

This item is the archived peer-reviewed author-version of:

Airline brand awareness and perceived quality effect on the attitudes towards frequent-flyer programs and airline brand choice : moderating effect of frequent-flyer programs

Reference:

Koech Alex Kipkorir, Buyle Sven, Macário Rosário.- Airline brand awareness and perceived quality effect on the attitudes towards frequent-flyer programs and airline brand choice : moderating effect of frequent-flyer programs
Journal of air transport management - ISSN 1873-2089 - 107(2023), 102342
Full text (Publisher's DOI): <https://doi.org/10.1016/J.JAIRTRAMAN.2022.102342>
To cite this reference: <https://hdl.handle.net/10067/1923140151162165141>

Airline Brand Awareness And Perceived Quality Effect On The Attitudes Towards Frequent-Flyer Programs And Airline Brand Choice - Moderating Effect Of Frequent-Flyer Programs

Alex Kipkorir Koech^{a*}, Sven Buyle^b, Rosario Macario^{b,c}

^a C-MAT, the Centre for Maritime and Air Transport Management, Antwerp Management School, University of Antwerp, Boogkeers 5, 2000, Antwerp, Belgium

^b Department of Transport and Regional Economics, University of Antwerp, Prinsstraat 13, 2000, Antwerp, Belgium

^c CESUR – Instituto Superior Técnico, Lisbon Technical University Lisboa, Portugal

Abstract

Understanding customer behaviour is critical to retaining loyal customers and attracting new ones when considering an airline brand. Most airlines have frequent-flyer programs (FFPs) meant to entice passengers' decisions regarding airline brand choice. However, the determinants of the attitudes toward FFPs and their effect on airline brand choice are not well documented. This study examined the influence of airline brand awareness and perceived quality on travellers' attitudes towards frequent-flyer programs and airline brand choice. Furthermore, the study investigated whether the attitudes towards FFPs indirectly (moderates) influence the causal relationship between airline brand awareness and brand perceived quality on airline brand choice. Social Exchange Theory (SET) guided the study. An explanatory research design was adopted. Primary data was sourced through the deployment of a structured online survey. Confirmatory factor analysis, composite reliability, and Cronbach alpha coefficients were assessed to determine discriminant validity and reliability of the measurement instrument. Afterwards, Pearson's correlation, simple linear, and multiple hierarchical (step-wise) regression models are estimated to test the conceptualised model using SPSS 27 software. The findings indicate that airline brand awareness and perceived quality influence travellers' attitudes towards FFPs and airline brand choice. Moreover, attitudes towards FFPs positively influence airline brand choice. Additionally, attitudes towards FFPs have a conditional (moderating) effect on the relationship between airline brand awareness and airline brand choice and between airline brand perceived quality and airline choice. The results indicate that high attitudes toward airline FFPs equate to higher airline brand choice despite low airline awareness or even when the airline's quality perception is evaluated as inferior. The findings of the study have significant theoretical and managerial implications.

Keywords: Airline Brand Choice, Airline Brand Awareness, Airline brand Perceived Quality, Airline Frequent-flyer programs, Social Exchange theory.

1 INTRODUCTION

According to the International Civil Aviation Organization (ICAO) (2018), 4.3 billion passengers travelled in 2018, and this is projected to grow to 10 billion passengers by 2040. IATA (2016) forecast this at 7.2 billion passengers by 2035 based on a 3.7% annual compounded average growth rate (CAGR). This positive trajectory was negatively devastated by the global outbreak of the COVID-19 pandemic. Whereby, based on IATA WATs (2021), at the depth of the crisis, 66% of the world's commercial air transport fleet was grounded as governments closed borders or imposed strict quarantines. ICAO (2021), however, forecasts a return to 2019 revenue passenger kilometres (RPK) by the year 2023 based on an optimistic (high) passenger assumption matrix, with the likely (mid) scenario being in 2024 while the pessimistic (low) level being at the year 2027. Despite the significant growth in passenger numbers pre-COVID-19 period, most airlines had difficulty having a profitable operation due to stiff and fierce competition in attracting and luring customers (Khan, Jung, Kim, & Kim, 2019). Khudhair *et al.* (2019) reported that over 270 international airlines ferried over 3.8 billion people in 2019. With the pandemic, CAPA-Centre for aviation (2020) estimated almost half of the global airline companies would cease operations. To survive, such as in the current harsh environment, commercial airline operators must re-strategize and rethink repositioning their airline brands to mitigate the challenges (Thakshak, 2018).

As airline companies re-strategize, airline passengers are also increasingly becoming more aware of their rights towards their specific needs and tend to switch to other airline brands if one brand fails to satisfy their needs (Gupta, 2018). Given that air transport is a derived demand and highly perishable, airline companies must continuously align their services to the needs of both current and potential customers by going beyond the customers' expectations. Airline companies must constantly differentiate from the competition to enhance their competitive advantage (Khudhair, Jusoh, Mardani, & Nor, 2019). One way determined is to prioritize the development of a positive brand image and provide superior services that are not intended only to attract prospective passengers but also to retain the current set of existing passengers (Korkut & Arslan, 2010; Chow, 2014). To enable this, the presence of airline *frequent-flyer programs* is essential. These schemes provide reassurance from a financial standpoint in times of prosperity and also present airlines with a captive audience to reinvigorate travel interest that may assist in thrusting the airline brand out of times of uncertainty (Pascual & Cain, 2021) such as the pandemic. Therefore, it is more advantageous for an airline company to develop, sustain, and preserve long-term relationships with their customers through brand *FFPs* than merely acquiring new ones as these passengers become emotionally attached to the airline company (Rafiq, Fulford, & Lu, 2013). Marketing statisticians term the cost of acquiring a new customer to be far much greater than that of maintaining an existing one, and a loss of customer base can damage the long-term development of a company as well as decrease its profits (Zhang, Ding, Ma, & Wang, 2018).

Although competition by airline companies offers air travelers more choice options, the services offered, in essence, are the same: transporting passengers from one point to another. The only variability is in product/service, such as in; aircraft type, the number of stops/connections, departure, and arrival time, amongst others (Gao & Choy, 2019). Passenger airline companies should therefore position themselves to identify sustainable competitive advantages, deliver superior brand value to customers, and establish profitable customer relationships (Chen, Li, & Liu, 2019). Nonetheless, the

understanding of a travelers' purchase decision and selection journey has been dictated as a challenge by commercial passenger airlines (Pels, Njegovan, & Behrens, 2009; Wu & Hanson So, 2018). It is, therefore, imperative to gain insight into a passengers' travel preferences. Understanding the determinants of choice for air travel is critical in supporting airline planning decisions such as brand awareness, the brand perceived quality, and the drivers of the attitudes towards an airline FFPs as passengers are deemed to make decisions based on these attributes. Consequently, passenger airline companies, air transport policymakers, and travel agencies need to understand passenger behavior vis-a-vis air travel clearly.

Grounded on Homan's (1958) social exchange theory (SET) that asserts that, when ones are presented with choices, individuals will undergo subjective cost-benefit analysis and weigh available alternatives before making the final decision (Emerson, 1976). And following the SET principle, it is reasonable enough to assume that when travelers are contemplating and weighing to make a decision, a series of exchanges may ensue betwixt consumers and service providers that may lead to creating an opportunity for relationship building. The applicability of SET in choice behavior can be a valuable instrument, especially when analyzing traveler-airline relationships. The study's premise is the service industry, specifically commercial passenger airlines, given the intensive competitive environment in this market and the need to maintain close and long-term relationships. To remain relevant, branding is essential as it enables the airline's voice to be heard. Building brand awareness even before the end consumer boards the plane through advertising and word of mouth enhances the airline's reputation and recognition, leading to choice (Choe & Zhao, 2013). Additionally, having a better quality perception of an airline brand by a traveler improves the chances of the airline brand being selected (Chen, Li, & Liu, 2019; Shih-Ping, 2016) and may enhance the travelers' attitude towards the airline FFP.

Despite the number of empirical studies that have been done on airline consumers' purchase decision, little, however, has been done to explicate and develop a theoretical understanding of the attitudes towards airline FFPs. This present study develops and tests a moderated conceptual model that investigates travelers' attitudes toward *frequent-flyer programs (FFPs)* as a regressand, regressor and a moderator in airline brand decision-making. The study contributes to brand equity and consumer purchase behavior literature by addressing critical potential research gaps. Two focal objectives are identified. The first objective specifically looks at the causal relationship that explores;

- i) Whether *airline brand awareness* and perceived quality positively influences the attitudes towards *frequent-flyer programs* and,
- ii) Whether *airline brand awareness*, perceived quality, and the attitudes towards *frequent-flyer programs* positively influences *airline brand choice*.

The second objective investigates the conditional effect of attitudes towards FFPs. In this case, the study objectizes that the attitudes towards FFPs have a moderating effect on the link between;

- i) *Airline brand awareness* and *airline brand choice* and,
- ii) *Airline brand perceived quality* and *airline brand choice*.

The current literature does not explore the conditional effect of *frequent-flyer programs* in influencing airline choice. In response to this scenario, the present paper focuses on a single moderator effect, as depicted in **Figure 1** model II.

2 THEORETICAL BACKGROUND AND LITERATURE REVIEW

2.1 Social Exchange Theory Application In Airline Brand Choice

The exploration of the consumer's search, process, and purchase behaviour has long received the attention of scholars and practitioners. Most recently, studies analysing consumers' decision processes have dwelled on different factors to quantify a consumer decision journey in making a choice. Santos & Gonçalves (2021), in their review of literature on the consumer decision journey, mapped out stages through which consumers arrive at a purchase decision. These stages were identified as either pre-consumption, consumption, and post-consumption behaviour (Demmers, Weltevreden, & Van Dolen, 2020); or pre-core, core, and post-core service encounters (Siebert, Gopaldas, Lindridge, & Simões, 2020); or pre-trip, active experience, and post-trip (Shen, Sotiriadis, & Zhang, 2020; Henderson, Tsui, Ngo, Gilbey, & Avis, 2019); with the most predominant stages being that of pre-purchase, purchase, and post-purchase behaviour (Varnali, 2019; Lemon & Verhoef, 2016). Most consumer decision stages, such as the above mentioned, are based on the grand models (Engel, Blackwell, & Miniard, 1995). The models demonstrate consumers' decision-making as a multi-staged and complex process involving; defining the choice problem (*problem recognition*), information search, evaluation of alternatives, the making of the actual purchase decision, and post-purchase behaviour (Moutinho & Bian, 2011; Hsin, Huery, & Ting, 2019). However, the concept of choice and purchase behaviour is a decision utility, and utility is the satisfaction of wants and needs inferred from revealed preferences, measured indirectly through choices between options or alternatives (Morewedge, 2015). To satisfy this utility, when choosing between alternative airline brands, travellers strive for a positive outcome that maximises their benefits while minimising costs when engaging in an economic/social exchange with an airline brand.

This present paper is grounded on Social Exchange Theory (SET) (Homans, 1958) in determining the impacts of social exchanges on the airline choice decision-making process. The theory focuses on an association that inherently involves an exchange between providers and consumers (Lee, Capella, Taylor, Luo, & Gabler, 2014), in this case airlines and pax. SET roots stems from social psychology and behavioural economic paradigm and is premised on the notion that when individuals are presented with choices, the individuals will undergo subjective cost-benefit analysis and weight available alternatives before making the final decision which leads to a desirable outcome (Liu, Min, Zhai, & Smyth, 2016; Lee, Capella, Taylor, Luo, & Gabler, 2014). The theory posits that exchange interactions involve economic and/or social outcomes that each party in the exchange relationship can compare over time to determine their dependence on the exchange relationship. *Self-interest* and *interdependence* are central properties of social exchange (Lawler & Thye, 1999). The main tenet of SET is the concept of reciprocity, which is the obligation to reciprocate when benefits accrue out of a relationship (Blau, 1964). Since the airline-passenger relationship is interdependent, the nature and extent of the exchange are subject to utilitarian, hedonic and social rewards (Wang, Luo, & Lee, 2019) gained. When a traveller engages in an economic exchange, they will first consider an airline brand that best meets their desired utility and also focuses on social norms like trust and commitment. Through a trustful exchange relationship, the chances for a continuation of the relationship will be higher, and a steady, continuous exchange relationship ensures unceasing supply (Holthausen, 2010). A review of the extant literature reveal that the antecedent social exchange factors that lead to airline choice are brand awareness (Macdonald & Sharp, 2000; Hsin, Huery, & Ting, 2019; Gao & Choy, 2019), brand perceive quality (Farooq, Salaam, Fayolle, Jaafar, & Ayupp, 2018) and *frequent-flyer* (loyalty) *programs* (Chen, Mandler, & Meyer-Waarden, 2021; Karunaratna & Kumara, 2018; Olazabal, Marmorstein, & Sarel, 2014; Neringa & Palmira, 2016).

2.2 Concept Of Brand Awareness

Brand awareness implies the extent to which the consumer is aware of the brand, which plays an essential factor in the decision-making process (Seo & Park, 2018; Tabrizi & Valanejad, 2018; Hsin, Huery, & Ting, 2019). It is taken as a precondition for brands to be considered within the repertoire of purchase options (Keller K. L., 2003). Cheng & Tseng (2010) defined *brand awareness* as the recall or recognition a customer attaches to a particular brand that stimulates curiosity leading to a trial and eventually repeated choice. As per the definition, awareness can be classified as brand recognition or recall (Hsin, Huery, & Ting, 2019). Brand recognition entails the ability to identify and tell a brand correctly the moment a consumer sees or hears of the brand (Keller K. L., 2003). It is a confirmation of prior exposure to the brand when the brand is given as a cue. In contrast, brand recall is the remembrance attached to the brand when consumers are presented with alternative brands to choose from (Hsin, Huery, & Ting, 2019). Brand recall entails the customers' ability to recall a brand when some cues related to the brand are given, requiring that the consumer correctly generate the brand from memory (Keller K. L., 2003). Additionally, brand awareness can be distinguished according to depth and breadth (Keller K. L., 1999). Brand awareness depth concerns the likelihood that the brand will come to mind and the ease with which it does so in a given situation; whilst the breadth of brand awareness concerns the range of purchase and usage situations where the brand comes to mind (Supphellen & Nygaardsvik, 2002). Awareness generally is created through consumers' repeated and memorable exposure to brand elements, such as the name, logo, and slogan, that induces and strengthens memory recall and improves the sense of brand familiarity (Keller K. L., 1999; Keller K. L., 2003). Brand communication is, therefore, of the essence. Communication directly relates to improved awareness, which occurs through higher frequency (depth) of exposure (with impact on recognition) and broader scope (breadth) of exposure to category and usage-related cues (with impact on recall) (Langaro, Rita, & Salgueiro, 2015).

2.3 Concept Of Brand Perceived Quality

Brand perceived quality entails a consumer's imagination of a product or service in terms of its perceived superior quality in its intended use to similar alternatives (Zeithaml, 1988). Likewise, Aaker (1991) described perceived quality as the functional characteristics associated with a service, such as perfection, sustainable performance, the economic life of the product, and service quality and its supporting elements that become selective brands in the consumer's minds. A brand's perceived quality gives value to consumers by providing them with a reason to purchase and differentiate the brand from competitors. Asshidin *et al.* (2016) defined perceived quality as a consumer's evaluation of a brand's overall excellence based on intrinsic and extrinsic cues. Intrinsic cues refer to the concrete physical property of a product that cannot be changed without altering the nature of the product itself, such as colour, size, texture, etcetera.; extrinsic cues are product related but do not alter the nature of the physical product and are external to the product, such as price, brand name, warranty, and guarantees, among others (Kirmani & Zeithaml, 2013). Furthermore, intrinsic attributes are important when they are search attributes in pre-purchase situations (accessible prior to purchase) rather than experience attributes, which are only accessible at consumption. Whilst, extrinsic attributes are critical in initial purchase situations when intrinsic attributes are unavailable or when quality is difficult to evaluate (Kirmani & Zeithaml, 2013). Essentially, superior service quality perceptions stimulate favourable behavioural intentions, which helps retain customers; in contrast, inferior service quality perceptions causes unfavourable behavioural intentions, resulting in customer defection (Karunaratna & Kumara, 2018). The perception of these service quality cues in a brand's judgement can be evaluated as superior/inferior, good/bad, high quality/low quality, pleasant/unpleasant, appealing/unappealing or like/dislike (Kirmani & Zeithaml, 2013). Skytrax

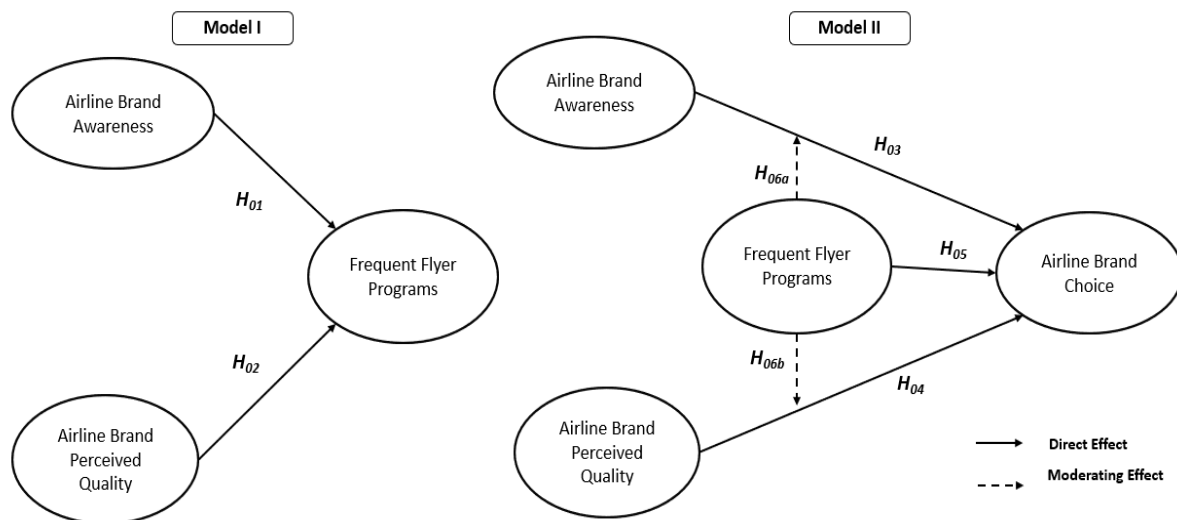
consultancy, which runs an airline and airport review and ranking, also provides a standard for analysing and assessing airline product and front-line service standards (Skytrax, 2022). These assessments, referred to as "Skytrax star ratings", are based on the evaluation of product and service standards for both the onboard and airport environments, using a unified and consistent rating scale from 1-star through to the all-exclusive 5-star airline award which influences customer perception and satisfaction of an airline brand (Skytrax, 2022; Merkert & Pearson, 2015)

2.4 Frequent-Flyer Programs (FFPs)

These are schemes or reward programs intended to allow passengers to accumulate rewards in miles flown with an airline, endearing them to make a repeated brand choice (Hartmann & Viard, 2005). *FFPs* are loyalty programs that are sometimes referred to as frequency reward programs, loyalty cards, advantage cards, or just loyalty schemes (Dorotic, Bijmolt, & Verhoef, 2012). They essentially enable a passenger to earn rewards out of the patronage of the airline brand (Kim, Lee, Choi, Wu, & Johnson, 2013; Sandada & Matibiri, 2016). Lee *et al.* (2014) postulated that loyalty (*FFPs*) programs endeavour to attract, retain, and enhance business and customer relationships. *FFPs* are integrated systems of personalised marketing actions and marketing communications that offer tangible (*such as discounts or gifts*) and intangible (*such as personalized services, status, or gifts*) rewards (Chen, Mandler, & Meyer-Waarden, 2021). This is in accordance with SET premise, which symbolises an interdependent relationship between two actors and is grounded on reciprocity and rewarding actions (Blau, 1964). The core motivation of the *FFPs* is to build airline-traveller relationships by providing incentives to passengers in order to enhance continued marketing exchanges with customers and secure their allegiance (Sandada & Matibiri, 2016) while providing customer information/data. This data is then processed and used to gain knowledge about the airline's customer base that the airline could use to offer more personalised services and products to the customer (Tabaku & Zerellari, 2015). Some of the benefits of *FFPs* are; free tickets/flights, discounted car rental, special promotions, discounted hotel accommodation, excess baggage allowance, lounge access, and reservation priority, amongst others. These provides an incentive to concentrate purchases at a single airline brand by the traveller (Sahin, Kusakci, & Mbowe, 2021) and intensify switching barriers while enhancing the airline value proposition (Thompson & Chmura, 2015). According to Oliver (1999), the programs represent a re-purchase commitment in future purchases that promises that consumers will still choose the brand as their favourite and will not switch their brand loyalty in differing or changing environmental situations. AAdvantage by America Airlines, established in 1981, was the first loyalty program of its kind, and thereafter, other airlines established their loyalty schemes (Neringa & Palmira, 2016). AAdvantage loyalty program valuation, for instance, is more than four times the actual value of the airline itself, a key factor to why the airline has survived uncertainties (Pascual & Cain, 2021). The USA has the highest registered *frequent-flyer programs* membership of any region at well over 80 million, as per Mankin & Jewell (2015).

2.5 Proposed Model And Hypotheses Development

Figure 2: The proposed conceptual model



Source: Authors Composition

2.5.1 Airline Brand Awareness Influence On Frequent-Flyer Programs

Travellers' knowledge (awareness) is essential in choosing an airline brand. Alamro & Rowley (2011), in their study, reported that awareness is an antecedent of brand preference. This is so because brand awareness enables individuals to be aware of, familiar with, and remember a brand (Alamro & Rowley, 2011). This recognition may arouse a sense of familiarity and gives an idea about the brand and a signal of commitment to the brand (Aaker, 1992). Awareness can affect people's perceptions and attitudes, leading to the brand selection, and be effective in strengthening brand loyalty (Eslami, 2020). Chen & Tseng (2010), in a study of airline customer-based brand equity, found that consumer brand awareness is an essential and descriptive element in airline values' perception; and is an antecedent to the behavioural manifestation of airline brand loyalty through an attitudinal orientation towards FFPs. Prior awareness of the airline brand influences and strengthens travellers' judgement about an airline company's overall superior service or excellence valuation, improving consumers' attitudinal loyalty towards the airline brand over competitors (Huang & Liu, 2020).

H_{01} : Airline Brand Awareness positively influence attitudes toward Airline Frequent-Flyer Programs.

2.5.2 Airline Brand Perceived Quality Influence On Frequent-Flyer Programs

Preceding literature has defined a direct relationship between perceived quality and loyalty in such a manner that when the value portrayed by an airline brand to its customers improves, so does the attitude towards the airline brand loyalty program (Forgas, Moliner, Sánchez, & Palau, 2010; Sánchez, Callarisa, Rodríguez, & Moliner, 2006). An enhanced brand perceived quality helps create a competitive advantage and motivates customers to purchase a brand repeatedly, leading to brand loyalty (Huy-Ho, Olsen, & Tri-Duong, 2006). As postulated by Devi & Yasa (2021), good service quality, as well as good perceived value by consumers, will later encourage consumers to be satisfied with a brand. If consumers are satisfied with the perceived quality of a product or service, they will likely become loyal customers. Furthermore, when customers see or perceive a product/service as better, get a higher value, and feel satisfaction, they intend to re-patronize or become loyal (Devi & Yasa, 2021).

H_{02} : Airline Brand perceived quality positively influences attitudes towards Airline Frequent-Flyer Programs.

2.5.3 Airline Brand Awareness Influence On Airline Brand Choice

In the case of air transport, brand awareness indicates how knowledgeable a passenger is about an airline brand. *Airline brand awareness* entails the recognition of the airline brand name, logo and symbol or livery that are embedded in the traveller's mind. Seo & Park (2018), asserted that airline brand awareness indicates that the passenger is familiar with the airline brand, services and products. This identification and recall increase the chances of the airline brand being selected as the preferred travel partner. Other things equal, travellers will choose those airline brands which require less time and cognitive effort as their preferred travel partners. When consumers are aware of a brand, the brand is more likely to be chosen than brands that are less known (Foroudi, Jin, Gupta, Foroudi, & Kitchen, 2018). This means they are very liable to be recalled in the future. Even though brand awareness plays a pivotal role in the making of choice, Konecnik & Gartner (2007) argued that brand awareness is the first and necessary, but not sufficient step leading to trial, repeat purchase, and loyalty because the effect of awareness results at best in product/service curiosity.

H₀₃: Airline brand awareness is positively related to airline brand choice

2.5.4 Airline Brand Perceived Quality Influence On Airline Brand Choice

In the context of airline service business, studies found that when customers have a high perception of the quality of a service, it may lead to influencing their decision because of the positive awareness and image of the brand (Chen, Li, & Liu, 2019; Farooq, Salaam, Fayolle, Jaafar, & Ayupp, 2018), leading to choice and satisfaction. Hsing *et al.* (2019), for instance, postulate that a previous experienced and remembered lousy product/service impacts a consumer's judgment on the product/service quality in the future, in that consumers may not trust the product/service because of their previous unpleasant experiences. Nevertheless, if the perceived brand quality exceeds the consumer's expectation and stated service performance, consumers will be excited and vice versa (Armstrong & Kotler, 2006). Airline brands' service quality evaluations are based on dimensions such as inflight services, reservations-related services, airport services, airline reliability, employee courtesy, and the availability of flights (Park J. , 2007; Chen & Tseng, 2010). Airline companies that seamlessly provide passengers with pleasant service experiences improve their quality perception and enhance their brand awareness and reputation, leading to repeated purchases (Chen, Li, & Liu, 2019; Chen I.-S. , 2016). Moreover, it impacts customer preferences and the willingness to recommend the services to other consumers and leads to a more favourable disposition towards the commitment to re-patronize (Karunaratna & Kumara, 2018).

H₀₄: Airline brand perceived quality is positively related to airline brand choice

2.5.5 Influence Of Attitudes Towards Frequent-Flyer Programs On Airline Brand Choice

The effects of airline *frequent-flyer programs* on customer choice behaviours are well studied in the literature, whereby most scholars posit that in the airline business, *frequent-flyer programs* are a huge revenue generator (Martin, Roman, & Espino, 2011; Olazabal, Marmorstein, & Sarel, 2014; Neringa & Palmira, 2016). These studies found that the most significant influence on airline passenger choice and repeat purchases is the presence of loyalty programs (Chang & Hung, 2013; Vlachos & Lin, 2014). The airline brand frequent-flyer scheme-traveller relationship needs to be mutually beneficial. For example, for a traveller to choose a particular airline brand, the airline's *frequent-flyer program* must fulfil their primary demand, comfort, and reliability. The motivation to join a *frequent-flyer program*, as per Kim *et al.* (2021), is based on four stages; acquisition, onboarding, expansion, and retention,

based on cognitive value appraisals and emotional evaluations that a customer experiences in their relationship with the *frequent-flyer programs*. Through these stages, airline companies can identify where an existing customer falls through data mining. They may use this information to engage new customers and simultaneously revitalize their relationships with dormant customers (Pascual & Cain, 2021). Although *FFPs* are meant to entice customers and foster or establish some sense of loyalty, doubts exist about their value to airline companies (Olazabal, Marmorstein, & Sarel, 2014); for this reason, the study hypothesizes that.

H₀₅: Attitudes towards frequent-flyer programs are positively associated with airline brand choice

2.6 Moderating Role Of Frequent-Flyer Programs

Previous studies have determined that *FFP*'s core purpose is to provide a sense of belonging and act as a switching barrier (Olazabal, Marmorstein, & Sarel, 2014; Neringa & Palmira, 2016). The investigation of the moderating effect of travellers' attitudes towards loyalty programs between *airline brand awareness* and *airline brand choice* and between *airline brand perceived quality* and *airline brand choice* is lacking in the literature. Against this backdrop, the present study focuses on the moderating effect of the attitudes towards *FFPs*. Attitudes towards *FFPs* have been determined to be effective in increasing customers' perceptions of switching costs, and tend to further customer retention (Wirtz, Mattila, & Lwin, 2007). Interestingly, Wendlandt & Schrader (2007) found that *FFPs* members do not necessarily switch but instead remain loyal despite service dissatisfaction. The reason could be that travellers who are non-*FFP* members are less likely to consider repurchasing when they are dissatisfied with the brand perceived quality (Wendlandt & Schrader, 2007). Equally, they could easily be gullible to other brands with strong market presence (awareness). Thus, the attitudes toward *FFPs* has been positioned as the moderator to determine whether it has a conditional effect on the relationship between brand awareness and brand perceived quality on an *airline brand choice*. The moderation effect could either enhance, buffer or antagonise the causal relationship.

H_{06a}): Attitudes towards Airline frequent-flyer Programs have a conditional effect on the relationship between airline brand awareness and airline brand choice.

H_{06b}): Attitudes towards Airline frequent-flyer Programs have a conditional effect on the relationship between airline brand perceived quality and airline brand choice.

3 METHODOLOGY

3.1 Research Design, Target Population, Sampling, And Data Collection Techniques

Quantitative analysis based on an explanatory research design was adopted. In the study, the target population were general airline passengers of 18 years and above. In this regard, decision-makers are airline passengers who travel for either business or leisure with no preference for the type of airline business model (*FNSC or LCC*). Given the large population size and since there is no known sampling frame, Cochran's (1977) sample size determination formula was adopted in deciding the sample size needed for the study. Approximately 90% of the population determined in previous studies could be used as a basis when using the sample size determination formula to estimate the sample size (Zeren & Kara, 2021). Based on a 95% confidence interval, a 0.05 sample error margin, and a Z-value of 1.96, the sample size determination formula yielded a sample size of $n = 384$. Additionally, the study

employed non-probability sampling techniques based on convenience and purposive sampling. Primary data was sourced and collected by deploying a comprehensive and structured online survey made from Qualtrics, as this was the only convenient option available. Responses to the survey were sorted through the mailing of the survey link to select known aviation professionals. The same survey link was also posted on professional airline and travel group pages on LinkedIn and Facebook. Data were collected within a time span of four weeks. Participation in the study was based on absolute confidentiality and own volition.

The online survey returned a total of four hundred and ninety-eight responses. However, one hundred and eight returned surveys were dropped due to invalid responses as a result of missing information or not consenting to the online survey. Additionally, ninety-eight survey responses of those that indicated to have flown once or less in a calendar year were purposely omitted from the study. In total, 272 usable surveys were retrieved. The sample comprised 55.5% males and 44.2% females, with one (0.3%) respondent not specifying his/her gender. Descriptive statistics of respondents' demographics revealed that 76 (25%) of the respondents categorised themselves as Gen-Z (18-24yrs), 75 (25.7%) as Gen-Y2, with Babyboomers being the least represented with 26 (8.9%). Of marital status, 187 (64%) of the respondents considered themselves single/unmarried, 95(32.5%) were married, while those separated, divorced or widowed contributed 3.5% cumulatively. As an indicator of diversity and difference in perspective, the ethnic origin of the respondents was sort. The study reveals that 156 (53.4%) of the respondents were from the EU/UK, 79 (27.1%) from Africa, and 36 (12.3%) from Asia, with 21 respondents coming from either Australia, north or south America. Respondents were also spread across educational achievements; 125 (42.8%) respondents indicated possessing a master's degree, 96 (32.9%) indicated bachelor's degrees, 24 (8.2%) indicated doctorate degrees, and the rest either had a high school diploma, college diploma or a professional degree. Regarding annual household income, statistics reveal that 79 (27.1%) of the respondents earned $\leq 15,000$ \$, with the rest of the categories equitably distributed, as shown in **Table 1**.

Table 1: Respondents Demographics

DEMOGRAPHIC CHARACTERISTICS OF THE RESPONDENTS							
Gender Information Frequency Percentage	Males 162 55.5		Female 129 44.2		Prefer not to state 1 0.3		Total 292 100
Age of respondent Frequency Percentage	Gen Z (18 – 24 yrs) 76 26%	Gen Y.1 (25–29 yrs) 66 22.6%	Gen Y.2 (30 – 40yrs) 75 25.7%	Gen X (41 – 56yrs) 49 16.8%	Baby boomers (+57 yrs) 26 8.9%	Total 292 100	
Marital Status Frequency Percentage	Single 187 64%	Married 95 32.5%	Separated 3 1%	Divorced 4 1.5%	Widow/Widowed 3 1%	Total 292 100	
Ethnicity/Origin Frequency Percentage	African 79 27.1%	North American 10 3.4%	Australian 6 2.1%	Asian 36 12.3%	EU/UK 156 53.4%	Latino 5 1.7%	Total 292 100
Education Level Frequency Percentage	High School Diploma 21 7.2%	College deg/Diploma 14 4.8%	Bachelor's degree 96 32.9%	Master's degree 125 42.8%	Professional degree 12 4.1%	Doctorate degree 24 8.2%	Total 292 100

Annual Income	< \$14999	\$15000-\$25999	\$26000-\$40999	\$41000-\$50999	\$51000-\$99999	> \$100000	Total
Frequency	79	45	52	37	40	39	292
Percentage	27.1%	15.4%	17.8%	12.7%	13.7%	13.4%	100

About the respondent's occupational background and frequency of flying annually, and if the respondents consider themselves members of an airline *frequent-flyer program*. Study observation (see **Table 2**) shows that those in Management & Administration had the majority representation with 70 (or 24%), followed by those in Transport & Logistics with 43 (or 14.7%), while those in Academics, Training, & Research had 39 (or 13.4%). A significant 29 (or 9.9%) of the respondents categorized themselves as others: students, retirees, those working with NGOs, and those in self-employment. Additionally, a majority of respondents, 125 (or 42.8%), flew four or more times in a year, 93 (or 31.8%) flew twice a year, with 74 (or 25.3%) indicated to have flown thrice in a year. Lastly, the study observation showed that the majority of the respondents, at 166 (or 56.8%), considered themselves members of an airline *frequent-flyer program*, indicating that FFPs membership is a favourite amongst airline passengers.

3.2 Variables And Measurements

Measurement items used in the study were adopted from previous similar studies; this is so because these items have already been examined with validity and reliability. The independent variables *airline Brand awareness*, *airline brand perceived quality*, and *airline frequent-flyer program* measures are based on Aaker's (1991) consumer-based brand equity models. Yoo and Donthu's (1997) Multidimensional Brand Equity (MBE) scales also guided the study with the predictor variable *airline brand choice* based on the Overall Brand Equity (OBE) scales (Yoo & Donthu, 2002; Washburn & Plank, 2002), which is a scale developed to converge the validity of the multidimensional brand equity scales. The first construct of *airline brand awareness* is based on the tow differential scale developed and validated by Washburn & Plank (2002) and includes six items adopted from Thakshak (2018) and Cheung *et al.* (2019). The second construct is *airline brand perceived quality* which was operationalised by six dimensions of in-flight services, reservation-related service, airport services, reliability, employee services, and flight availability with a total of 15 measurement items adopted from Park *et al.* (2004), Park (2007), and Cheng & Tseng (2010). The third construct relating to the attitude towards *frequent-flyer programs* looked at six scale items that examined behavioural intention to join an airline loyalty program and were adopted from Caruana (2002) and Sandada & Matibiri (2016). The final construct of *airline brand choice* scales is a convergence of the above three constructs as suggested by Yoo & Donthu (2000), and this variable is operationalised by seven measurement items adopted from Chen & Tseng (2010). A five-point Likert type scale ranging from 1 being "Strongly Disagree" to 5 being "Strongly Agree" was used on all the 34 measurement items.

Table 3: Respondents' Occupation, frequency of flying and FFP membership

Occupation	Frequency	Percentage	Frequency of flying annually before COVID-19	Frequency	Percentage
Management and Administration	70	24	Once or less	Purposely Omitted	0
Accountancy and Finance	20	6.8			
Architecture and Engineering	11	3.8	Twice	93	31.8

<i>Legal/Law</i>	23	7.9	Trice	74	25.3
<i>Academics, Training, and Research</i>	39	13.4			
<i>Arts/Design/Entertainment/Sports/Media</i>	9	3.1	Four times or more	125	42.8
<i>Healthcare/Medical</i>	21	7.2			
			Total	292	100
<i>Agri-Business</i>	1	0.3	Airline frequent-flyer program membership	Frequency	Percentage
<i>Transport/Logistics</i>	43	14.7			
<i>Sales and Promotion</i>	12	4.1	Yes	166	56.8
<i>Hospitality/Tours/Travel</i>	10	3.4			
<i>Military/Police/Security</i>	4	1.4	No	126	43.2
<i>Others</i>	29	9.9			
Total	292	100	Total	292	100

3.3 Statistical Analysis

Data were analysed by using IBM SPSS 27 and R-software. First, the descriptive statistics with the reliability of the survey instrument through the evaluation of Cronbach coefficients were conducted. Secondly, convergent and discriminant validity and composite reliability using confirmatory factor analysis were conducted. The overall chi-square measure, comparative fit index (CFI), parsimony normed fit index (PNFI), and root mean square error of approximation (RMSEA), were analysed and reported (Vatankhah & Darvishi, 2018). Third, Pearson product-moment correlation analysis, together with the square root of the average variance extracted, was applied to determine whether correlations between variables existed or not, as suggested by Wong & Hiew (2005). Finally, a test of both simple and multiple linear regressions was done to check for causal relationships. To assess interaction (moderation) terms and report on their effects, hierarchical (step-wise) linear regressions were estimated following the recommendation by Yang & Peterson (2004).

4 RESULTS AND INTERPRETATION

4.1 Assessment Of Common Method Variance

To control for potential biases, such as common method variance that could arise due to variation in responses caused by the measurement instrument. We first explicitly communicated and emphasized that there were no right or wrong answers in the measurement items (Mäkelä & Brewster, 2009) and that the anonymity of the respondents was guaranteed by attaching a link to a non-disclosure agreement with the main study purpose clearly stated. Secondly, to minimize the respondent-related source of CMV, such as naivety regarding the topic of the study (Podsakoff, MacKenzie, Lee, & Podsakoff, 2003), respondents that indicated to have flown once or less in a year were purposely omitted from the study. Third, after the conclusion of the data collection procedure, SPSS version 27 software was used to analyze the principal components of all items in the survey instrument. Harman's one-factor test was assessed. The result of this assessment showed that the total variance extracted (36.75%) by the first principal component was less than the recommended threshold of <50% (Kock, 2020). Finally, factor structure was examined through confirmatory factor analysis that validated the core domains (Chen, Li, & Liu, 2019). Therefore, the dataset was found not to be contaminated with common method variance.

4.2 Confirmatory Measurement Model

A four-factor model was assessed to verify the measurement instruments of the validated previous scales using confirmatory factor analysis (CFA). Several model fit indices and their criteria were used to examine the model's goodness of fit with the given dataset. According to the results all items in the measurement model loaded, and consequently the four-factor model fitted the data acceptably ($\chi^2=1252.994$; $p<.001$; $df=521$; $CFI=0.869$; $TLI=0.858$; $PNFI=0.780$; $RMSEA=0.069$). RMSEA value indicates an acceptable model fit, while the CFI value, which is close to 0.9, shows a relatively good fit (Kim, Ku, Kim, Park, & Park, 2016). The average variance extracted (AVE) by *airline brand awareness* and *airline brand perceived quality* is 0.50 and 0.55, respectively. Although *airline frequent-flyer programs* (0.36) and *airline brand choice* (0.47) have AVE that are below 0.50 however, discriminant validity assessed using Fornell & Larker (1981) by comparing the square root of each AVE (see **Table 4**) in the diagonal with the correlation coefficients (off-diagonal) for each construct in the relevant rows and columns is supported. This is so since the square root of the AVE between each pair of factors was higher than the estimated correlation between the factors. Furthermore, all measurement items demonstrated adequate internal consistency as each latent variable had a composite construct reliability score greater than .60. Likewise, the Cronbach's alphas of all the measures ranged from .88 to .92, surpassing the acceptable level of .70 (Lam, 2012), as seen in **Table 5**. These indicators symbolize that the measurement items have high internal reliability.

Table 6: Mean, standardized loadings, composite construct reliability (CR), and average variance extracted (AVE) of measures

Variable / Scale Items		MEAN (SD)	STANDARDIZED LOADINGS	CR	α	AVE
Airline Brand Awareness				0.86	0.85	0.50
1	I can quickly recall the symbol/livery/logo of the airline brand	4.05(1.01)	0.68			
2	The airline brand is famous and well known	4.12(0.98)	0.79			
3	There are a lot of impressive and frequent ads of the airline brand	3.54(1.09)	0.61			
4	I can easily recognize the airline brand among other competing brands	4.10(1.02)	0.77			
5	Some characteristics of the airline brand come to my mind quickly	3.90(1.09)	0.77			
6	The airline brand has a strong social media presence	3.58(1.18)	0.60			
Airline Brand Perceived Quality				0.92	0.92	0.55
Inflight services	The airline brand uses up-to-date aircraft and in-flight facilities	3.86(0.94)	0.67			
	The airline brand offers comfortable seat space and ample legroom	3.61(1.17)	0.72			
	The airline offers up-to-date inflight entertainment services	3.53(1.16)	0.65			
Reservation related services	The airline provides convenience in reservations and ticketing	4.05(0.90)	0.65			
	The airline brand provides promptness and accuracy of reservation and ticketing	4.08(0.90)	0.64			
Airport Services	The airline check-in services are great	3.91(0.97)	0.68			
	The airline brand offers promptness and accurate baggage delivery	3.95(0.99)	0.69			
Reliability	The airline offers on-time performance and reliability	4.01(0.88)	0.69			
	The airline brand is focused on customer satisfaction	3.79(1.14)	0.74			
	The airline brand has a safety record	4.14(0.92)	0.66			
Employee Services	The airline employees appearance is neat	4.08(0.95)	0.60			
	The airline employees are more than willing to help the passengers	3.98(0.97)	0.65			
	The airline employees are very knowledgeable and give passengers personal attention	3.84(1.05)	0.70			

	Flight	The airline offers a convenient flight schedule	3.95(1.06)	0.64			
	Availability	The airline offers non-stop flights	4.00(1.00)	0.60			
Airline Frequent-Flyer Program					0.91	0.91	0.36
1		I consider myself to be loyal to the airline brand	3.60(1.27)	0.70			
2		I receive better treatment from the airline brand because I am registered in the airline frequent-flyer program	3.32(1.32)	0.80			
3		I feel I share the same values as the brand name of the airline because of the frequent-flyer program	3.23(1.28)	0.84			
4		Every time I need to travel, no other airline brand come to my mind because of the loyalty program	3.14(1.38)	0.80			
5		I am satisfied with the airline customer loyalty program	3.55(1.16)	0.84			
6		I am happy with the rewards offered by the loyalty program	3.38(1.17)	0.79			
Airline Brand Choice					0.88	0.88	0.47
1		I choose the airline brand because it offers a wide range of destinations	3.99(.97)	0.62			
2		I choose the airline brand because it offers high-quality services	3.96(1.04)	0.67			
3		It makes sense to choose the airline brand instead of any other brand, even if they are the same	3.67(1.11)	0.81			
4		Even if another brand has the same features as the airline, I would still choose this airline brand	3.68(1.19)	0.81			
5		If there is another airline brand as good as this airline brand, I would still prefer to fly this airline brand	3.71(1.22)	0.82			
6		I choose this airline brand because of my prior experiences with the brand	4.06(.94)	0.64			
7		I choose this airline brand because it is well known in the market	3.91(1.01)	0.65			

4.3 Correlation Results

The correlation results of all variables in the study (see **Table 7**) indicate that the predictor variables have a positive linear relationship with the outcome variable, *airline brand choice*. Likewise, the predictor's *airline brand awareness* correlation $r=0.359$ (p -value 0.01) and *airline brand perceived quality* correlation $r=0.501$ (p -value 0.01) are positively correlated with the construct *frequent-flyer programs*, indicating that prior brand awareness and positive quality perception are significant drivers of the attitudes towards *frequent-flyer programs*. Moreover, *Airline brand perceived quality* category of inflight services correlation $r=0.549$ (p -value 0.01) and reliability correlation $r=0.506$ (p -value 0.01) had a significant and robust positive correlation with *airline brand choice* indicating the importance of these quality perceptions in influencing choice. The *airline brand perceived quality* category of Inflight services also had a significant and robust positive correlation $r=0.511$ (p -value 0.01) with *airline frequent-flyer programs* suggesting that inflight services influence the attitudes toward *FFP* and are vital as these perceived quality factors are drivers of loyalty.

Table 8: Composite reliability(CR), Average Variance Extracted, the square root of the Average Variance Extracted (AVE) (in bold) and Correlations between the four constructs (off-diagonal)

Variable	CR	AVE	1	2	3	4
1. Airline Brand Choice (ABC)	0.88	0.50	0.71			
2. Airline Brand Awareness (ABA)	0.86	0.55	.413**	0.74		
3. Airline Brand Perceived Quality (ABPQ)	0.92	0.36	.551**	.539**	0.60	
4. Airline Frequent-Flyer Program (AFFP)	0.91	0.47	.671**	.359**	.501**	0.69

Table 9: Descriptive and Correlation results of Airline Brand Perceived Quality items with the various constructs

VARIABLES	1	2	3	4	5	6	7	8	9
-----------	---	---	---	---	---	---	---	---	---

1. ABC	1								
2. ABA	.413**	1							
3. ABPQIS	.549**	.480**	1						
4. ABPQRRS	.380**	.454**	.571**	1					
5. ABPQAS	.406**	.398**	.567**	.583**	1				
6. ABPQREAL	.506**	.464**	.705**	.598**	.658**	1			
7. ABPQEMP	.418**	.414**	.562**	.509**	.584**	.636**	1		
8. ABPQFA	.358**	.396**	.576**	.495**	.591**	.577**	.528**	1	
9. AFFP	.671**	.359**	.511**	.336**	.368**	.426**	.373**	.372**	1
MEAN	3.85	3.88	3.67	4.07	3.93	3.98	3.97	3.98	3.42
STANDARD DEVIATION	0.83	0.80	0.91	0.81	0.86	0.81	0.84	0.91	1.05

Note: * Correlation is significant at 0.05 level (2-tailed). ** Correlation is significant at 0.01 level (2-tailed)

ABC = airline brand choice, ABA = airline brand awareness, ABPQis = airline brand perceived quality-inflight service, ABPQrrs = airline brand perceived quality-reservation related service, ABPQas = airline brand perceived quality- airport services, ABPQreal = airline brand perceived quality- reliability, ABPQemp = airline brand perceived quality- employees services, ABPQfa = airline brand perceived quality- flight availability

4.4 Regression Analysis And Hypotheses Testing

As a prerequisite to regression analysis, the rule of thumb provides that the relevant regression assumptions should be conducted (Hair, Anderson, Tatham, & Black, 1998). Standard residuals were analysed to assess and control for outliers; the results indicated that the data contained no outliers as the standardized residual values were within the recommended limits of -3.29 & 3.29 (*std. residual min* = -3.042, *std residual Max* = 3.102). A test of collinearity indicated that multi-collinearity problem was not a concern, as the VIF values for the data set were less than ten while the Tolerance was above 0.1 (*Airline brand awareness*, Tolerance = .699, VIF = 1.430; *Airline brand perceived quality*, Tolerance = .601, VIF = 1.664; *airline frequent-flyer programs*, Tolerance = .738, VIF = 1.355). Durbin-Watson was also investigated to determine if the residual terms are uncorrelated. The value yielded was (1.752), indicating the dataset met the assumption of independent errors as the value was not significantly different from 2. The histogram of standardized residuals indicated that the data contained approximately normally distributed errors, as did the normal P-P plot of standardized residuals, which showed points that were not entirely on the line but close. The scatterplot of standardized residual values also showed that the data met the homogeneity of variance and linearity assumptions. Finally, a test for Non-Zero variances to check whether the values were over zero was done. The results (*airline brand awareness*, variance = .682; *airline brand perceived quality*, Variance = .644; *airline frequent-flyer programs*, Variance = .484) had values above zero, meeting the assumption of non-zero variances.

4.4.1 Simple Linear Regression Analysis (Model I)

In testing the influence of brand awareness and brand perceived quality on travellers' attitudes towards *airline frequent-flyer programs*, the study anticipated that prior *airline brand awareness* and *brand perceived quality* were decisive drivers of the attitudes towards *FFPs*. A simple linear regression was undertaken to investigate this causal relationship, as depicted in Figure 3 model I. The results of the regression are given in **Table 10**.

Table 11: simple linear regression results

Predictors	B	Std.eRR	T-Value	Sig.	Tolerance	VIF
Airline Brand Awareness (ABA)	.164	.079	2.082	.038	.710	1.409
Airline Brand Perceived Quality (ABPQ)	.657	.091	7.228	.000	.710	1.409

Note: DV = Frequent-flyer programs, F= 51.286, R² =.262, Adjusted R²= .257, P<.000

As anticipated, the results manifested a positive and significant relationship. The slope coefficient for *airline brand awareness* is 0.164 ($p=.038$), and for *airline brand perceived quality* is 0.657 ($p=.000$). This indicates that travellers' attitudes towards *airline frequent-flyer programs* increases by a margin of 0.164 for every additional unit of awareness and a much higher increase of 0.657 when the perception of the airline brand quality was high in the traveller's mind. The R^2 value is 0.262, so 26.2% of the variation in attitudes towards *frequent-flyer programs* can be explained by *airline brand awareness* and *brand perceived quality* variables. Therefore these two construct validates the assumption that they are positive influencers of the attitudes towards FFPs hence the formulated hypotheses H_{01} and H_{02} are supported.

4.4.2 Hierarchical Regression Analysis And Test Of Moderation Results (Model II)

To test the four proposed variables cumulatively and assess for the moderation, as depicted in Figure 4, Model II, hierarchical (*step-wise*) linear regression analysis based on Yang & Peterson (2004) suggestion was estimated. The hierarchical test allows the investigation of the increase in variance accounted for during a test of the regression model and a significant R^2 change means that the variable added in each step significantly improves the prediction. Hierarchical regression was computed in four steps. *Airline Brand awareness* and *airline brand perceived quality* were entered in the first step. The construct *frequent-flyer program* was included in the second step while controlling for the variables entered in the first step. The first interaction term (*airline brand awareness X frequent-flyer programs*) is added in the third step, followed by the second interaction term (*airline brand perceived quality X frequent-flyer programs*) in the fourth and final step. The regression statistics are shown in Table 12, with steps one to four as model one to model four.

Table 13: Hierarchical regression results

Variables	Model 1	Model 2	Model 3	Model 4
Constant	4.333E-16	-3.773E-16	.632	.972
Airline Brand awareness (ABA)	.169(.856)***	.103(2.040)*	.221(2.940)***	-.048(-.334)
Airline brand perceived quality (ABPQ)	.549(8.047)***	.283(4.529)***	.317(4.939)***	.640(4.022)***
Frequent-Flyer Programs (FFPs)		.404(10.852)***	.533(7.465)***	.615(7.687)***
FFPs X ABA			-.039(-2.110)*	.049(1.115)
FFPs X ABPQ				-.107(-2.214)*
F	68.823***	103.671***	79.798***	65.687***
R ²	0.323	0.519	0.527	0.535
Adjusted R ²	0.318	0.514	0.520	0.526

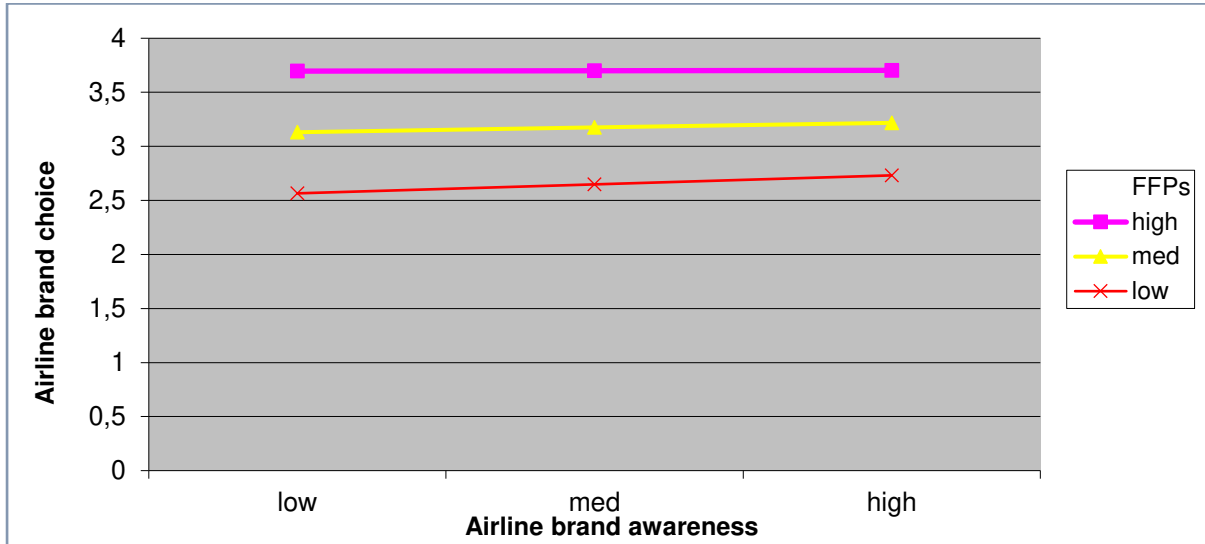
Note: DV=Airline brand choice, * $p<0.05$, ** $p<0.01$, *** $p<0.001$; t values in parenthesis

In the first step (Model 1), *airline brand awareness* ($\beta= 0.169$, $p=.005$), and *airline brand perceived quality* ($\beta= 0.549$, $p=.000$), were found to be significant predictors of *airline brand choice*. This relationship accounted for 32.3% of the variation in *airline brand choice*, as indicated by the R^2 (0.323). As expected from the model, the likelihood of a traveller selecting an airline brand improves if the brand is well known and if the traveller positively perceive the airline service qualities. Adding the attitudes towards *frequent-flyer programs* ($\beta= 0.404$, $p=.000$) into the regression model in the second step (*model 2*) significantly predicted *airline brand choice*. This variable independently explained an additional 19% of the variance in *airline brand choice*, and the change in R^2 (0.519) was significant with a p -value < 0.001 validating the notion that attitudes towards *frequent-flyer programs*

are positively associated with airline choice. When the first interaction term was introduced into the regression in step three (model 3), the result indicated a significant moderation effect ($\beta=-0.039$, $p=0.036$) with an increased R^2 of 0.527. In the final step (model 4), the second interaction term is introduced into the regression, the result ($\beta=-0.107$, $p=0.028$) also indicates a significant effect denoting moderation with a cumulative increase of R^2 to 0.535 denoting that 53.5% of variation in *airline brand choice* can be explained by these variables. The path relationship and hypothesis results are shown in **Figure 5**.

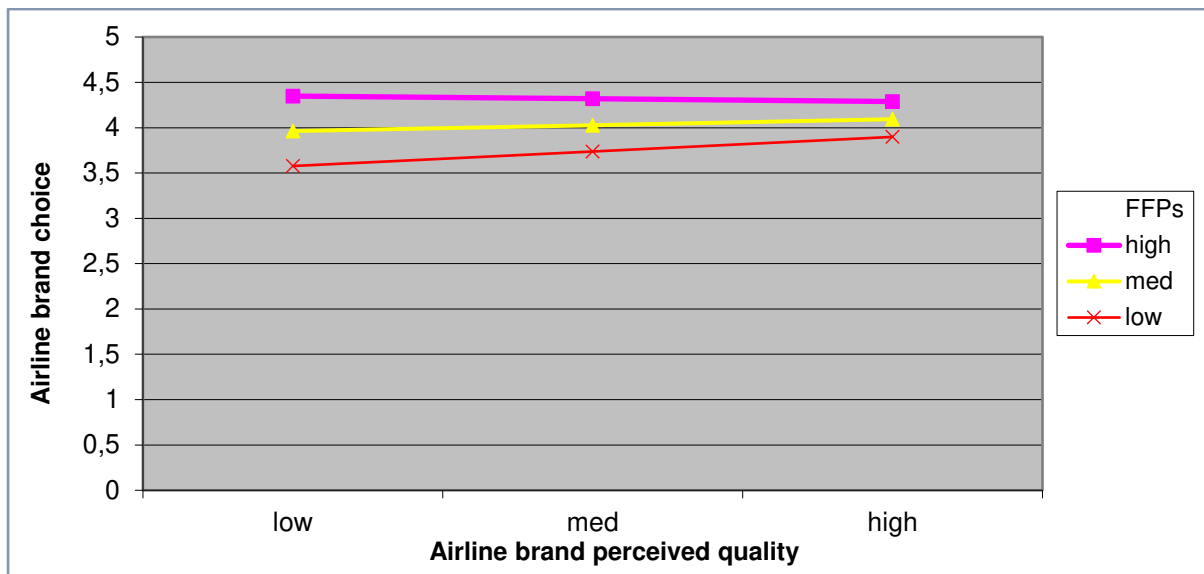
To further probe the moderation results, the latent variable's cell means were computed to yield the graphical display of statistical interactions (Jose, 2013). In **Figure 6**, *frequent-flyer programs'* ability to moderate *airline brand awareness's* influence on *airline brand choice* is investigated. The graphical result indicates that when travellers have high attitudes toward *frequent-flyer programs*, *airline brand choice* is unaffected whether *airline brand awareness* is low, medium, or high in the market. However, when the attitudes toward *frequent-flyer programs* decreased, airline choice tends to be gradually enhanced with high *airline brand awareness*. Likewise, when the ability of *frequent-flyer programs* to moderate the influence of *airline brand perceived quality* on *airline brand choice* is investigated, the graphical depiction (see **Figure 7**) indicates that the choice of an airline brand is high, with an enhanced attitude towards *frequent-flyer programs*, even when the airline brand is perceived to be of low quality. Nevertheless, as the perceived airline brand quality perceptions improve, so does the airline's brand choice, even when there is a presence of low attitudes towards *FFPs*.

Figure 8: Moderating effect of the attitudes toward Frequent-Flyer Programs on the relationship between Airline brand awareness and airline brand choice



Note: FFPs = Frequent-Flyer Programs

Figure 9: Moderating effect of the attitudes toward Frequent-Flyer Programs on the relationship between Airline brand perceived quality and airline brand choice



Note: FFPs = Frequent-Flyer Programs

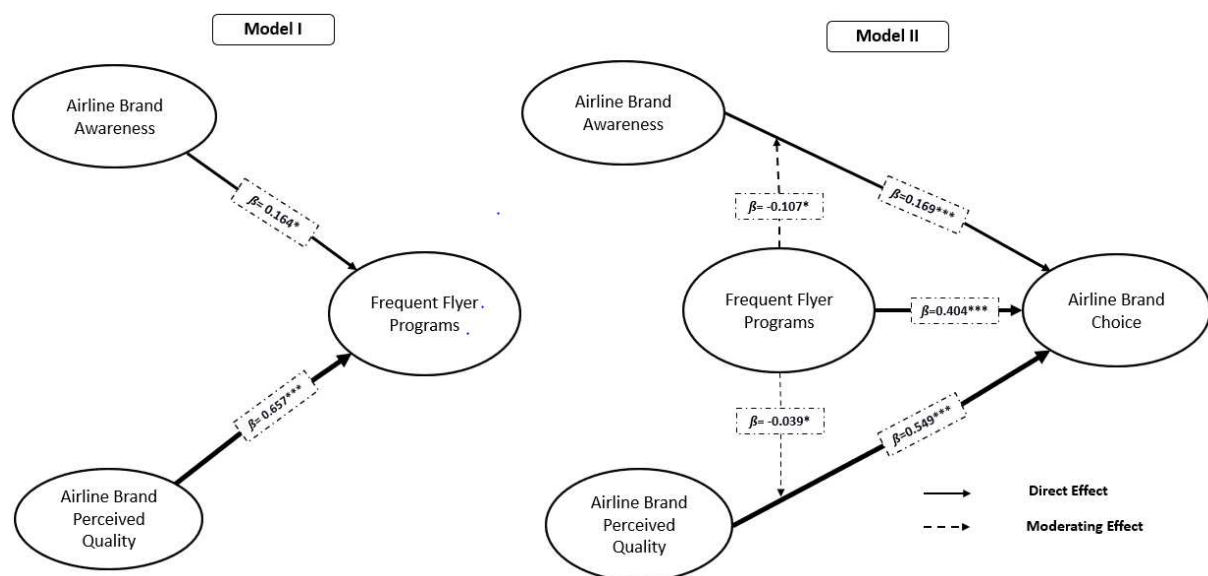
5 DISCUSSION OF FINDINGS

The findings of this study indicate that *airline brand awareness* is a positive and significant driver of *airline brand choice* and, consequently, influences the attitudes towards FFPs. These results suggest that an airline company that engages in brand awareness (marketing) positively influences a traveller's attitudinal perception towards an airline brand which manifests in re-purchase behaviour and ultimately influences traveller's attitudes toward an airline's *frequent-flyer program*. Thus, the higher the brand awareness, expressed as the consumer's ability to recognize and quickly identify the brand amongst other alternatives, the higher the likelihood of the airline being selected as a subsequent travel partner and may eventually lead to the individual associating with the airline's FFPs. This finding is consistent with previous airline consumer-based studies, such as the findings by Gao & Choy (2019), who found that the most recognizable airline brands equated to passenger purchase intention and preference. Chen *et al.* (2019) also support these findings when they acclaimed that increased brand awareness creates interest in the passenger's minds, raising curiosity that leads to a trial. Airline brands with high awareness and good image similarly promote passenger attitudes towards FFPs, and the higher the awareness, the higher the brand trust, and so is the purchase intention (Tabrizi & Valanejad, 2018). The study results also indicate that *airline brand perceived quality* positively influences *airline brand choice* and the attitudes towards FFPs. Antecedents factors such as inflight services, reservations services, airport services, reliability, employee services, and flight availability are significant influencers, as the superior perceptions of these attributes positively relate to choice and enhances passengers attitudes towards FFPs. Therefore, taking into account the brands' quality perceptions can enable an airline to build a solid and positive long-term relationship with other potential, unfamiliar customers. Karunaratna & Kumara (2018), in their literature review on the determinants of customer loyalty, found that perceived service quality had the most significant impact on customer loyalty. Chen, Li & Liu (2019) found that when customers have a high perception of the quality of service, it may influence their decision-making due to the brand's positive image. This finding is also supported by Farooq *et al.* (2018), who opined that better-perceived quality leads to enhanced customer satisfaction and fosters the goodwill of an airline company by positive word of mouth. In that, better-perceived service quality impacts customer satisfaction, and satisfaction leads to choice

and ultimately influences customers' attitudes towards FFPs (Sandada & Matibiri, 2016; Merkert & Pearson, 2015). Pearson's correlations analysis and multiple regression results indicate that improved attitudes toward frequent-flyer programs positively relate to airline brand choice. This variable was found to have the greatest impact on an airline brand choice. Basically, FFPs provide a sense of attachment and belonging in the minds of the travellers, which act as a competitive advantage to the airline company as these programs not only provide reassurance from a financial standpoint in times of prosperity but also present airlines with a captive audience to reinvigorate travel interest that may assist in thrusting the airline brand out of times of uncertainty (Pascual & Cain, 2021). The regression results are supported by previous studies (Olazabal, Marmorstein, & Sarel, 2014; Vlachos & Lin, 2014), which found the most significant influence on airline loyalty and repeat purchases was the presence of FFPs as these schemes enhance switching barriers.

The moderation results, which were this study's highlight, were also significant. The result of the first interaction term (airline brand loyalty programs X airline brand awareness) ($\beta = -0.039$, $p = 0.036$) indicates that when the attitude towards FFPs is low, it leads to a negative relationship between airline brand awareness and airline brand choice (see Figure 10). However, as the airline brand awareness improves, the airline brand's choice gradually increases despite low attitudes towards FFPs. In a scenario where the attitudes toward an airline's FFPs is enhanced, the choice of the airline will remain unchanged regardless of whether the airline brand is less recognized or highly recognized. A look at the results of the second interaction (frequent-flyer programs X Airline brand perceived quality) ($\beta = -0.107$, $p = 0.028$) indicates an interesting phenomenon. For instance, in a situation with low perceived attitudes towards FFPs, the relationship between airline brand perceived quality and airline brand choice is positive; that is, the airline brand choice will increase monotonically as the perceived quality of the airline brand improves in the mind of the traveller. However, high attitudes toward FFPs enhance brand choice when there is low brand perceived quality but negates choice when the airline brand perceived quality improves (see Figure 11). This result is interesting in that airline choice tends to diminish in a situation where there is both high attitudes towards FFPs and high airline brand perceived quality.

Figure 12: Causal relationships and hypothesis results



Note: All path estimates are significant (* $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$);

5.1 Theoretical Implications

Airline brand awareness, perceived quality, and frequent-flyer (loyalty) programs are core attributes for an airline company in creating recognition and memorable experiences for passengers that leads to a competitive advantage for the airline brand (Chen, Li, & Liu, 2019). Social exchange theory focuses on how individuals (travellers) engage in an exchange relationship whereby, according to Lee *et al.* (2014), individuals put into the relationship what they expect to get out of the relationship with the hope of maximising satisfaction. Greater social exchange is associated with a more robust and higher attitude towards commitment and a lower intention to switch, which ultimately leads to better airline company performance. For airline passengers, the motivation to choose an airline brand or be a part of an airline FFPs is based on knowledge (awareness) and superior perception of the airline brand quality. Specifically, travellers who rate an airline brand as highly attractive showed to have a greater awareness (recognition) of the airline brand, which is highly correlated with pleasant personal feelings towards the airline brand services and leads to a high level of perception of value (Chen, Li, & Liu, 2019). Understanding how attitudes toward airline *frequent-flyer programs* enhance awareness and improves brand quality perceptions provides insightful relationship marketing strategies. The ability of the traveller to earn a reward out of re-patronage of airline company will lead to feelings of a relationship that is reciprocal, and ultimately high satisfaction with the airline brand and higher levels of loyalty.

Results of the study suggest that travellers' attitudes towards FFPs have a buffering effect, especially during times of uncertainty (Pascual & Cain, 2021), such as the pandemic, as they help steer airline brands out of uncertainty. This is so since the frequent-flyer schemes enable the airline companies to maintain the existing relationship with their customers given the rewards the traveller will potentially accrue in terms of preferential treatments such as free lounge access, free tickets/flights, fast boarding, discounts amongst others, unlike airline brands without such programs. These programs act as switching barriers and enhance brand choice in situations where the airline brand is less known. Specifically, this study adds to the current understanding of the antecedents of choice and loyalty programs. It makes a theoretical contribution to the service, brand equity and customer decision behaviour literature on the experiences and perspectives of airline passengers regarding choice decisions. The study adds knowledge by identifying brand awareness, perceived quality, and attitudes towards FFPs as essential predictors of *airline brand choice*. The research also builds a conceptual model and extends consumer behavioural literature by pointing out the critical role of brand awareness and perceived quality in coping with a catalyst in the measurement of airline choice by the traveller.

5.2 Managerial Implications

The study provides important insights and practical implications to airline companies and air transport policymakers regarding marketing, perceived quality improvements, and the importance of *frequent-flyer programs*. First, managers and policymakers should have a marketing strategy in place that is meant to upholster and improve awareness of the airline brand in the market. One method determined is to have a social media presence. This will enable the airline company to engage virtually with their customers, whereby customers can freely share their experiences about the airline services, positively or negatively (BILGIN, 2018). The airline companies can use this information to improve on their shortcomings and pitfalls with the feedback they get. More so, brand awareness was found to

influence the *airline brand choice* and positively influence the attitudes toward *FFPs* as these programs assure future subsequent choice due to the rewards that accrue from the loyalty scheme as premised by Social Exchange theory. Secondly, *airline brand perceived quality* factors such as inflight services, reservation-related services, airport services, reliability, employee services, and flight availability need to be improved. Airline companies should therefore develop systematic ways of continuously assessing, monitoring, and improving these service qualities to improve the customer's perception of the airline's brand quality that the airline portrays. It is beneficial for airline companies to institute policies and training programs for their employees or engage in opportunities that improve the perception of quality of service by generating innovative solutions and ideas for service processes that are intended to upgrade existing services and products (Chen, Li, & Liu, 2019). This is because perceived service quality has a significant positive impact on customer preference and the willingness to recommend the services to other consumers, as it leads to a more favourable disposition towards the commitment to re-patronize which in the long-run will positively impact the airline bottom-line (Merkert & Pearson, 2015) . Lastly, a *frequent-flyer program* presence in an airline is a strategic capability that enhances competitive advantage, as these programs effectively act as switching barriers for the airline company. Moreover, *FFPs* enable the airline company to build closer bonds with their customers that act as a form of attachment. As such, *FFPs* enable the airline to retain customers for longer while discouraging existing customers from switching to other brands with more competitive offers. This is instrumental to airline companies, especially during periods of uncertainty, as these schemes provide reassurance and shield the airline brand from the effects of uncertainty (Pascual & Cain, 2021). Additionally, *FFPs* provide a buffering effect for airline companies in situations where the brand is less known or when the airline service quality is perceived as inferior. Moreover, positive attitudes toward *FFPs* enhance the airline brand's value proposition and act as a marketing tool through word of mouth. Therefore, *FFPs* should be core airline service products (both FSCs and LCCs) if airline companies are to have a lasting impact and wants to create a sense of belonging and attachment in the minds of the passengers, as this will enhance competitive advantage for the airline company in the long run.

5.3 Study Limitations And Suggestions For Future Study

The choice of an airline brand entails evaluating different attributes that satisfy travel utility as per the Social Exchange theory. It is agreeable that the attributes surrounding alternative airline brands that guide choice and drive loyalty are broad. Some of the potential airline attributes that travellers could evaluate in their exchange relationship are such factors as; airfares, the purpose of travel, flight frequency, flight time, aircraft type, and location of the airport (Shih-Ping, 2016; Chow, 2014; Chen, Li, & Liu, 2019; Martin, Roman, & Espino, 2011; Parrella, 2013) amongst others. Only three attributes (brand awareness, perceived quality and loyalty programs) relating to *airline brand choice* were the main focus of this study. However, the airline attributes that drive choice and influences the attitudes toward *frequent-flyer programs* uptake needs further investigation. Additionally, this study only checked for moderation effects; consequently, future studies should consider testing for mediation effects to replicate the same results utilising the proposed model (see Figures 13 & 14). This study was inevitably also affected by the COVID-19 pandemic that brought about numerous regulations, such as the imposition of social distancing, which rendered online surveys the only convenient data collection method. Furthermore, the data were collected within a short period (*one month*) using a cross-sectional research design. Future studies could benefit from employing a longitudinal design to replicate the same results. Moreover, the study adopted non-probabilistic techniques based on

convenience and purposive sampling through the deployment of an online survey. This method was deemed suitable for the study as it was impossible to draw random probability samples due to three identified limitation factors of; time, cost consideration and the effect of the pandemic (Covid-19). Another limitation corresponds to responses to the survey. Most of the responses returned were skewed towards certain regions (EU/UK and Africa), while other regions had minimal responses (Australia, Latin America). In conclusion, it is agreeable that respondents' demographic characteristics differ from region to region, especially in flight and household income characteristics that may distort the results of this study. Hence the results are inconclusive in terms of respondent flying characteristics. Future studies could consider data collection procedures that represent the different regions equally to have conclusive opinions.

6 ACKNOWLEDGEMENT

The authors would like to thank the anonymous editors and reviewers for their valuable time, insightful comment, and indispensable contribution that have guided in further improvement of the study.

7 References

- Aaker, D. (1991). *Managing Brand Equity: Capitalizing on the value of a Brand name*.
- Aaker, D. (1992). The Value of Brand Equity. *Journal of Business Strategy*, 13(4), 27-32.
- Alamro, A., & Rowley, J. (2011). Antecedents of brand preference for mobile telecommunications services. *Journal of Product & Brand Management*, 20(6), 475-486.
doi:<http://dx.doi.org/10.1108/10610421111166621>
- Armstrong, G., & Kotler, P. (2006). *Marketing: An Introduction* (6 ed.). Prentice Hall.
- Asshidin, N. H., Abidin, N., & Borhan, H. B. (2016). Perceived quality and emotional value that influence consumer's purchase. *Procedia Economics and Finance*, 35, 639-643. doi:doi: 10.1016/S2212-5671(16)00078-2
- BİLGİN, Y. (2018). The Effect of Social Media Marketing Activities on Brand Awareness, Brand Image and Brand Loyalty. *Business & Management Studies:An International Journal*, 6(1), 128-148. Retrieved from <https://doi.org/10.15295/bmij.v6i1.229>
- Blau, P. M. (1964). *Exchange and power in social life*. New Brunswinck, NJ: Transaction Publishers.
- CAPA. (2020). *COVID-19. By the end of May, most world airlines will be bankrupt*. Retrieved December 14, 2020, from <https://centreforaviation.com/analysis/reports/covid-19-by-the-end-of-may-most-world-airlines-will-be-bankrupt-517512>
- Caruana, A. (2002, August 1). Service loyalty: The effects of service quality and the mediating role of customer satisfaction. *European Journal of Marketing*, 36(7/8), 811-828.
doi:<https://doi.org/10.1108/03090560210430818>
- Chang, L.-Y., & Hung, S.-C. (2013). Adoption and loyalty toward low cost carriers: The case of Taipei–Singapore passengers. *Transportation Research Part E: Logistics and Transportation Review*, 50, 29-36.
- Chen, C., & Tseng, W. (2010). Exploring Customer Based Airline Brand Equity:Evidence from Taiwan. *Transportation Journal*, 49(1), 24-34.

- Chen, I.-S. (2016, October). A combined MCDM model based on DEMATEL and ANP for the selection of airline service quality improvement criteria: A study based on the Taiwanese airline industry. *Journal of Air Transport Management*, 57, 7-18. Retrieved from <https://doi.org/10.1016/j.jairtraman.2016.07.004>
- Chen, L., Li, Y.-Q., & Liu, C.-H. (2019). How airline service quality determines the quantity of repurchase intention - Mediate and the moderate effects of brand quality and perceived value. *Journal of Air Transport Management*, 185-197. Retrieved from <https://www.elsevier.com/locate/jairtraman>
- Chen, Y., Mandler, T., & Meyer-Waarden, L. (2021, January). Three decades of research on loyalty programs: A literature review and future research agenda. *Journal of Business Research*, 124, 179-197. doi:<https://doi.org/10.1016/j.jbusres.2020.11.057>
- Cheung, M., Pires, G., & Rosenberger III, P. (2019). Developing a conceptual model for examining social media marketing effects on brand awareness and brand image. *International Journal of Economics and Business Research*, 17(3), 243-261.
- Choe, P., & Zhao, Y. (2013, June). The Influence of Airline Brand on Purchase Intention of Air Tickets in China. *Industrial Engineering & Management Systems*, 12(2), 143-150. doi:<https://doi.org/10.7232/iems.2013.12.2.143>
- Chow, C. (2014, March). Customer satisfaction and service quality in the Chinese airline industry. *Journal of Air Transport Management*, 35, 102-107.
- Cochran, W. (1977). *Sampling Techniques*. New York: John Wiley & Sons.
- Demmers, J., Weltevreden, J., & Van Dolen, W. (2020). Consumer engagement with brand posts on social media in consecutive stages of the customer journey. *International Journal of Electronic Commerce*, 24(1), 53-77. doi:<https://doi.org/10.1080/10864415.2019.1683701>
- Devi, A. A., & Yasa, N. N. (2021, May 18). The Role of Customer Satisfaction in Mediating the Influence of Service Quality and Perceived Value on Brand Loyalty. *International Research Journal of Management, IT & Social Sciences*, 8(3), 315-328. doi:<https://doi.org/10.21744/irjmis.v8n3.1786>
- Dorotic, M., Bijmolt, T., & Verhoef, P. (2012). Loyalty programmes: current knowledge and research directions. *International Journal of Management Reviews*, 14, 217-237. Retrieved from <https://doi.org/10.1111/j.1468-2370.2011.00314.x>
- Emerson, M. R. (1976). Social exchange theory. *Annual Review of Sociology*, 2, 335-362.
- Engel, J., Blackwell, R., & Miniard, P. (1995). *Consumer behavior* (8 ed.). New York: Dryden Press.
- Eslami, S. (2020). The effect of brand experience on brand equity and brand loyalty through the mediating role of brand awareness, brand image and perceived quality. *Archives of Pharmacy Practice*, 11(1), 98-104.
- Farooq, M., Salaam, M., Fayolle, A., Jaafar, N., & Ayupp, K. (2018). Impact of service quality on customer satisfaction in Malaysia airlines: A PLS-SEM approach. *Journal of Air Transport Management*, 67, 169-180. Retrieved from <https://doi.org/10.1016/j.jairtraman.2017.12.008>

- Forgas, S., Moliner, M. A., Sánchez, J., & Palau, R. (2010). Antecedents of airline passenger loyalty: Low-cost versus traditional airlines. *Journal of Air Transport Management*, 16(4), 229-233. doi:<https://doi.org/10.1016/j.jairtraman.2010.01.001>
- Fornell, C., & Larcker, D. (1981). Evaluating structural equation models with unobservable variables and measurement error. *Journal of Marketing Research*, 18(1), 39-50.
- Foroudi, P., Jin, Z., Gupta, S., Foroudi, M., & Kitchen, P. (2018, August). Perceptual components of brand equity: Configuring the Symmetrical and Asymmetrical Paths to brand loyalty and brand purchase intention. *Journal of Business Research*, 89, 462-474. doi:<https://doi.org/10.1016/j.jbusres.2018.01.031>
- Gao, Y., & Choy, N. (2019). Brand Awareness, Purchase Intention and Price Premium of International Airlines Operating between Australia and the United Kingdom. *International Journal of Aviation, Aeronautics and Aerospace*, 6(3). doi:<https://doi.org/10.15394/ijaaa.2019.1345>
- Gupta, H. (2018). Evaluating service quality of airline using hybrid best worst method and VIKOR. *Journal of Air Transport Management*, 68, 35-47. Retrieved from www.elsevier.com/locate/jairtraman
- Hair, J., Anderson, R., Tatham, R., & Black, W. (1998). *Multivariate data analysis*. New Jersey: Prentice-Hall.
- Hartmann, W., & Viard, B. (2005). Quantity-Based Price Discrimination Using Frequency Reward Programs. Retrieved from <http://citeseerx.ist.psu.edu/viewdoc/download?doi=10.1.1.632.3941&rep=rep1&type=pdf>
- Henderson, I., Tsui, K. W., Ngo, T., Gilbey, A., & Avis, M. (2019, March). Airline brand choice in a duopolistic market: The case of New Zealand. *Transportation Research Part A: Policy and Practice*, 121, 147-163. doi:<https://doi.org/10.1016/j.tra.2019.01.016>
- Holthausen, J. (2010). *Scientific review of the Social Exchange Theory and its contribution to solving purchasers' decision making issues*. Twente. Retrieved from http://essay.utwente.nl/63634/1/BSc_The_Theo_Jannik_Holthausen_SET_10pager.pdf
- Homans, G. C. (1958). Social Behaviour as Exchange. *American Journal of Sociology*, 63(3), 597-606.
- Hsin, K., Huery, R., & Ting, y. (2019). The Impact of Brand Awareness on Consumer Purchase Intention: The Mediating Effect of Perceived Quality and Brand Loyalty. *Journal of International Management Studies*, 4(1), 135-144. Retrieved from <http://nhuir.nhu.edu.tw/handle/987654321/27159>
- Huang, Y.-C., & Liu, C.-H. (2020, December). Buffering effects of brand perception to behavioural intention - Evidence of China airlines. *Research in Transportation Business & Management*, 37, 100468. doi:<https://doi.org/10.1016/j.rtbm.2020.100468>
- Huy-Ho, T., Olsen, S., & Tri-Duong, T. (2006). The relationship among perceived quality, consumer satisfaction and loyalty in the Vietnamese market for seafood. *IIFET Portsmouth Proceedings*, (pp. 1-9).
- IATA. (2016). *IATA Forecasts Passenger Demand to Double Over 20 Years*. Retrieved from <https://www.iata.org/en/pressroom/pr/2016-10-18-02/>

- ICAO. (2018). *The World of Air Transport in 2018*. ICAO. Retrieved from <https://www.icao.int/annual-report-2018/Pages/the-world-of-air-transport-in-2018.aspx#:~:text=The%204.3%20billion%20airline%20passengers,some%2090%20million%20in%202040.&text=The%20world's%20major%20manufacturers%20delivered,640%20new%20aircraft%20net%20o>
- ICAO. (2021). *Post-COVID-19 Forecasts Scenarios*. Economic Development of Air Transport. Retrieved from <https://www.icao.int/sustainability/Documents/post%20covid%20forecasts%20scenarios%20tables.pdf>
- Jose, P. (2013). *ModGraph-I: A programme to compute cell means for the graphical display of moderational analyses*. Victoria University of Wellington, Wellington, New Zealand. Retrieved from <http://pavlov.psyc.vuw.ac.nz/paul-jose/modgraph/>
- Karunaratna, A., & Kumara, P. (2018, Aug 31). Determinants of customer loyalty: A literature review. *Journal of customer behaviour*, 17(1-2), 49-73.
- Keller, K. L. (1999). Managing brands for the long run: Brand reinforcement and revitalization strategies. *California management review*, 41(3), 102-124.
- Keller, K. L. (2003). The Multi Dimensionality of Brand Knowledge. *Journal of Consumer Research*, 29(4), 595-600. Retrieved from <https://doi.org/10.1086/346254>
- Khan, N., Jung, G., Kim, J., & Kim, Y. (2019). Evolving competition between low-cost carriers and full-service carriers: the case of South Korea. *Journal of Transport Geography*, 74, 1-9.
- Khudhair, H., Jusoh, A., Mardani, A., & Nor, K. (2019). Quality Seekers as Moderating Effects between Service Quality and Customer Satisfaction in Airline Industry. *International Review of Management and Marketing*, 9(4), 74-79. doi:<https://doi.org/10.32479/irmm.8144>
- Kim, H., Ku, B., Kim, Y. J., Park, Y.-J., & Park, Y.-B. (2016). Confirmatory and Exploratory Factor Analysis for Validating the Phlegm Pattern Questionnaire for Healthy Subjects. *Evidence-Based Complementary and Alternative Medicine*. doi:<https://doi.org/10.1155/2016/2696019>
- Kim, H.-Y., Lee, J., Choi, D., Wu, J., & Johnson, K. (2013). Perceived Benefits of Retail Loyalty Programs: Their Effect on Program Loyalty and Customer Loyalty. *Journal of Relationship Marketing*, 12(2), 95-113. Retrieved from <https://doi.org/10.1080/15332667.2013.794100>
- Kirmani, A., & Zeithaml, V. (2013). In D. Aaker, & A. Biel, *Brand Equity & Advertising: Advertising, perceived quality, and brand image* (pp. 143-161). Psychology Press.
- Kock, N. (2020). Harman's single factor test in PLS-SEM: Checking for common method bias. *Data Analysis Perspectives Journal*, 2(2), 1-6.
- Konecnik, M., & Gartner, W. (2007). Customer-based Brand Equity for a destination. *Annals of Tourism Research*, 34(2), 400-421.
- Korkut, O., & Arslan, F. (2010, June). The effect of brand extensions on product brand image. *Journal of Product & Brand Management*, 19(3), 170-180.
- Lam, L. W. (2012, September). Impact of competitiveness on salespeople's commitment and performance. *Journal of Business Research*, 65(9), 1328-1334. doi:<https://doi.org/10.1016/j.jbusres.2011.10.026>

- Langaro, D., Rita, P., & Salgueiro, M. d. (2015). Do social networking sites contribute for building brands? Evaluating the impact of users' participation on brand awareness and brand attitude. *Journal of Marketing Communications*, 24(2), 146-168.
doi:<https://doi.org/10.1080/13527266.2015.1036100>
- Lawler, E. J., & Thye, S. R. (1999). Bringing Emotions into Social Exchange Theory. *Annual Review of Sociology*, 25, 217-244.
- Lee, J. J., Capella, M. L., Taylor, C. R., Luo, M. (.), & Gabler, C. (2014, October). The financial impact of loyalty programs in the hotel industry: A social exchange theory perspective. *Journal of Business Research*, 67(10), 2139-2146. doi:<https://doi.org/10.1016/j.jbusres.2014.04.023>
- Lemon, K., & Verhoef, P. (2016). Understanding customer experience throughout the customer journey. *Journal of Marketing*, 80(6), 69-96.
- Liu, Z., Min, Q., Zhai, Q., & Smyth, R. (2016). Self-disclosure in Chinese micro-blogging: A social exchange theory perspective. *Information & Management*, 53(1), 53-63.
doi:<https://doi.org/10.1016/j.im.2015.08.006>
- Macdonald, E., & Sharp, B. (2000). Brand awareness effects on consumer decision making for a common, repeat purchase product: A replication. *Journal of Business Research*, 48, 5-15.
- Mäkelä, K., & Brewster, C. (2009, July 28). Interunit interaction contexts, interpersonal social capital, and the differing levels of knowledge sharing. *Human Resources Management*, 48(4), 591-613. doi:<https://doi.org/10.1002/hrm.20300>
- Mankin, J., & Jewell, J. (2015). Frequent flyer miles as a company scrip: implications on taxation. *Business Studies Journal*, 7(1), 14-32.
- Martin, J., Roman, C., & Espino, R. (2011). Evaluating frequent flyer programs from the air passengers perspective. *Journal of Air Transport Management*, 17(6), 364-368.
- Merkert, R., & Pearson, J. (2015, April). A Non-parametric Efficiency Measure Incorporating Perceived Airline Service Levels and Profitability. *Journal of Transport Economics and Policy*, 49(2), 261-275.
- Morewedge, c. (2015). *Utility: Anticipate, Experienced, Remembered*. Research Gate.
- Moutinho, L., & Bian, X. (2011). The role of brand image, product involvement, and knowledge in explaining consumer purchase behaviour of counterfeits: Direct and indirect effects. *European Journal of Marketing*, 45, 191-216. Retrieved from <https://doi.org/10.1108/03090561111095658>
- Neringa, V.-V., & Palmira, P. (2016). Influence of Customer Loyalty Program on Organizational Performance: a Case. *Engineering Economics*, 27(1), 109-116.
doi:<https://doi.org/10.5755/j01.ee.27.1.10267>
- Olazabal, A., Marmorstein, H., & Sarel, D. (2014). Frequent flyer programs: empirically assessing consumers' reasonable expectations. *American Business Law Journal*, 51(1), 175-250.
- Oliver, R. (1999). Whence Consumer Loyalty? *Journal of Marketing*, 63, 33-44.
- Park, J. (2007). Passenger Perceptions of Service Quality: Korean and Australian Case Studies. *Journal of Air Transport Management*, 13, 238-242.

- Park, J., Robertson, R., & Wu, C. (2004). The Effect of Airline Service Quality on Passengers' Behavioural Intentions: A Korean Case Study. *Journal of Air Transport Management*, 10, 435-439.
- Parrella, B. C. (2013). *Understanding Airline and Passenger Choice in Multi-Airport regions*. U.S.A: National Academy of Sciences. doi:DOI 10.17226/22443
- Pascual, E. M., & Cain, L. (2021). Loyalty programs: the vital safety feature for airlines to survive COVID-19. *International Hospitality Review*, 2021. doi:DOI:10.1108/IHR-03-2021-0017
- Pels, E., Njegovan, N., & Behrens, C. (2009). Low-cost airlines and airport competition. *Transportation research*, 45(2), 335-344. Retrieved from <https://doi.org/10.1016/j.tre.2008.09.005>
- Podsakoff, P. M., MacKenzie, S. B., Lee, J.-Y., & Podsakoff, N. P. (2003, October). Common method biases in behavioral research: A critical review of the literature and recommended remedies. *Journal of Applied Psychology*, 88(5), 879-903.
- Rafiq, M., Fulford, H., & Lu, X. (2013). Building customer loyalty in online retailing: The role of relationship quality. *Journal of Marketing Management*, 29(3/4), 494-517.
- Sahin, H., Kusakci, A. O., & Mbowe, B. (2021, August). Heritage and Sustainable Development. *The effects of frequent flyer programs in the airline industry on customer loyalty*, 3(2), 130-147. doi:DOI:10.37868/hsd.v3i2.69
- Sánchez, J., Callarisa, L., Rodríguez, R. M., & Moliner, M. A. (2006). Perceived value of the purchase of a tourism product. *Tourism Management*, 27(3), 394-409. doi:<https://doi.org/10.1016/j.tourman.2004.11.007>
- Sandada, M., & Matibiri, B. (2016). An investigation into the impact of service quality, frequent flier programs and safety perception on satisfaction and customer loyalty in the airline industry in Southern Africa. *South East European Journal of Economics and Business*, 11(1), 41-53. doi:DOI: 10.1515/jeb-2016-0006
- Santos, S., & Gonçalves, H. (2021). The consumer decision journey: A literature review of the foundational models and theories and a future perspective. *Technological Forecasting and Social Change*, 173, 121117. doi:<https://doi.org/10.1016/j.techfore.2021.121117>
- Seo, E.-J., & Park, J.-W. (2018, January). A study on the effects of social media marketing activities on brand equity and customer response in the airline industry. *Journal of Air Transport Management*, 66, 36-41. Retrieved from <https://doi.org/10.1016/j.jairtraman.2017.09.014>
- Shen, S., Sotiriadis, M., & Zhang, Y. (2020). The influence of smart technologies on customer journey in tourist attractions within the smart tourism management framework. *Sustainability*, 12(10), 1-18.
- Shih-Ping, J. (2016). The influences of airline brand credibility on consumer purchase intentions. *Journal of Air Transport Management*, 1-8.
- Siebert, A., Gopaldas, A., Lindridge, A., & Simões, C. (2020). Customer experience journeys: loyalty loops versus involvement spirals. *Journal of Marketing*, 84(4), 45-66. doi:<https://doi.org/10.1177%2F0022242920920262>

- Skytrax. (2022). *Explaining Airline Star Rating levels*. London: Skytrax. Retrieved from <https://skytraxratings.com/about-airline-rating>
- Supphellen, M., & Nygaardsvik, I. (2002). Testing country brand slogans: Conceptual development and empirical illustration of a simple normative model. *Journal of Brand Management*, 9(4), 385-395.
- Tabaku, E., & Zerellari, M. (2015). Brand loyalty and loyalty programs; a literature review. 10(2).
- Tabrizi, P., & Valanejad, S. (2018, March). The Relationship between Brand Equity, Brand Preference and Purchase Intention. *Case Studies Journal*, 7(3).
- Thakshak. (2018). Analysing customer based airline brand equity: perspective from Taiwan. *Future Business Journal*, 4(2), 233-245.
- Thompson, F., & Chmura, T. (2015). Loyalty Programs in Emerging and Developed Markets: The Impact of Cultural Values on Loyalty Program Choice. *Journal of International Marketing*, 23(3), 87-103. Retrieved from <https://doi.org/10.1509/jim.14.0125>
- Varnali, K. (2019). Understanding customer journey from the lenses of complexity theory. *The Service Industries Journal*, 39(11-12), 820-835. doi:<https://doi.org/10.1080/02642069.2018.1445725>
- Vatankhah, S., & Darvishi, M. (2018). An empirical investigation of antecedent and consequences of internal brand equity: evidence from the airline industry. *Journal of Air Transport Management*, 69, 49-58. doi:<https://doi.org/10.1016/j.jairtraman.2018.02.002>
- Vlachos, I., & Lin, Z. (2014). Drivers of airline loyalty: Evidence from the business travelers in China. *Transportation Research Part E: Logistics and Transportation Review*, 71, 1-17.
- Wang, L., Luo, X., & Lee, F. (2019). Unveiling the interplay between blockchain and loyalty program participation: A qualitative approach based on BubiChain. *International Journal of Information Management*, 49, 397-410. doi:<https://doi.org/10.1016/j.ijinfomgt.2019.08.001>
- Washburn, J., & Plank, R. (2002). Measuring brand equity: an evaluation of a consumer-based brand equity scale. *Journal of Marketing Theory and Practice*, 46-62. Retrieved from <https://doi.org/10.1080/10696679.2002.11501909>
- WATs. (2021). *IATA confirms that 2020 was the worst year for the airline industry*. Montreal: IATA. Retrieved from <https://hospitality-on.com/en/mobile/iata-confirms-2020-was-worst-year-airline-industry#:~:text=1.8%20billion%20passengers%20flew%20in,75.6%20percent%20year%20over%20year>
- Wendlandt, M., & Schrader, U. (2007). Consumer reactance against loyalty programs. *Journal of Consumer Marketing*, 24(5), 293-304.
- Wirtz, J., Mattila, A., & Lwin, M. (2007). How effective are loyalty programs in driving share of wallet? *Journal of Service Research*, 9(4), 327-334.
- Wong, C., & Hiew, P. (2005). Diffusion of mobile entertainment in Malaysia: drivers and barriers. *Enformatika*, 5, 263-6.

- Wu, C.-L., & Hanson So, T. (2018, September). On the flight choice behaviour of business-purpose passengers in the Australian domestic air market. *Journal of Air Transport Management*, 72, 56-67. doi:<https://doi.org/10.1016/j.jairtraman.2018.07.006>
- Yang, Z., & Peterson, R. (2004). Customer Perceived Value, Satisfaction and Loyalty: The Role of Switching Costs. *Psychology & Marketing*, 21, 799-822.
- Yoo, B., & Donthu, N. (1997). Developing and Validating a Consumer- based Overall Brand Equity Scale for Americans and Koreans: An extension of Aaker's and Keller's Conceptualizations, @. *AMA Summer Educators Conference*. Chicago.
- Yoo, B., & Donthu, N. (2002). Developing and Validating a Multidimensional Consumer-based Brand Equity Scale. *Journal of Business Research*.
- Zeren, D., & Kara, A. (2021). Effects of Brand Heritage on Intentions to Buy of Airline Services: The Mediating Roles of Brand Trust and Brand Loyalty. *Sustainability*, 13(1), 303. doi: <https://doi.org/10.3390/su13010303>
- Zhang, X., Ding, X., Ma, L., & Wang, G. (2018, December). Identifying Factors Preventing Sustainable Brand Loyalty Among Consumers: A Mixed Methods Approach. *Sustainability*, 10(12), 4685. doi: <https://doi.org/10.3390/su10124685>