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SATISFACTION OF INTERNATIONAL TOURISTS ON THE DEPARTURE PROCESSING SERVICE PERFORMANCE AT THE JULIUS NYERERE INTERNATIONAL AIRPORT

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Abstract

This study assessed the relationship between airport departure processing service performance and international tourists' satisfaction at the Julius Nyerere International Airport. A survey research design and quantitative approach with a sample size of 218 and a stratified sampling technique were adopted. A closed-ended questionnaire was used for data collection. IBM SPSS statistics version 21 and Partial Least Squares - Structural Equation Modelling with the help of SmartPLS 3 software was used for data analysis. The results showed that the airport departure processing domain (check-in, departure immigration, departure security screening) had a direct and significant relationship with international tourists' satisfaction, implying that the relationship exists in real life. The study recommends that all the domains/constructs service indicators should be treated as significant factors for assessing international tourist satisfaction. Regular customer service training is also recommended to all airport service providers for outstanding service provision to international tourists to make them loyal tourists.

Keywords: Airport Service Performance, Departure Processing Domain, Check-in, Departure Immigration, Departure Security Screening, Perceived Service Performance, Satisfaction

INTRODUCTION

Airports are a key tourism segment, providing access to different areas that can not easily be accessed (Soshkin, 2019). They handle several flights to support tourists reaching various remote areas for tourism commitments (Jasrotia et al., 2020; Gupta & Venkaiah, 2018). Many countries regard airports as significant ambassadors for tourism promotion. Hence, their attractiveness and regular improvement create an image guaranteed to meet tourist expectations (Nugraha, 2017; Rijal, 2018). Beautiful airport designs create a sense of tourism attractiveness that can entice tourists for leisure, spending, stayover, and other non-restricted deeds and avoid making it just an interchange for several modes of transport (Gupta & Venkaiah, 2018).

According to Liu et al. (2019), nearly 3,759 airports serve more than 1,303 airlines that operate over 31,717 aircraft worldwide. Berthe (2019) reiterates that international arrivals in 2018 reached 1.4 Billion globally, 91.99 Million in Africa, and 1.5 Million in Tanzania. This implies that tourists are key airport stakeholders whose changing behavior and expectations must closely be monitored (Alexander, 2014). It is projected that in the next 20 years, the tourism industry will be among the seven fastest-growing sectors in the world (Eleboda, 2017). However, the forecast was affected by COVID-19 in 2019, which restricted travel worldwide.

In today's tourism market, airport services have become a significant tourist satisfaction focus. Thus, outstanding airport service performance is a competitive tourism strategic priority in the world (Adeniran and Fadare, 2018; Lohmann and Trischler, 2018). Studies in the tourism sector have, however, overlooked the airport as a substantial key area for tourist satisfaction. Marchalina and Dewantara (2018) revealed that good airport service creates a positive impression on tourists and leads to an increase in tourist destination confidence. Wiredja (2017) disclosed two components of airport service performance: airport processing domains, which involve airport arrival processing domains, and airport departure processing domains. The second is airport non-processing domains comprising the airport arrival non-processing domain and airport departure non-processing domain. The airport departure processing domain contains check-in, departure immigration, and departure security screening. Departing international tourists must go through the departure processing domain by engaging in restricted activities where they interact with relevant staff and facilities (Wiredja, 2017; Mayhew, 2016).

According to Chuo, (2009), tourists' last impression about the destination is created during departure time at the airport terminal. Kick (2013) clarified that tourist ticket submission, passport processing, and consent baggage registration are generally completed at the check-in domain. Likewise, tourists accomplish the submission of regulatory documents and information in the immigration domain (Kramer et al., 2013). Checking for illegal tourist items before

reaching the waiting lounge is usually done at departure security screening (Atalick, 2009; Gupta and Venkaiah, 2018). Baranskaite (2019) testified that inappropriate tourist treatment results in unforgettable and negative experiences for tourists. Irrespective of the willpower to advance airport service provision, service delivery imperfections cannot entirely be eliminated (Chen et al., 2012; Saayman, 2018). Reports indicate that travellers are mostly dissatisfied with queuing and poor staff interaction during departure (Yavuz et al., 2021). According to Chi et al. (2018), numerous airports cannot provide extraordinary customer service to satisfy tourists.

Much research has been carried out in technologically advanced nations or overlooked to include the departure processing domains. Fascinated readers can visit the studies of Chi et al. (2022), Popovic et al. (2010), Yavuz et al. (2021), Park et al. (2011), Zhang and Jiang (2016), and Wiredja et al. (2017 and 2019), Bakır et al. (2022). According to Mwesiumo and Halpern (2021), tourists' satisfaction is determined by the quality of service performance at the airport terminal. Thus, behavioural change based on demographic characteristics and nationalities plays an essential role in the undercurrents of tourist satisfaction. Tourists' last impressions end during their departure time at the airport where they can either be satisfied or dissatisfied. Thus, there is a need to investigate the association between the performance of airport departure processing services performance and international tourists' satisfaction.

Despite the popularity of the Julius Nyerere International Airport (JNIA) in serving the number of tourists, there has been a concern about the airport service performance which affect tourism industry and the economy of the country. Unconvincing airport service performance caused international airports not to be ranked among the top ten best airports in Africa for the years 2019, 2020, 2021 and 2022 has received specific attention in Tanzania (Benson, 2022; Amara, 2020; McSherry, 2019; Maestro, 2017). According to Makoye (2014) and McSherry (2017), passengers' mistreatment, staff impoliteness, unknowledgeable about tourism matters, limited amenities, and unconvincing sanitation in the airport contributed to tourist dissatisfaction (Makoye, 2014 and McSherry (2017). Regardless of the complaints and the situation, very limited research has evaluated the challenge to help the industry address the raised matter. Likewise, studies showing the relationship between the departure processing domain and international tourists' satisfaction have been unheeded by many researchers in Tanzania. Therefore, there is a need to bridge this gap by researching the clear link to address the challenge. A passenger-centered airport model (PCAM) that consists of airport processing and non-processing domains touching arrival, departure, and transit to assess tourists' experience at the airport was recently developed by Wiredja et al. (2019). The present study adopted the model with trivial adjustments to suit this study. Hence, this study intended to assess the clear

relationship between airport departure processing service performance and international tourist satisfaction at JNIA.

LITERATURE REVIEW

Theoretical Framework

Expectancy disconfirmation theory

The Expectancy Disconfirmation Theory (EDT) was used to assess the association between airport departure processing service performance and international tourists' satisfaction. Many researchers have used this theory to determine the relationship between satisfaction and the hospitality industry's service. For example, Ryzin and Gregg (2006) and Zhang et al. (2022) used the theory to judge citizens' satisfaction with services offered by local government and private sectors. Fisun and Atila (2001) used the theory to measure customer satisfaction for the perceived service quality of products or services. Elaine (2013) used the theory to predict satisfaction in health care and other consumer service purchases. Since then, the theory has been the dominant basis primarily used in assessing customer satisfaction in the hospitality and tourism industry. The direct association between satisfaction and perceived performance is positive and strong (Lyons et al. 1992). The theory defines satisfaction through disconfirmation after perceived and expected services comparison (Patterson et al., 1997; Premkumar and Bhattacherjee, 2004; Bakri and Elkhani, 2011). The theory was first used by Oliver (1980) and Tse et al. (1988) in their studies; afterward, numerous modifications were made to suit other studies. For instance, Cheng (2019) combined Herzberg's two-factor and expectancy disconfirmation theories to analyze tourists' satisfaction. Therefore, this study incorporated the same theory with PCAM developed by Wiredja et al. (2019) to assess the relationship between international tourists' satisfaction and airport departure processing service performance (Figures 1 and 2). Only two constructs were used from the same theory: perceived performance and satisfaction. The perceived performance was modified to perceived service performance and then integrated with the PCAM developed by Wiredja et al. (2019) to assess the relationship between international tourists' satisfaction and airport departure processing service performance. The construct indicators in the model were addressed as perceived services at the airport terminal. Figure 1 shows the EDT model and the constructs adopted in this study. As highlighted in Figure 2, the construct indicators were deliberated as the perceived services offered to international tourists at the airport terminal.

The theory disregarded the involvement of service indicators from different fields. Cognizant of this, the study extended the theory by integrating it with the PCAM. To meet the study objective, check-in, departure immigration, and departure security screening and its

indicators were adopted from PCAM in assessing tourist satisfaction at the airport terminal (Wiredja et al., 2019). Centering on the fact that Wiredja et al. (2019) disjointed the departure processing domain into check-in, departure immigration, and departure security screening, the perceived service performance construct, in theory, has also been disjointed into three different constructs, as mentioned. According to Wiredja et al. (2019), researchers can add additional indicators to improve service performance at the airport terminal based on the study area. Respondents rated indicators to determine their level of satisfaction with airport service performance. Therefore, the PCAM modification inevitably reflected the added indicators from the literature. Figure 1a shows the actual EDT, while Figure 1b shows the actual PCAM with the actual constructs and indicators, as shown in the highlighted sections.

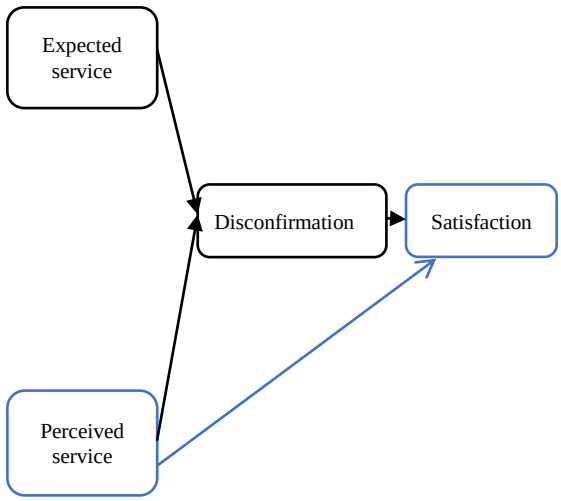

Figure 1a: EDT Actual Model
(Source: Oliver 1980)

Key: Adopted constructed

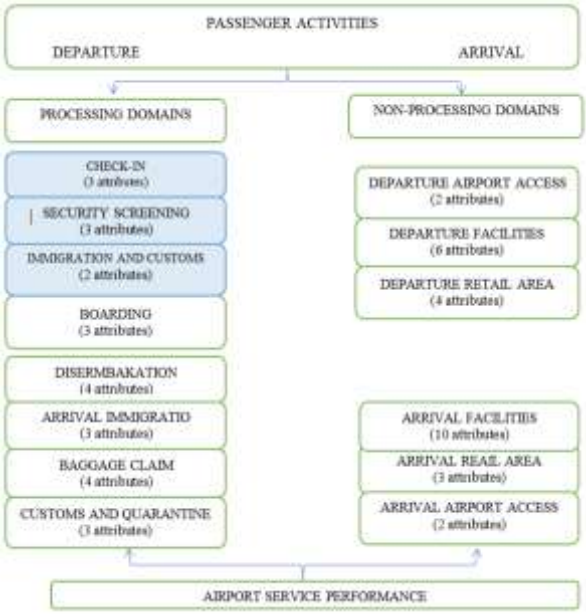

Figure 1b: Actual PCAM
(Source: Wiredje *et al*. 2019)

Passenger-centered airport model

Wiredja (2019) purposely developed the PCAM to identify passenger-centered indicators to measure service performance at airport terminals. However, the researcher used comparative analysis methodology to compare more than 40 prevailing passenger-driven airport models which confused users. The comparative analysis resulted in the PCAM (Figure 1b). The later model categorized airport passenger activities into two categories: airport non-processing domains and airport processing domains, each encompassing arrival, transit, and departure domains. This study focused on the airport departure processing domain being under the airport

processing domain category. Other researchers who have assessed airport service performance include Popovic et al. (2009), Popovic et al. (2010), Park et al. (2011), Wiredja et al. (2015 and 2017), Fukaya (2012), and Tse et al. (2011), however, they have overlooked its relationship with international tourists satisfaction. The newly developed model has service indicators in each domain, which helps airport operators recognize the service gaps in a specific domain/construct. Other indicators were added from the literature and finally assessed the relationship with their construct. The airport service indicators in each airport departure processing domain helped to meet the study objective.

The link between EDT and PCAM

Each domain/construct had indicators that must be processed through the EDT before international tourists' satisfaction interpretation as indicated in the PCAM. The link between EDT and PCAM is shown in Table 1, where international tourists rated for the satisfaction of perceived service performance through check-in, departure immigration, and departure security screening domains.

Table 1: The link between EDT and PCAM

Arrival processing domain (independent variable) (Perceived Services performance indicators)	**Satisfaction (Dependent variable)**
a) Service indicators at departure check-in (*Check-in Efficiency, Staff enthusiasm, waiting time and queue length, staff grooming and appearance, and problem-solving*)	International tourist Satisfaction
b) Service indicators at departure immigration *(waiting time and queue at immigration, staff helpfulness and staff courtesy,* Waiting time and queue on visa)	
c) Service indicators at departure security screening *(Staff courtesy and helpfulness, secure feeling, and waiting time or queue length)*	

Research hypotheses

During departure, tourists have time to perform restricted activities in three different departure processing domains/constructs: Check-In (CI), Departure Immigration (DI), and Departure Security Screening (DSS) (Wiredja et al., 2019). Each domain (construct) contains indicators for satisfaction assessment. Tourists' satisfaction or dissatisfaction in these domains depends on service providers (Sumanasiri et al., 2020). Check-in is the first point a departing tourist surrenders their tickets and passport for processing by respective airline staff and baggage registration ready for flight (Kick, 2013; Graham and Fakfare, 2021). The easy check-in process confidently affects the satisfaction of tourists (Chen et al., 2012; Wiredja et al., 2017).

Moreover, most passengers reported unsatisfied complaints with the check-in service which demoralizes tourists from becoming promoters of an airport (Agarwal, and Ansari, 2015; Mwesiumo and Halpern, 2021). Tourists' intentions to re-travel through an airport are supported by passengers' awareness and comfort at check-in, immigration, and security screening domain (Al-Saad et al., 2019). When comfort decreases, passengers' intentions or desires to re-travel through the airport decrease. More regarding the relationship between international tourists and check-in is documented by Prentice et al. (2019), Wiredja et al. (2019), Aydoğan (2021), Olgac et al. (2021), and the references therein. According to the expectancy disconfirmation theory and the literature used in this study, check-in was hypothesized to have a positive and direct relationship with tourist satisfaction. The formulated hypothesis is as follows;

H1: Services at the airport Check-in have a direct relationship with international tourist satisfaction

The positive interaction between the immigration section and travellers has been reported to influence tourist satisfaction (Chen et al., 2012, Antwi et al., 2020). Staff readiness to assist and extraordinary staff courtesy are significant in this domain as most airports strategize to impress tourists by providing efficient immigration processes to satisfy tourists (Bakır et al., 2022). Jasrotia et al. (2020) testified that satisfied services in these domain increases trust, tourist reconsideration, and service re-use at the airport terminal. The relationship between departure immigration and international tourist satisfaction has also been studied by Aydoğan (2021), Adetayo et al. (2020), and Antwi et al. (2020). The formulated hypothesis is as follows.

H2: Services at the departure immigration are directly related to international tourist satisfaction.

Likewise, the airport handles the departure security screening (DSS) where tourists are electronically checked for illegal issues to conform to security and safety procedures (Atalick, 2009). According to Chi et al. (2022), services at security screening have been conveyed to escalate tourist satisfaction. Passengers' complaints that they are unsure of what they can or can not carry during travelling in this domain contribute to dissatisfaction (Munoz et al.,2019; Wattanacharoensil et al., 2021). Therefore, tourists are more inclined to re-use an airport if they are pleased with the overall services provided at these domains/constructs (Petra et al.,2010). The relationship between departure security screening, departure immigration, and international tourist satisfaction has also been studied by Adetayo et al. (2020), Antwi et al. (2020), Nwaogbe et al. (2021) and Pivac et al. (2022). The formulated hypotheses are as follows.

H3: Services at the departure security screening are directly related to international tourist satisfaction.

Empirical Literature

Airport terminals are essential for increasing tourist experience and satisfaction. A study by Chi et al. (2022) showed that staff courtesy and queuing times at check-in, including terminal cleanliness, airport signs, and terminal seating, have the uppermost rate of impact on passengers' satisfaction. The customers' perspectives toward complaints at check-in are to improve the performance of check-in service and renovate the required facilities to meet customer expectations. A report by Aydoğan (2021) exposed that check-in facilities, information, and servicescape are among the significant factors influencing tourists' satisfaction. Quality service provision at this construct gives tourists the last impression of the country (Tsai et al. 2011). Staff friendliness, cleanliness, availability of rest zones, and physical ambiance significantly contribute to overall international tourists' satisfaction at the airport's terminal (Yavuz et al., 2021; Mwesiumo and Halpern, 2021; Sumanasiri and Dambagola, 2020; Ansari and Agarwah, 2020). Likewise, Antwi et al. (2020) and Bellizzi et al. (2018) cemented that waiting time, helpfulness, and the staff at check-in, immigration, and security screening influence the relationship with passengers' satisfaction.

According to Adetayo et al. (2020), the other most influential factors in passengers' satisfaction are attitude and waiting time at immigration and security screening. Accordingly, Nwaogbe et al. (2021) and Pivac et al. (2022) advise airport management to manage customer relations and satisfaction in all domains to yield good market competition in the tourism and aviation industry. A study by Riyas and Anand (2020) showed that the departure processing chain involving check-in (staff courtesy, waiting and queuing time, check-in speed), security screening (staff courtesy, waiting for and queuing time, secure feeling), and immigration (perception of waiting time and staff courtesy) have a positive relationship with passengers' satisfaction. Jasrotia, Kour, and Gupta (2020) disclosed that check-in and security service performance is significant in describing tourists' satisfaction.

Munoz et al. (2019) previously revealed that airport departure services, specifically check-in, security, and other services, positively affected tourists' satisfaction. Graham and Fakfare (2021) and Hajez and Fawzy (2021) revealed that security screening (filling safe and secure, friendliness, courteous and helpfulness of staff, clear staff communication and appropriate message delivery, thorough screening for passengers and personal belongings, waiting time is appropriate), check-in (courteous and helpfulness of check-in staff, clear communication and message appropriateness by check-in staff, the efficiency of check-in staff, availability of passengers luggage carts, waiting time and well design of check-in kiosk and easy to use) and immigration (waiting time in the outbound immigration area, waiting time in the inbound immigration area, waiting time in the inbound baggage belt area) have a dynamic

impact on tourist satisfaction. Equally, Ma and Ma (2022) showed that airport service quality significantly affects passengers' satisfaction. Regardless of the government investment and effort to promote the tourism industry in the country, more professionals are required to support the improvement of airport service at the destinations. Any omission in prioritizing airport service leads to poor performance, hence dissatisfaction.

Conceptual model

Grounding on the research hypothesis, theoretical framework, and empirical literature review, the conceptual model was formulated (figure 2).

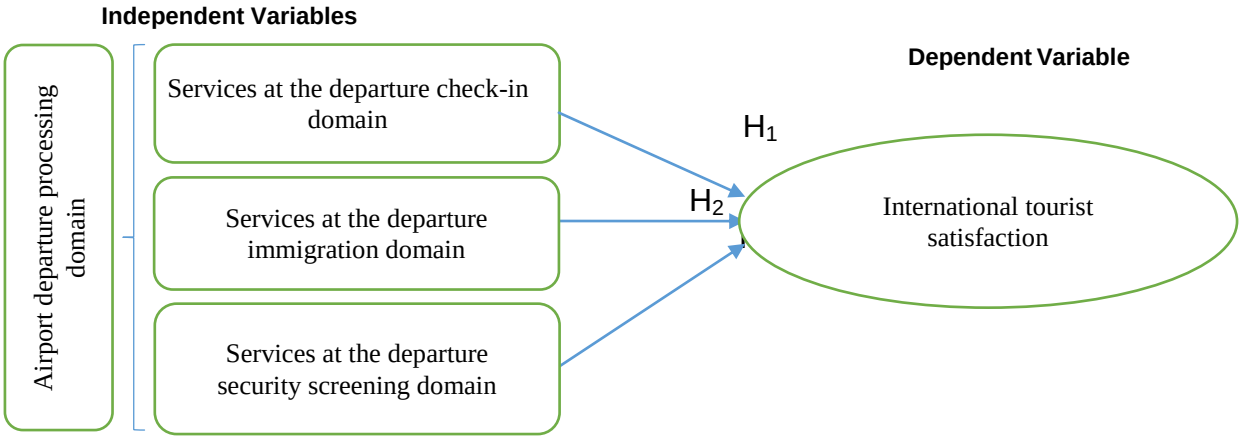

Figure 2: The study conceptual model (Source: Author, 2023)

METHODOLOGY

The present study used a quantitative research design to assess the relationship between departure processing service performance and international tourists' satisfaction. A sample of 218 international tourists was obtained through stratified sampling techniques because of its greatest freedom from bias and reduced chances of systematic error. The sample size was obtained by adopting the “ten times rule of thumb,” which recommends that a researcher have at least 10-15 participants per variable (Hair et al., 2012). The sampling approach was used to manage the quality and interpretation of data (Hair et al., 2018).

Data were collected using a structured questionnaire with closed-ended questions. The formulated questionnaire comprised demographic information like respondents' travel experience, sex, education, and age to serve the study purpose. The independent and dependent variables were non-parametric and did not need to fulfill the assumptions of parametric data. The study employed five Likert scales and coded data for precise analysis and interpretation. Table 2 shows the list of indicators used in the study.

Table 2: List of indicators used in this study

Departure Processing Domains	Code	Remarks
Check-in (CI)		
The average waiting time and queue during check-in were satisfactory.	CI1	PCAM
There is an efficient and easy check-in process at the airport.	CI2	PCAM
Check-in staff are helpful and courteous.	CI3	PCAM
Staff problem-solving or complaint-solving at check-in is good.	CI4	Added
Staff grooming and appearance are good.	CI5	Added
Departure Immigration (DI)		
Waiting time and queue at immigration is satisfactory	DI1	PCAM
Immigration staff are helpful and courteous.	DI2	PCAM
Waiting time and queue on the visa is satisfactory	DI3	PCAM
Departure security screening (DSS)		
Security staff are helpful and courteous.	DSS1	PCAM
I felt secure after a thorough screening at the security point	DSS2	PCAM
Waiting time and queue at security screening are satisfactory	DSS3	PCAM
International Tourists Satisfaction (ITS)		
I will communicate positive word of mouth about Tanzania to fellow people in my country	ITS1	Added
The good services at the airport made me plan another trip to Tanzania	ITS2	Added
Employees at the airport terminal are customer-focused	ITS3	Added
The overall service performance at the airport was satisfactory	ITS4	Added
I will recommend others in my country to visit Tanzania	ITS5	Added

The study used two stages of the Partial Least Square -Structural Equation Modelling (PLS-SEM) with the help of SmartPLS 3 software. The first stage evaluated measurement models comprising indicator reliability, discriminant validity, convergent validity, and internal consistency reliability. The second stage was the structural measurement model containing predictive relevance (Q^2), collinearity, coefficients of determination (R^2), significance and relevance of path coefficients (P- value), and f^2- effects size of path coefficients (Hair et al., 2018). The reflective measurement model was appropriate for the study since the constructs influence service indicators.

FINDINGS

Demographic Profile of the Respondents

In terms of gender, male respondents dominated the study by 68.2%, followed by 38.1% for female respondents. On the other hand, the study involved respondents of different ages: 50% were aged between 18-35 years old, 33.8% were between 36-50, and 16.2 were above 50 years old. Likewise, the respondents had different educational levels: 51.6% had a first degree, 37.6% had a master's and PhD, and 10.8% secondary level. The findings imply that aged respondents provided the information and data with wide-ranging and genuine knowledge.

Furthermore, findings showed that respondents visited Tanzania for different purposes. 51.8% visited for tourism, 20.2% for conferences, 27.5% for business, and 0.5% for other purposes. Regarding the number of visits to Tanzania, 35.9% had visited for the first time, 12.9% had visited for the second time, 6% had visited for the third time, and 45 % had visited more than three times. The implication is that many tourists visited Tanzania for the first time tourism.

Reflective Measurement Model

As recommended by Hair et al. (2018), the study findings exposed that the indicators' reliability was between 0.4 and 0.841, which is acceptable, as shown in Figure 3. The convergent validity was measured using Average Variance Extracted (AVE), results as in Table 3 indicate the value of AVE was above 0.5, signifying that every construct contributed more than 50% of the variance items making up the construct. Likewise, the findings' construct internal consistency reliability measure by composite reliability was above 0.708 and below 0.95, as recommended by Hair et al. (2018). This implies that the collected data for this study were reliable. Heterotrait-Monotrait (HTMT) correlation ratio was used to measure discriminant validity, of which the threshold value was less than 0.9 (Hair et al., 2018). The findings showed discriminant validity as per the HTMT report being less than 0.9 value in all of the constructs. The implication is that constructs are not exceedingly correlated to each other. Figure 3 show indicator reliability and Table 3 shows the internal consistency reliability, AVE, and HTMT values.

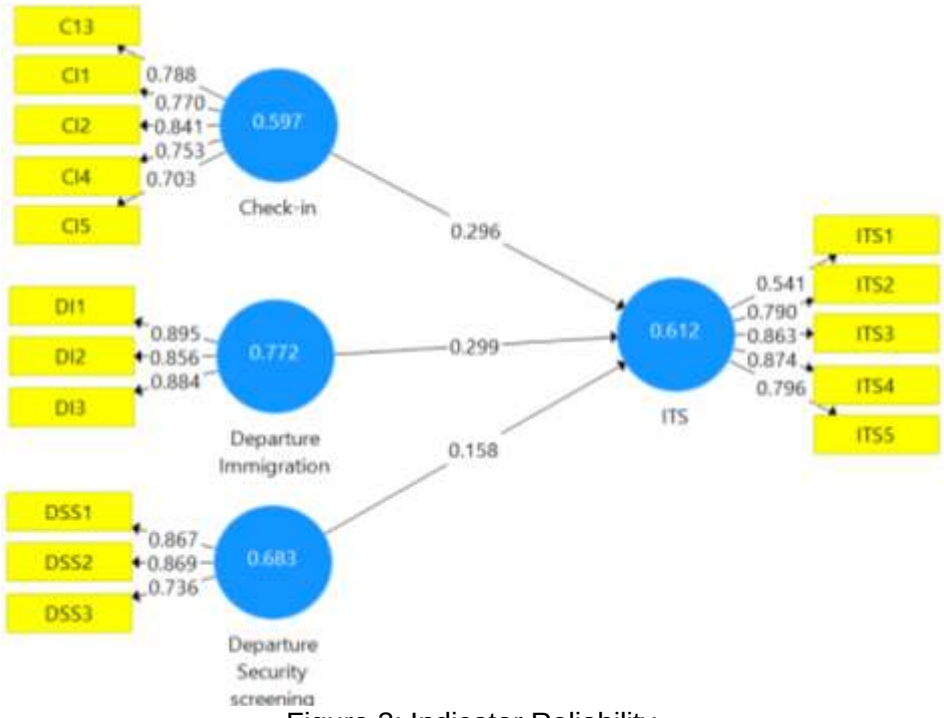

Figure 3: Indicator Reliability

Table 3: Internal Construct Reliability, AVE, and HTMT Values

	Composite Reliability	Average Variance Extracted (AVE)	Discriminant Validity Results by using (HTMT)		
			Check-in	Departure Immigration	Departure Security Screening
Check-in (CI)	0.881	0.597			
Departure Immigration (DI)	0.910	0.772	0.660		
Departure Security Screening (DSS)	0.865	0.683	0.740	0.632	
International Tourists Satisfaction (ITS)	0.885	0.612	0.624	0.630	0.582

Structural Measurement Model

Based on the recommendation by Hair et al. (2018), values of f^2 higher than 0.02 depict a small effect, 0.15 shows a medium effect, and 0.35 represents a significant f^2 effect. The f^2 effect size results from the findings were 0.083, 0.096, and 0.025, as recommended. According to Cohen (1988), if an f^2 value of 0.004 is small, we deliberate indirect interpretation and understanding of any f^2 value less than 0.02 not affecting that relationship. However, all the f^2 for the study were above the recommended value by Hair, implying the availability of the relationship between departure processing service performance and international tourists' satisfaction. Likewise, all the hypothesized relationship (check-in, departure immigration and departure security screening) had direct and statistically significant relationship with the P-value ≤ 0.05, signifying that the relationship exists in real life. Figure 4 shows the statistical significance of the hypothesized relationship and P- values while table 4 shows the tested hypotheses.

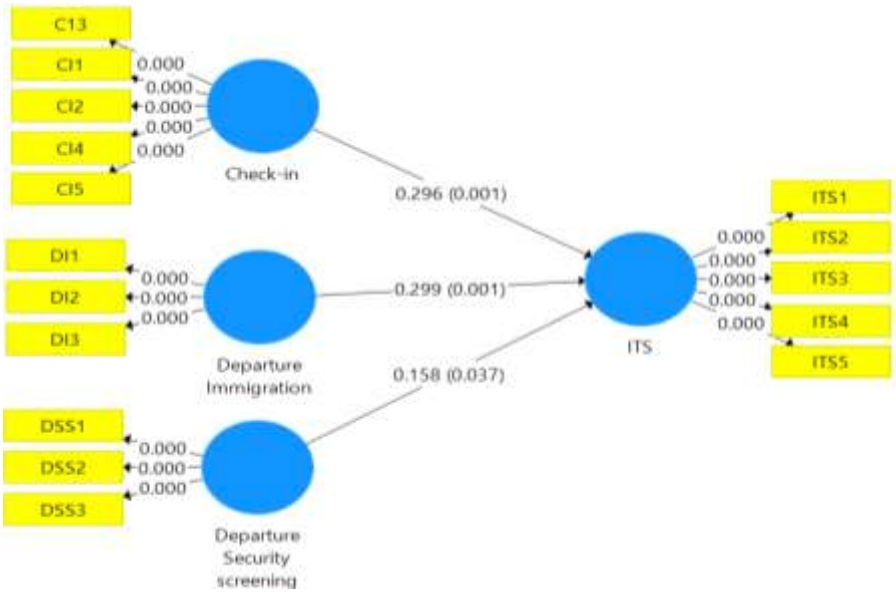

Figure 4: Statistical Significance

Table 4: The Tested Hypotheses

	T Statistics (|O/STDEV|)	Statistical significance	
		P - Values	Remark
Check-in -> ITS	3.069	0.002	Supported
Departure Immigration -> ITS	3.087	0.002	Supported
Departure Security Screening -> ITS	2.125	0.034	Supported

The R^2 value for the study was 0.404 which is between weak and moderate, implying that the exogenous constructs are influenced by over 40.4 % of the variation of endogenous constructs. The result for collinearity statistics values for the inner model was less than 5. This implies that there are no multicollinearity problems among the predictor constructs. The value of Q^2 was higher than zero (0.214), implying the exogenous constructs have the power to predict the endogenous constructs. The study also checked for the relevance of the path coefficient and statistical significance of the hypothesized relationship. The results disclosed positive path coefficients for the hypothesized relationships, implying that an increase in one standard deviation increased international tourists' satisfaction. Similarly, the findings established that statistical significance for all hypothesized relationships was supported with a p-value <0.05. The statistical significance of the hypothesized association for this study is seen in Figure 4 and Table 5 which show values for Q^2, R^2, F^2 and Collinearity.

Table 5: Q^2, R^2, F^2 and VIF values

	Q^2 Values	R^2 Value	f^2 Value	Inner Collinearity Statistics (VIF) values
	Q^2 (=1-SSE/SSO)	(R^2) ITS	(f^2) ITS	
Check-in			0.083	1.778
Departure Immigration			0.096	1.570
Departure Security Screening			0.025	1.649
ITS	0.214	0.404		

The importance-performance matrix analysis was run to obtain the importance-performance of the constructs and indicators. Results in Figure 5a indicate that the indicators positioned from 0.065 to 0.13 are more significant and their performance is highly required in this research model. Likewise, the indicators positioned from 0.00 to 0.065 show that they are less significant while their performances are highly required in this study. Furthermore, the importance-performance of the constructs was obtained as indicated in Figure 5b. Based on the position of the constructs (check-in, departure immigration, and departure security screening) position from 0.15 to 0.30 implies that the constructs are more significant and their performance

is higher in the research model. This further signposts that high contemplation is required for the services provided in these constructs.

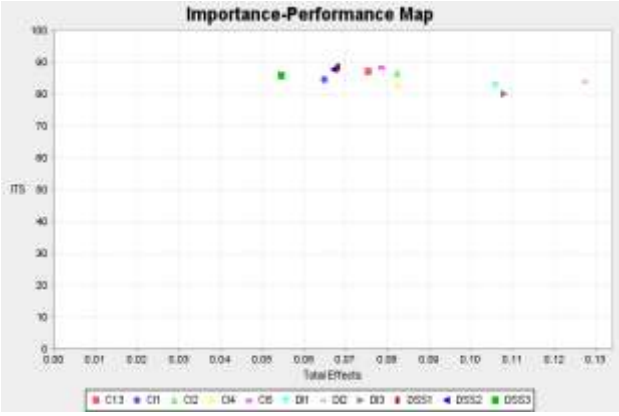

Figure 5a: Importance performance map of the indicator

Figure 5b: Importance performance map of the construct

DISCUSSION

The proposed model hypothesized that Check-In (CI), Departure Immigration (DI), and Departure security screening (DSS) had a positive and direct relationship toward international tourist satisfaction (ITS). The results showed that all hypothesized relationships had positive path coefficients, signifying that the increase of one standard deviation for check-in (average waiting time and queue during check-in was satisfactory, efficient and easy check-in process, check-in staff is helpful and courteous, staff problem or complain solving at check-in and staff grooming and appearance), departure immigration (waiting time and queue, immigration staff are helpful and courtesy, waiting for time and queue on visa) and departure security screening (security staff is helpful and courtesy, I felt secured after a thorough screening at the security point, waiting for time and queue at security screening) result in increased rates of international tourists' satisfaction. The discriminant validity was below 0.9 for all the study constructs, inferring no interrelation between the study constructs. However, the findings' collinearity statistics (VIF) value was less than 3, denoting the absence of multicollinearity issues among the predictor constructs.

The results of this study are similar to those of Chi et al. (2022), Aydoğan (2021), and Yavuz et al. (2021 which revealed the presence of a relationship between check-in and departure immigration service and tourist' satisfaction. Correspondingly, the findings by Mwesiumo and Halpern (2021) revealed that staff friendliness, cleanliness, and airport ambiance affect tourists' level of satisfaction. Jasrotia et al. (2020), Sumanasiri and Dambagola

(2020), Ansari and Agarwah (2020), Bellizzi et al. (2018), Antwi et al. (2020) disclosed that comfortability, airport sanitation, and staff willingness to assist lead to satisfaction and promote travelers re-visitation. According to Hajez and Fawzy (2021), the attitude of immigration staff and waiting time at security screening are the most influential factors in passenger satisfaction. Likewise, Kratudnak et al. (2018), and Fakfare and Graham (2021) exposed that service provision at check-in relates to international tourists' satisfaction. Additionally, a study by Al-Saad et al. (2019) showed that passenger comfort and modification of check-in services influence international tourists' satisfaction. However, airport staff failures and waiting time/queuing at check-in affect international tourists' satisfaction and tourists' re-visitation (Olgac et al., 2021). Bakır et al. (2022) and Chen et al., 2012 commented that the courtesy of immigration staff has a positive and direct relationship with international tourists' satisfaction.

Furthermore, the results are similar to those of Adetayo et al. (2020), Ansari and Agarwal (2020), and Riyas and Anand (2020) that security screening, immigration, and check-in service have a direct influence on international tourists' satisfaction. Jasrotia, Kour, and Gupta (2020) and Munoz et al. (2019) revealed that security and check-in services, including appropriateness of self-check-in kiosks, waiting time, and safe and secure security screening, influence international tourists' satisfaction. Equally, Munoz et al., 2019; Wattanacharoensil et al., 2021 and Yilmaz et al. (2017, revealed a direct relationship between security screening and international tourists' satisfaction. A study by Petra et al., 2010 shows that security screening positively influences international tourists' satisfaction. Tourists' satisfaction at this point is very critical as upon service completion to this domain, other studies that support these results include Fakfare and Graham (2021), Hajez and Fawzy (2021), and Ma and Ma (2022).

THEORETICAL IMPLICATIONS

Three constructs with indicators in this study were adapted from the PCAM proposed by Wiredje et al. (2019). Each construct contained several indicators to assess international tourists' experiences at the airport terminal. International tourists had to rate their levels of satisfaction through these indicators. A few indicators from the literature were added in the check-in domain, considerably affecting the definite number of indicators in the PCAM proposed by Wiredje et al. (2019). Consequently, the model, precisely the departure processing domain, has been modified.

CONCLUSION

The study assessed the association between international tourists' satisfaction and airport departure processing service performance. Two constructs from the theory, perceived

service performance, and satisfaction were adopted, of which the airport departure processing domain from the PCAM was the study focus. The departure processing domain contains three domains/constructs with service indicators of which the perceived service performance had also to be divided into three constructs to meet the study objectives. The study had to borrow service indicators from the PCAM because the theory missed service indicators. The study added other tested indicators from the literature being a significant knowledge contribution adopted to the theory. The study findings revealed that all the hypothesized relationships directly and significantly influenced international tourists' satisfaction. Based on that, the PCAM has been modified to accommodate the added and tested indicators. To increase the number of tourists, outstanding airport performance is inevitable. Hence, airport operators should observe and manage the airport services performed in these domains/constructs equally, firmly, and diligently. Additionally, numerous precautions must be taken during service provision to escape unnecessary grievances that may result in losing return tourists. Likewise, airport operators should withstand construct service quality for the indirect relationship to avoid negative perceptions, which can affect satisfaction negatively. The study was limited to three departure processing constructs, namely: Check-in, departure immigration, and departure security screening. Future studies may prolong the model with other contracts and indicators for service improvement at the airport terminal. Furthermore, the assessment of future studies may assimilate both international and local tourists when assessing satisfaction of tourists at the airport terminal. Similarly, this study assessed the relationship based on the reflective measurement model. Thus, further study can be based on the formative measurement model.

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REFERENCES

Adeniran, A.O. & Fadare, S.O. (2018). Relationship between passengers' satisfaction and service quality in Murtala Muhammed International Airport, Lagos, Nigeria. International Journal of Research in Industrial Engineering. 7: 349-369.

Adetayo,A.O., Mobolaji,S., and Feyisola,A.O. (2020). Factor analysis of passenger satisfaction at Murtala Muhammed Airport (MMA2). Aeronautics and Aerospace Open Access Journal, 4(1), 13-24.

Agarwal, J., & Ansari, Z.A. (2015). A Critical Analysis of the passenger satisfaction from the service quality of the King Abdulaziz International Airport Jeddah, Saudi Arabia. International Journal of Economics, commerce and management, 3(8), 213-228.

Aydoğan, S. (2021). Non-Generic Measurement Structure Of Airport Service. Süleyman Demirel Üniversitesi İktisadi ve İdari Bilimler Fakültesi Dergisi, 26, 97-117.

Alexander, R. (2014). Assessment of passenger perception of airport service quality: A case of Julius Nyerere International Airport. Dar Es Salaam: The university of Dar Es Salaam.

Al-Saad, S., Ababneh, A., and Alazaizeh,M.,. (2019). The influence of airport security procedures. European Journal of Tourism Research, 23, 127-141.

Amara, O. (2020). Top Ten Best International Airports in Africa. Retrieved March 11, 2021, from Answers Africa: https://answersafrica.com/top-10-best-african-international-airports.html

Ansari Z,A & Agarwah, J. (2020). A critical analysis of the passenger's satisfaction from the service quality of the King Abdulaziz International Airport Jeddah, Saudi Arabia. International Journal of Economics, Commerce and Management, 3(8), 213-228.

Antwi, C.O., Fan, C.J., Ihnatushchenko, N., Aboagye, M.O., and Hangyu, X.,. (2020). Does the nature of airport terminal service activities matter? processing and non-processing service quality, passenger affective image and satisfaction. Journal of Air Transport Management, 89, 1-15.

Atalick, O. (2009). Voice of Turkish Customer: Importance of expectations and level of satisfaction at Airport Facilities. Review European Studies, 1, 61-67.

Bakır, M.; Akan, ¸S.; Ozdemir,E.; Nguyen,P.H.; Tsai,J.F & Pham,H.A. (2022). How to Achieve Passenger Satisfaction in the Airport? Findings from Regression Analysis and Necessary Condition AnalysisApproaches through Online Airport Reviews. Sustainability, 14(2151), 1-22.

Baranskaite E. (2019). Transformation of tourism: Innovation in the world's busiest airport. ISMC and ICLTIBM (pp. 1-12). Istanbul, Turkey: Future Academy.

Benson, A. (2022). 10 best international airports in Africa according to the latest ranking. Retrieved from Business Insider Africa: https://africa.businessinsider.com/local/markets/10-best-airports-in-africa-according-to-latest-ranking/9ezcb60

Berthe. A. (2019). AFRAA Air Transport Statisctics. Nairobi: AFRAA. https://www.afraa.org/wp-content/uploads/2023/10/AFRAA-Air-Transport-outlook-Q1-2_2023_Final.pdf

Calderwood, L. A. (2019). Travel and Tourism Competitiveness Report: Travel and Tourism at a Tipping Point. Geneva: World and Economic Forum's for Shaping the Future of Mobility.

Chen, C.F., & Chang, YC.,. (2012). Meeting the and airports. Journal of tourism management. (33): 529-536.

Cheng, K. (2019). Factors Affecting Information System Satisfaction from a two-dimensional perspective. Open Journal of Business Management 7 (2), 568-596

Chi, J., & Wonmi,B. (2022). Content Analysis of" Passengers' Perceptions of Airport Service Quality: The Case of Honolulu International Airport. Journal of Risk and Financial Management, 15(5), 1-19.

Chi, P.G., Idris, M. & Yusoff, S.O. (2018). Tourism Service Design: Promoting Malaysia Cultural through National Brand in Kuala Lumpur International Airport (KLIA). International Journal of Academic Research in Business and Social Sciences, 8, 686-695.

Chuo, C.-C. (2009). A model for the evaluation of airport service quality. Institution of Civil Engineers (ICE) Publishing journal, 162 (TR4), 207-2013.

Eleboda, S. (2017). Appraisal of Passenger Satisfaction with Air. American Journal of Social Science Research, 3, 25-34.

Fisun Y & AtilaY. (2001). The expectancy Disconfirmation paradigm: A critique. Journal of Hospitality and Tourism Research, 25, 107-131.

Fukaya, K. (2012). Evolution and future possibilities of passenger terminal. Passenger terminal conference. Vienna, Austria: sons LTD.

Graham,A., Fakfare.W., & Wattanacharoensil, W. (2021). Airportscape and its Effect on Airport Sense of Place and Destination Image Perception. f Westminster: Emerald Group Publishing Limited.

Gupta, R., & Venkaiah, V. (2018). Airport Passengers: Their Needs and Satisfaction. SCMS Journal of Indian Management, 12, 46-57.

Hair.J. F., Sarstedt.M., Ringle.C.M., & Mena.J.A.M. (2018). An assessment of the use of partial least squares structural equation modelling in marketing research. Journal of the Academic, Marketing and Science, 40, 414-433.

Hajez, M.E., & Fawzy, M.F., (2021). Passenger' satisfaction with service quality at Saudi International Airport. International Journal of Economics, Commerce and Management, 9, 198-217.

Jasrotia, A., Kour, P., & Gupta, S.,. (2020). Understanding the impact of airport service quality on passengers' revist intentions amidst Covid-19 pandemic. Enlightening Tourism Journal, 10, 358-386.

Kinyondo, A & Pellizzo, R.,. (2020). Socioeconomic Impact of Tourism: The Case of Tanzania. African Journal of Economic Review, Volume viii, VIII(II), 239-257.

Kick,P.J., Popovic,V., Kraal,B. & Livingstone, A. (2012). Toward a Taxonomy of Passenger Airport Experience. Bangkok, Thailand: Chulalongkorn University.

Kramer, L.S., Bothner, A., & Spiro, M. (2013). How Airport Measure Customer Service Performance. Washington D.C:: Transportation Research Board.

Laniado, H., Munoz, C., & Cordoba, J. (2019). Modelling air travellers experience based on service quality stages related to airline and airports. Colombia: Canadian Center of Science and Education.

Lyons, W.E., Lowery, D., & DeHoog, R.H (1992) The Politics of Dissatisfaction: Citizens, Services and Urban Institutions, ME Sharpe.

Liu, F., Hocquard, S., Fanning, E., Juniac A. D. & Gittens, A. (2019). Aviation Benefits Report. Geneva, Switzerland: Ait Transport Action Group (ATAG): Aviation Benefits Beyond Border (ABBB).

Lohmann,G., & Trischler,J.,. (2018). Monitoring quality of service at Australia airport: a critical analysis. Journal of air transport management, 67, 63-71.

Ma, G. & Ma, J. (2022). The Impact of airport facility service quality on brand experience and passenger satisfaction: considering the mediating role of brand engagement. Future Transport(2), 501-521. doi:https://doi.org/10.3390/futuretransp2020028

Maestro, C. (2017). Top 10 and worst 10 international airports in Africa - Travel - Nairanland. Retrieved from Nairaland.com website: https://www.nairaland.com/3622013/top-10-worst-10-international

Makoye, K. (2014). Tanzania pledges tough action on airport bribes. Retrieved from Tanzania pledges tough action on airport bribes: https://www.dw.com/en/tanzania-pledges-tough-action-on-airport-bribes/a-17776161.

Marchalina, L., & Dewantara, M, H.,. (2020). Tourists perception of service quality at Ngurah Rai Airport Post-Eruption. Journal of Hospitality and Tourism, 17(1), 17-26.

Mayhew, S. (2016, January 19). Naples Airport introduces self-service immigration technology using. Retrieved from www.biometricupdate.com: https://www.biometricupdate.com/201601/naples-airport-introduces-self-service-immigration-technology-using-biometrics

Marchalina, L., & Dewantara, M, H. (2018). Tourists' perception of service quality at Ngurah Rai Airport Post-Eruption. Journal of Hospitality and Tourism, 17(1), 17-26.

McSherry, D. (2017). Best Airports in Africa 2017. Retrieved from Sleeping in Airport: https://www.sleepinginairports.net/survey/2017-best-airports-africa.htm

McSherry, D. (2019). Best Airports of 2019. Retrieved March 10, 2021, from Sleeping in Airport: https://www.sleepinginairports.net/survey/best-airports-2019.htm

McSherry, D. (2020). Kilimanjaro Airport Guide. Retrieved April 12, 2021, from Sleeping in Airport: https://www.sleepinginairports.net/guides/kilimanjaro-airport-guide.htm

Mwesiumo, D & Halpern N. (2021). Airport Service Quality and Passenger Satisfaction: The Impact of Service Failure on the Likelihood of Promoting an Airport Online. Research in Transportation Business and Management, 40. Retrieved from https://doing.org/10.1016/j.rtbm.2021.100667

Newton, J. (2021). Hygiene audit team shocked by 'complete lack of Covid-19 measures' at airport in paradise archipelago of Zanzibar, with photos showing crowds of passengers not wearing face masks. Retrieved from Travel News: https://www.dailymail.co.uk/travel/travel_news/article-9192297/Skytrax-hygiene-audit-team-left-shocked-Zanzibar-airports-complete-lack-Covid-19-measures.html

Nugraha, P. (2017). Analysing Indonesia Air Connectivity Period of 2006-2016. Journal of the Civil Engineering Forum, 3, 11-20.

Nwaogbe, O.R., Oqwude, I.C., Ejem E.A., & Pius, A. (2021). Service quality and passenger satisfaction in air transportation in a development economy: Evidence from Nigeria. Journal of Aviation Technology and Engineering, 10(1), 30-44.

Oliver, R. (1980). A cognitive model of the antecedents and consequences of satisfaction decisions. Journal of marketing research, 17(4), 460-469.

Olgac, S., Yavuz, N., Ay, E., & Aktas, S. G. (2021). Tourists Satisfaction with American Continent Airports. Journal of Multidisciplinary Academic Tourism, 6, 89-98.

Pandey, M. (2016). Evaluating the service quality of airports in Thailand using fuzzy multi-criteria decision making method. Journal of Air Transport Management, 57, 241-249.

Park,Y.W., & Jung,S.Y.,. (2011). Transfer Passenger' Perceptions of Airport Service Quality: A Case of study Incheon International Airport. Journal of International Business Research 4 (3), 76-82.

Patterson, P., & Johnson, L.,. (1997). Modelling the determinants of customer satisfaction for business to business professional services. Journal of the academy of marketing science, 25(1), 4-17.

Premkumar, G. & Bhattacherjee, A.,. (2004). Understanding changes in belief and attitude toward information technology usage: A theoretical model and longitudinal test. MIS Quarterly, 28, 229-254.

Prentice, C., & Kadan, M. (2019). Journal of Retailing and Consumer Services The role of airport service quality in airport and destination choice. Journal of Retailing and Consumer Services, 47(October 2018), 40–48. https://doi.org/10.1016/j.jretconser.2018.10.006.

Popovic, V,. Kraal, B., & Kirk, PJ. (2010). Toward airport Passenger experience models. Proceedings of 7th International Conference on Design and Emotion (pp. 4-7). Chicago, Illinois: Spertus Institute.

Popovic, V., Kraal, B,J., & Kirk, Philip,J.,. (2009). Passenger experience in an airport: an activity-centred approach. IASDR, (pp. 18-22). COEX, Seoul.

Pivac J, Štimac I, Vidović A, & Boc K. (2022). Overview of the influence of level of service on the airport passenger terminal capacity. Promet – Traffic&Transportation, 34(6), 863-879.

Rijal, C. (2018). Service efficiency of Nepal airlines: a case study of customer perceived gap analysis of Yeti Airlines. Nepal Journal of Multidisciplinary Research, 1, 80-134.

Riyas, A. M., & Anand, R. (2020). On Airport Service Quality: Passenger Perceived Service Quality Measurement Questionnaire Framing Components. Dogo Rangsang Research Journal, 10(7), 74-84.

Ryzin V., & Gregg G. (2006). Testing the expectance disconfirmation model of citizen satisfaction with local government. Journal of Public Administration Research and Theory, 16(4), 599-611.

Saadat, M., Tahbet, T. R., & Mannan, M. A. (2018). Factors That Influence Customer Satisfaction in Airline Industry in Malaysia, 20(8), 1–6. https://doi.org/10.9790/487X-2008050106.

Saayman, M. L. (2018). Tourist satisfaction and subjective well-being: An index approach. International Journal of Tourism and Research, 1-12.

Soshkin, M., & Calderwood, L.U. (2019). The Travel and Tourism competitiveness. Geneva: World Economic Forum's Platform.

Sumanasiri, E.A.G & Dambagolla, D.G.E.K.P. (2020). Passenger satisfaction with the quality of service offered at the Bandaranaike International Airport (BIA). Asia Journal of Economics, Business and Accounting, 15(4), 30-45.

Tse, D. K., & Wilton, P. C. (1988). 'Models of consumer satisfaction formation: an extension'. Journal of marketing research, 25(2), 2014-212.

Wiredja, D. (2017). Assessment of Airport Service Performance: A Passenger-Centred Model. A dissertation for the award of Doctor of Philosophy at the Queensland University of Technology, Brisbane-Australia: QUT.

Wiredja, D., Popovic, V., & Blackler, A. (2019). A passenger centred model in assessing airport service performance. Journal of Modelling in Management, 14, 494-520.

Yavuz,N., Ay,E.,Olgac,S., and Semra,G.A.,. (2021). Tourists satisfaction with American continent airports. Journal of Multidisciplinary Academic Tourism, 6, 89-98

Zhang, J., Chen, W., Petrovsky, N., & Walker, R. (2022). The expectancy disconfirmation model and citizen satisfaction with public services: A meta - analysis and an agenda for best practice. Journal of policy analysis and management, 82(1), 147-159.