Available online at www.sciencedirect.com
SCIENCE DIRECT®
PERGAMON
Tourism Management 24 (2003) 519–532
TOURISM MANAGEMENT
www.elsevier.com/locate/tourman

Passenger expectations and airline services: a Hong Kong based study

David Gilbert[a,*], Robin K.C. Wong[b]

[a] Surrey European Management School, University of Surrey, Guildford, Surrey GU2 7XH, UK
[b] Cathay Pacific Airways Ltd, 2/F, Central Tower, Cathy City, Hong Kong International Airport, Lantau, Hong Kong

Received 3 April 2002; accepted 14 November 2002

Abstract

The airline industry is undergoing a very difficult time and many companies are in search of service segmentation strategies that will satisfy different target market segments. This study attempts to identify the service dimensions that matter most to current airline passengers. The research measures and compares differences in passengers' expectations of the desired airline service quality in terms of the dimensions of reliability; assurance; facilities; employees; flight patterns; customization and responsiveness. Primary data were collected from passengers departing Hong Kong airport. Regarding the service dimension expectations, differences analysis shows that there are no statistically significant differences between passengers who made their own airline choice (decision makers) and those who did not (non-decision makers). However, there are significant differences among passengers of different ethnic groups/nationalities as well as among passengers who travel for different purposes, such as business, holiday and visiting friends/relatives. The findings also indicate that passengers consistently rank 'assurance' as the most important service dimension. This indicates that passengers are concerned about the safety and security aspect and this may indicate why there has been such a downturn in demand as this study was conducted just prior to the World Trade Center incident on the 11th September 2001.

Keywords: Airline; Services; Marketing; SERVQUAL; Segments

1. Introduction

It has been suggested that delivering superior service quality is a prerequisite for success and survival in today's competitive business environment. However, some may feel price is an important aspect of demand. As Collis (1998), IATA in 1997 carried out research in North America, Europe and Asia and found passengers favoured punctuality (65 per cent) and scheduling (52 per cent) over price (37 per cent). This is not to say that price is of secondary concern to airlines as cost structures and competitive pricing are always of key importance but for this study the emphasis is on improving service strategies. In the airline industry understanding what passengers expect is essential to providing desired service quality. However, service quality research that has focused on airline passengers' expectations has been limited. This research paper focuses on the link between customer expectations and service quality, and demonstrates how an airline can utilize a measure of different passengers' expectations as a diagnostic tool in managing its service quality. This study takes expectations to be the pre-consumption beliefs that consumers draw upon as the probabilities of the occurrence of positive and negative events. Therefore, they form an important part of the decision process for an airline. The expectations construct has been viewed as playing a key role in consumer evaluation of service quality (Grönroos, 1994; Parasuraman, Zeithaml, & Berry, 1985, 1988). Its meaning in the service quality literature is similar to the ideal standard in the consumer satisfaction/dissatisfaction literature. Such approaches have been previously researched in the tourism field. Tourism research utilizing applications of SERVQUAL has been carried out by a number of authors (Cunningham, Young, & Lee, 2002; Lam & Zhang, 1999; Ryan & Cliff, 1997; Bojanic & Rosen, 1994; Saleh & Ryan, 1991).

In reviewing the lessons learned over the last decade from service quality research there is a strong indication that improvement in service provides improved profit due to increasing the customer base through new and repeat purchases from more loyal customers. Research has indicated that companies that offer superior service are able to charge 8 per cent more for their product

*Corresponding author. Tel.: +44-1483-873-981.
E-mail address: d.gilbert@surrey.ac.uk (D. Gilbert).

0261-5177/03/$ - see front matter
doi:10.1016/S0261-5177(03)00002-5

(Gale, 1992), while achieving higher-than-normal market share growth (Buzzell & Gale, 1987) and profitability. In addition it is realized lowering customer defection rate can be profitable to airlines. This approach is reinforced by Johnson, Nader, and Fornell (1996) who argue cumulative customer satisfaction can help predict future retention behaviour and profitability.

In the airline industry context the problem is whether management can perceive correctly what passengers want and expect. Moreover, expectations serve as standards or reference points for customers. In evaluating service quality, passengers compare what they perceive they get in a service encounter with their expectations of that encounter. Assessing passenger expectations is not a static exercise as passengers are becoming increasingly sensitive to quality. However, not all service dimensions are equally important to all passengers, because no two passengers are precisely alike, especially when demographics; purposes of travelling and ethnic background is considered.

2. Purchase criteria

In order to produce a valid questionnaire different studies were examined to find the variables related to purchase criteria. Bowen and Headley (2000) have undertaken research on Airline Quality Rating (AQR) which has met with national and international acceptance and acknowledgement. The latest report, is based on attributes that focus on airline performance areas important to air passengers. All of these attributes are reported monthly in the Air Travel Consumer Report maintained by the US Department of Transportation. They include: On-time arrival; Being 'bumped' from a flight; Mishandled baggage (*whether lost, damaged, delayed or pilferage of baggage*) and Airline safety. It also includes passenger complaints: Flight problems (*e.g. cancellations, delays, deviations from schedule*); Reservations, ticketing, and boarding problems (*e.g. problems in making reservation and obtaining tickets due to busy telephone lines, queuing*); Fares (*incorrect or incomplete information about fares, overcharges, discount availability*); Refunds; Customer service (*rude or unhelpful employees, inadequate meals or cabin service, treatment of delayed passengers*); Advertising (*misleading messages*) and Frequent flyer programmes. The AQR only measures US domestic airlines and some attributes might not be suitable for some international airlines. Another department, the US Department of Commerce, also conducts periodic surveys on international air travellers' choice of airlines which includes monitoring of: schedule; Non-stop flight availability; Safety reputation; On-time reputation; In-flight service reputation; Frequent flyer programme. The key purchase criteria of travellers is a multi-attribute of service based upon: Frequency of flights; Timings; Punctuality; Good in-flight service and facilities; Good on-ground service and facilities; Non-stop service; Safety records.

The authors therefore conclude that the literature indicates passengers regard the following to be important attributes to delivering superior airline service quality:

- Reliability in maintaining flight schedules and reservation/ticketing/in-flight/ground services; Reassurance by good safety records; Convenient flight schedules and non-stop service; Correct and prompt handling of baggage; Friendly and helpful employees; A beneficial frequent flyer programme.

As the competition among airlines intensifies the above lists become important guidelines to areas the airline has to consider in greater detail. These guidelines informed the questionnaire design of this study.

3. Hypotheses formulation

Some of the differences in expectations of service are derived from different passenger cultures. Values and attitudes help to determine what members of a culture think is desirable. Moreover, consumer behaviour flows from values and attitudes adopted across cultures and airline marketers must understand these differences. This leads to the first hypothesis:

H1: If passengers are of different ethnic groups/nationalities then there will be significant difference in their expectations of desired airline service quality.

The reason this research stresses 'desired service' is because passenger expectations are often dual-level and dynamic whereby a 'zone of tolerance' separates the 'desired service' from 'adequate service' (Parasuraman et al., 1991). Simply meeting passenger adequate service expectations may not be good enough for airlines to survive the rivalry.

There are two main factors affecting expected desired service, namely 'enduring service intensifiers' and 'personal needs' (Zeithaml & Bitner, 1996). One of the most important enduring service intensifiers is 'derived service expectations' (Zeithaml & Bitner, 1996), which takes place when another person or group of people drive passengers' expectations. For example, a parent choosing an airline for the family members on a vacation occasion, his/her individual expectations are intensified because he/she experiences derived expectations from other family members who will receive the airline service too. In addition, he/she might want to impress the family members, and would blame

himself/herself when dissatisfied. This leads to the second hypothesis:

H2: If passengers are the decision-makers in choosing the airline, then their expectations of desired airline service quality will be significantly different from those of non-decision-makers.

This research is interested in identifying the difference in service expectations between decision-makers and non-decision makers because based on a survey (Cathay Pacific Airways, 1996–1999), 64 per cent of the passengers had the ability to make their own airline selection decision.

Another enduring service intensifier is 'personal service philosophy' (Zeithaml & Bitner, 1996). This concept coincides with the role of culture in the passenger's decision making process, which was discussed earlier in the first hypothesis (H1). The third hypothesis is derived from personal needs. There are three major reasons passengers need to travel: namely for business, for holiday and to visit friends/relatives, and it is believed that each group's expectations would be different:

H3: If passengers' needs for travelling are different, then there will be a significant difference in their expectations of desired airline service quality.

When monitoring service quality, airlines need to assess passenger expectations of service. Only when passengers' expectations have been met or exceeded by perceptions are there acceptable levels of satisfaction.

Goodman, Marra, and Brigham (1986) indicated that it is necessary to identify and prioritize expectations for service and to incorporate these expectations into improving service quality. According to their studies (Parasuraman, Zeithaml, & Berry, 1988), reliability has repeatedly been rated above all other dimensions. However, Cronin and Taylor (1992) argued that is important to be specific as it was posited that what holds for one type of service may not hold for another. This leads to the fourth hypothesis:

H4: If desired airline service is measured in terms of seven dimensions, namely reliability, assurance, facilities, employees, flight patterns, customization and responsiveness, then passengers' expectations of reliability will be above all the other six dimensions.

4. Methodology

The research method is a combination of Key Purchase Criteria formulated by Mason (1995), whereby a multi-attributes approach to service is formulated utilizing secondary data on airline service criteria to inform the questionnaire content, and by the use of SERVQUAL (Parasuraman et al., 1988, 1991). However the main approach comes from SERVQUAL. SERVQUAL is a survey instrument that purports to measure the quality of service rendered by an institution along five dimensions: *reliability, assurance, tangibles, empathy* and *responsiveness* (*RATER*). Assurance and empathy contain items representing seven original determinants—communication, credibility, security, competence, courtesy, understanding/knowing customers, and access. Therefore, while SERVQUAL has only five distinct dimensions, they capture facets of all 10 originally conceptualized determinants. The strength of SERVQUAL is it can measure what the customer expects from the airline in relation to these dimensions. In addition the personalization and customization aspect of service, which is overlooked in other research, is also advocated in the SERVQUAL model.

5. Concerns regarding SERVQUAL

In their 1988 work, Parasuraman et al. defined expectations as "desires or wants of consumers, i.e. what they feel a service provider should offer rather than would offer". The expectations component was designed to measure customers' normative expectations, and is "similar to the ideal standard in the customer satisfaction/dissatisfaction literature" (Zeithaml & Bitner, 1996).

Teas (1993a, b) found explanations of the desires and wants of consumers as vague and has questioned respondents' interpretation of expectations battery in the SERVQUAL instrument. He believed that respondents might be using any one of the following six interpretations:

- *Service attribute importance*. Customers may respond by rating the expectation statements according to the importance of each.
- *Forecasted performance*. Customers may respond by using the scale to predict the performance they would expect.
- *Ideal performance*. The optimal performance; what performance "can be".
- *Deserved performance.* The performance level customers, in the light of their investment, feel performance "should be".
- *Equitable performance*. The level of performance customers feel they ought to receive given a perceived set of costs.
- *Minimum tolerable performance*. What performance "must be".

Each of these interpretations is somewhat different, and Teas contends that a considerable percentage of the

variance of SERVQUAL expectations measure can be explained by difference in respondents' interpretations. Boulding, Kalra, and Zeithaml (1993) also identify three types of expectations among respondents' interpretations: the will expectation, should expectation, and, ideal expectation.

Carman (1990) conducted a study of SERVQUAL across four different industries, and found it necessary to add as many as 13 additional items (originally 22) to the instrument in order to adequately capture the service quality construct in various settings, while at the same time dropping as many as 14 items from the original instrument.

Although SERVQUAL has been widely used to measure service quality across industries no two providers of service are exactly alike. Therefore, the authors of this study concluded that an adaptation of SERVQUAL is needed and it should serve only as a framework for this research. The instrument is viewed as a basic "skeleton" that requires modification to fit the specific airline situation and supplemental context-specific items. The proposed survey for this research did not follow all of the original 22 SERVQUAL items; instead, items were modified, added or even deleted when planning the survey instrument. In addition, the categorization of the five dimensions was re-defined to fit the situation of the airline industry. The dimension 'tangibles' is too broad and was therefore broken down into three, namely, 'facilities', 'employees' and 'flight patterns'. The dimension 'empathy' was renamed as 'customization' for clearer identifications. In their 1989 set of studies, Parasuraman et al. asked more than 1900 customers of five different service companies to rate the relative importance of the five dimensions by allocating 100 points among them, and the result is given in Table 1.

The implication of identifying the relatively more important service dimension(s) is that, the 'zone of tolerance' (Zeithaml & Bitner, 1996) differs across the five dimensions passengers use in evaluating the airline service. In general, the greater a dimension's importance, the smaller is its zone of tolerance, reflecting less passenger willingness to relax assessment of service standard. According to the studies of Parasuraman et al. (1985), reliability has been repeatedly shown to be above all other dimensions. Moreover, reliability largely concerns the service outcome, i.e., whether the promised service is delivered. The remaining dimensions relate more to the service process, i.e., how the service is delivered.

Table 1
Relative importance of SERVQUAL dimensions

Reliability	32
Responsiveness	22
Assurance	19
Empathy	16
Tangibles	11

Source: Parasuraman, Zeithaml, and Berry (1989).

Therefore, instead of five dimensions, seven dimensions (*reliability, assurance, facilities, employees, flight patterns, customization and responsive*) were identified to be measured. Specific questions asked were also modified, deleted or even added to adapt to the airline industry context. These were validated as will be discussed later.

5.1. Questionnaire design

The questionnaire is a refinement of the original SERVQUAL instrument in that the questions were altered to fit the airline industry. In addition, instead of measuring both expectations and perceptions the questionnaire was designed to measure the expectations of passengers. This serves as a generic guiding framework for individual airlines when formulating strategies to monitor and exceed passengers' expectations.

Part 1 of the questionnaire dealt with specific airline service criteria relating to the 7 dimensions. Respondents were asked to rank each question on a scale of 1–8 which tends to avoid the 'neutral' central tendency and can differentiate the various levels of respondents' expectations more clearly as found in the pilot test. Each of the 26 questions pertains to one of the dimensions (see appendix for example of questionnaire). Part 2 asked respondents to prioritize the dimensions "in order of importance", and provided space for the respondents to offer comments about desired airline service. Part 3 gathered demographic information such as country of origin of the respondent, the purpose of travelling, in addition, whether he/she is the decision-maker in choosing the airline.

6. Sampling process

Hong Kong International Airport (HKIA), as an international air travel hub, has 255 flights scheduled to depart on each weekday (source: Hong Kong Airport Authority, Aug 2001). The total passenger throughput in July 2001 was about 2.8 million (source: Hong Kong Airport Authority). According to the Hong Kong Tourist Association, the major visitor categories in 2000 were Mainland Chinese (36 per cent), Taiwanese (22 per cent), Japanese (13 per cent) and American (9 per cent), and around 49 per cent were leisure travellers while business visitors made up 30 per cent of the total. These passenger profiles meet the fundamental requirement of this research as air travellers from different market segments can be found at HKIA, reducing the possible sampling error as valid samples can be clearly identified.

The study excluded arriving whereby it is argued that memories of the tangible evidence right after the service received might endure most strongly and could lead to bias. Moreover, this research is aimed to measure the 'expectations' rather than 'perceptions' of airline service. Therefore, departing passengers and even potential passengers seeing their friends off at the airport form more valid samples. Systematic sampling was adopted with a 'skip interval' of every 10th individual arriving at the entrance of HKIA. All three main entrances to the departure terminal were stationed by two interviewers (a total of 6 interviewers) in order to cope with flows of respondents. 336 completions of the questionnaire was calculated as the appropriate sample size. A pilot test of the questionnaire found the response rate to be about 34 per cent therefore, it was planned to approach at least 1200 respondents to ensure the capture of sufficient numbers of different ethnic travellers and to have a large enough response. The questionnaire was self-completion and prepared in three versions: English, Chinese and Japanese. The questionnaire was completed in the presence of the interviewer who encouraged the respondent to also write further information in the comments columns.

Fourteen questions from the SERVQUAL scale were reworded to cater to the airline context; twelve additional questions are derived from the passengers' key purchase criteria identified. The SERVQUAL dimension 'tangibles' is not specific enough and is therefore broken down into three, namely, 'facilities', 'employees' and 'flight patterns'. The dimension 'empathy' is changed to 'customization' for better representation.

In order to evaluate the reliability and validity of the questionnaire, a pilot test with 20 business travellers was conducted as well as opinions being gathered from expert marketers. A few questions were retested on the respondents through a verification call-back. Eighty per cent of the respondents selected the same scaled-response while the other 20 per cent selected the scaled-response which are not too far from the original ones (one scale up). In addition to verify the instrument a split-half reliability test was conducted. The statements in the questionnaire were split randomly into two groups and compared based upon one group of items to the other with a *t*-test used to analyse the data. As a result, the difference in mean scores was calculated to be insignificant. This indicated the questionnaire was reliable in generating similar scale-responses from respondents who reflect the final sample design.

7. Analysis of the findings

The survey was carried out in early September 2001 and the response rate was approximately 30 per cent. The questionnaires completed were 218 males and 147 females by gender. Owing to the insufficient sample collected from Filipino, Australian, Korean, Indian, Thai and South African respondents, these responses were not retained for the data analysis. The final ethnic mix utilized represented: Chinese—122; North American—86; Japanese—64; West European—56, making up a total analysis of 328 respondents.

Regarding the respondents' purpose of travel, although some respondents chose more than one purpose the interviewers immediately clarified this. The reasons for travel fall into the following three categories: Business, 135 respondents; Holiday 139 respondents; Visiting friends/relatives 54 respondents. Airline decision made by self was 188 respondents and by others 140 respondents.

7.1. Data analysis and hypothesis testing

A brief description of the 26 items in the questionnaire and the importance of the statements tested provides a better understanding of the analysis (see Table 2). The following statistics, which indicate no missing values, were generated by SPSS. It can be seen the findings provide evidence of:

- 23 items out of 26 (88 per cent) scored 5 or above on the 8-point scale, indicating respondents have above average expectations of almost all dimensions.
- Q6 has the highest mean scores and the smallest standard deviation, which indicates that safety is respondents' number one concern. Q1 ranks the second, meaning that on-time departure and arrival is also very important for respondents.
- Q21 (availability of air/accommodation packages) has the largest standard deviation.
- Q11 (availability of in-flight internet/email/fax/phone facilities); Q22 (availability of travel related partners) and Q21 (availability of air/accommodation packages) are of least importance for respondents and scored 4.22, 4.15 and 3.57, respectively.

Part 2 of the questionnaire asked respondents to prioritize directly the dimensions 'in order of importance' for them directly, and the findings are given in Table 3.

In both assessments (Parts 1 and 2 of the questionnaire), '*Reliability*' was not ranked, as in the literature, as the most important dimension (being ranked third and second, respectively). Hence the hypothesis H4 is rejected. Tsaur, Chang, and Yen (2002) in their research into airline service quality utilizing a fuzzy set approach found that of 15 service criteria the most important attributes were related to courtesy, safety, comfort and cleanliness. These reflect the findings of this study.

An independent sample *t*-test was carried out for decision-makers in relation to non-decision-makers.

Table 2
Descriptive statistics—all questions

	Mean	Std. deviation
Q6 (A) Safety	7.90	0.30
Q1 (R) On-time departure and arrival	7.84	0.37
Q5 (A) Behaviour of employees gives confidence	7.57	0.52
Q24 (RS) Efficient check-in/baggage handling services	7.27	0.61
Q25 (RS) Employees are always willing to help	7.25	0.62
Q23 (RS) Prompt service by employees	7.12	0.62
Q12 (E) Courteous employees	6.97	0.71
Q26 (RS) Employees handle requests/complaints promptly	6.96	0.72
Q15 (FP) Convenient flight schedules and enough frequencies	6.93	0.65
Q8 (F) Clean and comfortable interior/seat	6.90	0.75
Q2 (R) Consistent ground/in-flight services	6.88	0.63
Q7 (A) Employees have knowledge to answer questions	6.80	0.78
Q14 (FP) Non-stop flights to various destinations	6.70	0.66
Q3 (R) Perform service right the first time	6.60	0.72
Q13 (E) Neat and tidy employees	6.44	0.64
Q18 (C) Individual attention to passengers	6.33	1.02
Q17 (C) Understanding of passengers' specific needs	6.26	0.80
Q4 (R) Food and beverage	6.03	1.23
Q16 (FP) Availability of global alliance partners' network	5.99	0.78
Q9 (F) In-flight entertainment facilities and programmes	5.89	1.11
Q19 (C) Availability of loyalty programme	5.88	1.09
Q20 (C) Availability of frequent flyer programme	5.79	1.19
Q10 (F) Availability of waiting lounges	5.26	0.99
Q21 (C) Availability of air/accommodation packages	4.22	1.53
Q22 (C) Availability of travel related partners, e.g. hotels, car rentals	4.15	1.27
Q11 (F) In-flight internet/email/fax/phone facilities	3.57	1.04

($n = 328$ respondents for all questions)
Key: R—reliability; A—assurance; F—facilities; E—employees; FP—flight patterns; C—customization; RS—responsiveness.

Table 3
Descriptive statistics—relative importance of dimensions

	N	Mean[a]	Std. deviation
Assurance	328	1.1098	0.3411
Reliability	328	2.7165	0.9524
Responsiveness	328	2.8963	1.1500
Flight patterns	328	4.3659	1.1226
Employees	328	4.4299	1.0814
Facilities	328	6.0427	0.9945
Customization	328	6.4543	0.6892

[a] Mean: 1 = the most important; 7 = the least important.

Overall none of the individual items had a significance level less than 5 per cent. This implies the difference between the service expectations of decision-makers and non-decision-makers is so small that hypothesis H2 is rejected.

7.2. Significance test of differences among ethnic groups/nationalities

Four major ethnic groups/nationalities are identified, namely North American, West European, Chinese and Japanese. ANOVA was used and 13 items indicated highly significant differences (Sig. value smaller than 0.01) while one item (Q14) signaled significant difference. The differences come from various service dimensions except 'Assurance' (Q5, Q6, and Q7). The results indicate that there is no difference in expectations of 'Assurance' across different ethnic groups/nationalities. Since there are more than half of the items (14 items) signaling statistically significant differences, the hypothesis H1 is accepted which indicates airlines need to consider variations in service requirements by ethnic group.

In theory, ANOVA will indicate wherever there is at least one pair of sample groups that has statistically significant difference, but does not indicate where the differences are. Based on the means of individual items, some observations are described below:

- Japanese travellers have relatively higher expectations of various service dimensions in general (Q2, Q3, Q4, Q8, Q9, Q12, Q13, Q17, Q18, Q23, Q25 and Q26), particularly in areas such as: consistent ground/in-flight service (Q2); food/beverages quality (Q4); clean/comfortable aircraft interiors and seats (Q8); courteous and helpful employees who render prompt service with personal individual attention (Q12, Q25, Q23, Q17 and Q18).
- Both Chinese and Japanese fliers have higher expectations (rated 6.20 and 6.08, respectively) of in-flight entertainment facilities/programmes (Q9) when compared to North American and West European passengers.
- North Americans and West Europeans have higher expectations (rated 6.20 and 5.96, respectively) of an airline loyalty programme (Q19) than the Chinese and Japanese.

7.3. Significance test of differences among passengers of different travel purposes

Passengers usually travel for three main purposes: business, holiday and visiting friends/relatives. ANOVA results indicated 20 items with highly significant differences (Sig. value smaller than 0.01). 'Assurance' (Q5, Q6, and Q7) once again is not significant. This indicates that there are similar expectations of 'Assurance' among passengers travelling for different purposes.

On-time departure/arrival (Q1); clean and comfortable aircraft interiors/seats (Q8) as well as neat and tidy employee appearance (Q13) also are not significant. However, since the majority of the items (20 items)

tested signal statistically significant differences, hypothesis H3 is hence accepted. As mentioned previously ANOVA does not highlight where the differences are, therefore, some observations related to these differences are described below.

7.3.1. Business travellers

- They have the lowest expectations of quality service in relation to food and beverages (Q4); individual attention by airline employees (Q18); prompt service (Q23) and in-flight entertainment facilities/programmes (Q9), among the three categories identified. This is an interesting finding as it is usually these services that airlines concentrate on in relation to the business traveller. Obviously current experiences reflect that lower quality levels are influencing expectation. This provides an ideal opportunity for an airline brand to excel in these areas.
- They have relatively higher expectations of internet/email/fax/phone (Q11) and travel related partners of airlines (Q22). They have higher expectations of waiting lounges (Q10); convenient schedules and flight frequencies (Q15); loyalty and frequent flyer programmes (Q19 and Q20) than others.

7.3.2. Holiday-makers

- Among the three categories, they have the highest expectations of food/beverages quality (Q4); in-flight entertainment facilities/programmes (Q9); individual attention (Q18); helpful airline employees (Q25) who deliver prompt service (Q23) and understand their specific needs (Q17), as well as efficient in handling requests and complaints (Q26). Given holiday-makers normally fly on the cheapest fares then this finding can create a dilemma to the airline wanting to reflect lower price by having lower cost.

7.3.3. Passengers visiting friends/relatives

- They have generally the lowest expectations of the various service dimensions among the three categories, except in areas such as individual attention (Q18); food/beverages quality (Q4); prompt service (Q23) and for in-flight entertainment facilities/programmes, their expectations are higher than those of business travellers.

8. Conclusions

Understanding the relationship between airline service quality and profitability is important. However, it is perhaps more useful managerially to identify specific drivers of airline service quality that most relate to the passengers as appropriate intervention strategies can then be formulated. Based on the findings of the study it was found there are significant differences in service expectations among passengers of different ethnic groups/nationalities as well as passengers with different purposes of travel. However, there was no significant difference in service expectations between decision-makers and non-decision-makers in choosing airlines. Also, 'Reliability' was consistently found to be lower in rank than expected from the literature. The study allows a picture of passengers' service expectations and some recommendations to be summarized as follows:

- Safety is the number one priority for passengers. This research occurred just prior to the 'terrorist incident' in New York, and it is predicted 'Assurance' will be increasingly even more important for passengers and should not be compromised in any way. More measures in security and well-trained/vigilant employees will give passengers more confidence.
- Consideration should be given to ensuring on-time performance of flights, as it is another highly ranked attribute.
- Being prompt/responsive, willing to help and having a courteous attitude should be a priority objective for the employees as part of the service culture.
- Resources invested in 'Customization' (such as loyalty and frequent flyer programmes) and 'Facilities' (such as in-flight entertainment; waiting lounges and in-flight internet/email/fax/phone services) should be re-examined and targeted to the right audience, as these are the areas that are not highly regarded by all passengers in general.

8.1. Ethnic groups/nationalities

- More resources might need to be deployed across various service dimensions on routes dominated by Japanese passengers in order to meet their high expectations.
- More Japanese and Chinese entertainment programmes/movies and foreign films with subtitles are desired on route with higher Japanese and Chinese demographics (based on questionnaire written comments).
- More convenient schedules; frequencies of flight and global airline partners can attract more business travellers and holiday-makers.
- Availability of waiting lounges is one of the least important services rendered from the passengers' point of view. According to the written comments, some passengers do not have time to visit the lounges after checking-in and they also mentioned some lounges are too far from boarding gates. The lounges are more useful for transit passengers.

- Passengers visiting friends/relatives have lower expectations across the service dimensions. According to the written comments, price is one of the main determining factors in selecting an airline.

In conclusion this research has attempted to provide some useful information, i.e. the differences in service expectations among passengers of different market segments. Future research may want to expand on this study. This research involves only four ethnic groups/nationalities; so researchers might be interested in testing the differences in service expectations of other ethnic groups/nationalities. Future research may also study if the identified seven dimensions are fully appropriate in measuring the desired provision of airline service quality.

Appendix A. Questionnaire used for the study

Dear passenger,

We are conducting a survey regarding ***your expectations of airline services***. Please indicate the level of importance of each statement for you. Your comment is highly important to the analysis, and will be treated with anonymity and confidentiality. Thank you very much for your cooperation.

*Part 1: Please **circle the number** that indicates the level of importance of each statement for you*

	Unimportant						Very important		No opinion
1. The flight departs and arrives at a time it promises.	1	2	3	4	5	6	7	8	0
2. The airline provides good ground/in-flight services consistently.	1	2	3	4	5	6	7	8	0
3. The airline performs the service right the first time.	1	2	3	4	5	6	7	8	0
4. The airline provides quality food and beverages.	1	2	3	4	5	6	7	8	0
5. The behaviour of employees gives you confidence.	1	2	3	4	5	6	7	8	0
6. The airline makes you feel safe.	1	2	3	4	5	6	7	8	0
7. Employees of the airline have the knowledge to answer your questions.	1	2	3	4	5	6	7	8	0
8. The aircraft has clean and comfortable interiors and seats.	1	2	3	4	5	6	7	8	0
9. The airline has up-to-date in-flight entertainment facilities and programmes.	1	2	3	4	5	6	7	8	0
10. The airline has comfortable waiting lounges.	1	2	3	4	5	6	7	8	0
11. The airline provides in-flight internet/email/fax/phone services.	1	2	3	4	5	6	7	8	0
12. Employees of the airline are consistently courteous with you.	1	2	3	4	5	6	7	8	0
13. Employees of the airline appear neat and tidy.	1	2	3	4	5	6	7	8	0
14. The airline has non-stop service to various destinations.	1	2	3	4	5	6	7	8	0
15. The airline has convenient flight schedules and enough frequencies	1	2	3	4	5	6	7	8	0
16. The airline has global alliance partners in order to provide a wider network and smoother transfers.	1	2	3	4	5	6	7	8	0
17. Employees of the airline understand your specific needs.	1	2	3	4	5	6	7	8	0
18. Employees of the airline give you individual attention.	1	2	3	4	5	6	7	8	0

19.	The airline has a sound loyalty programme to recognize you as a frequent customer.	1	2	3	4	5	6	7	8	0
20.	The airline has a sound mileage programme.	1	2	3	4	5	6	7	8	0
21.	The airline offers you with air/accommodation packages.	1	2	3	4	5	6	7	8	0
22.	The airline has other travel related partners, e.g. car rentals, hotels and travel insurance.	1	2	3	4	5	6	7	8	0
23.	Employees of the airline give you prompt service.	1	2	3	4	5	6	7	8	0
24.	The airline has efficient check-in and baggage handling services	1	2	3	4	5	6	7	8	0
25.	Employees of the airline are always willing to help you.	1	2	3	4	5	6	7	8	0
26.	Employees of the airline are never too busy to respond to your request or complaint.	1	2	3	4	5	6	7	8	0

*Part 2: Please **prioritize** the following 7 attributes **in order of importance** to you*
(1=*The most important*; 7 = *The least important*)

———Assurance *(safety records, employees' capability)*
———Flight Patterns *(flight schedules, flight frequencies, flight network)*
———Reliability *(on-time departure/arrival, consistent service)*
———Responsiveness *(efficient service, prompt handling of requests/complaints)*
———Employees *(employees' appearance and attitude)*
———Facilities *(check-in / baggage handling service, in-flight facilities, waiting lounge)*
———Customization *(individual attention, anticipation of your travel needs)*

Are there any specific reasons why you prioritized the attributes in such order?

_____
_____
_____
_____
_____

*Part 3: Please **tick** the appropriate box below*

27. You are: ☐ Male_1 ☐ Female_2

28. Your purpose of travel (or next possible trip if not travelling today):
☐ Business_1 ☐ $\text{Visiting friends/relatives}_3$
☐ Tourist_2 ☐ Other (please write ————————)

29. Who made/will make (if not travelling today) the airline decision for you:
☐ Yourself_1 ☐ Secretary_2
☐ Travel agent_2 ☐ Family_2
☐ Other (please write ————————)

30. Which of these ethnic groups/nationalities do you belong to:
☐ American_1 ☐ French_2
☐ Canadian_1 ☐ Chinese_3
☐ British_2 ☐ Japanese_4
☐ German_2 ☐ Other (please write ————————)

Any other comments?

-THANK YOU-

Appendix B. ANOVA tables of findings

ANOVA—Ethnic groups/nationalities

		Sum of squares	df	Mean square	*F*	Sig.
Q1	Between groups	0.257	3	8.576E-02	0.629	0.597
	Within groups	44.179	324	0.136		
	Total	44.436	327			
Q2	Between groups	12.680	3	4.227	11.563	0.000
	Within groups	118.441	324	0.366		
	Total	131.122	327			
Q3	Between groups	20.192	3	6.731	14.847	0.000
	Within groups	146.878	324	0.453		
	Total	167.070	327			
Q4	Between groups	55.625	3	18.542	13.684	0.000
	Within groups	439.006	324	1.355		
	Total	494.631	327			
Q5	Between groups	8.934E-02	3	2.978E-02	0.109	0.955
	Within groups	88.298	324	0.273		
	Total	88.387	327			
Q6	Between groups	0.154	3	5.132E-02	0.579	0.629
	Within groups	28.724	324	8.865E-02		
	Total	28.878	327			
Q7	Between groups	3.039	3	1.013	1.695	0.168
	Within groups	193.680	324	0.598		
	Total	196.720	327			
Q8	Between groups	16.274	3	5.425	10.475	0.000
	Within groups	167.796	324	0.518		
	Total	184.070	327			
Q9	Between groups	35.044	3	11.681	10.291	0.000
	Within groups	367.782	324	1.135		
	Total	402.826	327			
Q10	Between groups	1.974	3	0.658	0.665	0.574
	Within groups	320.514	324	0.989		
	Total	322.488	327			
Q11	Between groups	7.111	3	2.370	2.211	0.087
	Within groups	347.413	324	1.072		
	Total	354.524	327			

Q12	Between groups	21.798	3	7.266	16.716	0.000
	Within groups	140.833	324	0.435		
	Total	162.631	327			
Q13	Between groups	8.167	3	2.722	6.966	0.000
	Within groups	126.614	324	0.391		
	Total	134.780	327			
Q14	Between groups	4.316	3	1.439	3.397	0.018
	Within groups	137.197	324	0.423		
	Total	141.512	327			
Q15	Between groups	1.083	3	0.361	0.865	0.459
	Within groups	135.161	324	0.417		
	Total	136.244	327			
Q16	Between groups	2.114	3	0.705	1.148	0.330
	Within groups	198.858	324	0.614		
	Total	200.973	327			
Q17	Between groups	58.929	3	19.643	42.990	0.000
	Within groups	148.043	324	0.457		
	Total	206.973	327			
Q18	Between groups	73.605	3	24.535	29.830	0.000
	Within groups	266.489	324	0.822		
	Total	340.095	327			
Q19	Between groups	15.395	3	5.132	4.497	0.004
	Within groups	369.727	324	1.141		
	Total	385.122	327			
Q20	Between groups	9.754	3	3.251	2.320	0.075
	Within groups	454.148	324	1.402		
	Total	463.902	327			
Q21	Between groups	8.089	3	2.696	1.155	0.327
	Within groups	756.106	324	2.334		
	Total	764.195	327			
Q22	Between groups	1.894	3	0.631	0.391	0.760
	Within groups	523.082	324	1.614		
	Total	524.976	327			
Q23	Between groups	9.777	3	3.259	9.116	0.000
	Within groups	115.821	324	0.357		
	Total	125.598	327			
Q24	Between groups	1.065	3	0.355	0.948	0.418
	Within groups	121.325	324	0.374		
	Total	122.390	327			
Q25	Between groups	10.287	3	3.429	9.643	0.000
	Within groups	115.213	324	0.356		
	Total	125.500	327			

Q26	Between groups	16.013	3	5.338	11.342	0.000
	Within groups	152.472	324	0.471		
	Total	168.485	327			

ANOVA—Purpose of travel

		Sum of squares	df	Mean square	*F*	Sig.
Q1	Between groups	0.508	2	0.254	1.878	0.155
	Within groups	43.928	325	0.135		
	Total	44.436	327			
Q2	Between groups	3.466	2	1.733	4.412	0.013
	Within groups	127.656	325	0.393		
	Total	131.122	327			
Q3	Between groups	14.295	2	7.148	15.206	0.000
	Within groups	152.775	325	0.470		
	Total	167.070	327			
Q4	Between groups	192.894	2	96.447	103.882	0.000
	Within groups	301.738	325	0.928		
	Total	494.631	327			
Q5	Between groups	1.415	2	0.707	2.643	0.073
	Within groups	86.973	325	0.268		
	Total	88.387	327			
Q6	Between groups	0.497	2	0.248	2.844	0.060
	Within groups	28.381	325	8.733E-02		
	Total	28.878	327			
Q7	Between groups	3.293	2	1.647	2.767	0.064
	Within groups	193.426	325	0.595		
	Total	196.720	327			
Q8	Between groups	0.985	2	0.493	0.875	0.418
	Within groups	183.085	325	0.563		
	Total	184.070	327			
Q9	Between groups	73.636	2	36.818	36.349	0.000
	Within groups	329.190	325	1.013		
	Total	402.826	327			
Q10	Between groups	57.520	2	28.760	35.276	0.000
	Within groups	264.968	325	0.815		
	Total	322.488	327			
Q11	Between groups	21.052	2	10.526	10.259	0.000
	Within groups	333.472	325	1.026		
	Total	354.524	327			
Q12	Between groups	11.190	2	5.595	12.007	0.000
	Within groups	151.441	325	0.466		
	Total	162.631	327			

Q13	Between groups	0.803	2	0.401	0.974	0.379
	Within groups	133.978	325	0.412		
	Total	134.780	327			
Q14	Between groups	13.472	2	6.736	17.097	0.000
	Within groups	128.041	325	0.394		
	Total	141.512	327			
Q15	Between groups	19.183	2	9.592	26.630	0.000
	Within groups	117.061	325	0.360		
	Total	136.244	327			
Q16	Between groups	31.338	2	15.669	30.020	0.000
	Within groups	169.635	325	0.522		
	Total	200.973	327			
Q17	Between groups	17.377	2	8.689	14.894	0.000
	Within groups	189.595	325	0.583		
	Total	206.973	327			
Q18	Between groups	116.888	2	58.444	85.097	0.000
	Within groups	223.207	325	0.687		
	Total	340.095	327			
Q19	Between groups	166.894	2	83.447	124.275	0.000
	Within groups	218.228	325	0.671		
	Total	385.122	327			
Q20	Between groups	194.970	2	97.485	117.808	0.000
	Within groups	268.933	325	0.827		
	Total	463.902	327			
Q21	Between groups	283.967	2	141.984	96.089	0.000
	Within groups	480.228	325	1.478		
	Total	764.195	327			
Q22	Between groups	82.225	2	41.112	30.178	0.000
	Within groups	442.751	325	1.362		
	Total	524.976	327			
Q23	Between groups	13.707	2	6.854	19.907	0.000
	Within groups	111.890	325	0.344		
	Total	125.598	327			
Q24	Between groups	4.680	2	2.340	6.461	0.002
	Within groups	117.710	325	0.362		
	Total	122.390	327			
Q25	Between groups	9.018	2	4.509	12.581	0.000
	Within groups	116.482	325	0.358		
	Total	125.500	327			
Q26	Between groups	16.706	2	8.353	17.886	0.000
	Within groups	151.779	325	0.467		
	Total	168.485	327			

References

Boulding, W., Kalra, A., & Zeithaml, V. (1993). A dynamic process model of service quality: From expectations to behavioral intentions. *Journal of Marketing Research*, *30*, 7–27.

Bowen, B., & Headley, D. (2000). *Air travel consumer report: The airline quality rating 2000*. Washington DC: US Department of Transportation.

Bojanic, D. C., & Rosen, L. D. (1994). Measuring service quality in restaurants: An application of the SERVQUAL instrument. *Hospitality Research Journal*, *18*(1), 3–14.

Cunningham, L. F., Young, C. E., & Lee, M. (2002). Cross-cultural perspectives of service quality and risk in air transportation. *Journal of Air Transportation*, *7*(1), 3–26.

Buzzell, R., & Gale, B. (1987). *The PIMS principles*. New York: The Free Press.

Carman, J. (1990). Consumer perceptions of service quality: An assessment of the SERVQUAL dimensions. *Journal of Retailing*, *66*, 33–55.

Cathay Pacific Airways. (1996–1999). *Reflex survey: Reflex demographic information,* Hong Kong.

Collis, R. (1998). What fliers would like—and get. *International Herald Tribune*, 16 January.

Cronin, J., & Taylor, S. (1992). Measuring service quality: A re-examination and extension. *Journal of Marketing*, *56*, 55–68.

Goodman, J. A., Marra, T., & Brigham, L. (1986). Customer service: Costly nuisance or low-cost profit strategy. *Journal of Retail Banking*, *36*, 36–48.

Gale, B. (1992). Monitoring customer satisfaction and market-perceived quality. *American Marketing Association Worth Repeating Series*, No. 922CSO I.

Grönroos, C. (1994). From scientific management to service management: A management perspective for the age of service competition. *International Journal of Services Industry Management*, *5*, 5–20.

Hong Kong Airport Authority, Business Report, Aug 2001.

Johnson, M. D., Nader, G., & Fornell, C. (1996). Expectations, perceived performance, and customer satisfaction for a complex service: The case of bank loans. *Journal of Economic Psychology*, *17*, 163–182.

Lam, T., & Zhang, H. Q. (1999). Service quality of travel agents in Hong Kong. *Tourism Management*, *20*, 341–349.

Mason, K. (1995). A stakeholder approach to the benefit segmentation of the short haul business air travel market. *European Journal of Marketing*, *29*(5), 73.

Parasuraman, A., Zeithaml, V., & Berry, L. (1985). A conceptual model of service quality and its implications for future research. *Journal of Marketing*, *49*, 41–50.

Parasuraman, A., Zeithaml, V., & Berry, L. (1988). SERVQUAL: A multiple-item scale for measuring consumer perceptions of service quality. *Journal of Retailing*, *64*, 12–40.

Parasuraman, A., Zeithaml, V., & Berry, L. (1991). Understanding customer expectations of service. *Sloan Management Review*, *32*(3), 39–48.

Ryan, C., & Cliff, A. (1997). Do travel agencies measure up to customer expectation? An empirical investigation of travel agencies' service quality as measured by SERVQUAL. *Journal of Travel and Tourism Marketing*, *6*(2), 1–31.

Saleh, F., & Ryan, C. (1991). Analyzing service quality in the hospitality industry using the SERVQUAL model. *The Service Industries Journal*, *11*, 324–343.

Teas, R. (1993a). Consumer expectations and the measurement of perceived service quality. *Journal of Professional Services Marketing*, *8*(2), 33–54.

Teas, R. (1993b). Expectation, performance evaluation, and consumers' perceptions of quality. *Journal of Marketing*, *57*, 18–34.

Tsaur, S., Chang, T., & Yen, C. (2002a). The evaluation of airline service quality by fuzzy MCDM. *Tourism Management*, *23*(1), 107–115.

Zeithaml, V., & Bitner, M. (1996). *Service marketing: Integrating customer focus across the firm*. USA: McGraw-Hill.