

Journal of Multidisciplinary in Social Sciences

Journal homepage: http://jmss.dusit.ac.th



Driving Factors of Passenger Satisfaction Affecting Airport Service Quality: A Case of Airport for Low Cost Carriers

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Article info

Article history: Received: 12 February 2020 Revised: 26 May 2020 Accepted: 4 June 2020

Keywords:

Airport service quality, Driving factors, Don mueang airport

Abstract

Several factors have brought all Thai airports to review their service quality and passenger satisfaction due to the nation's aspiration to become an aviation hub of ASEAN and its extension, the reliance of national revenue on travel and tourism sector amid emergence of new destinations and more vigorous stance of neighboring countries in regards to tourism promotion, and an ever more intense competition among airports that accentuates the non-aeronautic revenue streams.

Managing Airport Service Quality – ASQ is not an easy task especially as number of travelers frequenting the airports outpace the increment and renewal of airport facilities especially for airports serving mainly budget airlines (LCC) that need to turn the services rendered to a large number of passengers quickly on a limited budget. The management of the airport seeks to identify factors that drive passengers' overall satisfaction of the airport.

This study, therefore, aims to (1) Examine service quality rated by passengers of the studied airport (2) identify factors that drive overall satisfaction of passengers, (3) Examine other factors that might improve the service quality rating, and (4) to propose guidelines for the airport to improve service quality evaluation.

A self-administration survey was conducted with 340 domestic and international passengers using composite variables with normal score distribution (z-score is lower than 3.29) and for variables using interval scales to measure was conducted during the 4th quarter of 2018. Service items were categorized into 5 categories namely (1) Venue and Ambiance, (2) Effectiveness of the Accessibility and Directions Guiding (3) Efficiency of Process, (4) Discretionary Activities, and (5) Quality of Interaction with Service Personnel. The survey results showed that (1) all service components are significantly and positively correlated with overall satisfaction of the airport. (2) The factor that drives overall satisfaction of passengers is "Interaction with Service Staff" (3) Factors that might improve the service quality rating is "venue and ambiance" service component. (4) Guidelines for the airport to improve service quality evaluation is upgrading of venue and ambiance as well as the accessibility to the airport.

Introduction

Promotion of Thailand to become Asia-Pacific's air transportation hub has been one of the major policies of several administrations. The present administration has announced such a policy as a prioritized agenda in its twenty-year national strategy and ordered a concrete orchestrations of efforts and resource relocations among various government authorities, private sectors and international organizations (Department of Public Relations, 2017). The strategy is tightly linked to the strategy to create variety in tourism for sustainable development as airports are the first point of destination impression generation and the link between origin destinations of foreign travelers (Fodness & Murray, 2007; Manulang, Bendesa, & Putra, 2015; Office of the Prime Minister, 2018). Strengthening airport competitiveness is, therefore, of high priority for Thailand's socio-economic development.

Currently, Bangkok, the capital city of Thailand has two airports. The newer and larger one Suvarnabhumi Airport serves mainly full-service airlines and is located to the east of Bangkok while the older and smaller airport Don Mueang is located in the north of Bangkok and mainly serves low-cost carriers – LCC. While the adoption of LCC among both international and domestic travelers are on the rise, the second airport is operated in various constraints ranging from space, venue, and operational constraints. The situation is coupled with the rise in number and quality of facilities of airports in competing destinations. Sustenance and improvement of passenger satisfaction is, consequently, the key to not only the airports but also the country as a tourism destination.

Airport Industry and the Studied Airport, Traditionally, airports were regarded just as transportation terminals and a public space where passengers had no choice but to follow the decisions of airlines who choose to include particular airports in their routes (Fodness & Murray, 2007). Advancement of transportation technology, higher relative purchasing power of the general public, a more overt stance of previously socialist countries and liberalization of air transportation are among uncountable factors contributing to higher demand of air transportation and, consequently, larger and more sophisticated airports (Wilson, Zeithaml, Bitner, & Gremler, 2012; Fodness & Murray, 2007; Bezerra & Gomes, 2016).

Liberalization of air transportation, in particular, has made the competition among airports ever intense and the key success factors of airports are now

efficiency of the facility usage and service quality (Fodness & Murray, 2007; Lupo, 2015; Bezerra & Gomes, 2016). Despite the fact that passengers choose their departing or arriving airports from airlines' choice and location and direct customers of airports are airlines not passengers, it is believed that their satisfaction with airport service quality is an intervening factor of how airlines choose to include particular airports into their routes (Fodness & Murray, 2007). Airport market demand is fluctuating on the air transportation demand which is, by nature, cyclical on economic conditions (Fodness & Murray, 2007). Intense competition among airports force airports' managements to promote their service fees to airlines making revenue of airports decline. In such a light, airports actively seek measures to maximize non-aeronautical revenues such as from retail, food and beverage and other services that passengers consume while waiting to board (Fodness & Murray, 2007; Bezerra & Gomes, 2016; Pandey, 2016).

The two key success factors of airports; efficiency and service quality, unfortunately, often contradicts one with another. When airports would like to increase its efficiency, they normally take in more flights and shorten the turnaround times, service quality rendered to customers often decline. Service quality has become harder and harder to sustain and improve for airports that serve LCC as the airline business model is solely driven by efficiency (Channoi, Pitsaphol, & Deeprasert, 2016; Bezerra & Gomes, 2016). It can be argued that management of service quality for airports serving LCC is both difficult and complex given the operational environment and business models. The case is even more complicate for the studied airports that are constrained spatially, regulatorily, and operationally.

The studied airport is a secondary airport of Bangkok located in the northern strip of the capital city. The airport used to be the major airport since 1914 until the opening of the current major airport in 2006. The airport is closed for over a year and reopened again in 2007 to accommodate the rising demand of LCC connecting Bangkok to 49 domestic and international destinations. Each year, it serves more than 38 million passengers.

There are two terminals operated in the studied airport. Terminal one is for international flights and terminal two is for domestic flights. As terminal two was reopened later for domestic flight, its facilities are newer and better maintained. The traffic for international flights at terminal one is highly congested

with insufficient waiting areas and toilets. Service quality rating for international flights should be lower than domestic flights consequently.

The airport itself faces several limitations. Spatially, the airport is flanked by the air force, and Vipavadi Rangsit Road. Spatial limitation makes it almost impossible to expand the airports and its support facilities including parking space and airport terminals. Operationally, it cannot stop operation for renovation and expansion of the terminals due to tight schedules and high traffic demands. Compared to the major airport, the airport is closer to the city but smaller with older facilities and not well-designed. In such a light, management of customers' perceived service equality becomes a big challenge for the studied airport. Airport space can be divided functionally into three areas namely access interface, processing areas and flight interface (Pandey, 2016). Access interface refers to the areas where passengers access to and depart from the airport. Processing Areas include all areas where passengers are processed ranging from ticketing, check-in, security inspection and boarding. Flight interface refers to the interaction between passengers and airlines which normally take place after passengers board the aircraft. The last area is beyond the scope of this study. Activity wise, airport services can be divided into two major types namely process activities and discretionary activities (Bezerra & Gomes, 2016; Pandey, 2016; Cholkongka, 2019). Process activities include all services required for passengers to board the aircraft which tend to be similar across countries and are mostly demanded by law. They range from check-in to security screening and boarding. Process activities are normally evaluated on its efficiency, waiting time and courtesy of staff. Discretionary activities refer to services that passengers can voluntarily consume while waiting to board the aircraft. They are usually evaluated on the variety, and leisure of alternatives (Arif, Gupta, & Williams, 2013; Bezerra & Gomes, 2016; Pandey, 2016). The main motivation of air passengers is the smooth transfer from land to air transportation, the importance of process activities should outweigh the importance of discretionary activities. While process activities are usually concerned with how effective the airport services are in getting through the airport terminals as well as the quality of encounters with airport and airline personnel, discretionary activities are usually assessed on how well they can make the waiting time more productive and well-maintained (Fodness &

Murray, 2007).

Airport services for this study can therefore be grouped into five categories namely venue and ambiance, Effectiveness of accessibility and direction guiding, efficiency of process, Discretionary activities, and quality of interaction with service personnel.

Considering the motivation of service of air passengers, efficiency of process and quality of interaction should be the critical determinant with overall satisfaction with the passengers' experience with studied airports.

Objectives

- 1. Examine the service quality rated by passengers of the studies airport,
- 2. Identified factors that drive overall passenger satisfaction,
- 3. Examine factors that might improve the service quality rating, and
 - 4. Propose guidelines for airport service quality.

Conceptual framework

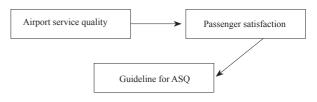


Figure 1 Conceptual framework

Research methodology

A survey questionnaire was designed comprising of 43 items asking flight information, frequency of flight taking, purpose of flights, service quality rating, relative importance ranking, and passengers' in-airport behaviors.

Composite variables were computed with reliability criteria of Cronbach's alpha of 0.70 and above. For composite variables with normal score distribution (z-score is lower than 3.29) will be further processed statistically. Variables that fail with normal score distribution criteria (z-score higher than 3.29) will be processed using non-parametric statistical processes.

For quantitative research, a self-administered survey was conducted with 340 respondents recruited using stratified random sampling where flights were selected by airport's management in English, Thai, and Chinese and variables using interval scales to measure,

due to no absolute zero, scores ranging from 1.00-1.80 are categorized in "improvement needed" zone, scores ranging from 1.81-2.60 are categorized in "poor" zone, scores ranging from 2.61-3.40 are considered "fair" while scores ranging from 3.41-4.20 is considered good. Scores ranging 4.21-5.00 are considered excellent. To find the service component that contribute most to the overall satisfaction, correlations between composite variables and overall satisfaction were computed. Mean scores of satisfactions towards different service components were also compared between travelers of different profiles using analysis of variance (Aron, Aron, & Coups, 2008; Manning & Munro, 2007; Neuman, 2011).

For qualitative research implementation of a semi-structured in-depth interview with 10 key informants who were willing to provide transcendent views on their experience with airport service quality of the studied airport conveniently recruited at the end of the quantitative survey.

Results

Out of 340 respondents, 196 (equivalent to 57.6%) were female and 144 (equivalent to 42.4%) were male. One of them (equal to 0.3%) failed to provide the information. The majority of respondents were aged between 26-54 years (84.7%).

Nationality wise, majority of the respondents were Thai and Chinese (255 passengers equivalent to 62%, and 39 respondents equivalent to 11.4%, respectively). Respondents mainly traveled for leisure purpose (165 respondents equivalent to 48.4%). As for class of service, majority of respondents (316 respondents equivalent to 92.9%) traveled on the economy class and 83% of them (284 respondents) engage in air travel 1-6 times within past six months.

Most respondents travel within the country (212 respondents equivalent to 62.2%) followed by developed country international destinations (49 respondents equivalent to 14.4%) and CLMV sub-region (34 respondents representing 10% of total sample).

Five composite variables were computed according to the priori theory namely Venue and ambiance, Effectiveness of accessibility and direction guiding, Efficiency of process, Discretionary activities, and quality of Interaction with Service Personnel. The first composite variable was computed initially from 6 items. Deleting one item "Quality of internet signal" was excluded from the composite variable due to higher reliability if such an item is deleted. The composite

variable "venue and ambiance" was calculated by averaging the score of the five question items shown in Table 1. The composite variable is reliable (Cronbach's alpha = 0.893, > 0.70) and valid (item-to-total correlation is higher than 0.5) (Manning & Munro 2007; Morgan, Barrett, Leech, & Gloeckner, 2019). The score of such variable is normally distributed (z-score = 1.688, < 3.29 critical value for sample size larger than 300) (Tabachnick, Fidell, & Ullman, 2007; Manning & Munro 2007). The composite variable is, therefore, ready for further statistical processing.

Table 1 Composite variable "venue and ambiance"

| Component variables | | Mean | S.D. | Z-Score | Item -to- total correlation |
|------------------------------------|------------------------|--------------------|-------|---------|-----------------------------------|
| Adequacy of toilets | 3.565 | 1.073 | 2.219 | 0.724 | |
| Cleanliness of toilets | Cleanliness of toilets | | | 2.876 | 0.721 |
| Comfort of waiting area | 3.679 | 0.952 | 2.267 | 0.752 | |
| passenger gates | | | | | |
| Cleanliness of passenger terminals | | 3.870 | 0.792 | 0.192 | 0.786 |
| Overall ambiance of the airport | | 3.769 | 0.792 | 0.027 | 0.702 |
| Crombach's alpha 0.893 | | Composite variable | | 3.704 | |
| | | mean | | | |
| Standard deviation | 0.754 | Z-score | | 1.688 | |

Table 1 notes that Don Muang International Airport's venue and ambiance are good (mean = 3.704, S.D. 0.754). Despite scores of all component variables are considered in "good" zone, adequacy and cleanliness of toilet facilities are rated the lowest.

The second component of airport service quality is "Effectiveness of accessibility and direction guiding". The service includes passengers' experience with how they get to and from the airport, how convenient it is for them to find directions and information in the airport. The composite variable was computed by averaging the scores of 8 items of the survey questionnaire as illustrated in Table 2.

Respondents find most components related to accessibility and direction guiding good except for components related to parking both with regards to quality and financial cost which are in the "fair" zone. The finding alarms the management to engage in improvement of the parking facilities and its service fees. The composite variable is both reliable (Cronbach's alpha = 0.884 > 0.70) and valid (item-to-total correlations > 0.50) (Neuman 2011).

From Table Two, it is shown that passengers find The Studied Airport good in terms of accessibility and direction guiding (mean = 3.532, S.D. = 0.648) and the score of the composite variable is normally distributed

Table 2 Composite variable "effectiveness of accessibility and direction guiding"

| Component variables | | Mean | S.D. | Z-Score | Item -to- total correlation |
|------------------------------------|-------|--------------------|-------|---------|-----------------------------------|
| Ground transportation fr | 3.552 | 0.845 | 1.592 | 0.669 | |
| airport | | | | | |
| Parking facilities | | 3.081 | 0.982 | 0.082 | 0.653 |
| Parking fee | 3.062 | 0.962 | 1.016 | 0.708 | |
| Adequacy of trolley | 3.661 | 0.829 | 0.826 | 0.625 | |
| Ease of finding way in the | 3.770 | 0.863 | 1.337 | 0.663 | |
| Ease of finding flight information | | 3.874 | 0.830 | 1.690 | 0.565 |
| Walking distance | | 3.644 | 0.860 | 0.707 | 0.647 |
| Ease of connecting flight | | 3.649 | 0.796 | 1.244 | 0.727 |
| Crombach's alpha 0.884 | | Composite variable | | 3.532 | |
| | | m | ean | | |
| Standard deviation | 0.648 | Z-score | | 1.059 | |

(z-score = 1.059, < 3.29 critical value for sample size larger than 300). The statistics indicate the readiness for further statistical process.

The third aspect of Airport Service Quality is the efficiency of core airport service processes namely check-in, passport inspection, security screening, baggage claims and custom inspection. The composite variable was computed by averaging score of 9 different items. All component service items were found good by respondents. The composite variable was reliable (Cronbach's alpha = 0.918, > 0.70) and valid (item-tototal correlation > 0.50). The mean score of core service efficiency composite variable is 3.738 (S.D. 0.689) meaning that respondents find the core service efficient. The score of this variable is normally distributed (z-score = 0.50 < 3.29 critical value for sample size larger than 300) signifying that the variable is ready for further statistical processes (Manning & Munro, 2007; Neuman 2011; Morgan, Barrett, Leech, & Gloeckner, 2019). Table 3 illustrates the detail of the composite variable "Efficiency of Core Processes"

Table 3 Composite variable "efficiency of core processes"

| Component vari | Mean | S.D. | Z-Score | Item -to- total correlation | |
|-----------------------------|----------|--------------------|---------|-----------------------------------|-------|
| Check-in waiting time | 3.580 | 0.985 | 1.930 | 0.576 | |
| efficiency of check-in st | aff | 3.819 | 0.898 | 1.259 | 0.695 |
| Passport inspection wait | ing time | 3.794 | 0.912 | 2.462 | 0.716 |
| Meticulosity of security | 3.798 | 0.919 | 1.968 | 0.732 | |
| Security screening time | 3.824 | 0.868 | 1.241 | 0.771 | |
| Confidence in security s | 3.895 | 0.877 | 2.044 | 0.763 | |
| Arrival passport inspection | | 3.714 | 0.823 | 0.715 | 0.738 |
| Baggage claim | | 3.609 | .0839 | 2.133 | 0.720 |
| Custom inspection | | 3.609 | 3.849 | 1.797 | 0.695 |
| Crombach's alpha 0.918 | | Composite variable | | 3.738 | |
| | | m | ean | | |
| Standard deviation | 0.689 | Z-score | | 0.50 | |

The fourth aspect of airport service quality is discretionary activities or activities that passengers can voluntarily engage in while waiting to board the flight. Six question items were included in the composite variable "discretionary activities" as illustrated in Table 4. It can be seen that while respondents find quality and variety of catering (mean = 3.649, S.D. = 0.958), bank machines (mean = 3.703, S.D. = 0.899) and tax-free shopping services (mean = 3.525, S.D. = 0.939) good, they rated internet service only fair (mean = 3.256, S.D. = 1.078).

As for price of discretionary activities, respondents rate the price of catering (mean = 3.174, S.D. = 1.052) and tax-free shopping services (mean = 3.198, S.D. = 1.028) fairly good confirming response tendency of consumer market research that customers tend to assert that prices of the questioned goods or services are too high (Maholtra, 1999).

The composite variable is composed by averaging the score of the six component variables. The composite variable is both reliable (Cronbach's alpha = 0.868, > 0.70) and valid (item to total correlations > 0.50) (Manning & Munro, 2007; Morgan, Barrett, Leech, & Gloeckner, 2019). The score of this composite variable is also normally distributed (z-score = 0.859 < 3.29 critical value for sample larger than 300). From Table 4, it can be seen that respondents rate their discretionary activities' quality at Don Muang International Airports very good (mean = 3.417, S.D. = 0.771) despite the "less-than-good" experience with internet access and prices of discretionary activities.

Table 4 Composite variable "discretionary activities"

| Component vari | Mean | S.D. | Z-Score | Item -to- total correlation | |
|--|-------|-------------------------|---------|-----------------------------------|-------|
| Quality and variety of ca facilities | 3.649 | 0.958 | 1.756 | 0.591 | |
| Food cost | | 3.174 | 1.052 | 0.737 | 0.669 |
| Sufficiency of bank and machines | 3.703 | 0.899 | 1.551 | 0.675 | |
| Tax free shopping facilit assortment | 3.525 | 0.939 | 1.571 | 0.701 | |
| Price of tax-free shopping | | 3.198 | 1.028 | 0.820 | 0.777 |
| Accessibility and quality of wifi internet | | 3.256 | 1.078 | 1.571 | 0.594 |
| Crombach's alpha 0.868 | | Composite variable mean | | 3.417 | |
| Standard deviation | 0.771 | Z-s | core | 0.8 | 359 |

The last dimension of airport service in this study is the quality of interaction with service staff which include the interactions with airline staff during check-in or baggage drop process, with immigration officers during passport screening, with airport's security officers during security screening process, and with airport attendants on random when needing help. The composite variable "interaction with service staff" was computed by averaging the scores of the four component variables. The composite variables are both reliable (Cronbach's alpha = 0.887, > 0.70) and valid (item-to-total correlations > 0.50) (Manning & Munro, 2007; Morgan, Barrett, Leech, & Gloeckner, 2019). The score of the composite variable is also normally distributed (z-score = 2.393 < 3.29 for sample larger than 300) (Manning & Munro, 2007). From Table 5, it is noted that respondents find their experience with service staff at Don Muang International Airports very good (mean = 3.875, S.D. = 0.783).

Table 5 The composite variable "interaction with service staff"

| Component vari | Mean | S.D. | Z-Score | Item -to- total correlation | |
|--------------------------|-------|--------------------|---------|-----------------------------------|--|
| Attentiveness and helpfu | 3.856 | 0.918 | 3.091 | 0.779 | |
| check-in staff | | | | | |
| Attentiveness and helpfu | 3.887 | 0.857 | 2.724 | 0.797 | |
| passport controllers | | | | | |
| Attentiveness and helpfu | 3.826 | 0.918 | 1.067 | 0.768 | |
| security screeners | | | | | |
| Attentiveness and helpfu | 3.869 | 0.958 | 3.189 | 0.678 | |
| airport staff | | | | | |
| Crombach's alpha 0.887 | | Composite variable | | 3.875 | |
| | | m | ean | | |
| Standard deviation | 0.783 | Z-score | | 2.393 | |

To identify the contribution of the five aspects of airport services at the studied airport, a multiple linear regression was performed between the service aspects as independent variable and overall satisfaction as dependent variable.

The five composite variables representing different dimensions of airport service quality were tested with multicollinearity problem using Pearson's correlation coefficient. From Table 6, it is shown that each airport service dimensions are significantly correlated to each other but not exceeding the critical value (0.90) (Manning & Munro, 2007) signifying that the five independent variables and the dependent variable are appropriate for multiple linear regression.

The multiple correlation coefficient (R = 0.694) was significant different from zero F (5,130) = 24.188, p < 0.05 and 48.2 percent of variance of overall satisfaction can be explained by five independent variables as a set (R = 0.694, Adjusted $R^2 = 0.482$). Only "venue and ambiance" (Beta = 0.414, T = 4.486,

Table 6 Correlation between airport service quality dimensions and multiple linear regression with overall satisfaction

| Variables / Pearson's correlation (Sig) | Interaction with service staff | Discretionary activities | Efficiency of core activities | Accessibility and direction guiding | Venue and ambiance |
|--|--------------------------------------|-----------------------------|-------------------------------|--|--------------------|
| Overall satisfaction | 0.550 (0.000) | 0.490 (0.000) | 0.608 (0.000) | 0.585 (0.000) | 0.654 (0.000) |
| Venue and ambiance | 0.646 (0.000) | 0.580 (0.000) | 0.689 (0.000) | 0.678 (0.000) | |
| Accessibility and direction guiding | 0.750 (0.000) | 0.793 (0.000) | 0.786 (0.000) | | |
| Efficiency of core activities | 0.875 (0.000) | 0.657 (0.000) | | | |
| Discretionary | 0.657(0.000) | R = 0.694, Adjus | sted $R^2 = 0.482$, 1 | F(5,130) = 24.18 | 88 (sig. = 0.000) |
| | | | | | |
| Independent var | riables | В | Beta | T-test | Sig. |
| Venue and ambia | Venue and ambiance | | 0.413 | 4.486 | 0.000 |
| Accessibility and direction guiding | | 0.141 | 0.124 | 1.308 | 0.301 |
| Efficiency of core process | | 0.281 | 0.253 | 1.717 | 0.088 |
| Discretionary activities | | 0.022 | 0.024 | 0.252 | 0.802 |
| Interaction with s | service staff | -0.047 | -0.049 | -0.356 | 0.723 |

p < 0.05) was found to be significantly and uniquely contribute to the prediction of "overall satisfaction". Effectiveness of accessibility and direction guiding, efficiency of core service, discretionary activities and interaction with service Staff were not found to provide any significant contribution to overall satisfaction (T = 1.308, p > 0.05, T = 1.717, p > 0.05, T = 0.252,p > 0.05, T = -0.356, p > 0.05). The equation of prediction produced by this analysis among the variables can be stated as follows:

Overall satisfaction = 0.401 venue and ambiance +0.141 efficiency of accessibility and direction guiding + 0.281 efficiency of core service + 0.022 discretionary activities – 0.047 interaction with service staff + 1.004

From multiple linear regression performed above, hypothesis two (efficiency of process is the most critical airport service for overall passenger satisfaction) and hypothesis three (quality of interaction with service personnel is the most critical airport service for overall passenger satisfaction) are rejected.

To test hypothesis one, one-way analysis of variance was performed between overall satisfaction and terminals of the departure flights. While terminal one is dedicated for international flights and terminal two is dedicated for domestic flights, the analysis of variance would show if domestic passengers rate their satisfaction with airport service quality higher than international flight passenger or not.

Table 7 Analysis of variance between international and domestic flight passengers on overall satisfaction with international airport

| Service | Statistics | Overall mean | International flights | Domestic flights | Remarks |
|----------------------|------------|-----------------|--------------------------|------------------|--|
| Overall satisfaction | x | 3.917 | 3.936 | 3.907 | Levene statistics = 2.941, df (1,337) = p > 0.05 One way ANOVA: F (1,337) = 0.130, p = 0.719, >0.05 |

One-way analysis of variance indicates insignificant difference between international and domestic passengers' overall satisfaction with the studied airport's services. Levene's statistic which serves as the test of homogeneity was found to be insignificant (Levene statistics = 2.941, df (1,337) = p > 0.05) signifying that the data is appropriate for analysis of variance. However, the F statistics has shown insignificant differences between passengers taking international and domestic flights (ANOVA: F (1,337) = 0.130, p = 0.719, >0.05). Hypothesis one was therefore rejected.

However, the researchers took a further step to compare overall satisfaction of Thai and international passengers and have found significant differences between the two groups of respondents regardless of destinations and departure terminals.

Table 8 One-way analysis of variance between Thai and international passengers on overall satisfaction

| Service | Statistics | Overall mean | Foreign passengers | Thai passengers | Remarks |
|----------------------|------------|-----------------|--------------------|-----------------|---|
| Overall satisfaction | X | 3.917 | 4.117 | 3.795 | Levene statistics = 2.381, df (1,325) = p > 0.05 One way ANOVA: F (1,325) = 4.117, p = 0.000, <0.05 |

Table 8 shows that Levene's statistics of Thai and international passengers are appropriate for one-way analysis of variance (Levene statistics = 2.381, df (1,325) = p > 0.05) and have found that Thai passengers rate the quality of the airport services at the studied airports (Mean = 3.795) significantly lower than international passengers (Mean = 4.117) (One way ANOVA: F (1,325) = 4.117, p = 0.000, <0.05). The finding has triggered the interest of researchers to take steps further to understand lower satisfaction of Thai passengers.

Semi-structured interview was conducted with ten Thai passengers who are conveniently recruited during the survey of the subsequent quarter. Informants were asked (1) if it was convenient for them getting to the airport as compared to other airports in Thailand (2) if it was smooth for them to get through the processes to board the flight (3) if the studied airport provides sufficient discretionary facilities for them while waiting to board the flight (4) if the staff are pleasant and helpful and (5) if the airport building and surrounding are pleasant. Probing was occasionally done for a deeper insight (Patton, 2002; Hennink, Hutter, & Bailey, 2020).

Among the ten informants conveniently recruited, one found the airport service quality fair (3 out of 5), 6 found the airport poor (2 out of 5) and 3 found the airport very poor (1 out of 5).

Thai passengers found that getting to the studied airport is problematic as there is no convenient public transportation (such as a sky train) to get to the airport and taxis usually request to top up the meter fees or even not use the meter. Parking was problematic as well in terms of both adequacy and fees. Once arriving at the airport, passengers found that the arrangement was poor and security officers at the departure and arrival ramps are not friendly.

One passenger who travels extensively both in Thailand and abroad asserted that "I used this airport when I was young and it is, if not worse, similarly difficult to get to this airport. I don't understand why other countries even those who started developing their countries later than us surpass us now. This airport should take Suvarnabhumi airport as their benchmark of quality, although it is difficult to get a parking at SVB, you can choose to get there by taxi and you have time dragging your baggage down. You can even get there by Airport Rail Link."

Another passenger who travel occasionally between her hometown and Bangkok to visit her children asserted that "My daughter always complained when she drops me off at this airport because there were cars, taxis, and vans messily dropping people off and security officers whistling to rush us to get out of the car" "I used to take taxis too, they requested not to use the meters and the requested price is out of question, I feel ripped off. I don't understand why we can't arrange it as nicely as Japanese airports I visited with my family."

From the in-depth interview, it can be seen that passengers feel stressed when travelling to the studied airport and always compare against newer larger airports serving full-service airlines and even airports in other countries confirming the disconfirmation of expectation theory positing that passengers form expectation from their actual experiences, media and word of mouth (Gnoth, 1997; Lovelock, Patterson, & Walker, 2001; Chi

& Ou, 2008).

Passengers also found that check-in process was acceptable, but the security screening was unacceptably slow and unfriendly. Passengers cannot distinguish between process and nature of interaction of security screening attendants. The same respondent who travels to Bangkok to visit her family asserted that:

"The check-in ladies are nice and so are the identity control. What I find unacceptable is the security screening. I don't know what to screen. The officers do not smile and they even make fun of you when you do not know what not to bring on board. They act as if you know nothing and are from rural areas."

Passengers found restaurants and shopping facilities are good but the price is too expensive. They affirm their understanding about the food price at airports to be irrationally high from the media that reported the unfairly high food price at airports. For those who are less experienced with air travel, they do not understand that airports are profit making unit and food and shopping facilities should be provided at reasonable prices as welfare for passengers.

The passenger who travel extensively between Thailand and China asserted that "you have more and more food choices and things to buy here but the prices are unacceptably high. I know that the price of things at airports tend to be high, but this is something like 50% higher. Even the newspapers reported that food cost at Thai airports are much higher."

The passenger who rarely travel asserted that "I don't get the idea of charging the food exceptionally high while you make money from ticket selling. We paid dearly for air tickets and we also have to pay dearly for food. Girl (she called herself aunt), my lunch today at this airport is worth a whole week market fee at home."

Passengers are quite satisfied with the interaction with service staff except security screening. However, those with higher travel experiences tend to be more understanding. However, many of them still think that service staff at Suvarnabhumi Airport are more professional and better-mannered. They expect similar service level at the studied airport.

The passenger who travels extensively asserted that "Security screening officers are similar everywhere. They think that they have all the power to block you there or let you pass through your flight. I have seen worse than what I experienced today....Anyway, you have to admit that people, in general, at Suvarnabhumi airport are much nicer and better trained. They know how to

approach you...." Being asked if it is understandable that the service level at the studied airport can be lower than Suvarnabhumi airport as it served mainly LCC, the same passengers voiced that "that's not an excuse for being unprofessional. They should know that their airport is older and passengers are cramped in the hall, they should make sure that they receive good services."

The passenger who travels for her religious trip every other month in the north eastern province of Thailand asserted that "Normally, I am forgiving but security screening attendants are rude and look down on Thai passengers. I have observed, they only do this to Thais and Chinese." Being asked if the lower standard is justifiable because the airport serves LCC, the same passenger asserted "Low cost or not is not the question, does low cost means rude and rough?"

Passengers find the venue and ambiance of the studied airport is lower than Suvarnabhumi airports and those of developed countries especially in regard to toilets, and passenger halls.

The passenger who travel extensively abroad and rarely travel up country using LCC asserted that "I feel stressed using this airport. Suvarnabhumi is not the best of course but this airport is much worse. Toilets are smelly and crowded, passenger halls are old and sometimes hot. I don't know if the airport switch on all the air cons… look at Malaysia, Vietnam or even many airports in China, they are better managed… after all, the airport should remember that it is one of the major airports of Thailand and is located in the capital city."

The passenger who travel for religious reason asserted that "the airport is old is one thing but I have to sit on the floor while waiting to board as passengers are flocked in the hall and it's hot. I feel like almost fainted. There was no air to breathe I have never felt the same at Suvarnabhumi or even in other countries."

In-depth interviews have uncovered the underlying feeling of significantly lower rating of airport service quality of the studied airport. Despite the fact that the service quality and the environment of the studied airport need improvement both in regard to service and facilities, Thai passengers tend to set unrealistic expectation towards the studied airport quality. They set similar expectation of service quality between the studied airports that serves mainly LCC and Suvarnabhumi airport which is much newer and serves mainly legacy airlines. Setting realistic expectation should be one of the priority managerial intervention that the management of the studied airport should undertake.

Discussion

Despite the fact that passengers get to the airport to transfer from their land-bound transportation to air-bound transportation, process activities that concern directly the main motivation of airport visitation is not significantly contributing to the overall satisfaction of the airport service quality. In fact, no any type of activities (process or discretionary activities) or interaction with airport service staff determine the level of satisfaction with the airport (Fodness & Murray, 2007; Manulang, Bendesa, & Putra, 2015). The only factor that significantly contribute to overall satisfaction of the airport is venue and ambiance which, according to multiple linear regression, was found to be the only factor that uniquely contribute to airport service quality rating.

The finding confirms the variable and intangible natures of service products – in this study, an airport. Statistics showed that passenger evaluate the quality of the service rendered at the airport (overall satisfaction) based on how they are satisfied with the airport's physical evidence – venue and ambiance and that services are evaluated variedly on the evaluator's mood. Airports should, therefore, seek to urgently upgrade its facilities and ambiance to provide the quality proxy and influence good moods of passengers (Davidson, Manning, Brosnan, & Timo, 2001; Wilson, Zeithaml, Bitner, & Gremler, 2012; Faullant, Matzler, & Mooradian, 2011).

Guidelines for the airport to improve service quality evaluation is upgrading its venue and ambiance does not mean that the studied airport can leave other aspects of the service alone. Pearson's correlations showed significant correlation coefficients between the five aspects of the service quality to passengers' overall satisfaction. The second most important aspect of airport service quality is efficiency of the core service which concerns mainly with check-in, passport control and security screening. The third most important service aspect is accessibility and direction provision. While discretionary activities often provide non-aeronautic revenue streams to the airport, they have very little impact on overall satisfaction (Bezerra & Gomes, 2016; Pandey, 2016).

Another aspect that should be discussed is to nurture a realistic expectation among Thai passengers who have tendency to have undifferentiated expectation between Suvarnabhumi airport and the studied airport which serve LCC. Passenger education through internet website, social media or even signage can help improve the evaluation of the studied airport service quality.

Future studies should engage in qualitative interview with larger airport community members to find their view, difficulties and ideas of how to improve the service quality and how to improve the venue and ambiance of the studied airports.

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