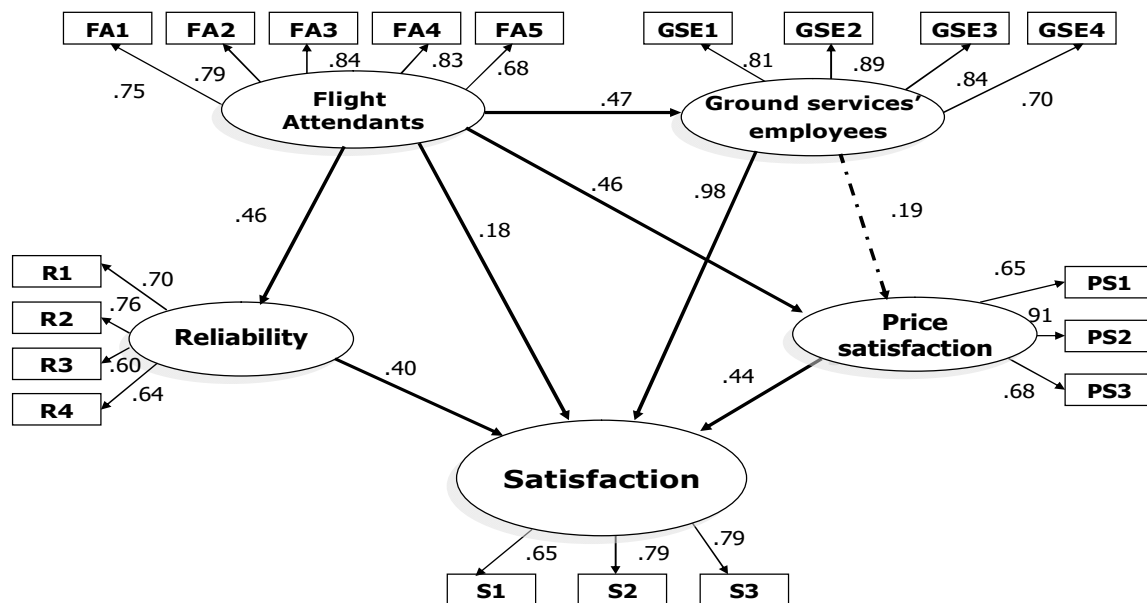
Table 2: Descriptive statistics

	Mean <i>(values: 0-7)</i>	Variance
Flight attendants (FA)		
FA1: This airline's flight attendants understand customers' needs	5.10	1.344
FA2: This airline's flight attendants are courteous	5.49	1.485
FA3: This airline's flight attendants checking with passengers from time to time if they need anything	4.90	1.403
FA4: This airline's flight attendants are always willing to provide any information related to the flight	5.12	1.368
FA5: This airline's flight attendants can deal with an extraordinary situation during the flight	4.82	1.383
Ground services employees (GSE)		
GSE1: This airline's ground employees provide individual attention to customers	4.38	1.468
GSE2: This airline's ground employees give me prompt service	4.26	1.532
GSE3: This airline's ground employees understand what the specific needs of their passengers are	4.24	1.494
GSE4: This airline's ground employees are helpful when flights are delayed	4.45	1.582
Price satisfaction (PS)		
PS1: The price of the ticket was better than other airlines' ones	4.23	1.639
PS2: The price of the ticket is according to my expectations	4.13	1.568
PS3: I paid a fair price for the airline ticket	4.07	1.541
Reliability (R)		
R1: This airline makes me feel safe	5.22	1.272
R2: This airline provides good ground and in-flight services consistently	5.03	1.311
R3: The departure and arrival hours are always accurate	4.59	1.667
R4: This airlines' aircrafts are modern with clean and comfortable interiors and seats	4.86	1.458
Satisfaction (S)		
S1: My overall satisfaction with this airline is very high	4.72	1.298
S2: I rank this airline's service quality as being very high	4.36	1.533
S3: I intend to recommend this airline to friends and relatives	4.96	1.482

Table 3: Model fit indices

Indices	Index value	Suggested index value
χ^2	251.410	
p.	0.000	
df.	140	
Relative χ^2	1.796	< 3.00
GFI (Goodness of Fit)	0.924	> 0.90
AGFI (Adjusted Goodness of Fit)	0.897	> 0.90
TLI (Tucker Lewis Index)	0.956	> 0.90
IFI (Incremental Fit Index)	0.964	> 0.90
CFI (Comparative Fit Index)	0.964	> 0.90
RMSEA	0.052	< 0.08

Figure 2: The final model



6. CONCLUSIONS, IMPLICATIONS AND SUGGESTIONS FOR FURTHER RESEARCH

6.1 Main Conclusions

Although, there is an abundance of studies on airline service quality and customer satisfaction, this study has shown that the "human factor" is an important aspect of service quality in

airlines. More specifically, the performance of flight attendants was associated not only with overall satisfaction, but also with the performance of ground-service personnel, reliability, and price satisfaction. The implication is that reliability includes the consistent provision of good in-flight services. Moreover, price satisfaction was associated with customers' expectations about service quality, flight attendants, and ground-service employees, all of which represent significant factors in customers' overall satisfaction with the service provided. In addition, the performance of ground-service personnel was related to the performance of flight attendants, with both being key elements in the service quality provided by the airline. These relationships confirm the importance of flight attendants and ground-service personnel in producing overall satisfaction in the airline industry. As Brodie, Whittome and Brush (2009) conclude "customer satisfaction is generated by satisfied, loyal and productive employees", as their overall findings confirmed the theory that a reliable "personal touch" service is what the customers perceived as good service quality. In addition to the "human factor", the variables of reliability and price satisfaction played important roles in determining customers' overall satisfaction with airline service.

6.2 Managerial Implications

The above findings have implications for airline managers and marketers. According to Mittal and Frennea (2010: 2), "superior customer satisfaction provides a clear strategic advantage and an inimitable resource for a firm – particularly in today's complex and often uncertain markets". In the uncertain contemporary business environment that they face, airline managers require a clear understanding of the requirements of their customers, in terms of the products and services that provide superior airline service quality. As Bogicevic (2013: 6) concluded "even though we assume that customer satisfaction is anticipated because of successful service outcome, the nature of drivers for customer satisfaction is far more complex". This study, bridge the gap between theory and practice in the Greek airline industry, as it has shown that important determinants of this service quality include the performance of flight attendants and ground-services personnel, together with reliability and satisfactory pricing arrangements. These factors should be given priority by managers - given that airline service quality is a multidimensional concept that incorporates many aspects of the wide variety of services offered by an airline. As Olorunniwo et al. (2006: 72) claimed "the message is clear in that customers are more likely to come back, recommend the service, and remain loyal to the service provider if they are satisfied with the service offerings". In a similar way, Bamford and Xystouri (2005: 38) suggest that "it is important for businesses to understand that it is not necessarily the initial service failure or incident which leads to dissatisfaction, but

the organization's subsequent lack of response to the situation. For this reason, a recovery program becomes crucial in maintaining consumer satisfaction and loyalty".

In addition, airline companies, given their size, should face current cost structures and fierce price competition, especially in the overcrowded economy cabins. According to An & Noh (2009), airline companies' in-flight service should have different delivery strategies based on the customer seat class. They also claim that generally "people with higher income and positions in their organizations tend to experience higher quality service and thus are more sensitive to the evaluation of service quality" (An & Noh, 2009: 305). Consequently, the recognition of service quality can be different among those with different income and professional status. Therefore, airline companies need to differentiate their strategies for different type of customers, by emphasizing in the appropriate factors, which would provide them with high standard of service quality and satisfaction.

6.3 Limitations and Suggestions for Further Research

One limitation of this study is that the research was conducted in only two airports of Greece. Because the specific characteristics of the Greek airline industry and customers could influence the results of the analysis, care should therefore be exercised in generalising from the present findings. As Bogicevic (2013:4) concluded, "addressing the limited generalizability of previous studies' results, there is a need for understanding which air travel factors are essentials (dissatisfiers) and which factors serve as enhancers of passenger satisfaction (satisfiers) in a global context". In addition, non-probability sampling was used, which made it impossible to estimate sampling error.

In view of these research sample limitations, it would be useful to analyse data from a larger sample, incorporating a wider range of geographical areas and other airlines. It would be interesting to investigate the importance of the "human factor" in determining overall satisfaction in other countries with different population characteristics. In addition, factors such as inbound or outbound travellers, or what was the purpose of their trip, could potentially impact travellers' expectation levels about service quality and total satisfaction with the airline.

REFERENCES

1. Abdlla, G., Mohamed, A.R. & Mekawy, M.A. (2007). "Managing Tourist' Needs and Expectations: An Empirical Analysis of the Egyptian Airline Sector", *Tourism*, 55, No. 3, 277-296.

2. An, M. & Noh, Y. (2009). "Airline customer satisfaction and loyalty: impact of in-flight service quality", *Service Business*, 3, No. 3, 293-307.
3. Babbar, S. & Koufteros, X. (2008). "The Human Element in Airline Service Quality: Contact Personnel and The Customer", *International Journal of Operations & Production Management*, 28: 9, 804-830.
4. Balcombe, K., Fraser, I. & Harris, L. (2009). "Consumer willingness to pay for in-flight service and comfort levels: a choice experiment", *Journal of Air Transport Management*, 15, 221-226.
5. Bamford, D. & Xystouri, T. (2005), "A case study of service failure and recovery within an international airline", *Managing Service Quality*, 15: 3, 306-20.
6. Berry, L.L., Parasuraman, A. & Zeithaml, V.A. (1988). "The Service Quality Puzzle", *Business Horizons*, 31: 5, 35-43.
7. Bogicevic, V., Yang, W., Bilgihan, A. & Bujisic, Milos (2013), "Airport service quality drivers of passenger satisfaction", *Tourism Review*, 68: 4, 3-18. Available from: <https://doi.org/10.1108/TR-09-2013-0047> (accessed on 14/03/2016).
8. Brodie, R.J., Whittome, J.R.M. & Brush, G.J. (2009). "Investigating the service brand: A customer value perspective", *Journal of Business Research*, 62, 345–355.
9. Chang, Y.H. & Yeh, C.H. (2002). "A survey analysis of service quality for domestic airlines", *European Journal of Operational Research*, 139, 166-177.
10. Chen, C.F. (2008). "Investigating structural relationships between service quality, perceived value, satisfaction, and behavioral intentions for air passengers: evidence from Taiwan", *Transportation Research, Part A*, 42, 709-717.
11. Chen, F. & Chang, Y. (2005). "Examining Airline Service Quality from a Process Perspective", *Journal of Air Transport Management*, 11: 2, 79-87.
12. Chiu, H & Lin, N. (2004). "A Service Quality Measurement Derived from the Theory of Needs", *The Service Industries Journal*, 24: 1, 187-204.
13. Ekinci, Y. & Dawes, P.L. (2009). "Consumer perceptions of frontline service employee personality traits, interaction quality, and consumer satisfaction", *The Service Industries Journal*, 107: 125, 503-521.
14. Gilbert, D. & Wong, K.C. (2003). "Passenger expectations and airline services: a Hong Kong-based study", *Tourism Management*, 24, 519-532.
15. Grönroos, C. (1988). "Service Quality: The Six Criteria Of Good Perceived Service Quality", *Review of Business*, 9: 3, 10-13.
16. Grönroos, C. (1990). *Service Management and Marketing: Managing the Moments of Truth in Service Competition*, Lexington, MA, Lexington Books.
17. Grönroos, C. (2001). "The Perceived Service Quality Concept – A Mistake?", *Managing Service Quality*, 11: 3, 150-153.
18. Gursoy, D., Chen, M.H. & Kim, H.Y. (2005). "The US airlines relative positioning based on attributes of service quality", *Tourism Management*, 26, 57-67.
19. Hair, J. F., Anderson, R. E., Tatham, R. L., & Black, W. C. (1998). *Multivariate data analysis*, Englewood Cliffs, NJ, Prentice-Hall.
20. Han, R.J., Kwortnik, Jr. & Wang, C. (2008). "Service Loyalty: An Integrative Model and Examination across Service Contexts", *Journal of Service Research*, 11: 1, 22-42.
21. Hoe, Siu Loon (1998). "Issues and procedures in adopting structural equation modelling technique", *Journal of Applied Quantitative Methods*, 3: 1, 76-83.

22. Hoyle, R.H. (1995). "The structural equation modelling approach: basic concepts and fundamental issues", in Hoyle, R.H. (Ed.), *Structural Equation Modeling: Concepts, Issues and Applications*, Thousand Oaks, CA, Sage Publications.
23. Kang, G.D. & James, J. (2004). "Service Quality Dimensions: An Examination of Grönroos's Service Quality Model", *Managing Service Quality*, 14: 4, 266-277.
24. Kiatcharoenpol, T. & Lasirihongthong, T. (2006). "Innovations in service strategy: an evaluation of quality in airline service operations by using SERVQUAL model", in *IEEE International Conference on Management of Innovation and Technology*, 21-23 June 2006, 748-752.
25. Lapré, M.A. & Scudder, G.D. (2004). "Performance improvement paths in the U.S. airline industry: Linking trade-offs to asset frontiers", *Production and Operations Management*, 13: 2, 123-134.
26. Liou, James J.H. & Tzeng, Gwo-Hshiung (2007). "A non-additive model for evaluating airline service quality", *Journal of Air Transport Management*, 13, 131-138.
27. Mittal, V. and Frennea, C. (2010). *Customer Satisfaction: A Strategic Review and Guidelines for Managers*, MSI Fast Forward Series, Marketing Science Institute, Cambridge, MA, 2010. Available from: <https://ssrn.com/abstract=2345469> (accessed on 24/01/2016).
28. Morash, E.A. & Ozment, J., (1994). "Toward management of transportation service quality", *Logistics and Transportation Review*, 30, 115-140.
29. Matzler, K., Wurtele, A. & Renzl, B. (2006). Dimensions Of Price Satisfaction: A Study In The Retail Banking Industry. *International Journal of Bank Marketing*, 24(4), 216-231.
30. Nejati, M., Nejati, M. & Shafaei, A. (2009). "Ranking airlines' service quality factors using a fuzzy approach: study of the Iranian Society", *International Journal of Quality & Reliability Management*, 26, 3, 247-260.
31. Olorunniwo, F., Hsu, M., K. & Udo, G. J. (2006), "Service quality, customer satisfaction, and behavioral intentions", *Journal of Services Marketing*, 20: 1, 59-72.
32. Ostrowski, P.L., O'Brien, T.V. & Gordon, G.L. (1993). "Service Quality and customer loyalty in the commercial airline industry", *Journal of Travel Research*, 32, 16-24.
33. Pakdil, Fatma & Aydin, Ozlem (2007). "Expectations and perceptions in airline services: an analysis using weighted SERVQUAL scores", *Journal of Air Transport Management*, 13, 229-237.
34. Parasuraman A., Zeithaml, V.A. & Berry, L.L (1988). "SERVQUAL: a Multiple-Item Scale For Measuring Consumer Perceptions of Quality", *Journal of Retailing*, 64, 12-40.
35. Park, J.W. (2007). "Passenger perceptions of service quality: Korean and Australian case studies", *Journal of Air Transport Management*, 13, 238-242.
36. Park, J.W., Robertson, R. & Wu, C.L. (2005). "Investigating the effects of airline service quality on airline image and passengers' future behavioural intentions: findings from Australian international passengers", *The Journal of Tourism Studies*, 16, 2-11.
37. Robledo, M.A. (2001). "Measuring and Managing Service Quality: Integrating Customer Expectations", *Managing Service Quality*, 11, No.1, 22-31.
38. Saha, G.C. & Theingi (2009). "Service quality, satisfaction, and behavioural intentions: a study of low-cost airline carriers in Thailand", *Managing Service Quality*, 19, No. 3, 350-372.

39. Tsaor, S.H., Chang, T.Y. & Yeh, C.H. (2002). "The evaluation of airline service quality by fuzzy MCDM", *Tourism Management*, 23, 197-115.
40. Suzuki, Y., Tyworth, J.E. & Novack, R.A. (2001). "Airline market share and customer service quality: a reference-dependent model", *Transportation Research A*, 35, 773-788.
41. Wirtz, J., Heracleous, L. & Pangarkar, N. (2008). "Managing human resources for service excellence and cost effectiveness at Singapore Airlines", *Managing Service Quality*, 18: 1, 4-19.
42. Xiaoli, X., Yinghong, W., Zhijian, H. & Hui, L. (2006). "The impact of service quality, satisfaction, value and switching barrier on customer loyalty in Chinese airline industry". *International Conference on Service Systems and Service Management (ICSSSM' 06)*, held at Troyes, France (October 25-27).
43. Zins, A.H. (2001). "Relative attitudes and commitment in customer loyalty models: some experiences in the commercial airline industry", *International Journal of Service Industry Management*, 12: 3, 269-94.