

The Importance of Service Attributes between Low-cost and Full-service Carrier Customers: A case of Airline Type Hybridisation

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Abstract

This study sought to assess if the importance attached by customers to the airline service attributes differed across low-cost and full-service airline models. A Mann-Whitney U Test was used to assess the difference between the two models. However, before subjecting the data to differential tests, an exploratory factor analysis (maximum likelihood) was performed on the fifty-five items of service attributes, reducing them into forty-two items retained into ten latent factors (airline service attributes). The results of the revealed a significant difference in the importance attached to staff competence, courtesy and responsiveness only. Such findings suggest that the positioning of airlines into binary (FSC - LCC) models could be a waste of effort and resources since airlines seem to be converging.

Keywords: Low-cost carrier, full-service carrier, airline service attributes, convergence, hybridisation

Introduction

Several studies have investigated airline service quality, especially its relationship with airline choice, customer satisfaction and loyalty (e.g., Park, Lee & Nicolau, 2020; Bogicevic, Yangb, Bujisicc & Bilgihan, 2017; Mantey & Naidoo, 2017; Leong, Hew, Lee & Ooi, 2015; Kühn, Spies & Petzer, 2015; Namukasa, 2013; Campell & Vigar-Ellis, 2012; de Jager & van Zyl, 2012; Lambert & Luiz, 2012; de Jager, van Zyl & Toriola, 2012; Diggines, 2010; Fourie & Lubbe, 2006). Scrutiny of literature on the South African airline domestic passenger market, which was the focus of this study, shows an affinity towards what Park, Lee and Nicolau (2020: 1) refer to as “linear (or symmetric) relationship between the attributes of airline services and overall service quality and/or satisfaction”. There is a paucity of studies investigating the difference (or lack of) of importance attached by low-cost airline customers compared to full-service airline customers. From the existing studies, we find only Fourie and Lubbe (2006) and Diggines (2010) having investigated the difference or lack of in South Africa. Thus, this study sought to build on the previous studies and provide an up to date comparison of the importance attached by low-cost airline and full-service airline customers.

Airline service attributes

Airline service attributes are the key performance indicators crucial for evaluating airline service quality. As a result of increased access to market information, airline customers are well aware of airline service quality (Basfirinci & Mitra, 2015); hence, they already have expectations regarding the various service attributes as they interface with airline service offerings which airlines have to meet. The performance of an airline on these service attributes is evaluated and determines the perceived service quality. For this reason, it is crucial for airlines to intimately understand customer expectations and perceptions to model and develop superior service offerings. Studies about airline service quality abound in services literature.

Such abundance is not surprising as service quality is central to airline preference and choice (Waguespack & Rhoades, 2014; Suki, 2014); hence an airline’s competitiveness (brand positioning). In their study, Kim and Park (2017) noted that the majority of the studies tend to investigate the airline service quality based on the opinions of airline customers, neglecting those of aviation experts. Even though this can be argued and rightly so, it does give a complete picture of the importance attached to different airline service quality attributes.

Furthermore, Park, Lee and Nicolau (2020) point that researchers investigating airline service quality have identified service attributes differently. The most used approach is the SERVQUAL model, which categorises the airline service attributes into five dimensions: tangibility, reliability, responsiveness, assurance, and empathy (Parasuraman, Zeithaml & Berry, 1988; Lambert & Luiz, 2012). Some researchers have adopted the fuzzy set theory (Tsuar, Chang & Yen, 2002), AIRQUAL (Alotaibi, 2015; Bari, Bavik, Ekiz, Hussain & Toner, 2001), visual data mining (Bogicevic et al., 2017; Park, Lee & Nicolau, 2020), Kano model (Basfirinci & Mitra, 2015; Wang & Fong, 2016), while some were exploratory (Campbell & Vigar-Ellis, 2012; de Jager, van Zyl & Toriola, 2012; Diggines, 2010; Fourie & Lubbe, 2006) and some initially exploratory but later concluded by categorising using some models above (Mantey & Naidoo, 2017; de Jager & van Zyl, 2012). As a result, different studies have identified different airline service attributes and assessed their influence on airline choice, customer satisfaction and loyalty. Table 1 presents the commonly identified airline service attributes, which were included in this study’s instrument.

Table 1: Common airline service attributes

Service attribute/item	Literature sources
Airline reputation/image	Mbura (2020); Medina-Muñoz, Medina-Muñoz & Suárez-Cabrera, 2018; Abdel Rady (2018); Campbell & Vigar-Ellis (2012); Buaphiban (2015)
Airline safety	Campbell & Vigar-Ellis (2012); Chen & Chen (2014); Buaphiban (2015); Koo, Caponecchia & Williamson (2015); Luke (2015); Diggines (2010); Lambert & Luiz (2011)
Airline reliability/punctuality	Atalay, Atalay & Isin (2019); Hu & Hsiao (2016); Luke (2015); Campbell & Vigar-Ellis (2012); Fourie & Lubbe (2006); Surovitskikh & Lubbe (2008); Diggines (2010); de Meyer & Mostert (2011); Lambert & Luiz (2011)
Airline ticket prices	Diggines (2010); Campbell & Vigar-Ellis (2012); Luke (2015); Mbura (2020); de Meyer & Mostert (2011)
Customer service	Hu & Hsiao (2016); Atalay, Atalay & Isin (2019); Campbell & Vigar-Ellis (2012); Diggines (2010)
Loyalty programs are known as frequent flier programs (FFPs)	Atalay, Atalay & Isin (2019); Luke (2015); Campbell & Vigar-Ellis (2012); Diggines (2010); Fourie & Lubbe (2006)
Booking and check-in services	de Meyer & Mostert (2011); Fourie & Lubbe (2006); Surovitskikh & Lubbe (2008); Hu & Hsiao (2016); de Jager & van Zyl (2012); Lambert & Luiz (2011); Atalay, Atalay & Isin (2019); Luke (2015)
In-flight services and cabin features Such as IFE Quality of food served, seat comfort, legroom, cabin cleanliness, etc.	Hu & Hsiao (2016); Atalay, Atalay & Isin (2019); Luke (2015); Campbell & Vigar-Ellis (2012); Fourie & Lubbe (2006); Surovitskikh & Lubbe (2008); Diggines (2010); Lambert & Luiz (2011); de Meyer & Mostert (2011)
Luggage handling and safety	Campbell & Vigar-Ellis (2012); Hu & Hsiao (2016); Atalay, Atalay & Isin (2019); de Meyer & Mostert (2011)
Airline personnel quality including courtesy, competence, grooming and responsiveness.	Surovitskikh & Lubbe (2008); Lambert & Luiz (2011); de Meyer & Mostert (2011); Campbell & Vigar-Ellis (2012); Hu & Hsiao (2016); Surovitskikh & Lubbe (2008)

Source: Fuyane (2020), Fuyane, Xaba & Sikwela (2021)

The literature clearly shows that the emergency of LCCs significantly impacted the airline industry, particularly the service attributes structure and ticket prices (Intervistas, 2014;



Varella, Frazão & Oliviera, 2017). The FSCs and LCCs are presented as distinct airline models. However, more recent studies (e.g., Ferrer-Rosell & Coenders, 2017; Azadian & Vasigh, 2019; Daft & Albers, 2013; Lange, Sieling & Parra, 2019) have argued that the purported distinction has become so blurry; hence advance that the convergence/hybridisation thesis. This thesis is outlined in the following Section 4 (as problem statement).

Airline business models

"Business model" is a common term in the lexicon of business/strategic management (Daft & Albers, 2015), used to systematically characterise a particular firm's strategic orientation and organisational design. It is central to how a firm responds sustainably to the broader operating environment (Boons & Lüdeke-Freund, 2013; Lepak, Smith & Taylor, 2007). Hence, it determines a firm's value creation and capture mechanisms (Acquier, Carbone & Massé, 2019; Daft & Albers, 2015) and its market positioning. The term (business model) has been associated mainly with the two - FSC and LCC airline models within the domestic passenger airline markets.

Full-service airlines

The full-service airline model, also referred to as legacy airlines (Ferrer-Rosell & Coenders, 2017), is synonymous with State-owned airlines. These airlines (FSCs) offer a full range of airline services to their customers, albeit at a premium. Full-service airlines deem professionalism and high-quality airline services instrumental to satisfying customers and creating customer loyalty (Rajaguru, 2016; Periera, Porenca & Reis, 2011; Forgas, Moliner, Sanchez & Palau, 2010). Thus, full-service airlines charge higher ticket prices to recoup the input costs. Also, ticket prices are higher as they account for a wide range of airline services apart from the core transportation service. Customers do not incur any additional payments for the services (Bozogán & Hurná, 2018). In South Africa, the FSCs are the state-owned SAA and SA Express, SA Airlink and BA Comair.

Low-cost airlines

The low-cost airline business model is undoubtedly a beneficiary of the liberalisation of the aviation industry. Its emergence revolutionised the airline industry, impacting legacy airlines, passengers and airports (Luke & Walters, 2013; Schlumberger & Weisskopf, 2014; Budd, Francis, Humphreys & Ison, 2014; Adeyeye, 2016). Strategically, low-cost airlines emphasise cost leadership strategy, hence, position themselves in terms of low-ticket prices. Therefore, they strip their service packages of all the frills and provide basic air transport services. The services provided by legacy airlines are often for free (frills); for example, baggage fees, onboard meals, assigned seating are charged separately from the ticket price. As a result, ticket prices are generally lower than FSCs (Bozogán & Hurná, 2018). The other characteristics of LCCs include being short-haul carriers, using point-to-point route structures, prefer secondary airports, optimal utilisation of aircraft, and a newer, more fuel-efficient and uniform fleet (Schlumberger & Weisskopf, 2014). They also favour high-density one-class configuration, low-cost distribution and high labour utilisation (*ibid*). Unlike in the United States of America, where low-cost airlines entered the market and prospered (Fu, Oum & Zhang, 2010), the South African low-cost carriers have had mixed fortunes, of which Shaw-Smith (2012) estimates a 73% airline failure rate. Only two (Kulula and Mango) have been in existence for more than ten years. The other LCCs (see in Mhlanga & Steyn, 2017) did not last that long, with the shortest time in operation being of Velvet Sky, which lasted for less than twelve months (Mhlanga, 2017; Henama, 2014).

As a confirmation of the effects of deregulating the South African domestic airline market (Kuuchi, 2016; Williams, 2016; McLennan, 2015) and the emergence of LCCs, substantial market share shifts have emerged. SAA, which held approximately 95% of the domestic market (Paelo & Viliakazi, 2016; Markman, 2016), saw its market share tumble to around 50-60% post-deregulation (Paelo & Viliakazi, 2016). This was further exacerbated by the entry of LCCs from 2001. As of 2016, SAA had a 36% market share (CAPA, 2016). Combined with BA Comair's market share, FSCs had 52% of the market, with the remainder amongst the LCCs as follows: Kulula (22%), Mango (20%), and Safair with 6% (CAPA, 2016; Mhlanga, 2017).

Problem statement and research objectives

As indicated earlier, there is growing literature suggesting a growing convergence of strategic orientations and structures within the airline industry (Daft & Albers, 2013, 2015). According to Lange, Sieling and Parra (2019:39), business models are said to converge when their "strategic positions and operative procedures become more similar." In simple terms, convergence or hybridisation of airline models occurs when low-cost airlines become less low-cost like and full-service airlines become less legacy like (Corbo, 2017; Ferrer-Rosell & Coenders, 2017). For example, low-cost airlines are now providing services that would ordinarily be offered by legacy airlines. They now also offer free luggage allowance and ticket-flight flexibility. On the other hand, legacy airlines are beginning to remove some frills from their service offering to reduce prices. For these reasons, Lohman and Koo (2013) argue against the LCC - FSC binary labels and suggest that indeed airlines are hybridising. In concurrence, Tomová and Materna (2017) state that they tend to influence each other because of the co-existence of these two airlines types and competitive pressures, thus creating a hybrid airline model. As a result, it is essential for researchers and or airline marketers to continuously evaluate if the markets still find the distinction of importance or not. This is important to avert mispositioning, which is positioning on dimensions that do not matter to the market.

Previous studies investigating the convergence of airline business models have used data drawn from airline information systems, for example, cost per available seat miles (CASM) (Azadian & Vasigh, 2019), FlightAware ADS-B receivers (Lange, Sieling & Parra, 2019) and the airline business model framework (Daft & Albers, 2013, 2015). Previous studies tend to describe airline business models from airlines' point of view with a bias towards this approach. To complement and build on the existing body of knowledge, this sought to approach from a market's (customers') point of view. Assessing the importance attached by both LCC and FSC customers can instrumentally show if the markets do find the purported airline models different or not. Based on this thesis, the following objective of the study was formulated: To assess if the importance of the service attributes differs across low-cost and traditional full-service airlines in the South African domestic market.

Hypotheses

The following hypotheses were formulated to operationalise the study's research objective. The airline service attributes used in these hypotheses were obtained through an exploratory factor analysis by Fuyane (2020). The hypotheses were:

H₀₁: The importance of *Booking and check-in* services does not differ across low-cost and traditional full-service airlines in the South African domestic market.

H₀₂: The importance of *Loyalty programs and ancillary pricing* does not differ across low-cost and traditional full-service airlines in the South African domestic market.

H₀₃: The importance of *Airline Safety* does not differ across low-cost and traditional full-service airlines in the South African domestic market.

H₀₄: The importance of *Airline reputation* does not differ across low-cost and traditional full-service airlines in the South African domestic market.

H₀₅: The importance of *Staff competence, courtesy and responsiveness* does not differ across low-cost and traditional full-service airlines in the South African domestic market.

H₀₆: The importance of *Onboard services* does not differ across low-cost and traditional full-service airlines in the South African domestic market.

H₀₇: The importance of *Airline reliability* does not differ across low-cost and traditional full-service airlines in the South African domestic market.

H₀₈: The importance of *Luggage handling* does not differ across low-cost and traditional full-service airlines in the South African domestic market.

H₀₉: The importance of *Ticket savings* does not differ across low-cost and traditional full-service airlines in the South African domestic market.

H₀₁₀: The importance of *Cabin features and experiences* does not differ across low-cost and traditional full-service airlines in the South African domestic market.

Methodology

As indicated, the airline service attributes used in the hypotheses of this study were drawn from Fuyane's (2020) study titled "*The influence of consumer personal values on airline choice within the South African domestic market.*" In brief, Fuyane's study used a survey to collect data from a sample of low-cost and traditional full-service airline customers in South Africa. The universe of the study was the South African domestic airline passengers (Fuyane, 2020:24). Airlines operating chartered flights were excluded from this study. A sample of 324 respondents was obtained using a hybrid of convenience and snowball sampling technique but was later reduced to 298 after a data cleaning exercise. Respondents were asked to complete an online structured questionnaire consisting of 55 airline service items describing the airline service attributes drawn from literature (see Section 2). The service items were measured on a five-point importance Likert scale ranging from *Not Important at all* to *Absolutely essential*. The other variables included airline preference, the purpose of travel and the ability to make choices. SPSS Version 26 software was used for data analysis to check sample characteristics, dimension reduction and difference analysis. The sample consisted of 55% males and 43.6% females, while 1.4% preferred not to reveal their gender. The ethnic diversity of the sample was reflective of the South African demographic profile, as stated in the Stats SA (2019) report. A majority (54%) of the respondents were blacks, followed by Indians 22.1%, whites 18.5% and coloureds 5.4%. The age of the respondents was skewed towards the age of 40 years or younger at 68% of the sample. Most were also employed (77.5%), but most of them indicated that they could make decisions on the choice of airline.

Identified airline service attributes

As indicated in Section 5, the hypothesised airlines service attributes were from Fuyane's (2020) study and were identified through a data reduction technique (EFA). The EFA's Kaiser-Meyer-Olkin (KMO) Measure of Sampling Adequacy score of .85 and Bartlett's Test of Sphericity < .001 indicated that it was appropriate (Hair, Black, Babin & Anderson, 2019; Yong & Pearce, 2013; William, Onsmann & Brown, 2010) and that the model was not an identity matrix (Hair et al., 2019; Pallant, 2013). Through this technique, the 55 airline service items were reduced into ten latent factors (airline service attributes). The retained service attributes (*'Booking and check-in'*, *'Loyalty programs and ancillary pricing'*, *'Airline Safety'*, *'Airline reputation'*, *'Staff competence, courtesy and responsiveness'*, *'Onboard services'*, *'Luggage handling'*, *'Ticket savings'*, *'Cabin features and experiences'* and *'Airline reliability'*) were used in this study to assess if there is a difference in the importance placed by FSC and LCC customers. The Cronbach alpha values for these factors were above .60, indicating a sufficient discriminating power (Nunnally, 1967; Mansour, 2015).

Hypotheses testing results

A Mann-Whitney U-Test was performed to test the above hypotheses, and the results are presented in Table 1.

Table 1: Difference Analysis between FSC and LCC Customers

	Statistics	Hypotheses	Decision
Mann-Whitney U	9316.500	H01: The importance of <i>Booking and check-in</i> services does not differ across low-cost and traditional full-service airlines in the South African domestic market.	Retain the null hypothesis
Wilcoxon W	14069.500		
Z	-0.623		
Asymp. Sig. (2-tailed)	0.533		
Mann-Whitney U	8497.000	H02: The importance of <i>Loyalty programs and ancillary pricing</i> does not differ across low-cost and traditional full-service airlines in the South African domestic market.	Retain the null hypothesis
Wilcoxon W	28798.000		
Z	-1.800		
Asymp. Sig. (2-tailed)	0.072		
Mann-Whitney U	9476.000	H03: The importance of <i>Airline Safety</i> does not differ across low-cost and traditional full-service airlines in the South African domestic market.	Retain the null hypothesis
Wilcoxon W	14229.000		
Z	-0.393		
Asymp. Sig. (2-tailed)	0.694		
Mann-Whitney U	9538.500	H04: The importance of <i>Airline reputation</i> does not differ across low-cost and traditional full-service airlines in the South African domestic market.	Retain the null hypothesis
Wilcoxon W	29839.500		
Z	-0.302		
Asymp. Sig. (2-tailed)	0.763		
Mann-Whitney U	8149.000	H05: The importance of <i>Staff competence, courtesy and responsiveness</i> does not differ across low-cost and traditional full-service airlines in the South African domestic market.	Reject the null hypothesis
Wilcoxon W	12902.000		
Z	-2.333		
Asymp. Sig. (2-tailed)	0.020		
Mann-Whitney U	9351.500	H06: The importance of <i>Onboard services</i> does not differ across low-cost and traditional full-service airlines in the South African domestic market.	Retain the null hypothesis
Wilcoxon W	29652.500		
Z	-0.576		
Asymp. Sig. (2-tailed)	0.564		
Mann-Whitney U	9314.500	H07: The importance of <i>Airline reliability</i> does not differ across low-cost and traditional full-service airlines in the South African domestic market.	Retain the null hypothesis
Wilcoxon W	14067.500		
Z	-0.632		
Asymp. Sig. (2-tailed)	0.528		
Mann-Whitney U	9654.000	H08: The importance of <i>Luggage handling</i> does not differ across low-cost and traditional full-service airlines in the South African domestic market.	Retain the null hypothesis
Wilcoxon W	29955.000		
Z	-0.137		
Asymp. Sig. (2-tailed)	0.891		
Mann-Whitney U	8962.500	H09: The importance of <i>Ticket savings</i> does not differ across low-cost and traditional full-service airlines in the South African domestic market.	Retain the null hypothesis
Wilcoxon W	29263.500		
Z	-1.136		
Asymp. Sig. (2-tailed)	0.256		

Mann-Whitney U	8503.500	H ₀ 10: The importance of <i>Cabin features and experiences pricing</i> does not differ across low-cost and traditional full-service airlines in the South African domestic market.	Retain the null hypothesis
Wilcoxon W	13256.500		
Z	-1.801		
Asymp. Sig. (2-tailed)	0.072		

a. Grouping Variable: Preferred Airline Type

Table 1 above shows that out of the ten hypotheses, only one hypothesis (*Staff competence, courtesy and responsiveness*) was the null hypothesis rejected. The results presented in the table are further discussed per each hypothesis below.

Staff competence, courtesy and responsiveness

That means the importance of *Staff competence, courtesy and responsiveness* differ across low-cost and traditional full-service airlines in the South African domestic market. These results are somehow consistent with those by Loureiro and Fialho (2016) and Leong et al. (2015), who found that airline customers do not differentiate between the low-cost and full-service airlines' services based on the quality of personnel. Also, the results are slightly different from those of Fourie & Lubbe (2006), who found mixed results. Out of eleven attributes they tested, their results indicated no differences in the importance placed by both FSC and LCC on five attributes. Several studies mention employee behaviour as the key to the attraction and predictor of customers' satisfaction (Lin & Huang, 2015; Wu & Cheng, 2013; Saha & Theingi, 2009). Regarding *Staff competence, courtesy and responsiveness*, this study is consistent with Leong et al. (2015) findings. Leong and colleagues found personnel quality (*Responsiveness*) an important driver of post-purchase behaviour for low-cost and full-service airlines. For Koklic, Kukar-Kinney and Vegelj (2017), the influence of airline personnel quality was more substantial for FSC than LCC customers. Also, Lambert and Luiz (2011) found that both airline managers (both LCCs and FSCs) and airline travel industry managers ranked responsiveness as the second most important dimension for passengers.

Ticket price savings

In respect of the pricing attribute, this study aligns with others (e.g., Fourie & Lubbe, 2006) who also found no significant difference in the importance of airline ticket pricing between low-cost and full-service airline customers. The results of this study are inconsistent with the findings of Kurtulmuşoğlu, Can and Tolon (2016), where ticket prices were identified as having the highest impact on the preference when selecting an airline. Also, in Diggins (2010), most (93.6%) of the respondents reported that they would switch to LCCs if FSCs increased ticket prices, suggesting that passengers differentiate two airline models based on ticket prices. Supporting the notion that the importance of ticket price is different between LCC and FSC customers, other studies (e.g., Lim & Lee, 2020; Kim & Park, 2017; Rajaguru, 2016; Kurtulmuşoğlu, Can & Tolon, 2016; Lin & Huang, 2015; Kuljanin & Kalić, 2015; Wittman, 2014) found low-cost customers as more price-sensitive compared to full-service customers. Hence, they compare ticket prices before booking (Diggins, 2010) and are attracted to LCCs' lower prices (Chiou & Chen, 2010). For FSC customers, higher prices are tolerated for higher service quality (Seo, Moon & Lee, 2015). Kurtulmuşoğlu et al. (2016) found booking convenience to be among the most impactful attributes on the preference when selecting an airline.

Booking and check-in services

Several studies have investigated the influence or role of booking and check-in services on airline choice, customer satisfaction and loyalty (Wang, So & Sparks, 2017; Lin & Filieri,

2015; Lu, Chou & Ling, 2009) or to compare between LCCs and FSCs (Lim & Lee, 2020). The findings of this study align with those of Lu (2017) found no difference in *Baggage check-in*, *Priority boarding* and *Priority check-in* services between LCC and FSC customers. LCC and FSC customers were found to converge on *the Convenience of booking/purchasing a flight* and *Self-check-in* services (Lu, 2017).

Loyalty programs and ancillary pricing

In the literature, loyalty programs are more associated with FSCs (Lim & Lee, 2019; Lu, 2017; O'Connell & Warnock-Smith, 2013; Fallert, 2012), while LCCs have been touted the "ancillary revenue champs" (Fallert, 2012). Lu's (2017) findings further confirmed the difference, concluding that there are heterogeneous perceptions about loyalty programs across the airline models. The results in Table 1 show the contrary. They reveal no difference in the extent of importance placed by LCC and FSC customers on loyalty programs and ancillary pricing. The results are consistent with those where frequent flyer (loyalty) programs were found to be among the least important attributes for both LCC and FSC customers (Fourie & Lubbe, 2006) and have no impact on the ranking and selection of airlines (Kurtuluşoğlu, Can & Tolon, 2016). As for ancillary charges, it is listed as the fourth most common complaint by airline customers (Skytrax, 2021b), suggesting airlines need to pay more attention to it.

Airline safety

For the *Airline Safety* attribute, the results show no difference in the importance attached to this attribute by both low-cost and traditional full-service airlines in the South African domestic market. These results are contradictory to other studies conducted in South Africa. For instance, in Campell and Vigar-Ellis (2012) and Lambert and Luiz (2011), airline safety was rated as the most important airline service attribute. Such a contradiction could be because of airline safety being a hygiene factor, which, when present, does not lead to motivation/satisfaction, but if compromised, it leads to dissatisfaction. In a study comparing the importance of airline selection attributes (among many others) in South Korea, Kim and Park (2017) found a significant difference in the importance the FSC and LCC customers placed on airline safety. However, this could be due to some structural differences between the markets.

Airline reputation

Similarly, this study found no difference in the importance of low-cost and traditional full-service airline customers on airline reputation as an airline service attribute. It would seem that there is a paucity in the evaluation of the importance of airline reputation as a service attribute in the South African market. Only Campell and Vigar-Ellis (2012) did include airline reputation as an airline choice factor, and it was rated among the least important attributes. In another study, Beneke, Mill, Naidoo and Wickham (2015) investigated the relationship between electronic word-of-mouth (eWOM) and brand attitudes/affect, trust, affect and repurchase interest by airline passengers in South Africa. These (brand attitudes/affect, trust, and repurchase interest) can be seen as either antecedent or due to airline brand reputation. For example, Song, Ruan & Park (2019) found responsiveness and reliability of service quality as significantly affecting corporate image and customer trust. They also found that corporate image and customer trust significantly predict corporate reputation. According to Fombrun and Shanley (1990), corporate reputation is central to corporate performance and competitiveness.

Onboard services

The results indicate no difference in the importance attached to it as an airline selection attribute across low-cost and full-service airline customers regarding airline onboard services. These

results partly contradict those of Fourie and Lubbe (2006) study, which compared, among other airline choice factors, the importance of *In-flight meals and drinks* and *In-flight entertainment* (onboard services) across LCC and FSC customers. Albeit *In-flight entertainment* was regarded as the least important attribute by both LCC and FSC, the results revealed that *In-flight meals and drinks* have different ratings between LCC and FSC customers. It was the fifth important attribute for LCC customers and the third least important attribute for FSC customers. In another study, de Jager and van Zyl (2012) also included *Cabin service scape (food and cabin crew)*, which somehow resembles onboard services used in this study. However, they did not compare the importance attached to the attribute between LCC and FSC customers, thus rendering it not comparable to the results of this study. However, their findings indicate that the *Cabin service scape (food and cabin crew)* latent factor accounted for 28.7% variation in the data.

Airline reliability

The Mann-Whitney U Test in Table 1 shows that the importance of *the Airline reliability* attribute does not differ across low-cost and traditional full-service airlines in the South African domestic market. As indicated in Song, Ruan and Park (2019), an airline's performance of various service dimensions, especially in reliability, enhances how customers view it (airline brand image) and can also impact the airline's reputation in the long run (Gotsi & Wilson, 2001). A negative airline reputation can lead to some disgruntled customers engaging in negative eWOM, thus significantly impacting overall brand attitudes, trust and repurchase intention (Beneke et al., 2015). The results of this study align with those in Fourie and Lubbe (2006), where the results showed no difference in the importance of an aspect of airline reliability (*Schedule/frequency of flights*) across low-cost and full-service carrier customers. Kim & Park (2017) also found no difference in the importance of *On-time performance (departure/arrival) along with cancellation ratio* (an airline reliability item) across the customers of two models. This can mean that reliability is another hygiene factor, which when an airline default on, is bound to lose customers to competitors.

Luggage handling

The results in Table 1 reveals that the importance of the luggage handling attribute does not differ across the LCCs and FSC customers. The results are against the backdrop of evidence that luggage handling is one of the important attributes used by airline customers when choosing an airline (Muruganantham & Joseph, 2020; de Jager, van Zyl & Toriola, 2012; Campbell & Vigar-Ellis, 2012; Lambert & Luiz, 2011; Diggines, 2010; Surovitskikh & Lubbe, 2008), which is also used as one of the dimensions used for Skytrax World Airlines Awards (Skytrax, 2021a). Moreover, luggage-related complaints top the list of common complaints by airline customers (Skytrax, 2021b). However, luggage handling is a multifaceted dimension, which includes circumventing luggage mishandling, loss, damage and theft/tampering, which leads to customer complaints (Surovitskikh & Lubbe, 2008). It is also concerned with making decisions about the luggage allowance thresholds and enhancing luggage security features such as labelling and tracking. What makes luggage handling challenging is that, apart from the airline, several actors (ground services) handle passenger luggage at both ends of the journey. For instance, in Lambert and Luiz (2011: 11674), some managers from travel agencies mentioned that airline customers "often confuse the responsibility between the airline and the travel management company".



Cabin features and experiences

Similarly, the Mann-Whitney U Test revealed that there is no difference in the importance of Cabin features and experience across LCC and FSC customers. In this study, this attribute focused on passenger comfort as an experience generated by the cabin interior features (Ahmadpour, Lindgaard, Robert & Pownall, 2014), for example, cabin room space, cabin cleanliness, seat comfort, leg room (seat configuration) and cabin temperatures. The results of this study suggest that airline customers do not differentiate airlines based on this attribute. A possible explanation for such indifference could be the safety restrictions, cost, regulations and effect on passenger capacity that comes with changes to cabin features (Patel & D’Cruz, 2018). This is even worse for most of the South African airlines using leased aircraft. In line with the results of this study, Fourie and Lubbe (2006) also found no difference in the importance LCC and FSC customers attach to seat comfort. However, empirical evidence about the importance of airline service attributes seems to be contradictory. Campbell and Vigar-Ellis (2012) found *Space on board and leg room* (an aspect of cabin features and experiences) as the second least important airline attribute, which can be assumed to be why airline customers do not differentiate between the two airline models. However, in Lambert and Luiz (2011), *Comfort and cleanliness of seat* (an item under Tangible dimension) were rated by airline managers and travel industry managers as the most important attribute. Such disparities between the customer and airline perspectives are worrisome, and this study seeks to address them.

Conclusions and implications

This study extends from an earlier study (assessing the importance of airline service attributes on airline preference or choice - in press) to determine if there were differences in the importance attached to the airline service attributes by LCC and FSC customers. The results show that, in general, there is no difference, putting into question the essence of categorising airlines as either LCC or FSC in the South African domestic market. This suggests that it would also be beneficial for airlines to understand airline service quality from a customer perspective to avoid what Lambert and Luiz (2011) note as a tendency to overestimate the importance of some attributes, which often leads to mischannelling resources. The findings of this study imply that it might not be wise for airlines to pursue segmentation, targeting and positioning strategies based on the characterisation of the two airline model types. Instead, airlines must strive to integrate and coordinate their service attributes into their service value chain and deliver consistent customer expectations. More importantly, in highly volatile markets such as the airline industry, airlines need to identify sources of competitive advantage. From this study, it can be suggested that an airline that optimises the quality of its personnel (i.e., competence, courtesy and responsiveness) can attain some competitive advantage. Unlike the tangible airline attributes such as aircraft, cabin features, and ground equipment, human talent is less replicable.

More importantly, the results confirm the concept of airline hybridisation or convergence as suggested in the growing literature. That is, low-cost carriers have, over the years, adopted some of the characteristics associated with the full-service carriers, for example, offering business class, use of primary airports and adoption of the hub and spoke model. Similarly, full-service carriers have adopted cost-cutting measures such as reducing or capping frills. Thus, the paper concludes that South African airlines seem to have ditched the one-directional strategic approaches. On the one end, legacy (full-service) airlines pursue product differentiation through high service quality, and low-cost airlines differentiate their offering through cost reduction and price leadership on the other end.

In search of competitiveness and viability, airlines adopt bi-directional strategies that borrow practices across the LCC and FSC models, resulting in blurring lines (convergence)

between the two airline models. Since the concept of airline model convergence or hybridisation is still new, it would be plausible for future studies to investigate how the concept manifests in South Africa and elsewhere. As indicated, the study employed a non-probability sampling technique, and the sample was not proportional between low-cost and full-service airline customers as the airlines were unwilling to allow the researcher to access their customers. As a result, the findings cannot be generalised as the reported trends might occur by chance rather than as a reflection of actual cause (Gray, Bramhall, Corker & Garnett, 2012). Furthermore, even though the quantitative results provide an insight into the levels of importance attached by both LCC and FSC customers, they do not explain why such importance is attached (or not attached). As such, future studies need to employ a qualitative approach to dig deeper to understand the underpinning reasons for attaching differing importance to the airline service attributes when choosing an airline.

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