THE INFLUENCE OF CONSUMER PERSONAL VALUES ON AIRLINE CHOICE WITHIN THE SOUTH AFRICAN DOMESTIC MARKET

by

NKULULEKO FUYANE

submitted in accordance with the requirements for

the degree of

DOCTOR OF COMMERCE

in the subject

BUSINESS MANAGEMENT

&

at the

UNIVERSITY OF SOUTH AFRICA

SUPERVISOR: **PROF L. VAN SCHEERS**

CO-SUPERVISOR: **PROF M. MAKHITHA**

4 September 2020

Declaration of Originality

Name: Nkululeko Fuyane

Student number: 55775497

Degree: Doctor of Commerce Degree in Business Management

I declare that this thesis titled *The Influence of Consumer Personal Values on Airline Choice within the South African Domestic Market* is my work and that all the sources that I have used or quoted have been indicated and acknowledged using complete references.

I further declare that I submitted the thesis to originality checking software and that it falls within the accepted requirements for originality.

I further declare that I have not previously submitted this work, or part of it, for examination at Unisa for another qualification or at any other higher education institution.

_____   <u>4 September 2020</u>
SIGNATURE   DATE

Dedications

Frequently, embarking on doctoral studies brings excitement and self-fulfilment. Little do people know it is a journey filled with up and downs. More so, that the downs are sometimes so severe that you feel quitting might be the best thing to do to save your sanity. At that point, you need a support system filled with people who will encourage you to soldier on in many different ways. I, also having gone through such phases, would like to take this opportunity to thank the following people whom I relied on for the strength to finish this journey.

I would like to thank my wife Thandoe and kids (Denzel, Daryl and Kenya) for putting up with my social absence because of my studies. I owe my wife for many cold nights she found herself sleeping alone like she was not married. To my kids, after this journey, I will have time for playing games with you.

My gratitude also goes to my supervisors for their guidance, especially Prof Van Scheers, for her motherly nurturing. Many times, when I wanted to quit, she would let me cool down and contact me, just to give me assurances I was not far from the point. How could I forget my critical readers; Prof Charmaine Williamson for nudging me in the right direction in my first year. Also, to Dr Ndebele and Dr Bryant, thank you for helping with academic writing. Snipers (you know yourselves), this yours too. I would not have done it with your support, especially when I was facing the uncertainty of my employment.

To my friends, Dr Sikwela, Sivela, Mnelisi Xaba, Phathisa, Livaroe, and all those I could not name here, I thank you for the constant support and inspiration to stay the course. I would also like to thank Mr Collins (former ACSA Communications Manager) for helping me get permission to collect data within the environs of King Shaka International Airport. If I had to mention all those who were instrumental to this study, I would write another thesis, so let me thank you all, you know yourselves.

Abstract

Airline choice is of interest to both airline product development and marketing personnel and academics. While most of the studies airline choice/service quality only identify airlines service attributes essential to customers, this study employed personal values to extend and provide the reasons why airline service attributes are not or essential to passengers. Personal values are presented in the literature as the ultimate life goals individuals seek to attain in all aspects of their lives; hence, guide their behaviour. Based on this, the main objective of this study was to examine and identify the consumer (passenger) personal values that underpin the evaluation of airline service attributes used to choose an airline within the South African domestic passenger market. To achieve this objective, together with the secondary objectives, a quantitative descripto-explanatory research design was employed to guide data collection and analysis. A sample of 324 respondents was selected using a hybrid technique of convenience, and snowball sampling techniques and data were collected using both an online and hardcopy questionnaire. Data obtained were sorted and cleaned for analysis using the Statistical Product and Service Solutions (SPSS 26) and the Analysis of a Moment Structures (AMOS Version 26) software. Exploratory factor analysis (EFA) was conducted to assess factor structures of observed variables and identify latent constructs. The factorability of portrait value questionnaire (PVQ) items was determined using the confirmatory factor analysis (CFA). Hypotheses were tested using the backward multiple regression analysis, Whitney-Mann test, Spearman correlation and hierarchical regression with Hayes' Process Macro. The study identified five of Schwartz's 19 refined values as significantly influencing the evaluation and prioritisation of airline service attributes. A state of indifference among customers was found when the impact of airline service attributes was tested, with only onboard services found to significantly influence post-purchase outcomes such as satisfaction, loyalty and repeat purchase behaviour. It was also found that passengers did not distinguish between low-cost and full-service carriers. Income only moderated the influence of stimulation and self-direction thought values on airline service attributes while marketing communications effort was found to have a direct than a moderating role. In the main, these findings bring a novel and rich way of explaining

airline choice through personal values. The results are essential for airline market segmentation, positioning and the development of airline products or features that match passenger desired life goals (personal values) which are touted as a guide to their choice behaviour.

KEY TERMS:

Personal values, airline choice attributes, post-purchase outcomes, satisfaction, loyalty, repeat purchase intention, service quality, consumer behaviour, marketing communications, domestic passenger market.

Isifinqo

Ukuqoka inkampani yezindiza ozoyisebenzisa kumayelana nokuthuthukisa umkhiqizo nabasebenzi bokumaketha kanye nabacwaningi. Phezu kokuba ukucwaninga ngezindiza nokuqokwa kwazo/ ikhwalithi yesevisi kukhomba kuphela izimfanelo zesevisi ezibalulekile kumakhasimende, lolu cwaningo lumbandakanye okungamagugu abantu ukunweba nokuletha izizathu zokuthi kungani izimfanelo zesevisi zenkampani yezindiza zingabalulekile noma zibalulekile kubagibeli. Okungamagugu abantu kwethulwe ngemibhalo kwaba ngamaphupho ekusasa ahlonzwayo ezimpilweni, ngakho,ebe eqondisa indlela yokuziphatha kwabo. Kuncike kulokhu, eyona nhlosongqangi yalolu cwaningo kwaku wukuhlola nokuhlonza okungamagugu omuntu ongumthengi (umgibeli) ukusekela ukuhlolwa kwezimfanelo zesevisi ezisetshenziswa ukukhetha inkampani yezindiza azoyisebenzisa ezimakethe zalezi ezihambela ngaphakathi eNingizimu Afrika. Ukufezekisa le nhlosongqangi kanye nezinye izizathu zocwaningo, idizayini yokucwaningo ye'*quantitative descripto-explanatory*' isetshenziswe ukuqokelela idatha nokuhlaziya ulwazi. Isampula yababambe iqhaza abangama-324 ikhethiwe kusetshenziswa i *hybrid technique of convenience,* kanye nendlela yesampula yemihlathi eyazanayo (snowball sampling), kanti idatha iqoqwe ngakho kokubili, '*online'* namaphepha anemibuzo ebuzelwa ukuthola okuthile. Idatha etholakele ihlukanisiwe yenzelwa ukuhlaziyeka kahle kusetshenziswa *iStatistical Product* ne*Service Solutions* (SPSS 26) kanye ne-*Analysis of a Moment Structures* (AMOS Version 26) *software*. I-*Exploratory factor analysis* (EFA) yenziwe ukuze kuhlolwe ukuthi izakhiwo eziyizimiso ukuqaphela okuguqukayo kwabuye kwaqashelwa ne-*identify latent constructs*. I-*factorability yeportrait value questionnaire* (PVQ) izinto zanqunywa kusetshenziswa i*confirmatory factor analysis* (CFA). Umbono ube usuhlolwa kusetshenziswa *ibackward multiple regression analysis*, *Whitney-Mann test*, *Spearman correlation* ne *hierarchical regression* ene *Hayes' Process Macro*. Lolu cwaningo lube nezinkomba ezinhlanu zika'Schwartz's 19' ezingamagugu acwengisisiwe abe nomthelela wazo ethonyeni lokuhlola nokubeka phambili kwezinkampani zezindiza izimfanelo zesevisi. Kutholwe isimo sokunganaki kubagibeli uma kuhlolwa izimfanelo zesevisi yenkampani yezindiza, kuphela nje isevisi yangaphakathi endizeni ithathwa njengebaluleke kakhulu enomthelela

emiphumeleni yokuthenga kamuva okubalwa kukho ukwaneliseka kwabagibeli, ukwethembeka nokuphinda kuthengwe amanye ngokuzayo. Kutholakele ukuthi abagibeli abakwazanga ukwahlukanisa phakathi kosizo olusezingeni eliphansi nalolo olusezingeni eliphezulu. Inzuzo ibe nomthelela kuphela ekukhuthazeni isiqondiso ngasinye ngokwamagugu okuziphatha ezinsizeni zesevisi yenkampani yezindiza ngakolunye uhlangothi ezokuxhumana kwezezimakethe kuyimizamo etholakele kube neqondile kuneqhaza elisezingeni elilinganayo. Ngokwesidingo, lokhu okutholakele kwethula indlela entsha ecebileyokuchaza ukuqokwa kwezinkampani zezindiza ezisethenziswa abantu abawuhlobo oluthile. Imiphumela ibalulekile emakethe yezinkampani zezindiza ukuze kwahlukaniswe, kubekwe endaweni, kuthuthukiswe imikhiqizo yezinkampani zezindiza noma izinto ezithandwa abagibeli nezidingo zabo zempilo okuyizona eziwumhlahlandlela wokuqoka inkampani abazoyisebenzisa.

AMAGAMA ASEMQOKA:

Amagugu kayedwana, ukuqoka amagugu ezindiza, imiphumela yasemva kokuthenga, ukwaneliseka, ukwethemba, inhloso yokuphinda uthenge, ukunakekelwa kwabagibeli, ukuziphatha kwabathengi, izimakethe zokuxhumana, izindiza zangaphakathi.

Table of Contents

CHAPTER 7: DISCUSSION OF RESULTS, CONCLUSIONS, RECOMMENDATIONS AND FUTURE RESEARCH   **274**

List of Figures

List of Tables

List of Acronyms and Abbreviations

ACSA - Airports Company of South Africa

ACV - Attribute Consequences Value

AIRQUAL - Air Service Quality

BASA - Bilateral air services agreements

CAPA - Centre for Asia Pacific Aviation

CFA - Confirmatory Factor Analysis

DoT - Department of Transport

EFA - Exploratory Factor Analysis

FFP - Frequent Flier Program

FSC - Full-Service Carriers

HCCME - Heteroscedasticity Consistent Covariance Matrix Estimator

HEDQUAL - Service Quality Model for Higher Education

HVM - Hierarchical Value Maps

IATA - International Air Transport Association

ICAO - International Civil Aviation Organization

IMC - Integrated Marketing Communications

KMO - Kaiser-Meyer-Olkin

KSIA - King Shaka International Airport

LCC - Low-Cost Carriers

LOV - List of Values

MDS - Multidimensional Scaling

MEC - Mean-End Chain

MECCAS - Means-End Conceptualisation of Components for Advertising Strategy

NTPS - National Transport Policy Study

OECD - Organisation for Economic Co-operation and Development

ORTIA - Oliver Reginald Tambo International Airport

PVQ - Portrait Value Questionnaire

RPK - Revenue Passenger Kilometres

RVS	-	Rokeach Value System
SAA	-	South African Airways
SAAC	-	South African Aviation Corps
SAATM	-	Single African Air Transport Market
SACAA	-	South African Civil Aviation Authority
SERPVAL	-	Service Personal Values
SERVPERF	-	Service Performance
SERVQUAL	-	Service Quality
SST	-	Self-Service Technology
SVPL	-	Service value to peaceful life
SVS	-	Schwartz Value System
SVSI	-	Service value to social integration
SVSR	-	Service value to social recognition
THEMQUAL	-	Service Quality in Theme Park
VAB	-	Value Attitude Behaviour
VALS	-	Values and Lifestyles
WEF	-	World Economic Forum
YD	-	Yamoussoukro Decision

CHAPTER 1: INTRODUCTION AND BACKGROUND

1.1 INTRODUCTION

This study was carried out to determine the influence of consumer personal values on airline choice within the South African domestic passenger market. The study comes on the backdrop of several studies that have identified the factors that undergird airline choice or the evaluation of airline service quality in South Africa and elsewhere. Most of these studies, for example, Lubbe, Douglas and Mclachlan (2016); Campbell and Vigar-Ellis (2012); De Meyer and Mostert (2011); De Jager, van Zyl and Toriola (2012); Yaylali, Çelik and Dilek (2016); Milioti, Karlaftis and Akkogiounoglou (2015) and Namukasa (2013) are merely descriptive. One of the criticisms that have been labelled against such studies is their failure to account for contexts, thus turning airline customers into value-free objects (Rokeach; 1973; Gutman, 1982).

Furthermore, criticism has been levelled at several previous studies for restricting the motivation explanation of airline choice only to the proximal airline service attributes (Cai and Shannon, 2012). The critics do not dispute that there is some relationship between airline choice and airline service attributes. They argue that airline service attributes are just a 'means to an end'. These arguments draw from the human (personal) values theories to give a counter explanation to consumer behaviour. The leading scholars on human values conceptualisation of consumer research include Rokeach (1968, 1973); Schwartz, (1992, 2012); Gutman (1982) and Kahle (1983) whose classical work on the concept of personal values has been a source of reference.

Extensive literature beyond the classical literature mentioned above, confirms that personal values, as indeed the 'end' that consumers seek to satisfy in each consumption situation. Therefore, in line with the argument raised by human values theorists, this study aimed to bring in the personal values dimension to explain airline choice within the South African domestic passenger market.

In this chapter, the background of the study is presented, and the underpinnings of the research and relevant concepts are raised and connected to the study. The concepts that are presented in the background of the study include a brief discussion of the concept of personal values, how they are conceptualised to underpin consumer behaviour. Also, the chapter briefly highlights the South African domestic airline passenger market. In essence, this chapter will set the tone for the detailed discussions of these issues/concepts in chapters 2 and 3, respectively.

In addition to the background of the study, the problem statement outlining the research gap is presented, and research objectives formulated therefrom. Then, in line with Nassaji (2019) suggestion; clear, specific and goal-oriented questions are raised to operationalise the research problem. After that, follows some sections on the significance, the delimitations of the study and a brief overview of the research methodology used to seek answers to the research questions are presented. The chapter also includes the definition of key terms that are prevalent throughout the study. Lastly, an outline of the chapters is laid out, followed by a summary of the chapter.

1.2 BACKGROUND TO THE STUDY

There is a substantial corpus of literature on consumer behaviour in general, and how airline customers evaluate airline service quality and choose airlines in particular. Majority of studies on passenger airline services seem to prefer what Oliver (1980) refers to as the disconfirmation models, for example, SERVQUAL and SERVPERF, and other traditional models. However, of late, there has been a shift towards the adoption of value-based models. Scholars from Asia, Europe and America, have immensely used such models to explain consumer behaviour. A close inspection of the body of literature indicates that there has been a low uptake of the value-based models of consumer behaviour by African scholars.

Classical literature on personal values (Thomas and Znaniecki, 1927; Allport and Vernon, 1931; Tolman, 1932; Becker, 1941; Kluckhohn, 1951; Maslow, 1954; Tonnies, 1957; Rokeach, 1973; Vinson, Scott and Lamont, 1977; Clawson and Vinson, 1978 and many others) has been instrumental in the assimilation of personal values by contemporary

scholars. The seminal work by these scholars, though stemming from diverse fields, concur that human/personal values are universal and enduring life goals and beliefs, which individuals strive to achieve. Henceforth, personal values are seen as determinants of attitudes and behaviour or as guides to actions and judgements across consumption situations (Lee *et al.*, 2014; Li and Cai, 2012). Thus, this study adopted personal values to explain the phenomenon of consumer behaviour concerning airline choice in South Africa.

Personal values, a central concept in the domains of the social sciences such as sociology, psychology, anthropology and all related disciplines (Schwartz, 2012) has been propagated and popularised in the marketing field through various theoretical models to explain consumer behaviour. These models include Rokeach's (1973) Value Survey (RVS), Gutman's (1982) means-end chain (MEC) theory, Kahle's (1983) List of Values (LOVs) and later on the Schwartz' (1992) theory of basic human values.

In this study, Schwartz's (1992, 2012) theory of basic human values was adopted as the underpinning theoretical blueprint (see detailed discussion in chapter 3). Schwartz's preliminary work of human values which spanned across eighty-two countries (Schwartz, 2012), draws from and integrates the tenets of the earlier models (e.g., the RVS and the LOV), thus making it more comprehensive. Initially, Schwartz (1992) derived ten basic human values (Achievement, Stimulations, Self-direction, Universalism, Hedonism, Power, Benevolence, Tradition, Conformity, and Security), which were concluded to be the fundamental motivations that characterise individuals in any society (Knafo, Roccas and Sagiv, 2011). Later on, Schwartz *et al.* (2001) confirmed the ten values and the circumplex structure of the theory of basic human values using the personal values questionnaire (PVQ) as the measurement.

What sets apart Schwartz's (1992, 2012) theorisation of human values from the other value models is, Schwartz went beyond presenting a typology of values to specifying the conflicts and compatibility amongst these ten values (Sarris, Knoppen and Schwartz, 2013). As a result, Schwartz (1992) determined that the values were quasi-circumplex, indicating that values opposite each other on the circle conflict while those adjacent tend

to be complementary. On that basis, Roszkowski, Kinzler and Kane (2014) aver that values are a continuum of related motives. On the same token, Knafo, Roccas and Sagiv (2011) believe that values allow for the generation of "systematic, integrative hypotheses that link multiple values to other variables, such as behaviours, attitudes, emotions, or stable individual variables."

Personal values have been adopted as a valid research phenomenon in various studies; consumer motivations, purchase intentions and choice (Wassenberg, Goldenberg and Soule, 2015; Kitsawad and Guinard, 2014; Wittmer and Riegler, 2014; Schaefers, 2013); consumer perceptions (Lin and Yeh, 2013); customer loyalty (Lee, Chang and Liu, 2010; Hau and Thuy, 2012); cross-cultural analysis of consumer behaviour (Schwartz, 1992, 2012; Knafo, Roccas and Sagiv, 2011; Cai and Shannon, 2012) and positioning (Jeng and Yeh, 2016; Pike, 2012). An extensive literature on personal values including the above studies and others (for example, Ho, Lin and Huang, 2014; Jeng and Yeh, 2016; Lee *et al.*, 2014) present a clear framework of how attributes as means link to personal values (ends) to explain consumer behaviour.

In South Africa, literature is awash with studies on the passenger airline industry, particularly choice behaviour and evaluation of airline service quality (Campbell and Vigar-Ellis, 2012; De Jager, 2012; De Jager and Van Zyl, 2012; De Jager, Van Zyl and Toriola, 2012; Lambert and Luiz, 2011; Luke, 2015; Surovitskikh and Lubbe, 2015; Luke and Walters, 2013; Henama, 2014; Mostert and De Meyer, 2010). Notwithstanding the growing omnipresence of personal values as a research phenomenon in understanding consumer behaviour (Ho, Lin and Huang, 2014), it would appear as if South African researchers are shying away from using personal values phenomenon to explore and explain airline passenger behaviour.

However, it should be noted that it was not the intention of this study to explain the reasons for not using personal values to explicate consumer behaviour in South Africa. Instead, this study sought to contribute to the body of literature of South African airline services consumers using Schwartz' theory of basic human values (Schwartz, 1992, 2012, 2015). Such a study is expected to bring a different perspective of how consumer

behaviour in general and airline choice in particular manifest within the South African domestic passenger market. Henceforth, the results of the study are expected to bolster the understanding of airline customers' motivations when choosing an airline.

It is encouraging to note that there are a few studies in the South African context, albeit in other fields, that have applied personal values to explain human behaviour. For example, an investigation of the performance of small and medium enterprises (Fatoki, 2015), evaluation of ethical issues amongst university students in South Africa (Fatoki, 2014), implications for advertising theory and practice (Jonkheid, 1999), establishing consumer and meat trader perceptions on quality and animal welfare issues of beef (Vimiso *et al.*, 2012) and suitability of Schwartz's Value Survey in the South African context (Becker *et al.*, 2017). The findings of these studies also confirm the theorisation of various seminal studies that personal values are instrumental in the formulation of attitudes and guidance of human behaviour.

Thus, based on the evidence that personal values underlie consumer behaviour, and without any study employing personal values to explain the choice behaviour of South African airline passengers, this study takes centre stage to bring a new perspective to explain consumer behaviour. The study built on the findings of various studies, for example, Wittmer and Riegler (2014), Nwanko, Hamelin and Khaled (2014), Schwartz (2012, 2017) to explain why consumers (airline passengers) place more importance on some service attributes when choosing an airline. Such an approach brings a new analytic lens to the South African passenger airline context.

An insight into consumer personal values' influence on airline choice will enable airlines to avoid over-relying on traditional consumer behaviour models which concentrate on product attributes (stimuli) as the only choice (response) determinants. Such an approach is evident with many studies on airline choice and service quality, adopting the stimulus-response analysis of consumer behaviour (Kotler and Armstrong, 2018; Yan, 2018). The risk of over-relying on stimulus-response models is, airlines and their agents might concentrate on the wrong or superficial cues to develop their services and marketing communication strategies (Shimp and Andrews, 2013).

For example, low ticket prices are the most favoured attribute identified as a decision factor (Campbell and Vigar-Ellis, 2012; De Jager and Van Zyl, 2012; Luke, 2015; Surovitskikh and Lubbe, 2015). It is, however, the meaning that passengers derive from lower prices that are critical to the design market offerings. Therefore, this study sought to provide a rich and profound explanation of airline passenger behaviour by placing personal values as the prime influence of airline choice. Such is vital to the development of marketing communication strategies (Jonkheid, 1999; Ha and Jang, 2013; Shimp and Andrews, 2013) and air travel services that can meet or even exceed customer expectations.

Reliance on traditional attribute models of consumer behaviour might lead to what Clawson and Vinson (1978) described as the disparity between marketing practitioners and academics. The authors explain that this disparity comes as a result of academics' concentration "on consumers' more rational beliefs concerning tangible product attributes and marketing characteristics" whereas marketing "practitioners are appealing for rich, deep emotion-laden values" (p.396) that stimulate and undergird consumer behaviour. The risk of what the authors raise is, airlines might end up developing services and marketing communications that address features instead of the enduring consumer needs. Consumers do not merely buy airline services, but as Cooper (2014) puts it, they buy better versions of themselves. That is, consumers evaluate airline services based on how they can instrumentally lead to the achievement of personal values.

1.2.1 The Research Context

In South Africa, the domestic passenger airline market has witnessed a phenomenal growth in terms of load factors since its deregulation up to 2015 (Wood, 2016). The liberalisation of domestic skies in 1990 opened up the domestic passenger market to nine airlines[1], six of them having joined in post-2010 Soccer World Cup[2] (Luke, 2015; Paelo, 2015). Before the domestic market deregulation, the competition was heavily regulated and skewed, favouring the national carrier (South African Airlines), which enjoyed some

---

[1] Airlines that came in as a result of the deregulation of the South African domestic market include Flitestar, Phoenix Airways, SA Express, Sun Air, Nationwide Airlines, Atlantic Airways, Interlink Airlines, Kulula, 1Time Airline and Mango.

[2] Airlines that came in post-2010 World Cup include; Velvet Sky, Fly Go Air, Cemair, FlySafair, Skywise and Blue Crane.

monopoly over the high-density routes while the likes of Comair, Link Airways and Bop Air were flying the feeder routes (Luke and Walters, 2013).

This skewed competitive landscape changed when the Government promulgated the Air Services Licencing Act: 115 of 1990, which eliminated the restrictions on market entry and exit, capacity, frequencies and tariffs (ICAO Secretariat, 2008). Among the new entrants, Kulula became the first low-cost airline to grab the opportunity, starting its operations in 2001. Sadly, most of the airlines have so far exited the market (Mhlanga, Steyn and Spencer, 2017) due to various market dynamics such as unfair and intense competition, and high operation and capital costs (Schlumberger, 2010; Paelo, 2015; Smith 2013; Wood, 2016; Mhlanga, 2017).

The result of deregulation of the South African domestic air transport industry as is the case elsewhere is a market with two types of airlines – the low-cost carriers (LCCs) and the full-line/legacy airlines (Luke, 2015). Moreover, coupled with socio-economic changes, the passenger market has experienced an expansion of passenger numbers (ACSA, 2019; Campbell and Vigar-Ellis, 2012; Myburgh *et al.*, 2006; Richman and Lyle, 2005). Mhlanga (2017) and African Airlines Associations (2016) pin the rapid expansion on the burgeoning middle-class income group.

The entry of the no-frills LCCs has affected legacy airlines' market share, for example, Moneyweb (2015) estimated that South African Airways' (SAA) market share has dropped from about 90 per cent in 1994 to less than 50 per cent. Oxford Business Group (2014) concur that low-cost carriers have profound effects, putting pressure on legacy airlines' market share. This drastic change in the industry structure has reduced the overconcentration of legacy airlines' market power. In response and to consolidate market share, legacy airlines have formed their LCCs, for example, SAA-owned Mango Airlines and Comair-operated Kulula.

On the backdrop of a highly competitive airline (passenger) market, a considerable amount of literature (Campbell and Vigar-Ellis, 2012; Fourie and Lubbe, 2006; De Jager, 2012; De Jager, van Zyl and Toriola, 2012; Lambert and Luiz, 2011; Luke, 2015; Mantey and Naidoo, 2017) has been published on the factors influencing airline choice within the

South African domestic industry. A review of these studies confirms an affinity towards the attribute (stimulus-response) models such as the Howarth-Sheth model, Pavlovian model and Engel-Blackwell-Kollat model to explain the airline choice phenomenon. Jonkheid (1999) lambasts the ubiquitous use of these models, for they fail to explain how the concrete aspects of airline services fit into consumer's life. The author cautions that concentration on superfluous factors (service attributes) which change over time, makes it challenging to develop marketing strategies that address underlying consumer motivations of travel.

As a solution, Jonkheid (1999), Thuy and Hau (2010) and Wittmer and Riegler (2014) extol the application of personal values to provide the best theoretical framework to explain consumer choice instrumental to the formulation of winning marketing strategies for airlines. Thus, this study links airline service attributes to personal values to provide an understanding of why air travellers place importance on various airline service attributes when choosing an airline and concomitant post-purchase outcomes and behaviour. The next section draws from the background outlined so far to problematise airline choice and identify the research gap for this study.

1.3 PROBLEM STATEMENT

Airline choice, though a well-researched phenomenon, remains complex to understand. Several studies, for example, Campbell and Vigar-Ellis (2012), Namukasa (2013), Luke (2015), Mantey and Naidoo (2017) and Lim and Tkaczynski (2017) among many others, have managed to identify the factors (airline service attributes) pursued by customers when choosing airlines or evaluating airline service quality. Such studies usually adopt stimulus-response models of consumer behaviour where airline service attributes are seen as the stimuli and choice as the response thereto.

However, the problem with using airline service attributes as the ultimate determinants of choice is, they do not provide a rich explanation of the choice phenomenon. Airline passenger services are made up of several airline service attributes, which, according to Gutman (1982) and Zeithaml (1988) are just a means to an end. Moreover, one airline service attribute may mean different things to different people. On this note, Philips (2014)

cautions that "consumers do not buy a product for what it is, but for what the product can do for them."

Therefore, insomuch as identifying and understanding airline choice factors is critical, it is the customers' motivations for pursuing these factors that are more important to airlines' strategists. Such insight is crucial for designing and improving market offerings, which are defined as the combination of products, services, information, or experiences offered to a market to satisfy a need or a want (Kotler and Armstrong, 2018; Shimp and Andrews, 2013). While previous studies on airline choice in South Africa and beyond have statistically substantiated the relationship between airline service attributes (service quality), satisfaction and loyalty, they fail to explain the underlying motivation for pursuing these service attributes. Thus, despite the empirical evidence, it is inconclusive as it does not explain the intrinsic motivations that lead individuals to prioritise specific airline service attributes when making airline choice decisions.

As such, this presents a gap in the existing research, which this study aimed to bridge. Some scholars, for example, Shimp and Andrews (2013) and Jonkheid (1999) amplify the shortcomings of such a gap. The authors aver that using the output (findings) of studies employing the stimulus-response models is problematic for designing airline services and marketing strategies thereof. The reason is, they do not take into account the consumers' underlying motives and might lead to the development of market offerings that do not substantially meet customer expectations or poor positioning by an airline.

There is extensive research supporting this reasoning. Such literature suggests that personal values are better placed to provide a rich understanding and explanation of consumer behaviour (Zinas and Jusan, 2017; Borg, Bardi and Schwartz, 2017a; Tey *et al.*, 2018). Unlike the service attributes that are inconstant (Wirtz and Lovelock, 2018), personal values are a manifestation of one's culture and do not change easily, even when investing considerable effort" (Krystallis, Vassallo and Chryssohoidis, 2012; Rokeach, 1973; Schwartz *et al.*, 2017). Accordingly, personal values effectively shape attitudes and behaviour and indicate what is of utmost importance to a person (Becker *et al.*, 2017; Tey *et al.*, 2018; Manan, 2016; Li and Cai, 2012). Therefore, using personal values to evaluate

consumer behaviour provides airlines with an opportunity to match their service offerings to consumers' underlying needs distinctly.

As a result, this study used personal values as the underlying motivations or criteria for choosing an airline. Guiry and Vequist IV (2015) in concurrence with Shimp and Andrews (2013) and Jonkheid's (1999) averments state that using personal values is key to the development of products that speak to the consumer's *being*, and or the development of effective marketing communications. Consequently, this leads to the provision of high service quality by airlines which is crucial for customer satisfaction and loyalty (Arambewela and Hall, 2011; Mustaffa *et al.*, 2016; Atulkar and Kesari, 2017; Thienhirun and Chung, 2017).

Furthermore, a considerable amount of literature (Luke, 2015; Paelo, 2015; Comair, 2013; Mncube, 2014) indicate that airlines struggle to stay afloat in a heavily contested domestic passenger market despite the various interventions they adopt such as strategic alliances and cost-cutting measures. In such a market, TravelStart (2015c) unequivocally states that demand management is critical airline viability. Airlines must segment, target and position their service offerings in line with consumers (passengers) end goals. Therefore, it is not enough to know the airline service attributes (often loosely referred to as customers' needs and wants), but the deep-lying purpose or ultimate goals (personal values) that customers seek to fulfil through airline services.

Thus, to become and remain an airline of choice, an airline needs to understand trallevers' personal values that are central to how they evaluate airline services attributes when choosing an airline. This study, therefore, sought to go beyond mere determination of the correlational strength of various airline service attributes. It built on the work of seminal scholars (e.g., Tolman, 1932; Kluckhohn, 1951; Rokeach, 1973; Schwartz, 1992, 2012) that indicate the centrality of personal values to human actions. It is envisaged that the study will bolster the existing literature and help airlines develop sustainable service offerings modelled around personal values. What follows in the next section are research objectives to operationalise the research problem articulated in this section.

1.4 RESEARCH OBJECTIVES

Based on the problem statement described in the preceding section, the primary and secondary research objectives are outlined below.

1.4.1 Primary Research Objective (PRO)

The primary aim of this study was *to examine and identify the consumer (passenger) personal values that underpin the evaluation of airline service attributes used to choose an airline within the South African domestic passenger market*. Several scholars (as indicated in prior sections) agree that personal values denote what is important to individuals, hence guides their behaviour. Personal values also depict the differences among individuals based on cultures, social groups, religions, political orientations and occupations (Schwartz, 2012; Becker *et al.*, 2017; Lee *et al.*, 2011). As a result, personal values can be used to predict behaviour, making them of particular importance to airline marketing decisions (Krystallis, Vassallo and Chryssohoidis, 2012).

1.4.2 Secondary Research Objectives

Together with the primary objective above, the following secondary research objectives (SROs) were also pursued in this study:

SRO 1: To identify the most important airline service attributes used by customers to evaluate and choose airlines within the South African domestic passenger market.

SRO 2: To examine the impact of airline service attributes on customer post-purchase outcomes and behaviour within the South African domestic passenger market.

SRO 3a: To assess if there is a difference in personal values influencing the evaluation of airline service attributes by low-cost carrier customers compared to full-service carrier customers within the South African domestic passenger market.

SRO 3b: To assess if there is a difference in the effect of airline service attributes on post-purchase outcomes and behaviour for low-cost carrier customers compared to full-service carriers' customers within the South African domestic passenger market.

SRO 4a: To evaluate if demographics (income and education) moderate how personal values influence the evaluation of airline service attributes used to choose an airline within the South African domestic passenger market.

SRO 4b: To evaluate if demographics (income and education) moderate the effect of perceived service and post-purchase outcomes and behaviour.

SRO 5a: To investigate if airline marketing communications effort moderate how personal values influence the evaluation of airline service attributes used to choose an airline within the South African domestic passenger market.

SRO 5b: To investigate if airline marketing communications effort moderate the effect of perceived service on post-purchase outcomes and behaviour within the airline industry in South Africa.

SRO 6: To determine if the consumer personal values also explicate post-purchase outcomes and behaviour within the South African domestic passenger market.

1.4.3 Research Questions

The study sought to achieve the primary and secondary research objectives by answering the following questions:

RQ 1a: What is the most parsimonious set of consumers' (passenger) personal values that influence airline choice within the South African domestic passenger market?

RQ 1b: Which are the most important airline service attributes used by customers to evaluate and choose airlines within the South African domestic passenger market?

RQ 2: Does the performance of airline service attributes result in positive post-purchase outcomes and behaviour within the South African domestic passenger market?

RQ 3a: Is there a difference in personal values influencing the evaluation of airline service attributes by low-cost carrier customers compared to full-service carrier customers within the South African domestic passenger market?

RQ 3b: Is there a difference in the effect of airline service attributes on post-purchase outcomes and behaviour for low-cost carrier customers compared to full-service carriers' customers within the South African domestic passenger market?

RQ 4a: Do demographics (income and education) moderate how personal values influence the airline service attributes used to choose an airline within the South African domestic passenger market?

RQ 4b: Do demographics (income and education) moderate the effect of airline service attributes on post-purchase outcomes and behaviour within the South African domestic passenger market?

RQ 5a: Does airline marketing communications effort moderate how personal values influence the evaluation of airline service attributes used to choose an airline within the South African domestic passenger market?

RQ 5b: Does airline marketing communications effort moderate the effect of perceived service on post-purchase outcomes and behaviour within the airline industry in South Africa?

RQ 6: Do consumer personal values (identified in H1) also explicate post-purchase outcomes and behaviour within the South African domestic passenger market?

Research questions, which "arise out of a perceived knowledge deficit within a subject area or field of study" (Farrugia *et al.*, 2010:278) are crucial in any research undertaking. As the central pillar of any research, research questions provide a framework, direction and cohesion of a study (Doody and Bailey, 2016). As such, research questions set the limits by illuminating the boundaries of the study insofar as literature search and methodological issues such as the research design and type of data to be collected (Kloda and Bartlett 2013; Onwuegbuzie and Leech 2006). The above questions are explored through critical literature analysis on the airline industry and its dynamics (Chapter 2) and consumer behaviour in general and choice in particular (Chapter 3).

Furthermore, the research questions were crucial for delineating the research variables and consequently, the building of the conceptual framework. Chapter 4 of this study

conceptualises the research questions into a model from which hypotheses were formulated. In Chapter 5, the research philosophy, strategy and design, data collection methods and analysis were all informed by the above research question. The last two chapters drew from the data analysis to discuss the answers, make recommendations and draw conclusions as a way of answering the research questions.

1.5 SIGNIFICANCE OF THE STUDY

First and foremost, this study is significant to domestic airlines operating within the South African domestic passenger market. As indicated, the study explored airline choice from a personal values perspective. Such an approach, as averred by several human values theorists, is key to providing a deeper understanding and explanation of how South African domestic travellers' value systems inform their choice of airlines. Knowledge of the underlying motivations of airline choice would help airlines to predict customer needs and likely behaviour towards their service offerings. Airlines can thus leverage such knowledge for segmentation, targeting and positioning.

Insomuch as personal values have been widely used and validated in consumer research across the world, the concept has not been popular among South African scholars. Only a few studies have applied personal values in South Africa; for example, Jonkheid (1999) employed personal values to illustrate how understanding a consumer's values can help develop effective advertising campaigns. In another study, Asah, Fatoki and Rungani (2015), investigated "the impact of motivation, personal values and managerial skills of managers on the performance of small and medium enterprises (SMEs)." Interestingly, Asah and colleagues found that there was a significant positive relationship between personal values and SMEs' performance.

Becker *et al.* (2017) also using Schwartz' (1992) theory of basic human values (the SVS), reported that the human values theory "holds promise as a measure to study value priorities." However, in a study by Mtutu and Thondhlana (2016), personal values, though crucial to shaping attitudes, were found not to translate into behaviour necessarily. Instead, the authors indicated that in some instances, there were exogenous factors beyond people's values that strongly influenced behaviour. In passenger airline services,

such exogenous factors such as lack of airline alternatives (for example, most routes other than the Golden Triangle routes).

Secondly, the study significantly contributes to consumer research literature theoretically and empirically. Theoretically, the study critically evaluated literature both from South Africa and beyond to enrich the consumer research discourses and thus the body of knowledge. Empirically, the study confirms the symbiotic influence of personal values presented by many studies outside South Africa. This study comes on the backdrop of several studies on the South African domestic airline market which were restricted to using traditional models to evaluate consumer behaviour, for example, Luke (2015), Luke and Walters (2013), De Jager and Van Zyl (2013), Campbell and Vigar-Ellis (2012) Lambert and Luiz (2011) and De Jager (2012). These studies focused only on airline service attributes to explain travellers' evaluation of airlines services quality and their choices decisions. Such an approach has been criticised for its simplicity and surface approach.

Whereas product attributes are the proximal aspects of a product that consumers rely on to judge a product (Wang and Yu, 2016 Kim, Kim and King (2016), it is, however, the consequences derived from these attributes concerning achieving important personal values. This can be well articulated using a famous business adage – "*Nobody wants a drill bit; they want a hole.*" Various scholars (e.g., Gutman, 1982; Lin and Yeh, 2013; Sohaimi *et al.*, 2017) opine that product attributes (in this case, airline service attributes) are the "means" by which passengers seek to achieve their life goals/end-states (personal values).

Such averments take us to the study's third significance, that is, the consumer. Air travellers become the ultimate winner as the results of a study of this nature significantly improve airline services offerings. Airlines, with a better understanding of its customers, can develop services (and experiences) that meet customer expectations and life goals. The section below provides a brief literature review for the study.

1.6 LITERATURE REVIEW

The literature for this study was divided into two chapters. The first one sought to paint a clear picture of the South African domestic airline market, together with market dynamics related to consumer behaviour. Then the second literature review chapter, which is the fulcrum of the study delves into the theoretical foundations of consumer behaviour in general, zooming into airline choice.

1.6.1 The South African Domestic Airline Market Literature Review

Despite the deregulation of the African aviation industry gaining traction around the 1960s (Button, Brugnoli, Martini and Scotti, 2015), literature shows that it only came into effect in South Africa in 1991 (Surovitskikh and Lubbe, 2015; Luke and Walters, 2013; Luke, 2015; Mhlanga, 2017). Surovitskikh and Lubbe (2015) explain that this gap was as a result of political isolation to cripple the apartheid government in South Africa (Pirie, 2006).

In search of genuine interconnectivity within the African air transportation network, ten African nations signed the Treaty on Air Transportation in Africa, known as the Yaoundé Treaty in 1961 (Button, Brugnoli, Martini and Scotti, 2015). This was followed by the initiation of the Yamoussoukro Declaration (YD) which sought to progressive liberalise African skies and have African countries commit to integrating their airlines (*ibid*). Since South Africa was under political sanctions, the government did not participate in the formative stages towards liberalisation of African skies (Brown, 2017). Still, it organically adopted liberalisation as per the IATA's articulations and in line with South Africa's national economic plans imperative, mainly post 1994.

The then South African government, though under sanctions, started the process of liberalising its airspaces in 1979 which culminated in the promulgation of the Air Services Licensing Act No. 115 (Luke, 2015; Luke and Walters, 2013). Since then, the South African aviation industry has witnessed some phenomenal growth with the domestic airline market seeing the entry and exit of some airlines. Further to that, the aviation legal framework has been strengthened. Currently, there are eight (non-chartered) airlines operating within the domestic airline market. That is South African Airways, British

Airways operated by Comair, South African Express, SA Airlink, Kulula, Mango, FlySafair and Cemair.

Several studies attest that liberalisation of air spaces resulted in air traffic growth, competition translating to passenger and economy-wide benefits (*Intervistas*, 2014; Abate, 2016; TravelStart, 2015a, 2015c). As such, Lohmann and Duval (2015) and Spasojevic, Lohmann and Scott (2018) describe liberalisation as a catalyst for the tourism and leisure industry while *Intervistas* (2014). Fu, Oum and Zhang (2010) say it is central to trade and investment flows (World Trade Organisation, 2006; Button, 2008; Air Transport Action Group, 2014). To this effect, Henama, Acha-Any and Sifolo (2016) state that in South Africa, the deregulation of the domestic market can become a catalyst for the growth of other industries, cities and towns.

On the backdrop of a growing and competitive South African domestic airline market, as indicated above, there have been several studies seeking to explain airlines' customer behaviour. These studies, for example, (Campbell and Vigar-Ellis, 2012; Heyns and Carstens, 2011; Fourie and Lubbe, 2006; Lambert and Luiz, 2011; De Jager and Van Zyl, 2012, De Meyer and Mostert, 2011) have sought to elucidate the critical factors for airline choice, and that leads to customer satisfaction and loyalty. Majority of the studies approach the airline choice question from a simplistic stimulus (in the form of airline attributes) to behaviour view, often using the traditional consumer behaviour models.

The following section briefly propounds on extant literature on consumer behaviour models and airline service attributes. It also offers the motivation behind the adoption of human/personal values to explain airline choice, and how paying attention to the importance customers attach to various airline service attributes is critical for delivering airline service quality. The section goes on to show the connection between personal values-aligned service attributes and customer satisfaction, repeat purchase intention and customer loyalty.

1.6.2 Consumer Behaviour Within the South African Domestic Airline Market

The study of consumer behaviour has been central to the field of marketing. For marketers to promptly match their market offerings to the market needs, they need to understand the underlying motivations of consumer behaviour in general fully, and customer choice in particular (Guiry and Vequist IV, 2015). Extensive research indicates that marketers widely accept culture as one of the underlying determinants of consumer behaviour. Further explaining this assertion, Hofstede and Hofstede (2005) cited in Li and Cai (2012) state that culture manifests through personal values, which according to Ladhari and Tchetgna (2015) and Ma and Lee (2012) are significant predictors of consumer choices and preferences. As such, personal values provide the much needed deep and rich explanations of consumer actions or responses to marketing efforts by airlines.

Seminal literature on personal values has become the anchor of understanding consumer behaviour in various marketing spheres. As a result, personal values have been applied to explain food consumption decisions (Arsil, 2013; Lee *et al.*, 2014; Manan, 2016; Tey *et al.*, 2018), choice behaviours in higher education (Mustaffa *et al.*, 2017; Fatoki, 2014; Chabra and Misra, 2012; Durvasula, Lysonski and Madhavi, 2011; Arambewela and Hall, 2011), tourism and travel choices (Li and Cai, 2012; Guiry and Vequist IV, 2015; Pike, 2012), accommodation decisions (Hu, Geertman and Hooimeijer, 2016; Zinas and Jusan, 2017), and shopping behaviours (Lim *et al.*, 2016; Cai and Shannon, 2012) among many others.

All these studies have demonstrated the centrality of personal values to understanding and explaining consumer behaviour. However, several studies on airline choice within the South African domestic passenger market seem to favour the traditional consumer behaviour models that explain passenger choices from a stimulus-response conundrum. For example, Campbell and Vigar-Ellis (2012), De Jager and Bin Dahari (2012), De Jager and Van Zyl (2012), De Meyer and Mostert (2011), Fourie and Lubbe (2006), and Udjo, Lubbe and Douglas (2013) all presents airlines choice as a response to airlines' service attributes (stimulus).

Notwithstanding the immense contribution to the body of knowledge on airline choice, these studies' approach to consumer behaviour is not only short-sighted but also philosophically flawed. Travellers are not necessarily after airline service attributes. Instead, these attributes become essential to them and worth being a choice criterion only if they are instrumental in the achievement of personal values (Gutman, 1982; Schwartz, 1992, 2012). Personal values are (seminally) defined as ''centrally held, and an enduring belief which guides actions and judgments across specific situations and beyond immediate goals to more ultimate end-states of existence (Vinson, Scott, and Lamont, 1977:44). Philosophically, the stimulus (attributes) – response explication is dogmatic in that it assumes that choice decisions are strictly an objective reality. Interpretivists/constructivists reject such reasoning and argue that choice decisions are subjective, underpinned by culture and the core and personal circumstances.

Therefore, the subjectivist approach supports the application of personal values to examine and explain consumer behaviour both at the micro and macro level. Henceforth, this study sought to bridge the gap created by the overreliance on airline service attributes to explain airline services consumption behaviour. By employing personal values, this study aimed to go beyond the proximal factors of consumer behaviour to deep lying issues that define individuals' life goals as shaped by societal beliefs, norms and values (culture). Now that there seems to be low or no interest among scholars studying airline services consumers' behaviours (choice in particular), this study seized the opportunity to fill that gap in providing a more reliable and rich explanation of how and why individuals choose airlines.

It is with no doubt that previous literature provides adequate evidence on the most sought-after airline service attributes. Several studies identify nearly similar airlines service attributes (Diggines, 2010; Campbell and Vigar-Ellis, 2012; De Jager, 2012; Namukasa, 2013; Luke, 2015; Khan, 2017), for example, ticket prices, safety, reliability, the security of luggage, staff courtesy and responsiveness, ease of booking and cancellation and cabin/flight condition, but with different names. However, the findings of the studies indicate that there is no outright or fixed ranking order of importance among the attributes. For instance, a study by Campbell and Vigar-Ellis (2012) found safety,

punctuality/reliability of flights, safely/carefully handled baggage, low price, friendliness, customer service and efficiency of employees as the essential attributes in order of importance, all with scores above 7.5.

In another study of the determinants of the selection of full-service airlines and low-cost carriers, Fourie and Lubbe (2006) identified seat comfort, the schedule/frequency of trips and the ticket price as the essential service attributes for both low-cost carriers and full-service customers. De Jager and Van Zyl (2012) condensed the service quality attributes into four broad categories, namely, the convenience of booking, cabin servicescape, cabin crew and timeliness of the flight. These scholars then ranked the items under each category, and comfort of booking; an opportunity to book online, convenience when making reservation/booking and availability of airline websites on the internet respectively topped the ranks. Under cabin servicescape, comforts of the seats, cabin cleanliness and quality of the food served were reported as the three items.

As for the cabin crew category which had three items; cabin crew's credibility was regarded as the most important item (*M=6.53)*, followed by cabin crew's ability (*M=6.44)* to answer questions and lastly the physical appearance of cabin crew (*M=6.14)*. On the last category (timeliness of flight), the items that were rated the most important were on-time departures and arrivals, on-time luggage delivery on arrival and speed of check-in, in that order. Other studies only concentrated on specific airline service attributes than the list, for example, frequent flier programs (Lubbe, Douglas and Mclachlan, 2016), safety (Fleischer, Tchetchik and Toledo, 2015; Koo, Caponecchia and Williamson, 2018) and ticket prices (Udjo, Lubbe and Douglas, 2013; Haarhoff, 2017).

Some studies on airline service attributes within the South African domestic airline market and elsewhere have gone beyond the business of only identifying and ranking airlines service attributes. They (for example, Mantey and Naidoo, 2017; Namukasa, 2013; Jiang and Zhang, 2016; Ganiyu, 2016; Farooq *et al.*, 2018) explore these attributes holistically, as the service quality concept, and the relationship or effects they (attributes) have on customer satisfaction and loyalty.

In the midst of all this, this study sought to explain better airline service quality which is judged on how much it instrumentally and terminally enables passengers to attain personal values. Where it does, there is sustained satisfaction, one which makes individuals achieve their instrumental and terminal values (Rokeach, 1973). Continued alignment of airline service factors with consumer personal values creates loyal customers. Having provided a brief literature review above, the following section pithily outlines methodological issues adopted to answer the study's research questions presented in Section 1.4.3.

1.7 RESEARCH METHODOLOGY

In his seminal work, Kuhn (1962) argued that research is organised into paradigms. These paradigms are in the form of communities of practice where researchers develop philosophical assumptions and theoretical frameworks which inform or guide how they relate to the world, nature and social reality. Consequently, the philosophical lenses inform how a group of researchers view the world and pervade into how they create knowledge and interpret meaning (Chilisa and Kawulich, 2012; Rahi, 2017; Rehman and Alharthi, 2016). Accordingly, paradigms are composed of ontological, epistemological, methodological and axiological perspectives (Hope, 2016; Rehman and Alharthi, 2016). Thus, in this section, these four components of paradigms are briefly expounded.

1.7.1 Paradigmatic Stance of this Study

Over the years, there has been a proliferation of research paradigms. Within the social sciences (in business research), there are three broad and ubiquitous paradigms. These are; positivism, interpretivism and pragmatism. The origins of positivism can be attributed to the French philosopher Auguste Comte (1789-1857), and it became prominent around the nineteenth century (Rehman and Alharthi, 2016; Kivunja and Kuyini, 2017; Marcella, Maura and Michelle 2018).

Crotty (1998) in Strang (2015:23) refers to the positivist paradigm as "the oldest and best-known 'researcher' philosophy, which is evidence and theory-driven". The prominence of positivist paradigm coincides with the time business management researchers (e.g. Frederick Taylor, Elton Mayo, Kurt Lewin and many others) were involved in seeking ways

of optimising businesses. Boeije, Slagt and van Wessel (2013) opine that positivism has become popular within the social sciences research domain, particularly business research.

Over time, a sub-school of thought known as post-positivism emerged from the positivist paradigm. Creswell (2014) notes that post-positivism profoundly differs from positivism. Whereas positivists naively assert that there is only one absolute truth, post-positivists concede "the existence of unobservable entities as well as the capacity to explain observable phenomena" (Kelly, Dowling and Miller, 2018). While some have argued that post-positivism fails to address the shortcomings of positivism, O'Leary (2014) argues that post-positivism incorporates intuition, holism, induction and is exploratory. In that light, post-positivism augured well with this study's research objectives; hence was adopted to answer the research questions and hypothesis.

1.7.2 Research Strategy and Design

One of the strengths of post-positivism is its multiple critical perspectives on knowledge creation (Kelly, Dowling and Miller, 2018; Neuman, 2007), thus, dispel the notion of single absolute truth in pure positivism. Accordingly, post-positivists "reject the neutrality and human detachment that are characteristic of logical positivism" (Tanlaka, Ewashen and King-Shier, 2019:741). The post-positivist modified dualism underpin the tenets of *quantitative criticalism* employed in this study to question the analytical traditions favoured by the majority of the previous studies investigating airline choice behaviour. Also, Stage and Wells (2014) suggest that this strategy (*quantitative criticalism*) seeks to improve modelling research constructs measures and analytical techniques.

In challenging the normative positivist epistemologies famous in the business research, Stage and Wells (2014) point out that critical analysis could be employed by adopting an unknown variable to improve the understanding of a phenomenon. As such, this study brought the concept of personal values to cross-analyse and explain airline choice. Personal values as an unfamiliar concept build on and strengthen the findings of previous studies on airline choice.

To operationalise quantitative criticalism, descriptive and explanatory research designs were integrated to become what Saunders, Lewis and Thornhill (2016) refer to as the *descripto-explanatory* design. Thus, beyond describing the relationship between the research variables, this study also aimed at providing a formidable explanation of the connection (or lack of) among variables. Several studies (both seminal and contemporary) found that personal values serve as guiding principles in people's lives (Schwartz, 2006); hence, undergird human behaviour.

1.7.3 Population and Sampling

For this study, the population consisted of South African residents who have used or are currently using domestic airline services. Also, potential airline customers who have never used air transport but intend to fly in future were included. From a marketing perspective, potential customers are critical for growth prospects of the business; hence, their perceptions of airlines services and their expectations are paramount for airlines.

According to ACSA (2019), there are approximately 24 million passengers transported by domestic airlines within South Africa. Due to such a large population, and in the pursuit to address the research objectives and questions, a non-simple random sampling was adopted. The sampling technique was a hybrid of convenience and snowball sampling techniques.

From the population outlined above, a sample of 326 respondents was drawn to elicit data for answering the research questions. Choosing a sample size is often filled with controversies, particularly when integrating two paradigms which for some time were believed to be incompatible. The researcher was guided by the argument that it is the research objectives and questions that are key in determining the sample size (Creswell, 2014; Molina-Azorin, 2016; Makrakis and Kostoulas-Makrakis, 2016).

Furthermore, the researcher was also guided by the sample size guidelines for exploratory factor analysis (EFA), confirmatory factor analysis (CFA) and multiple regression analysis studies. In general, exploratory factor analysis (EFA) and confirmatory factor analysis (CFA) including regression analysis are large sample methods (Kyriazos, 2019; Kline, 2016; Brown, 2015; Wang and Wang, 2012; Schumacker

and Lomax, 2016). However, Costello and Osborne (2005) indicate to the contrary, that when the data is more robust, a smaller sample can achieve adequate accuracy for these methods.

In response to the large sample rule, Kline (2016) raises a good question of, "How large is large enough?" Such a question is pertinent as there is no consensus on what is deemed a small and a large sample. This lack of consensus is evident in literature, where various rules of thumb for the determination of sample size are cited, each suggesting a different minimum figure (Wolf *et al.*, 2013; Kyriazos, 2019).

In this study, the sample size decision was guided by several rules of thumb. The first was by Kline (2016) and Muthén and Muthén (2002) who regard samples less than 100 ($n < 100$) as small to achieve statistical power as suggested by Cohen (1988, 1990). Also, a proposal by Schumacker and Lomax (2016) for traditional multivariate statistics which indicates that a ratio of 20 cases per measured variable $n = 300$ is sufficient was also relied on. For the EFA aspect of the study, the Kaiser-Meyer-Olkin (KMO) test for sampling adequacy for checking sample size adequacy for EFA (Yasir Arafat, 2016) was observed. For CFA, the researcher was guided by Muthén and Muthén (2002) CFA sample size requirements range 150 to 315 and 150 to 1025.

1.7.4 Data Collection and Analysis

As for the 324 cases indicated above, the data collection instrument was an online questionnaire which was also converted to hardcopies to allow those without internet connectivity or merely disinterested in technology to participate. The online questionnaire was distributed through emails, QR code and a URL shared on social media platforms. The hardcopy, on the other hand, was distributed in tourist destination places like Zimbali Fairmont Hotel and Pumula Lodge in KwaZulu Natal, where the researcher had the privilege of accessing during work commitments. These places were selected because most visitors there would have flown from other [South African] cities or towns to Durban.

The collected data was analysed, at a descriptive level to outline the sample and data characteristics. EFA and CFA were used to confirm factorability. At the same time, multivariate regression analysis was the primary statistical analytical method for

determining the relationships among the research variables presented in the conceptual model in Chapter 4. The researcher used SPSS 26 and AMOS 26 statistical packages for data analysis. Data on personal values were analysed as prescribed by Professor Schwartz who originated the Schwartz' theory of basic human values measured through the SVS and the PVQ (Schwartz *et al.*, 2012) (see Appendix E for his prescription on analysis of the PVQ-RR data).

1.7.5 Results and Interpretation

Data analysis was broken down into three parts to answer the six research questions raised in section 1.4.3. above. As such, this section summarises EFA, CFA and hypothesis testing results presented in detail in Chapter 6.

1.7.5.1 Exploratory Factor Analysis Results

Exploratory factor analysis has been widely used in social sciences and other fields. According to Baglin (2014), EFA is critical in assessing the dimensionality of questionnaire scales. In this study, 91 items from the questionnaire (comprising 55 items for airline service attributes, 21 items for marketing communications effort, 11 items on customer satisfaction and four items on repeat purchase intentions and loyalty) were pooled into EFA.

A series of exploratory factor analysis using maximum likelihood extraction methods, Kaiser's criteria (eigenvalue > 1 rule) as a retention method and Promax rotation were conducted. A simplified model with nine latent constructs was obtained. The Kaiser-Meyer-Olkin (KMO) Measure of Sampling Adequacy coefficient obtained for the final model was .843, conforming to Pallant's (2013) minimum criterion. Bartlett's Test of Sphericity was significant ($p < .001$). Such a result indicated an excellent 'factorability of the correlation matrix (Hair, Black and Babin, 2010; Treiblmaier and Filzmoser, 2010).

From the 55 items on airline service attributes, the EFA retained six latent constructs and were labelled as: overall airline reliability, booking and check-in, airline reputation, onboard services, loyalty programs and ticket price, and cabin features and experiences. Also, two latent constructs (marketing messages and marketing communication mix) were retained from the 21 items on the marketing communications effort. Post-purchase

outcomes and behaviour was the latent construct retained from a mixture of customer satisfaction, repeat purchase intentions and loyalty items. These nine constructs became the inputs for hypothesis testing.

The six airline services attribute latent constructs were ranked in terms of importance using their means and standard deviations to answer the research question; *Which are the most important airline service attributes used by customers to evaluate and choose airlines within the South African domestic passenger market?* The results showed that overall airline reliability was the most important attribute (*M=47.79, SD=7.59*), followed by booking and check-in (*M=25.31, SD=4.44*), onboard (in-flight) services (*M=21.13, SD=5.53*), loyalty programs and ticket price (*M=16.79, SD=4.51*), cabin features and experiences (*M=16.21, SD=3.23*) and lastly airline reputation (*M=13.17, SD=4.25*).

1.7.5.2 Confirmatory Factor Analysis Results

Confirmatory factor analysis was applied to assess the factor structure of the 19 refined personal values made up of the 57-portrait value questionnaire (PVQ) items (Krystallis, Vassallo and Chryssohoidis, 2012; Schwartz *et al.*, 2012; Cieciuch and Davidov, 2012; Schwartz and Butenko, 2014; Simón *et al.,* 2017) in line with Schwartz' analysis prescriptions (see Appendix E attached). Since calculating distinctiveness for the 19 latent variables and 57 value items may be virtually impossible (Harrington, 2008), and might introduce misspecification (Schwartz and Butenko, 2014), the four higher-order categories of values (self-transcendence, self-enhancement, openness to change and conversation values) were run separately as recommended by Cieciuch and Schwartz (2012), Schwartz and Butenko (2014), and Becker *et al.* (2017).

The model fit for these higher-order value models were acceptable based on the following benchmarks: CFI values ≥ .90 (Bentler, 1990), RMSEA values ≤ .08 (Browne and Cudek,1993), and SRMR values ≤ .06 (Hu and Bentler, 1999). The model summary statistics for self-transcendence values model χ2/df = 1.860, CFI = .98, RMSEA = .05, SRMR = .03; self-enhancement values model χ2/df = 2.446, CFI = .99, RMSEA = .07, SRMR = .01; conservation values model χ2/df = 1.228, CFI = .99, RMSEA = .03, SRMR

= .02; and the aggregated personal values model $\chi2/df = 1.935$, CFI = .99, RMSEA = .06, SRMR = .01 indicate that were acceptable.

Only the openness to change values model $\chi^2 = 5.785$, $df = 1$, CFI = .98, RMSEA = .13, SRMR = .01 had unacceptable root mean square error of .13. However, Lai and Green (2016) opine that when this happens, it does not necessarily mean the model can be rejected. These model fit results together with reliability and validity tests confirmed that 19 personal values did fit the data; hence, it could be used for further analysis which is outlined in the next section.

1.7.5.3 Hypothesis Testing Results

The study had six hypotheses (discussed in Chapter 4) that were to be addressed through meticulous data analysis. A backward multiple regression analysis was run to determine the most parsimonious set of personal values that significantly influence the evaluation and prioritisation of airline service attributes when choosing an airline. Five values were identified, that is, self-direction thought, stimulation, achievement, universalism tolerance and benevolence care values.

Then the influence of these values on airline service attributes was tested (hypothesis $H1_1$), again through backward multiple regression analysis, and self-direction thought value was found to significantly influence the evaluation and prioritisation of overall airline reliability and onboard services. Stimulation value underpinned the evaluation and prioritisation of overall airline reliability, onboard services and loyalty programs and ticket price. In contrast, the achievement value influenced booking and check-in services and onboard services. Universalism tolerance value undergirded the evaluation and prioritisation of overall airline reliability and loyalty programs and ticket price. Lastly, benevolence care value influenced booking and check-in services and onboard services. The results indicate that no personal value affects the evaluation and prioritisation of airline reputation and cabin features and experiences.

For hypothesis $H2_1$, only onboard services attribute was found to predict post-purchase outcomes and behaviour significantly. This is understandable since it is where a passenger gets to interface with an airline's service delivery mill directly. Hypothesis $H3a_1$

focused on determining if there was any difference in how personal values influence the evaluation and prioritisation of airline service attributes among low-cost carrier (LCC) customers compared to full-service carrier (FSC) customers. To test this hypothesis, a three-step process was adopted. Firstly, a Mann-Whitney U test was conducted to determine if customers differentiated airlines into LCC and FSC when making airline choices. The results indicate that travellers/passengers did not distinguish between the two airline model types.

Secondly, a test was conducted to see if there was any difference in how personal values influence the evaluation and prioritisation of airline service attributes among the two groups of customers. The results show that there was a difference in how the stimulation and universalism tolerance values influence evaluation and prioritisation of airline service attributes among the two groups of customers. Thirdly, a correlation test was conducted to understand the difference in step two further. The results of the Spearman correlation indicated that customers driven by stimulation value had an affinity towards low-cost airlines while those driven by universalism tolerance were for the full-service airlines.

In hypothesis 3b$_1$, the focus was shifted to determining if there was any difference in how airline service attributes (perceived service) impacted on post-purchase outcomes and behaviour. The results of the Mann-Whitney U test revealed that there was no difference in how airline service attributes (perceived service) impacted on post-purchase outcomes and behaviour. The next hypotheses (H4a$_1$ and 4b$_1$) focused on the moderation effect of the demographic variables, income and education levels. To test these hypotheses, a hierarchical regression analysis was employed.

In H4a$_1$, the moderation effect of income and education levels was tested on the relationships between personal values and the evaluation and prioritisation of airline service attributes when choosing an airline. The regression results reveal that income moderates the relationship between self-direction thought value and onboard services, as well as between stimulation value and booking and check-in services. Education was found to moderate the effect of stimulation value and onboard services only.

In hypothesis H4b$_1$, income was found to have no moderating effect on any of the relationships between airline service attributes and post-purchase outcomes and behaviour. In the same analysis, education was found to moderate the impact of airline reputation on post-purchase outcomes and behaviour. Hypotheses 5a$_1$ and 5b$_1$ are addressed in the next paragraph.

Hypotheses 5a$_1$ and 5b$_1$ dealt with the moderation effect of marketing communications effort (divided into marketing messages and marketing communication mix) on the relationship between personal values and airlines service attributes and the relationship between airline service attributes and post-purchase outcomes and behaviour. In hypothesis 5a$_1$, the results show that airline marketing messages moderated two relationships between personal values and airlines service attributes. The first was the relationship between self-direction thought and overall airline reliability. In this relationship, marketing messages had a small interaction effect (R^2 change). The second relationship was that between self-direction thought and onboard services where the airline marketing messages construct was found to have a small moderating effect.

In hypothesis 5b$_1$, the results indicate that only the relationship between onboard services and post-purchase outcomes and behaviour was significant. A closer inspection of the results revealed that onboard services and marketing communications mix had a direct effect on post-purchase outcomes and behaviour. However, the results also show that both marketing messages and marketing communications mix do not moderate any of the relationships between airline service attributes and post-purchase outcomes and behaviour.

The last hypothesis (H6$_1$) sought to test if personal values had a direct effect on post-purchase outcomes and behaviour. The test was carried out using multiple regression analysis, and the results were somewhat surprising. Only stimulation value was found to predict post-purchase outcomes and behaviour significantly. In the next section, the scope of this study is outlined.

1.8 DELIMITATIONS

The scope of this study is highlighted in the background of the research and the problem statement. In this section, the scope is further explained in detail. The study was delimited advertently to the South African domestic passenger market to ascertain its manageability in terms of resources before being spread wider. Following hereunder are specific delimitations that needed to be identified and justified to ensure that the findings of the study are as useful and applicable as possible by concentrating on a well-defined problem and scope.

Firstly, both legacy (full-service) and low-cost carriers licensed to operate in the domestic passenger routes within South Africa were included in the study. The researcher favoured the domestic airline market to access the passengers as the research participants easily. However, the study excluded chartered airlines (private hired flights) as they represent a different consumption perspective. The study also excluded local stopover flights operated by long-haul or regional airlines in-between domestic destinations. Secondly, unlike previous studies which focused on the dense Golden triangle routes (Johannesburg – Cape Town – Durban), this study drew its participants from the major airports (OR Tambo International Airport and King Shaka International Airport) and not routes. These airports act as hubs to various other destinations beyond the golden triangle, including flights to smaller airports.

Thirdly, the scope of the study extended the evaluation of airline choice phenomena beyond the ubiquity of airline service attributes in previous studies on airline choice in South Africa. This study brought a new dimension to investigate what influences airline choice. It used personal values to proffer a richer explanation of airline choice, articulating clearly the role played by the airline service attributes in the choice decisions.

Lastly, the researcher upon the realisation that consumer choice as a significant aspect of consumer research, can be studied through various theoretical perspectives and frameworks, it became apparent that these be streamlined to the best possible framework. Consumer behaviour research ranges from the traditional stimulus-response models such as the *homo economicus* theory (rational man), Howard-Sheth model,

Nicosia model to the value-based approaches. Amongst the value-based models, some examples include the value-attitude-behaviour, Rokeach's (1968, 1973) Value Survey, Kahle's (1983) List of Values, Gutman's (1982) means-end chain theory and Schwartz (1992, 2012) theory of basic human values.

The breadth of these models was critically reviewed (see in Chapter 3) to arrive at the best possible theoretical framework. As a result, the study was delimited to Schwartz' theory of basic human values theory. The theory, like the means-end chain theory (Gutman, 1982) distinctively explains how products, through their attributes, are considered to achieve individual life goals. However, Schwartz' (1992) theory distinction comes from its ability to present personal values as a circular continuum of motivations (Schwartz and Butenko, 2014; Cieciuch *et al.*, 2014).

Its circumplex structure enables not only the listing of personal values but also specifies their relationship (Schwartz, 2012). Accordingly, values adjacent to each other are theoretically complementary while those opposite conflict (Borg, Bardi and Schwartz, 2017). This characteristic of the theory is fundamental to the accurate targeting of marketing efforts, for example, product and marketing messages. In the following section, the key terms used in this thesis are defined and or explained.

1.9 KEY TERMS AND POINTS OF DEPARTURE

This section of the chapter seeks to bring to the fore a raft of ubiquitous concepts of the study through brief definitions of the key terms. Detailed illustrations and discussions of these terms are found in the chapters throughout this thesis document. Thus, the purposes of these terms are meant to elucidate the conceptualisation of the study as a whole.

Bilateral air services agreements (BASAs): also known as the air service agreements (*Intervistas*, 2014), these agreements are generally between two states relating to controlling market access and entry (routes and traffic rights, the designation of airlines), capacity, and frequencies (Schlumberger, 2010).

Consumer behaviour: a vital aspect of marketing, it enables marketers to understand how consumers arrive at decisions to purchase, partake, use (or not) products (goods, services, ideas or events), and it includes the cognitive and social processes that come before and after these actions (Jisana, 2014). Understanding consumer behaviour patterns enables airlines to understand when and how to intervene in the decision-making process to achieve their objectives.

Consumer choice: usually used interchangeably with consumer behaviour, choice is the action motivated by a goal(s) deemed vital to one's life (Swait, Argo and Li, 2018). Bartels and Johnson (2015) present consumer choice as consequential outcomes people pursue in consumption situations.

Customer loyalty: is a vital intangible asset and a source of competitive advantage for an organisation which is crucial for business viability. According to Ganiyu (2016) and Liu *et al.* (2012), loyalty signifies customer inclinations or degree of attachment towards the company and its product/service. Accordingly, loyalty is a commitment to repurchase intention or continued patronage of a firm or its products (Namukasa, 2013).

Customer satisfaction: in a choice and consumption situation, consumers have criteria upon which the product's performance is evaluated, and expectations are formulated. Thus, customer satisfaction often viewed within Oliver's (1980) expectation-disconfirmation paradigm is when a firm or its products meet or exceed customer expectations leading to a pleasurable feeling. Conversely, Namukasa (2013) opines that failure to meet the expectations leads to disappointment (dissatisfaction).

Deregulation/ Liberalisation: often used interchangeably, these two terms refer to the exposure of airlines to free-market forces achieved through the removal of most strict regulations on market access, entry and exit barriers, routes and frequencies, airspace freedoms, controls overpricing, and capacity (Ismaila, Warnock-Smith and Hubbard, 2014; Schlumberger, 2010). In the airline industry, liberalisation has been ascribed to increased airline service quality levels, and lower fares as more airlines (low-cost carriers in particular) enter the industry. This, according to *Intervistas* (2014), "in turn stimulates additional traffic volumes, facilitates tourism, trade, investment and other sectors of the

economy and brings about enhanced productivity, economic growth and increased employment."

Domestic airline market: the South African aviation industry is more complicated than in other African countries. It is well-developed and is the hub to various destinations globally. The domestic airline market is restricted to those airlines that service the inter-city routes. In its formative development, the South African domestic airline market was limited to the "Golden Triangle" routes (Johannesburg – Cape Town- Durban), which were initially a preserve of the national flag carrier – South African Airways. Following the deregulation of the market, more players have come in and there has been some expansion of routes to smaller towns and tourist destinations.

Full-service carriers: these are the traditional airlines whose business model comprises full-service, mainly offering pre- and in-flight services in different service classes employing complex pricing structure (Koklic, Kukar-Kinney and Vegelj, 2017). Full-service airlines excel in the following service aspects, for example, such as airport lounges and amenities, checked baggage, free meals and beverages all included in the ticket price. This type of airline uses typically a variety of aircraft, often the wide-body aircraft to allow spacious legroom and comfortable seats.

Low-cost carriers (LCC): contrary to full-service airlines, LCCs pursue cost advantages through a no-frills strategy; hence they are also referred to as the budget or discount airlines. As part of cost reduction drive, the LCCs even prefer secondary or small airports with lower service charges and usually use low-maintenance and low-fuel consumption aircraft.

Personal values: Rokeach's (1973) definition of personal values has been the reference for most studies. Rokeach defined personal values as ''an enduring belief that a specific mode of conduct or end-state of existence is personally or socially preferable to an opposite or converse mode of conduct or end-state of existence''. Schwartz (1992) simplified personal values, defining them as the "desirable goals, varying in importance, that serve as guiding principles in people's lives".

Post-purchase outcomes and behaviour: usually after interaction, experience or consumption, consumers evaluate the actual (perceived) service against their expectations. The result could be positive, indifferent or negative outcomes, for example, satisfaction and dissatisfaction. These outcomes lead to specific behaviours such as repeat purchase intention, recommending to others (ambassadorship) and loyalty.

Protectionism: refer to a litany of regulations, policies and practices that are imposed by the government as measures to protect its local industries. As such, in the airline industry, such measures restrict or limit market access and entry, including the provision of international traffic rights (de Wit, 2014; Dobruszkes and Graham, 2016). In Southern Africa, most governments believe in protecting national flag carriers at the expense of privately-owned airlines (Mhlanga and Steyn, 2016). However, those against protectionism criticise it for leading to loss of allocative efficiency, higher prices and constricted consumer choice.

Airline service attributes: refer to both service features perceived by consumers, including factors such as airline brand image, ticket prices, staff competence, service quality, airline safety and reliability, check-in, onboard meals and entertainment and many more. It is through these service attributes that airlines propose customer value to consumers. However, as Jeng and Yeh (2016) argue, service attributes are not in themselves customer value unless they facilitate the attainment of consumer's life goals (personal values).

Airline service quality: Airline service quality is the measurement of the airline's total service outputs against passenger perceptions, and or expectations. Naik and Savant (2016) as a function of the variance between service expectations and customers' perceptions of the actual service delivered. Put merely; airline service quality is the extent (or fitness) of service attributes (and consequences therefrom) in meeting or exceeding passenger expectations.

The Margo Commission: was a Commission appointed by the government of the Union of South Africa in 1979 to investigate the deregulation of the airline industry (Luke, 2013).

This commission culminated in a 'Report of the Commission of Inquiry into Civil Aviation in South Africa' (Margo 1984).

Yamoussoukro Decision: in pursuit of liberalisation of African skies (airspace), 44 African Ministers (including South Africa) responsible for the aviation industry met in Yamoussoukro, Côte d'Ivoire to pave the way for the "gradual liberalization of scheduled and non-scheduled intra-African air transport services" (Schlumberger, 2010).

1.10 THESIS LAYOUT

The study is broken into various chapters, each contributing to a credible final document that will contribute to the body of knowledge, proffer recommendations to the South African domestic airline industry and pave the way for future research in the airline industry.
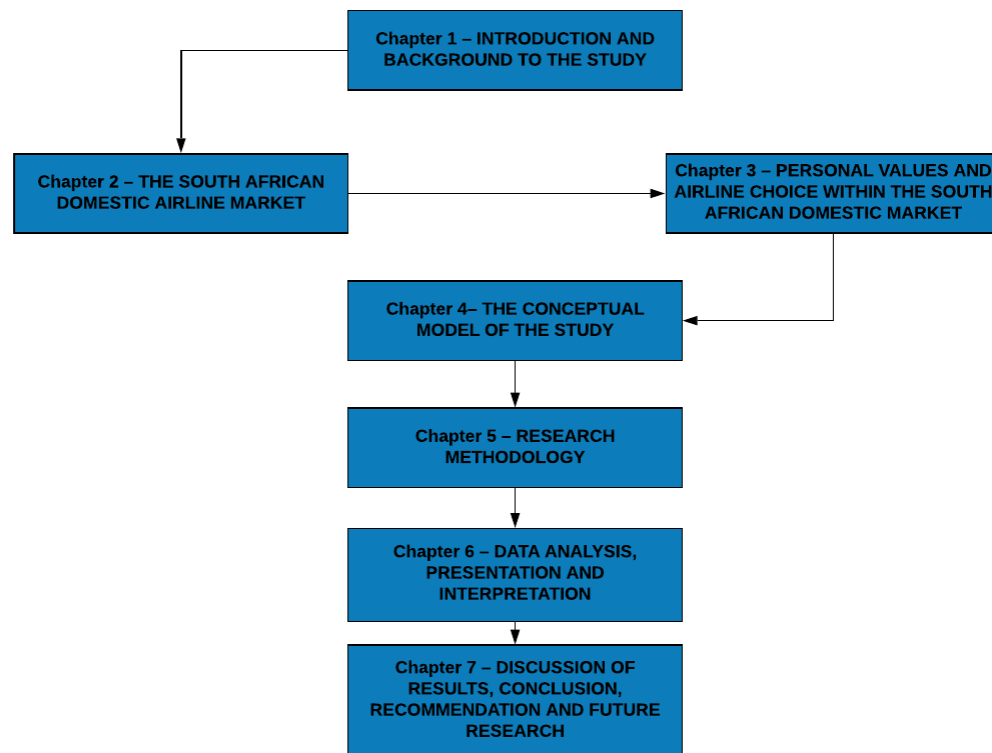
Figure 1.1: Research Plan layout (*Primary source*)

Chapter 1 – INTRODUCTION AND BACKGROUND TO THE STUDY: This chapter generally spells out the basis upon which this study was undertaken. Specifically, the chapter gave a context of the study, articulated the problem statement necessitating the study, and from which research objectives were set and research questions raised. The significance of the study was also stated together with delimitations. Essentially, it was meant to give the reader an insight into the study.

Chapter 2 – THE SOUTH AFRICAN DOMESTIC AIRLINE MARKET: The purpose of this chapter is to give an overview of the structure and competitive state of the South African domestic passenger market emanating from policy shift which slowly obliterated protectionism through liberalisation of airspaces. Thus, the chapter narrates the policy milestones that shape the South African domestic market, opening up to low-cost carriers into the market.

Chapter 3 – PERSONAL VALUES AND AIRLINE CHOICE WITHIN THE SOUTH AFRICAN DOMESTIC MARKET: In this chapter, detailed literature on consumer behaviour models is critically reviewed. The review starts from the traditional models and stretches to the values-based models. A comparative analysis of the values-based model is performed, resulting in the choice of the theoretical framework undergirding the study.

Chapter 4 – THE CONCEPTUAL MODEL OF THE STUDY: This chapter presents the conceptual model depicting the relationship amongst the variables of the study. The relationships are operationalised through the hypotheses. This study is a vital precursor of the methodological aspect of the study discussed in the ensuing chapter.

Chapter 5 – RESEARCH METHODOLOGY: The chapter outlines the philosophical standpoint of driving the methodological aspects of the study. This chapter packages these aspects by adopting Strang's (2015) research process – research ideology, strategy, method (herein also termed as design) and techniques. Also delineated in this chapter will be the ethical issues and a brief of data analysis. In essence, this chapter expounds the procedures that were adopted to ascertain that the findings of this study and valid and reliable.

Chapter 6 – DATA ANALYSIS, PRESENTATION AND INTERPRETATION: This chapter presents the data collected and applies all analytical methods consistent with the achievement of the research objectives and ultimately, the answering of the research questions. Through the data analysis, the conceptual model is tested. Thus, together with a wholesome of the analytical approaches, the chapter is the pedestal of the ensuing chapter, which will concentrate on discussing the results of the study.

Chapter 7 – DISCUSSION OF RESEARCH RESULTS: In this chapter, the research results arrived at in the previous chapters expansively discussed against the research problem, objectives and questions. Thus, the theoretical and literature underpinned hypotheses presented in Chapter 4 are either confirmed or disconfirmed, and limitations of the study are revealed in this chapter. Furthermore, the researcher proffers recommendations as informed by the findings, theoretical contributions and supported by existing literature. Future research prospects arising from this study's findings and conclusions are highlighted as a further contribution to the existing literature as well as proffering solutions to business problems.

1.11 CHAPTER SUMMARY

This chapter, as the introductory part of the thesis, laid the foundation for the study. The chapter presented the background of the study supported by an extensive review of existing literature on consumer research and the dynamics of the South African domestic airline market. The background of the study culminated in the identification of the research problem which was operationalised through the research objectives and questions. The chapter also outlined the importance of the study and the delimitations thereof. Also, the main concepts in this study are delineated through the definition of the critical terms repeatedly used throughout the study. After that, the outline of the thesis is presented for easy navigation of the thesis document.

The next chapter, which provides a detailed discussion of the South African domestic airline market will outline how the liberalisation of South African airspace has impacted on the market conditions. For example, there has been steady growth in passenger numbers, thus attracting investments into the sector. More airlines entered the market

making it very competitive, therefore, making it vital for airlines to astutely understand the underlying motivations of air travel services consumers. Such an understanding will enable them to carry out differentiation strategies key for survival on the market front.

CHAPTER 2: THE SOUTH AFRICAN DOMESTIC AIRLINE MARKET

2.1 INTRODUCTION

The previous chapter introduced this study by outlining the background and the context of this study in general. More fundamental and culminating from the background and context was the research problem which this study sought to address. The research problem was operationalised through the research objectives and questions which were critical in driving literature review throughout the study.

As depicted in Figure 2.1, this chapter extends the background and context of the study by providing a brief history of the African aviation market. It draws on an extensive corpus of literature on the liberalisation of African skies in general and the South African market in particular, including the benefits thereof, to characterise the current state of the airline industry. The prime purpose of this chapter is to assist the reader with an understanding of how the South African domestic airline market is structured. The chapter focuses on the historical growth trajectory of the aviation (passenger) market by detailing the milestones, pre- and post-1994. Furthermore, an overview of the airlines currently servicing domestic routes, their competitive positions and strategies are presented and discussed in light of the research problem.

The chapter also discusses the adoption of airline services in South Africa, passenger profiles and consumption patterns over the same time, which spells out the competitiveness of the market. As indicated under the delimitations (scope) of the study in Chapter 1, this chapter does not discuss the technical issues such as costs of fuel, parts, servicing and other ground services that also impact on the viability and service quality of airlines. The airline service attributes are also not discussed in this chapter but are discussed in Chapter 3 as a vital construct of consumer behaviour.

Figure 2.1 below provides a graphical map for the chapter.
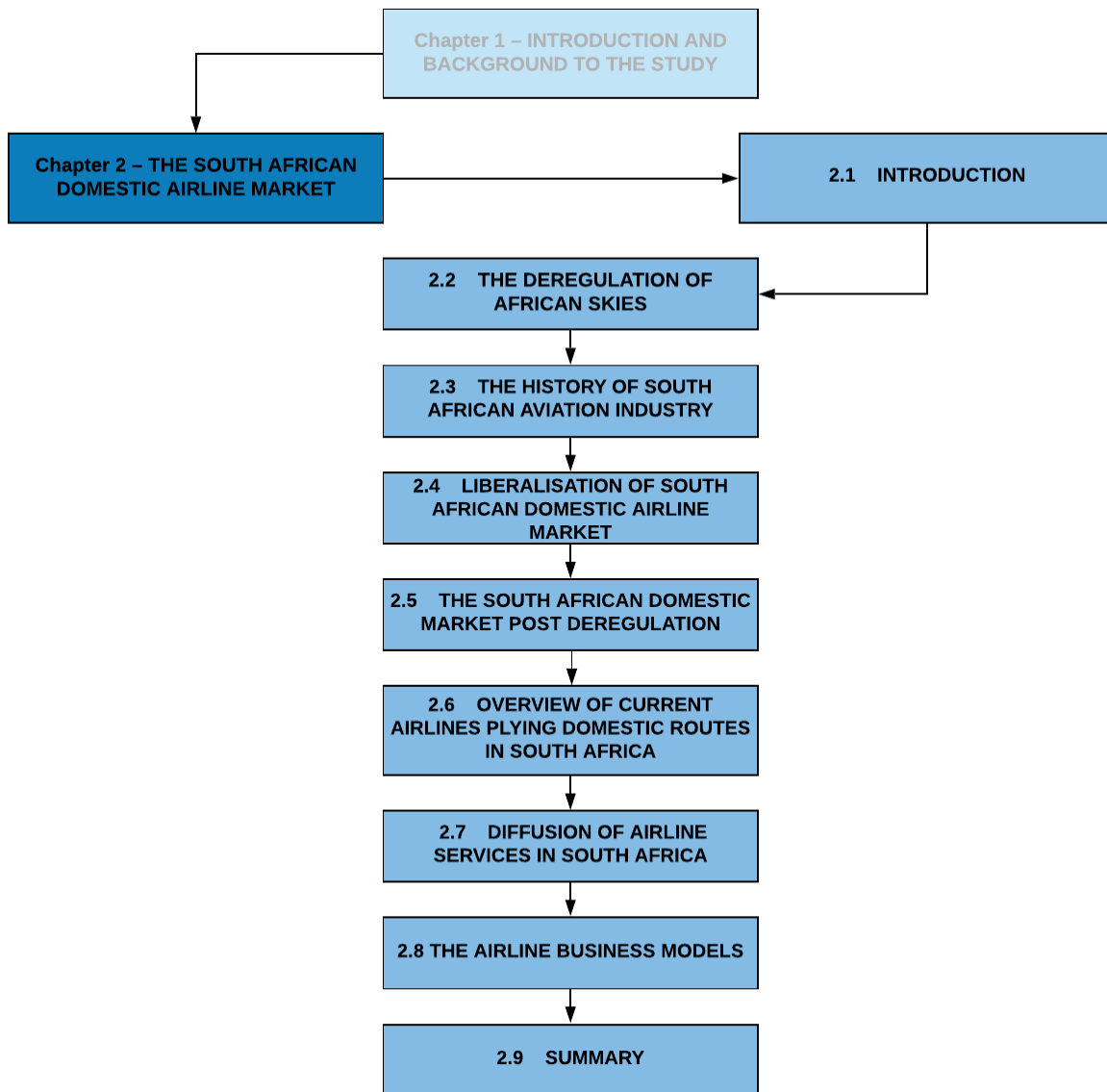
Figure 2.1: Chapter 2 Structure (*Primary Source*)

This chapter is a pivotal precursor of the following chapter in that it lays a foundation about the South African domestic passenger market and gives a general overview of the African aviation industry. Over and above, the chapter is pertinent to the understanding of airlines service attributes (service quality) by different airlines operating within the South African domestic passenger market. However, the chapter does not include the airport infrastructure and services controlled by the Airports Company of South Africa (ACSA)

and travel agencies offered services. It only focuses on service factors that are within domestic airlines' locus of control.

2.2 THE DEREGULATION OF AFRICAN SKIES

Existing research shows that in Africa, deregulation of the aviation industry started gaining traction around the 1960s. Button, Brugnoli, Martini and Scotti (2015) cite lack of improvement in good interconnectivity within the African air transportation network as the reason why in 1961 ten African nations signed the Treaty on Air Transportation in Africa, known as the Yaoundé Treaty. The authors state that this initiative led to drift from the rigid bilateral air service agreements (BASA) adopted from the Chicago Convention. In 1988, a move towards progressive liberalisation of African skies was initiated, through the Yamoussoukro Declaration (YD). This declaration sought African countries to commit to integrating their airlines (Button *et al.*, 2015).

Following the slow progress of the implementation of the YD, some African countries (Ghana, Sierra Leone, Cape Verde, Guinea Bissau, Gambia and Nigeria) met in what became known as the Banjul Accord for an Accelerated Implementation of the Declaration. These countries recognised themselves as a single geographical, commercial air transportation operations zone. Just after the Banjul Accord, was the Abuja Treaty of 1991, a follow-up to the Organisation of African Unity (OAU) African Economic Community (AEC) (Schlumberger, 2010). The Banjul Accord was aimed at stimulating economic integration, and also to fast track the implementation of the YD through its Article 10 (*ibid*).

Subsequently, forty-four signatory African countries committed in 1999 to deregulate their skies through what came to be known as the Yamoussoukro Decision (note not Declaration). This treaty was earmarked to promote regional air markets open to international competition (Button *et al.*, 2015). According to Surovitskikh and Lubbe (2015), BASAs remained the primary instrument of air transport liberalisation. Of the forty-four signatories, South Africa was not part thereof (Brown, 2017). Nonetheless, South Africa managed to organically adopt liberalisation guided by the national economic

plans' imperative, mainly post 1994. IATA's articulations in addressing airspace barriers also guided South Africa in deregulating her airspace.

The process of moving to deregulate would not come easy though, as the then South African Minister of Transport, Dipuo Peters put it; the African aviation industry is still lagging behind the rest of the world due to what she termed political gatekeeping (Van Wyngaardt, 2015). In concurrence, Button *et al.*, (2015) also decry the purported integration (airspace deregulation in particular) as minimal and much rhetoric by politicians and other involved groups.

Button and his colleagues were surprised that despite the global evidence on the significance of liberalising air transportation to stimulate economic development, many African governments are still maintaining restrictions on entry into their aviation industries (Bofinger, 2017). That is, national airspaces and airlines are still seen as some form of sovereignty and strategic to the political economy, hence so much protectionism. It, therefore, indicates why the majority of African States are still practising protectionism, in favour of their national carriers.

To this effect, Crawfurd (2013) and Button, Martini and Scotti (2015) reveal a sad state of affairs in that Africa only accounts for less than 2 percent of global airline passenger traffic. This state of affairs is prevalent despite evidence of growing passenger traffic flows globally due to factors such as privatization, regional integration, globalisation, consolidation as well as deregulation and liberalisation (Steyn and Mhlanga, 2016; Surovitskikh, Lubbe and Louw, 2012; Schlumberger, 2010). Campbell (2014) and Zweigenthal in CNBCAfrica (2013) corroborates this by mentioning that the performance of African aviation has failed to take advantage of liberalisation, leading to international airlines to gain a foothold on African airspaces.

However, Van Wyngaardt (2015) acknowledges that there are pockets of like-minded countries that have made strides in liberalising their airspaces. These countries (South Africa, Namibia, Angola, Algeria, Senegal, Nigeria, Tunisia, Uganda, Kenya, Ghana, Egypt and Ethiopia) are mentioned in the IATA (2014) report as having been key to the liberalisation of the African airline industry as a whole. South Africa, which is at the centre

of this study, is named as a shining beacon in the Southern Sahara for championing liberalisation of her air spaces. As such, South Africa has become a leader in the African aviation industry (Campbell, 2016; Schlumberger, 2010). Its aviation infrastructure (specifically the OR Tambo International Airport, Cape Town International Airport and King Shaka International Airport) is counted as the best in the continent, handling all sizes of aircrafts both local and international.

In the year 2015, the African Union in pursuit of creating a single unified air transport market in Africa conceptualised the Single African Air Transport Market (SAATM) as its flagship project (African Civil Aviation, n.d.). This was in recognition of the impact of liberalisation of Africa's civil aviation on the continent's economic development and integration agenda. The SAATM was launched in 2018 to expedite the implementation of the Yamoussoukro Decision (IATA, 2016). However, despite all the efforts to evolve African aviation into a single market where airlines enjoy all the freedoms of rights, Governments are still stuck with their sovereignty guns, protecting their state-owned airlines. The following section outlines the remnants of protectionism in Africa and their impact on aviation development and ultimately on Africa's economic growth and integration plan.

2.2.1 Reasons for Protectionist Practices in Africa

It is unfortunate that despite all the efforts to liberalise airspaces by adopting the Yamoussoukro Decision (YD), some African countries are still reluctant to let go of protectionist aviation policies. IATA (2016) cites lack of competition regulatory framework in many countries as the main reason for slow progress in opening up their skies and variance in the development stages of the signatory countries. As such, opening up to competition could be detrimental to their national carriers. However, it is crucial that these countries see beyond their national carriers, and think of the downstream benefits such as tourism, trade facilitation and access to air travel by their citizens.

Other reasons for non-implementation of the YD by member-states, thus continuance of protectionism is detailed below:

2.2.1.1 Lack of political commitment and unification

According to Surovitskikh and Lubbe (2015), lack of political commitment and unification leads to failure to unify liberalisation at national and continental levels. The authors state that most of the member-states have failed to establish competition rules, dispute settlement mechanisms and operational monitoring bodies. As a result, they choose to keep restrictive bilateral air services agreements (BASAs) (Schlumberger, 2010). This is somehow understandable as African countries are still at their developmental state, some with resource and aviation infrastructure challenges, for example, financial resources and human talent constraints (Intervistas, 2014). For South Africa, Henama (2015) points at the national transformation plan; for example, affirmative action policies as causing the political stir affecting the industry.

2.2.1.2 Aviation Infrastructure Variances

Developmental variances in infrastructure, aircraft safety and security systems are also cited as impeding the liberalisation of African skies (Surovitskikh and Lubbe, 2015). IATA (2016) say such weaknesses leave many African carriers exposed to severe restrictions by, among others, EU safety regulators. Schlumberger (2010) reports some minor progress on safety and quality issues with South Africa emerging as the best and thereby becoming the hub of African aviation. South Africa has world-class airport facilities and modern aircraft fleet compared to its African peers.

In light of the above, most African governments tend to exercise caution as liberalisation may harm state-owned airlines (Heinz and O'Connell, 2013). Thus, these governments adopt restrictive measures to protect their national carriers from competing with the well-resourced airlines such as the South African Airways (SAA) within the region and other international carriers such as Emirates Airways, and British Airways. Dobruzskes and Mwanza (2007) state this difference as the reason for some African governments to maintain restrictions on the 5th, 6th, 7th, 8th and 9th air freedoms to protect the national airlines; hence, limit full liberalisation.

2.2.1.3 Ineffective Monitoring of YD Implementation

Articles 9.1 to 9.3 of the YD stipulates that a Monitoring Body should be in place to assess and oversee the implementation of the decision. However, as Schlumberger (2010) asserts, this mechanism is not effectively reinforced. Furthermore, governments regard the implementation of the agreements as a sovereign issue which is at their discretion. Such an approach leaves the privately-owned airlines playing in a not so level market space. For example, SAA has received guarantees from the South African government totalling more than ZAR20 billion (South African Government News Agency, 2015), to the chagrin of Comair who had to approach the Courts of law on unfair practices (Maqutu, 2015).

Intervistas (2014) states that in response to these, IATA intends to exert its influence on accelerating the pace of Yamoussoukro Decisions' implementation. IATA and the African Union, like all proponents of airspace liberalisation, believe that there are a lot of benefits to accrue to African economies and passengers (Brown, 2017; Njoya, 2016). The benefits are thus discussed in the section below.

2.2.2 Benefits of Liberalisation of African Skies

A report by Intervistas (2014) commends airspace liberalisation for air traffic growth, which translates to passenger and economy-wide benefits. Figure 2.2 depicts the downstream effect of airspace liberalisation. In this diagram, Intervistas (2014) illustrates how liberalisation of airspaces has benefited not only the passengers but also the broader economy. For the passengers, benefits have come in the form of new routes and increased frequencies, shortened travel times between cities and airfare savings (*ibid*). For example, Abate (2013:1) reports a "40% increase in departure frequency in routes that experienced some type of liberalisation compared to those governed by restrictive bilateral arrangements."
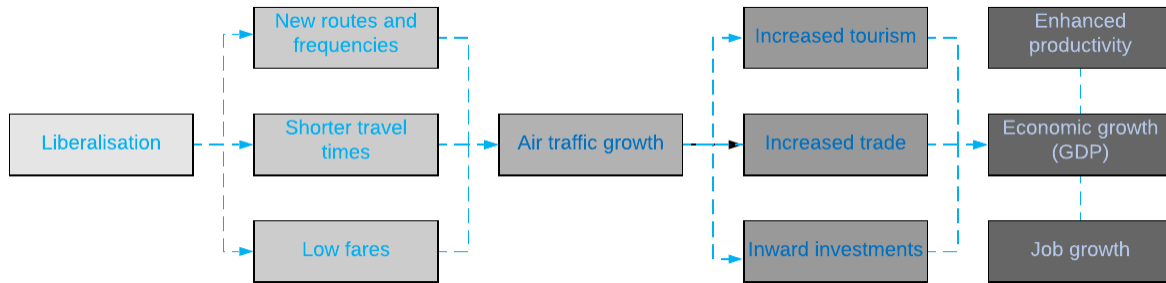
Figure 2.2: Liberalisation flow model (*Adapted from Intervistas, 2014*).

The impact of airspace liberalisation as depicted in Figure 2.2 is evident in the South African domestic market, where after its deregulation in 1991, there has been an increase in routes other than the Golden triangle, flight frequencies and reduced ticket prices (TravelStart, 2015a, 2015c). The market has also become intensely competitive. In addition to passenger benefits, the aviation industry also benefits as air traffic growth often attracts investments, including from new players such as low-cost carriers. As a testimony of the impact of liberalisation, Boeing Commercial Aeroplanes (2014) forecasted that on average, African revenue passenger kilometres (RPK) would grow by 5.7 percent per annum between 2013 and 2032. Intervistas (2014) reports that due to a substantial fall of ticket prices, air transport services demand shot up by 81 per cent.

Figure 2.2 also illustrates that air traffic growth (as a result of liberalisation) is an indispensable complementor for tourism (Lohmann and Duval, 2015; Henama, 2015; Spasojevic, Lohmann and Scott, 2018), and it improves trade flows and inward investment movements (Intervistas, 2014; Fu, Oum and Zhang, 2010). Conversely, tourism is equally crucial for the performance of the aviation industry, for example, the development of charter airlines, new routes (especially to leisure destinations) and hubs (Bieger and Wittmer, 2006; Lohmann and Duval, 2014; Lohmann and Vianna, 2016). The reason for the centrality of the aviation industry to tourism is, most international tourists travel by air transport (UNWTO, 2015); hence improved and efficient (operationally and prices) air transport is key to tourists' movements.

Furthermore, the aviation industry is key to stimulating trade, attracting investments in various sectors of African economies and connecting Africa to the global supply chain.

Therefore, this suggests that liberalisation of African aviation can lead to increased productivity, creation of employment across various sectors of the economy and ultimately improve GDPs of the countries involved (IATA, 2016). For example, Intervistas (2014) estimated that liberalisation would "create 155,100 jobs in aviation, tourism, and the wider economy", thus contributing 0.7% of the GDPs of the twelve countries under study. Also, the World Economic Forum (2016) reported that the air transport industry accounted for 7 million jobs in Africa and contributed above US$80 billion to African States GDPs.

However, it must be noted that this study's focus is not on the effects or impact of liberalisation. Only an overview of the continental aviation industry is proffered. Such is essential since the aviation industry is so integrated and all markets' performances are interdependent. That is to say, the success of the South African aviation and economic development and integration agenda is dependent on the cooperation it gets from other countries, in terms of airspace agreements. Hereunder, the section presents the history of the South African domestic aviation industry.

2.3 THE HISTORY OF SOUTH AFRICAN AVIATION INDUSTRY

There is no consensus on the genesis of South African aviation. Stander (n.d.) states that it can be traced back to 1907 when a civil engineer; John Weston, constructed an aeroplane which he later shipped to France to get it fitted with a Gnome rotary engine (50hp). The Department of Transport (2013) states that it was in 1913 where the South African aviation industry earnestly began when citizens were invited to join the South African Aviation Corps (SAACs) and trained as officer-aviators and be part of defence forces.

Contrary to the earlier views, Mhlanga and Steyn (2016) argue that it began in 1929. Supporting Mhlanga and Steyn's view, SAA Museum Society (n.d.) attribute the genesis of the aviation industry to Major Allister Miller who founded Unions Airways after he was awarded a contract to transport mail between Cape Town and major cities. After that, Unions Airways gradually became a passenger plane (Pirie, 2006). However, due to a series of plane crashes which plunged it into financial and operational crisis, the

Government took over the airline in 1934 and made it the first national passenger airline (Gavin, 2013; Ndhlovu and Ricover, 2009), and was renamed as South African Airways (SAA, 2017).

In 1945, Comair, a new private airline, was established and started operating in 1946 (Goldstein, 2001). South African Airways (SAA) was protected from private airlines, through the Air Services Act, No. 51 of 1949 (International Air Services of 1949). This law was promulgated to ensure that SAA was the only one plying all main domestic routes ahead of private and international airlines (Luke and Walters, 2013; Mhlanga and Steyn, 2016). Section 20 of the Air Services Act required all new entrants interested in main routes to demonstrate that SAA was not servicing the routes adequately (Brits, 2010). According to Ssamula (2008), such was virtually impossible; hence, left SAA enjoying a monopoly over high-density main routes.

After Comair entered into the market, Link Airways and Bop Airways followed suit in 1978 and 1979 respectively, thus presenting a structured passenger sector. However, as Section 20 of the Act would dictate, these airlines were relegated to secondary (feeder) routes only (Luke and Walters, 2013). Also, to note, the International Air Transport Association (IATA) was founded at the time Comair entered the South African market. SAA was one of the founding airlines (SAA, 2017). This opened up the South African airline market to the global network and became the foundation of South Africa's move towards liberalisation of her skies. Liberalisation paved the way for strategic alliances and more robust connections among South African airlines with other airlines to grow industries such as tourism and leisure following a gradual growth of international trade and sector (World Trade Organisation, 2006; Button *et al.*, 2015; Air Transport Action Group, 2014).

Globally, the airline market was heavily regulated until the late 1970s when the United States initiated deregulation through the Airline Deregulation Act of 1978 (Peterson, 2018; Heinz and O'Connell, 2013). Before this, various Governments were protective of their national carriers from private players. Unfortunately, such a protectionist strategy has been labelled as the chief architect of inefficiencies associated with many national carriers

(OECD, 2010). In South Africa, this is evidenced by the perennial failure (loss running into billions of Rands) of the national carrier (SAA), which on numerous times had to be bailed out by the Government (Frankson, 2017; BusinessTech, 2017; Paelo, 2015).

OECD (2010) also affirms that trade liberalisation (including in aviation) is instrumental in avoiding inefficiencies and uncompetitive behaviours that are mostly synonymous with protectionism. Globally, inter-country air transport was initiated through the Chicago Convention of 1944 where international bilateral air services agreements (BASAs) system was established and is still used to govern international air transport to date (Surovitskikh, 2012). This section laid out how the South African aviation industry came into existence; the ensuing one offers a critical discursive view on the liberalisation and deregulation of the South African domestic market.

2.4 LIBERALISATION OF SOUTH AFRICAN DOMESTIC AIRLINE MARKET

The meteoric rise of the South African local market can no doubt be attributed to the liberalisation of the country's airspace. It is without any doubt that liberalisation of South African's skies has shaken the aviation sector, impacting on privately owned airlines (Steyn and Mhlanga, 2016) and the state-owned South African Airlines. As a result of liberalisation, the low-cost carriers have entered the market, leading to increased competition. Below, the genesis of liberalisation in South Africa is presented.

The deregulation of the South African domestic passenger market followed a decision taken by the Government in 1979 to look for ways of reorganising the aviation industry (Luke, 2013). The decision culminated in the Margo Commission, followed by the National Transport Policy Study (NTPS) in 1985 (Luke and Walters, 2013). The Margo Commission produced the 'Report of the Commission of Inquiry into Civil Aviation in South Africa' (Margo in Luke and Walters, 2013) which espoused the tenets of deregulation. Goldstein (2001) states that the Margo report was followed by the 1987 White Paper on Privatisation and Deregulation of the airspace.

Later on, efforts to deregulate the sector finally paid off when the Domestic Air Transport Policy of 1990 was published (Luke and Walters, 2013). This policy became the yardstick for deregulating the domestic air transport services in South Africa. Again in 1990, the Government also gazetted into law - the Air Services Licensing Act No. 115 (Air Services Licensing 1990). The much-awaited liberalisation of the South African airline market, which officially manifested in 1991 eliminated restrictions on market entry and exit, routes, capacity, frequencies, and tariffs (ICAO Secretariat, 2008). This opened up the domestic passenger market to new airlines.

This law (the Air Services Licensing Act No. 115), together with other eased regulatory frameworks burst SAA's strict protection bubble espoused in the Air Services Act, No. 51 of 1949, leaving it to battle it out with privately-owned airlines and low-cost carriers. In 2006, the Airlift Strategy was developed to unblock obstacles through regulatory mechanisms as well as bilateral and multilateral air services negotiations (Surovitskikh and Lubbe, 2015; Surovitskikh, 2012). The Airlift Strategy was later revived in 2015 to align it with numerous strategies arising out of the BRICS alliance in addition to the National Development Plan (Brown, 2017).

Surovitskikh (2012) accentuated that the Airlift Strategy was also intended to accelerate tourism growth, enhance the prospects of South Africa as a preferred air travel destination and to synchronise the basis for bilateral air services negotiations with other national priorities. The strategy supported the Millennium Development Goals (MDGs), continental integration initiatives such as those embodied in the African Union (AU) and New Partnership for Africa's Development (NEPAD) (Department of Transport, 2013). A detailed account of the effects of deregulation of the South African airspace is presented in the following section.

2.5 THE SOUTH AFRICAN DOMESTIC MARKET POST DEREGULATION

Before proceeding to discuss issues arising out of the deregulation of the South African aviation industry, it is noteworthy to highlight that only four airlines were operating within

the South African domestic passenger market. These were SAA, Comair, Link Airways and Bop Air (Luke, 2015; Luke and Walters, 2013). Immediately after the widespread deregulation in 1991, Luke and Walters (2013) state that a flurry of airline entries and exits has been witnessed. Now the traditional four had to face new competition such as Flitestar, Sun Air, SA Express, Phoenix Airways and Atlantic Airways among those who entered between 1991 and 1995.

Upon entry, Flitestar started servicing the main routes, Golden Triangle in particular, which had been a preserve for SAA (Luke and Walters, 2013). In 1992, after noticing that SAA had an unfair advantage over other airlines because of its ownership of aviation infrastructure and related services, it was recommended that a neutral company be created to take over the aviation infrastructure and services (Mhlanga and Steyn, 2016; Ssamula, 2014; Federico, 2013). The company, the Airport Company of South Africa (ACSA) was formed in 1993 under the Airports Company Act of 1993 (Ssamula, 2014; Pirie, 2006). The transfer of the infrastructure such as airports, related equipment and services was in a way, a form of deregulating the industry.

Before deregulation, SAA enjoyed 95% of the domestic market (Steyn and Mhlanga, 2016; Ndlovu, 2001), but its fortunes changed after that. In response to the waning chances, and to consolidate its market position, SAA initiated a partnership with new entrants, SA Express and Airlink (changing its name to SA Airlink). However, its market continued to tumble. Orlek (2010) estimated that in 2010, SAA's share of the domestic market had plunged to between 50% to 55%. Since the deregulation of the market allowed many players into the market, Steyn and Mhlanga (2016), however, state that the majority of the entrants did not stay long.

Flitestar and Nationwide Airways lasted for three years; Sun Air for five years, while Phoenix could not even survive for more than a year, and Atlantic Airways operated only for three months. Mhlanga (2017) concedes that this failure rate resulted from an intensely competitive deregulated airline market. Elsewhere, Steyn and Mhlanga (2016) argue that the high turnover (rate of entry and exit) of airlines cannot be entirely attributed to increased competition. Instead, they point at mismanagement and other issues. Surovitskikh (2012) corroborates Steyn and Mhlanga's view by mentioning that Flitestar

exited the market due to high operational costs associated with a weakening exchange rate (Surovitskikh, 2012).

In the year 2001, Kulula became the first low-cost carrier (LCC) to enter the deregulated aviation scene (Kulula, 2017; Flightside, 2013). 1time followed Kulula in 2004 (Planespotters, 2013) and Mango in 2006 (Flightside 2012; Luke and Walters, 2013). The market remained promising for potential players with Velvet Sky joining the fray in 2011. A year later, in 2012, Velvet Sky, together with 1time, exited the market due to financial challenges (CH-aviation, 2012; Henama, 2014). After that, a new breed of entrants came into the market, that is; FlySafair, Blue Crane and Skywise. FlySafair entered in 2014, while Skywise and Blue Crane both came in 2015. Of all the low-cost carriers that entered the domestic market from 2001, only Kulula, Mango Airlines and FlySafair are still operational. Skywise and Blue Crane ceased operations in 2017 and 2017 respectively.

2.5.1 Impact of Airspace Liberalisation on the South African Domestic Airline Market

Liberalisation has undoubtedly come with enormous benefits, as stated in a report compiled for IATA by Intervistas (2014). Figure 2.3 is a testimony of the impact of liberalising African skies in general. The Intervistas report indicates that South Africa's passenger movements, as of 2013, had increased by more than 54% compared to numbers before the liberalisation of the market in 1991.

Figure ES-1: Passenger Traffic Impact of Liberalisation
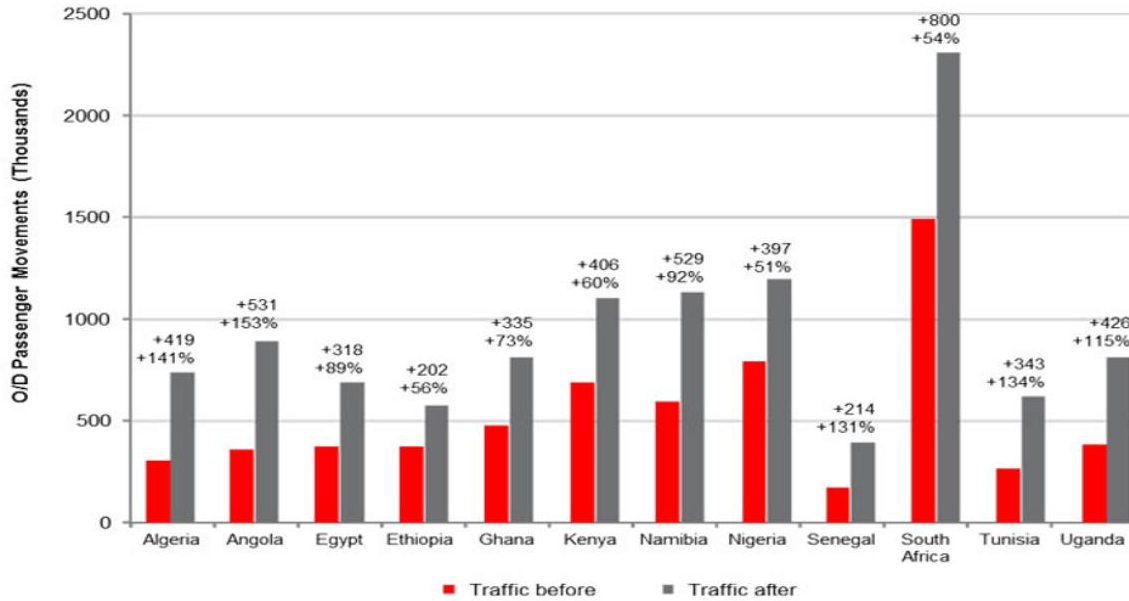
Figure 2.3: Passenger Traffic Impact of Liberalisation (*Source: Intervistas, 2014*)

The passenger movement figures and percentages for the South African domestic airline market shown in Figure 2.3 above are illustrative of a market that has grown phenomenally. Brits (2010) alludes this big jump in air traffic to LCCs that have attracted large numbers of many South Africans (who were not keen to fly due to exorbitant ticket prices) through discounted air ticket prices. Liberalisation did not only result in the removal of the previous restrictions on airline prices but also in decontrolling the previously protected routes, thus allowing the LCCs to service the dense Golden triangle routes. In addition to deregulation, there has been a massive socio-economic shift; South African markets have witnessed the emergence of the black middle class (aka black diamonds) as mainstream consumers (Burger *et al.*, 2017). This social class has been reported as more prone to fly for both business and leisure (Sithole, 2012).

In Table 2.1 below, Intervistas (2014) confirms the impact of liberalisation on ticket prices in twelve African countries. Senegal emerged the biggest beneficiary, scoring a 35% decrease in ticket prices. South Africa recorded a 28% decrease while Kenya and Namibia scored the lowest decline. For the South African domestic market, Gordon

(2015) states that this resulted in a peak of passenger numbers by 2.4%, attributed an increase of entry to new airlines - Skywise and FlySafair. Prices in routes flown by these two airlines dropped by as much as 39% (Mhlanga, Steyn and Spencer, 2017). However, the author raised a concern that the growth failed to fill up the 5% additional capacity brought by the entry of these airlines. On the flip side, this is an indication of untapped demand.

Table 2.1: Estimated Fare Impact of Liberalisation

Country	% Reduction in Average Fares	Total Savings for Existing Users (US$ Million)	Increase in Consumer Surplus (US$ Million)
Algeria	-31%	18.2	76.6
Angola	-33%	43.9	113.3
Egypt	-32%	38.4	68.4
Ethiopia	-28%	38.2	52.6
Ghana	-29%	46.0	80.1
Kenya	-25%	49.1	89.3
Namibia	-25%	28.1	85.9
Nigeria	-27%	71.4	93.4
Senegal	-35%	32.1	65.0
South Africa	-28%	139.3	183.1
Tunisia	-29%	14.5	57.5
Uganda	-29%	21.2	58.2
Total	-	540.4	1,023.4

Source: Adapted from Intervistas (2014).

Undoubtedly, the aviation industry is a significant benefactor of the South African economy. The industry contributed a staggering ZAR74 billion (3.1%) to the Gross Domestic Product (GDP) (Styan, 2013; Oxford Economics, 2011). Air Transport Action Group (2014) states that the contribution was through direct (R20.1 billion), indirect (R21 billion), induced (9.8 billion), and catalytic (R23.4 billion) activities. Three years later, Smith (2017) reported that the contribution to the GDP had increased to R154.8 billion and supported 490 000 jobs across other industries. The sector directly employs close to 57000 people and pays R6 million in taxes.

For this study, such economic impacts of liberalising the aviation industry are significant as the basis of individual airline competitiveness. As a result of liberalisation, Abeyratne (2016) and Babić, Tatalović and Bajić (2017) aver that the airline industry remains intensely competitive and plagued by low product differentiation (offers similar service attributes along with two business models – full-service and low-cost models). As such, airlines need to understand the structure of the industry. In the following section, airlines operating in the South African domestic are discussed.

2.6 OVERVIEW OF CURRENT AIRLINES PLYING DOMESTIC ROUTES IN SOUTH AFRICA

Following the deregulation of South Africa's domestic airspaces, the market has been characterised by some turbulence, with a couple of market entrants and exits (Mhlanga, 2017; Steyn and Mhlanga, 2016; Luke, 2015). Of the four legacy airlines that were operating before deregulation in 1991, only two, SAA and Comair, are still operational in their original form. Table 2.2 below summarises airlines that entered, exited and those that are still operational to date.

The table shows that there has been a hive of activity within the domestic market, with sixteen airlines entering the industry between 1991 and 2015. Unfortunately, most of these airlines had very short lifespans, surviving for a few months (Mhlanga, Steyn and Spencer, 2017). For this study, only those airlines that are still operational are discussed in the subsequent subsections to avoid straying beyond the scope.

Table 2.2: Summary of SA domestic market airlines to date

Airline Name	Commencement of Operations	Status
South African Airways (SAA)	1934	Still operational, more detail on subsection 2.6.1
Comair Limited	1946	Still operational and operating British Airways flights domestically. More detail on subsection 2.6.2

Link Airways	1978	An alliance between Magnum Airlines, Border Air and City Air, operating as Link Airways collapses and the airline was liquidated, due to financial problems and was later founder successfully bid for it and renamed as SA Airlink in 1992.
Bop Air	1979	Later became known as Sun Air. Ceased operations (see under Sun Air).
Flitestar	1991	Ceased operations in 1994 due to high costs as a result of a weakening exchange rate and the fact the aircraft lease agreement was settled in US dollars (Luke and Walters, 2013).
SA Airlink	1992	Formed an alliance with SAA in 1997. Still operational. More detail on subsection 2.6.3
Phoenix Airways	1994	Ceased operations in 1995 due to failure to pay its debts (Paelo and Vilakazi, 2016).
SA Express (SAX)	1994	Another State-owned airline which is part of the tripartite alliance with SAA and SA Airlink. Still operational. More detail on subsection 2.6.4
Sun Air	1994	Ceased operations in 1999 when SAA announced that it had taken over the airline and subsequently closed it down.
Nationwide Airlines	1995	Ceased operations in 2008 due to bankruptcy (Paelo and Vilakazi, 2016).
Atlantic Airways	1995	Ceased operations in October 1995 that is, after three months of operations.
Interlink Airlines	1998	Interlink Airlines went into liquidation and ceased operations in 2010.
Kulula.com	2001	Still operational. More detail on subsection 2.6.5
1time airline	2004	Ceased operations in 2012 when it went bankrupt (Paelo and Vilakazi, 2016).

Mango	2006	Still operational. More detail on subsection 2.6.6
Velvet Airlines	2011	Ceased operations in 2012 when it failed to pay debts (Paelo and Vilakazi, 2016).
Fly Go Air	2012	Ceased operations after just one flight to Nelspruit in 2015 after it was alleged that it was operating illegally (South Africa Travel Online, 2017(a)).
Cemair	2013	Still operational. More detail on subsection 2.6.7
FlySafair	2014	Still operational. More detail on subsection 2.6.8
Skywise	2015	Ceased operation in December 2015. Henama (2015) attributed its shut down to poor economic conditions that led to unprofitability, as stated by Baroux (2013). Skywise's financial cracks showed out early when it failed to settle airport service charges leading to its suspension first by the Air Traffic Navigation Systems (ATNS) and then by the Airports Company of South Africa (ACSA) for a few days before it was restored. This hogged negative publicity to the airline, leading to booked flights cancellations (Slabbert, 2015).
Blue Crane	2015	Ceased operations in February 2017. Its problems became imminent as early as November 2016 when it entered into business rescue. In February 2017, it cancelled its flight under the guise of restructuring operations (Gernetzky, 2017). Since then, the airline has never come back.

Primary Source

A discussion of the airlines currently operating in the South African domestic market is crucial for two reasons. Firstly, it enables the delineation of airlines as either legacy (traditional/full-service) airlines or low-cost carriers, thus projecting their competitive positioning. Secondly, flowing from the first reason, it provides an insight of how different airlines are likely to perform on various service attributes (discussed in depth in Chapter 3), which in this study are seen as mediating the relationship between consumer personal values and airline choice and subsequent outcomes.

2.6.1 South African Airways (SAA)

South African Airways is the national full-service carrier, established 85 years ago when the South African Government took over assets of Union Airways. From 1934 up to 1991, SAA enjoyed substantial protection from the Government (Paelo and Vilakazi, 2016). As a result of this protection through the Air Services Act, No. 51 of 1949, SAA enjoyed a monopoly of the dense and lucrative primary routes (known as the Golden Triangle) while its competitors, Comair, Bop Air and Link Airways, were restricted to secondary (feeder) routes.

Up to 1991, SAA had been commanding close to 95% of the market share (Steyn and Mhlanga, 2016; Ndlovu, 2001), but upon deregulation, the airline had to face stiff competition from the new entrant – Flitestar (Luke and Walters, 2013). SAA also had to deal with increasing competitive pressures from other private airlines, mainly Comair and Sun Air (Free Market Foundation, 2013) who after deregulation, were able to expand into the Golden Triangle routes. In a bid to consolidate its market position, SAA had to establish a three-tier partnership, in 1993, with SA Airlink and SA Express (Luke and Walters, 2013). The battering of SAA's market shares further worsened in the year 2001, when the first low-cost carrier, Comair-operated Kulula, entered the market. After that, came other LCCs such as Velvet Sky and 1Time, Skywise, FlySafair and Blue Crane. In response, SAA adopted a downward stretch strategy and created its own low-cost Mango Airlines.

However, this did not change its fortunes significantly. As of 2013, SAA's market share was estimated to have plunged to around 50% (Orlek, 2010; Free Market Foundation, 2013). As argued by Steyn and Mhlanga (2016), SAA's market misfortunes cannot be attributed entirely to the competitive pressures brought about by deregulation of the domestic airspace. SAA still enjoys protection from the government through preferential treatment at national airports, financial bailouts and guarantees. SAA has received over ZAR20 billion in State guarantees (Ferreira, 2017; Capazorio, 2016; Slabbert, 2016), but is still tethering on the brink of collapse. This approach by the government has been blamed for being the cause of SAA's mismanagement and cost-inefficiencies, creating market distortions and frustrating investments into the sector, thus forestalling further

market growth. However, the airline still enjoys route density, as shown in Figure 2.4 below.
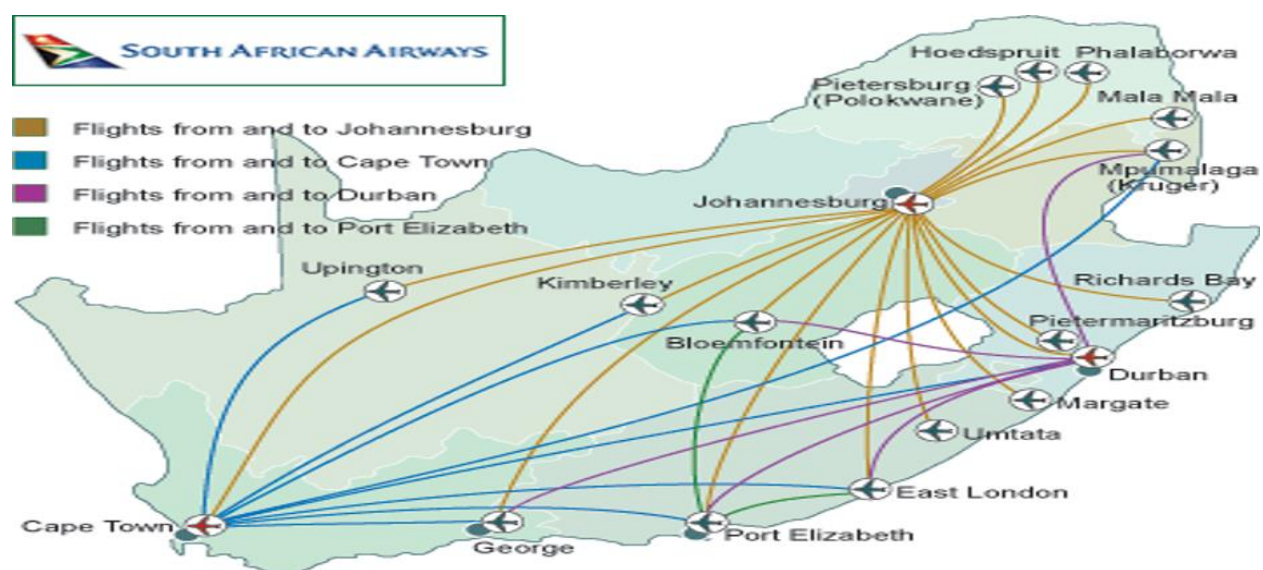
Figure 2.4: SAA Domestic Route Map (*Source:* https://safariguideafrica.com)

In a bid to insulate itself from the competitive onslaught, SAA became a member of the Star Alliance in 2006. Such a membership is a crucial competitive tool within the passenger airline industry. SAA leverages its Star Alliance membership to enjoy benefits accruing from the network benefits within the domestic market and beyond. In addition to Star Alliance membership benefits, SAA uses its five-tier frequent flyer program (the Voyager) to lock-in customers. As a testimony of its service quality, SAA has managed to scoop several industry awards, for example, SKYTRAX Award for Best Airline in Africa, and On-time Performance Service Award by Flightstats for the Middle East and Africa category (News24, 2013a).

On the equipment side, the airline (SAA) has the biggest fleet of aircraft, not only in South Africa but in the African continent, with about fifty-two active planes. Its fleet ranges from smaller aircraft to super jumbos (SAA, 2019). However, for domestic flights, the airline uses smaller aircraft within the fleet (Boeing 737s and 747s) which still enable them to offer a range of in-flight services. Despite its substantial market share losses, SAA still commands some huge clientele base within the domestic market. Some studies (Wasswa, 2017; Chang and Cheng, 2011) have alluded that national airlines often benefit

from consumer ethnocentrism. However, in 2018, SAA decided to surrender most of its domestic flight to its low-cost carrier – Mango Airlines. This has been viewed as uncompetitive behaviour.

2.6.2 BA Comair

BA Comair is a British Airways (BA) franchisee based in South Africa. It is the oldest privately-owned full-service airline (Luke and Walters, 2013) and the second oldest airline operating in South Africa (after SAA) and Southern African countries. The airline started operating in South Africa in 1946. Since its inception up to market deregulation in 1991, Comair was restricted through the Air Services Act, No. 51 of 1949 to operate only in secondary routes which were feeder routes to the ones plied by SAA.

As a result of deregulation, Comair started to service the 'Golden Routes' in 1992, with the Johannesburg to Cape Town route as its first. Comair joined British Airways as a franchisee in 1996 to become known as BA/Comair and inherited a stronger well-known international brand (Comair, 2018). In the same year, BA/Comair became a member of the OneWorld® Alliance in the same year. Although the airline industry is well-known for its negligible profit margins, BA/Comair has managed to keep a clean profit sheet for seventy-two years. They attribute this feat to efficiencies emanating from their "newer, bigger but more fuel-efficient aircraft and use of new-generation information technology platforms that enable us to deliver greater efficiencies and new commercial opportunities" (Comair, 2018).

The airline (BA/Comair) uses twenty-six Boeing 737 aircraft to service the domestic market (Comair, 2018), a fleet that allows it to compete fairly with SAA. However, BA/Comair's route network (see Figure 2.5) is not as diversified as SAA's; the airline (BA/Comair) optimises the number of flights (frequency) in the domestic market as shown in the figure below.
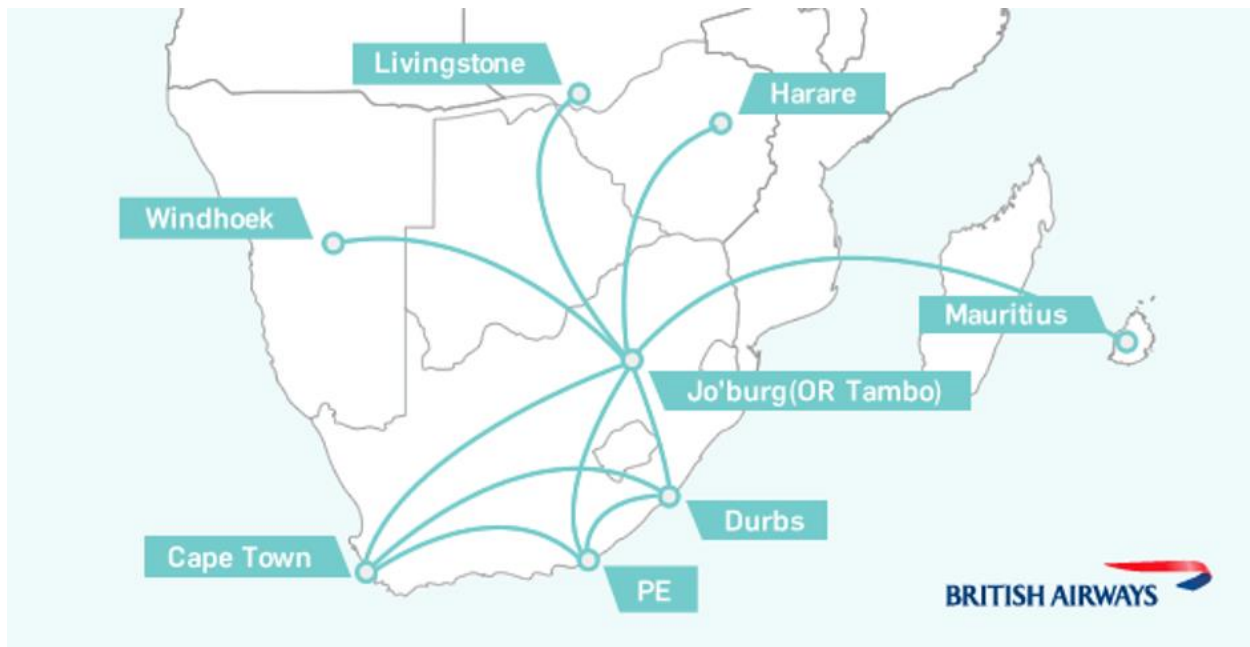
Figure 2.5: British Airways Route Map (*Source:* http://www.airlineroutemaps.com)

In the South African domestic market, BA Comair has positioned itself as a premium airline brand, thus targeting the premium end of the airline market. This positioning is evident in its pricing strategy and high service quality market offerings. Such a positioning strategy works well because of British Airways' brand equity. However, BA Comair in pursuit of a downward market stretch strategy launched the first-ever South African low-cost airline – Kulula in 2001.

2.6.3 SA Airlink

SA Airlink was born out of a partnership amongst three small airlines, Magnum Airlines, Border Air and City Air (Airlink, n.d.). It was known as Link Airways before its liquidation in 1992 (Luke and Walters, 2013). After its settlement, two of its founders, Rodger Foster and Barrie Webb successfully bid for the business and renamed it as Airlink. Then in 1997, Airlink entered into a tripartite strategic partnership with SAA and South African Express (SA Express). Foster (2017) posits that Airlink penned a formal franchise agreement with SAA in the year 2000 to become SA Airlink. In the domestic market, SA Airlink plies feeder routes (see Figure 2.6) to link smaller towns and resort centres from its Johannesburg OR Tambo International Airport (ORTIA) hub (Airlink, n.d.).
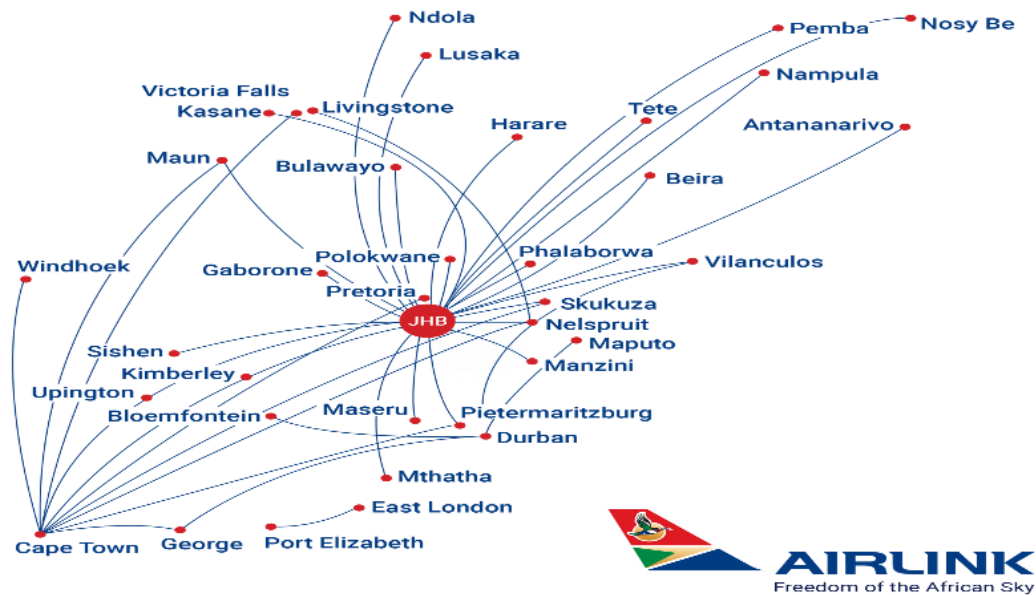
Figure 2.6: Airlink's Route Map (*Source:* http://airlinkcargo.co.za)

SA Airlink is the largest independent regional airline in southern Africa (Airlink, n.d.). Its fleet of 56 aircraft includes Embraer ERJ 135/140/145 jet aircraft, Embraer E-Jet 170 and Embraer E-Jet 190, Jetstream 41 aircraft, BAe RJ85 aircraft and the Grand Cessna Caravan 208BEX (Airlink, n.d.; Planespotters, 2019a). Airlink serves mostly business travellers (70%) compared to 30% of leisure travellers (Airlink, n.d.). Its smaller aircraft enables it to service smaller airports, for example, the Skukuza and Sishen.

2.6.4 SA Express airways

SA Express is a State-owned airline established in 1994 and mandated to offer seamless air travel and offer connectivity to secondary and primary airports while being a feeder airline to the national carrier (SA Express, 2015). As another State-owned airline, SA Express is a strategic partner of SAA together with SA Airlink, a strategic partnership formed in 1997 (CAPA Center for Aviation, 2017). SA Express operates a fleet of 24 small aircraft with carrying capacities ranging from 50 to 75 passengers (SA Express, 2015). The airline operates the Q400 turboprop aircraft, the 50-seat Canadair Regional Jet (CRJ) and DeHavilland Dash 8-Series 300-turbo-prop aircraft (SAA, 2019). The aircraft's

carrying capacities makes SA Express suitable to ply feeder routes sustainably considering the size of airports and traffic volumes in these smaller towns and remote destinations.

Unfortunately, like its sister airline (SAA) SA Express is also swimming in the red, realising a net loss of ZAR132m during the 2014/15 trading period (SA Express, 2015). Furthermore, the South African Civil Aviation Authority (SACAA) had since 2016 intensified its oversight on the airline's compliance performance (News24, 2016) and recently, the airline was grounded for non-compliance and failure to settle ACSA's bills (Khumalo, 2019).
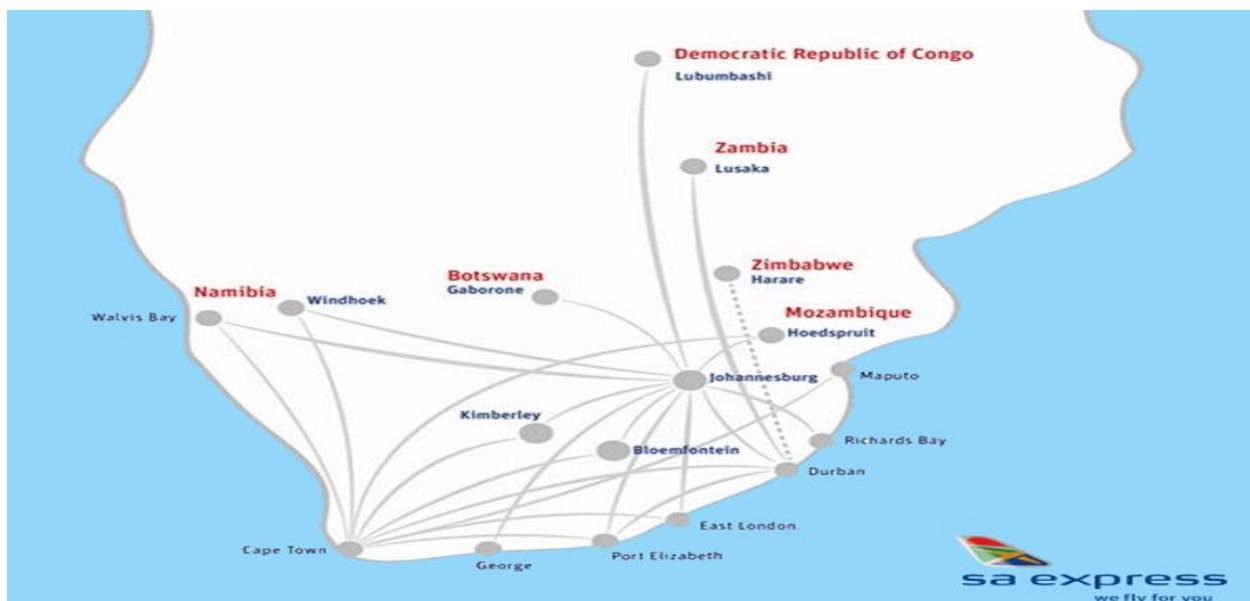
Figure 2.7: SA Express Route Map (*Source:* http://www.theafricanaviationtribune.com)

Figure 2.7 above shows the SA Express route map. However, Ginindza (2019) and Khumalo (2019) report that the airline has ditched most of its domestic routes to concentrate on the Johannesburg – Cape Town route and regional ones. The airline cites intense competition within the local market, particularly after the entry of Safair. Due to perennial loss-making, the Government is calling for the merger of SAA, Mango and SA Express as a measure to take the airlines back to profitability.

2.6.5 Kulula Airways

Kulula was the first low-cost carrier to grace the South African domestic skies established in 2001 whose entry into the market changed the competitive stage (Mhlanga, 2017; Mhlanga and Steyn, 2016; Luke, 2015). In a short space of time, Kulula was bagging accolades such as the "Best domestic airline" by the Airport Company of South Africa (ACSA) in 2003 (News24, 2013b). Kulula is owned by Comair and has grown in leaps and bounds from a simple 'no-frills airline' to a formidable brand with interests in car rental, accommodation and financial businesses. Comair deliberately chose the name 'Kulula' which means "it's easy" in Zulu and Xhosa to summarise its approach to air travel (Flightsite, 2017).

Kulula's first flight was between Johannesburg and Cape Town (Kulula, 2017). Later on, Kulula grew its presence within the 'Golden Route' and also expanded to some untapped routes such as Cape Town – George, Johannesburg – George (see Figure 2.8 for Kulula's route map). The airline stimulated competition in the industry when it launched flights from the privately owned Lanseria Airport in 2006 (Kulula, 2017). Kulula has become a force to reckon with by deliberately adopting marketing efforts, for example, its green livery, promotional campaigns and strategic partnerships to enhance customer satisfaction. To date, Kulula has scooped over fifteen awards for its marketing efforts such as Best African Low-Cost Airline.
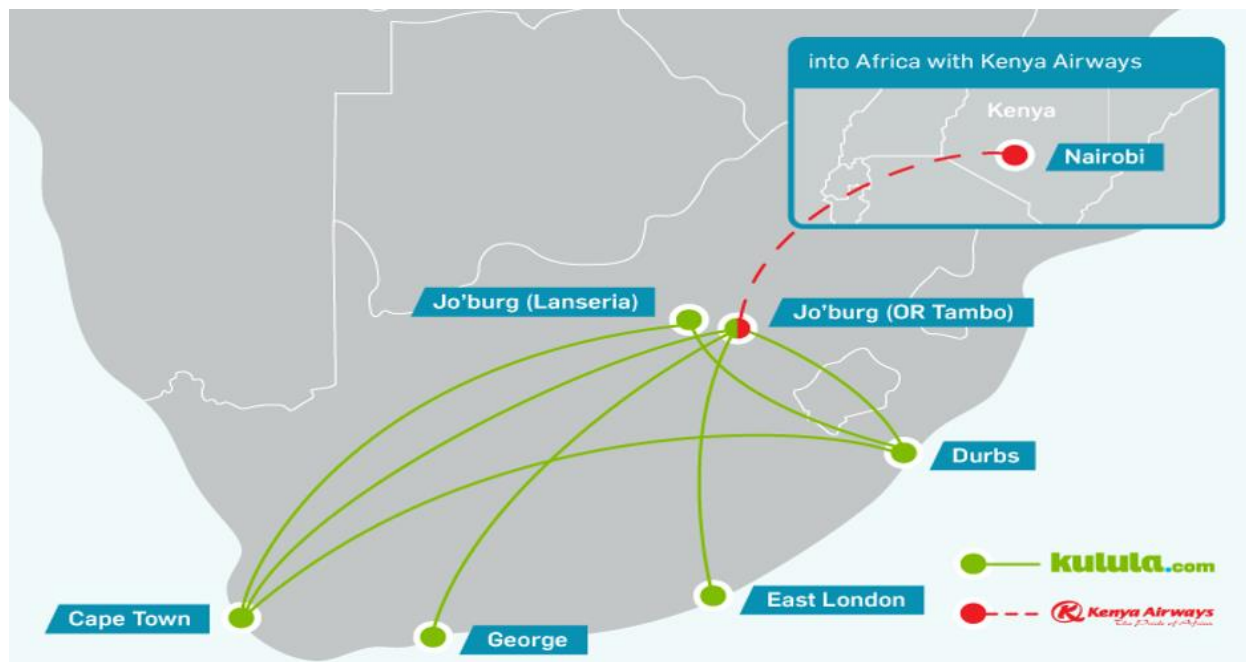
Figure 2.8: Kulula Airlines Route Map (*Source: Kulula, 2019*)

The airline boasts of a young fleet with an average age of 13 years, making it the most environmentally friendly airline, thus confirming its commitment to the green project. Kulula flies ten modern Boeing 737s, which are fuel-efficient and environmentally friendly (Planespotters, 2019b). In line with its vision of a modern fuel-friendly fleet, Kulula's operator Comair ordered eight Boeing 737 Max8 and have received one of the aircraft. Unfortunately, after two mishaps involving this type of aircraft, it has been grounded by various aviation authorities. Even though the South African Civil Aviation Authority (SACAA) had not ordered the grounding of the plane, Comair decided to suspend it until further notice (Faku, 2019).

2.6.6 Mango Airlines

Mango Airlines SOC Ltd is an SAA wholly owned low-cost carrier (LCC) which was established in 2006. Mango was introduced as SAA's downward stretch strategy to compete in the low-end market where there were already players such as Kulula and 1Time who were seemingly doing well and hurting SAA's market share. Therefore, its approach was to be SAA's multi-brand strategy budget option offering affordable prices (King Shaka Airport, 2017; CAPA, 2013).
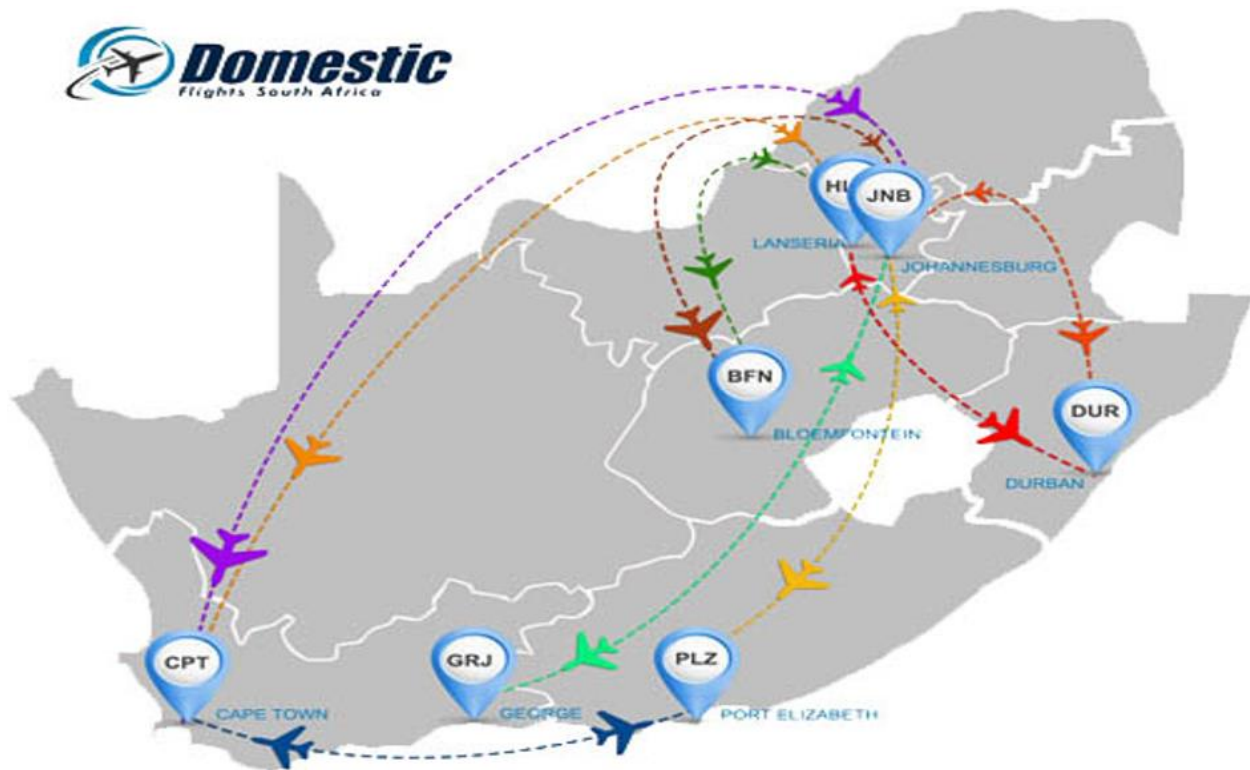
Figure 2.9: Mango Route Map (*Source:* https://www.domesticflights-southafrica.co.za)

The airline operates eight Boeing 737-800 aircraft with a capacity of 186 seats (Domestic Flights South Africa, 2017; Mango, 2017). Mango flies within the Golden Route and to smaller cities and towns such as Port Elizabeth, George and Bloemfontein (see Figure 2.9 for Mango's route map above). The airline prides itself as an innovative airline. Mango (2017) states that it is the first South African airline to offer onboard Wi-Fi services. It also innovated its distribution strategy through the use of store cards such as Edgars/Jet cards for booking, being the first airline to sell tickets through Shoprite Checkers and the first to offer booking and payment facilities through a mobile application. The collapse of two other LCCs,1Time and Velvet in 2012, left Mango Airlines and Kulula as the only low-cost carriers in the domestic market (CAPA, 2013).

2.6.7 Cemair

Cemair started as an aircraft leasing company than a scheduled flights airline. In 2012, Cemair acquired its Canadair Regional Jets (Cemair, 2019), a move that culminated in operating domestic flights in 2013 under the Cemair (5Z) brand (Trip Advisor, 2017). Cemair flies to various destinations, such as Bloemfontein (BFN), Margate Airport (MGH),

Sishen Airport (SIS) and Plettenberg Bay Airport (PBZ). See Figure 2.10 for Cemair's route map.
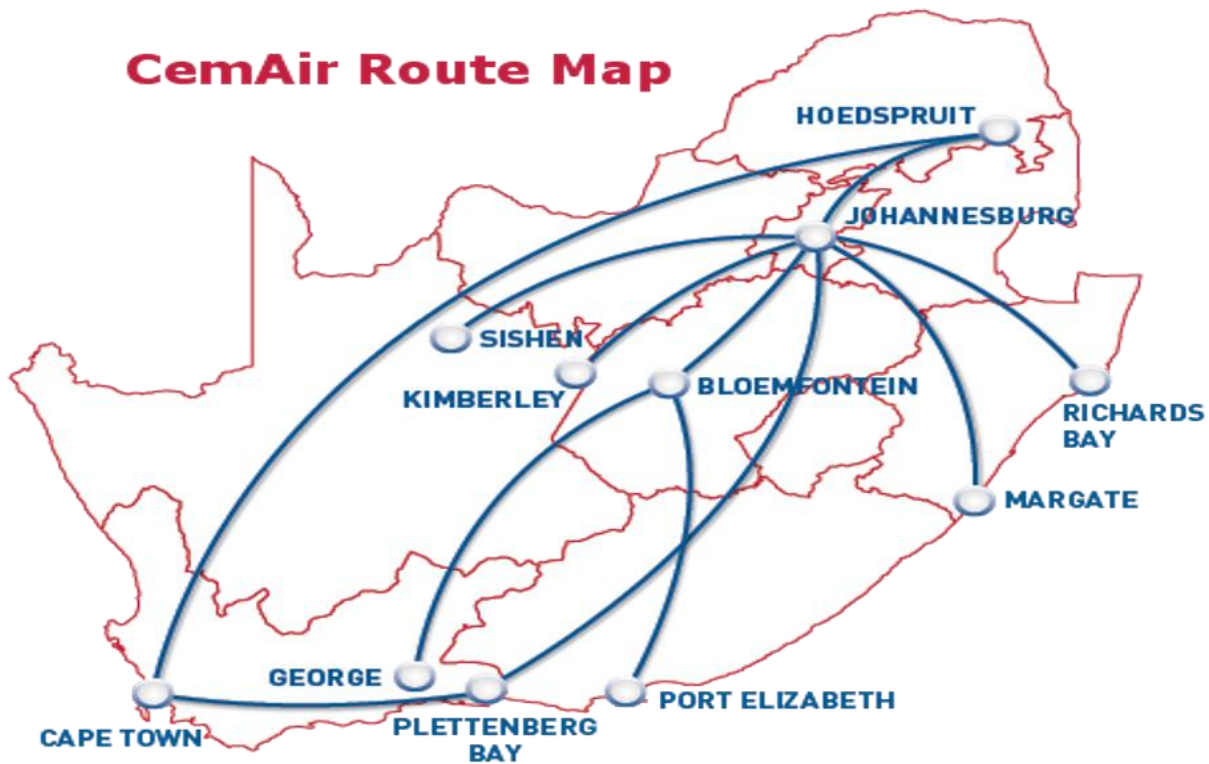
Figure 2.10: Cemair Route Map (*Source:* http://www.flycemair.co.za)

The airline has a heterogeneous fleet of twenty-three aircraft, which include the Bombardier CRJ -100, Bombardier Dash 8-Q300s, Bombardier Dash 8-100 and Beechcraft 1900D planes (Cemair, 2019). An analysis of the comments about Cemair on TripAdvisor (2017) reveals that it is a premium airline which focuses on quality service delivery as a differentiator. Recently, Cemair ran into problems when SACAA audits, which found the airline to be non-compliant of safety regulations and had their licence suspended twice (Grobler, 2019; Savides, 2018).

2.6.8 FlySafair

FlySafair took to the skies in October 2014 and has disrupted the domestic market (FlySafair, 2017), with its aggressive pricing strategy. The airline is new but taps on the experience of its parent firm, Safair - an aviation company that has been in operation for over fifty years but focusing on a wide range of specialist airlift services (FlySafair, 2017).

Safair assisted various airlines set up, for example, the firm operated the Kulula's maiden flight, and have done some work for SAA (Mango), Ryanair and Air Namibia (FlySafair, 2017). FlySafair was introduced as another low-cost airline to fill in the vacuum left after the demise of 1Time and Velvet Air (Henama, 2014) and challenge the likes of Mango and Kulula on ticket prices. Its entry further brought down ticket prices by 39% (Paelo, 2016; FlySafair, 2017), a move that has enabled South Africans who would not dream of flying before due to high ticket prices to afford flying within South Africa.
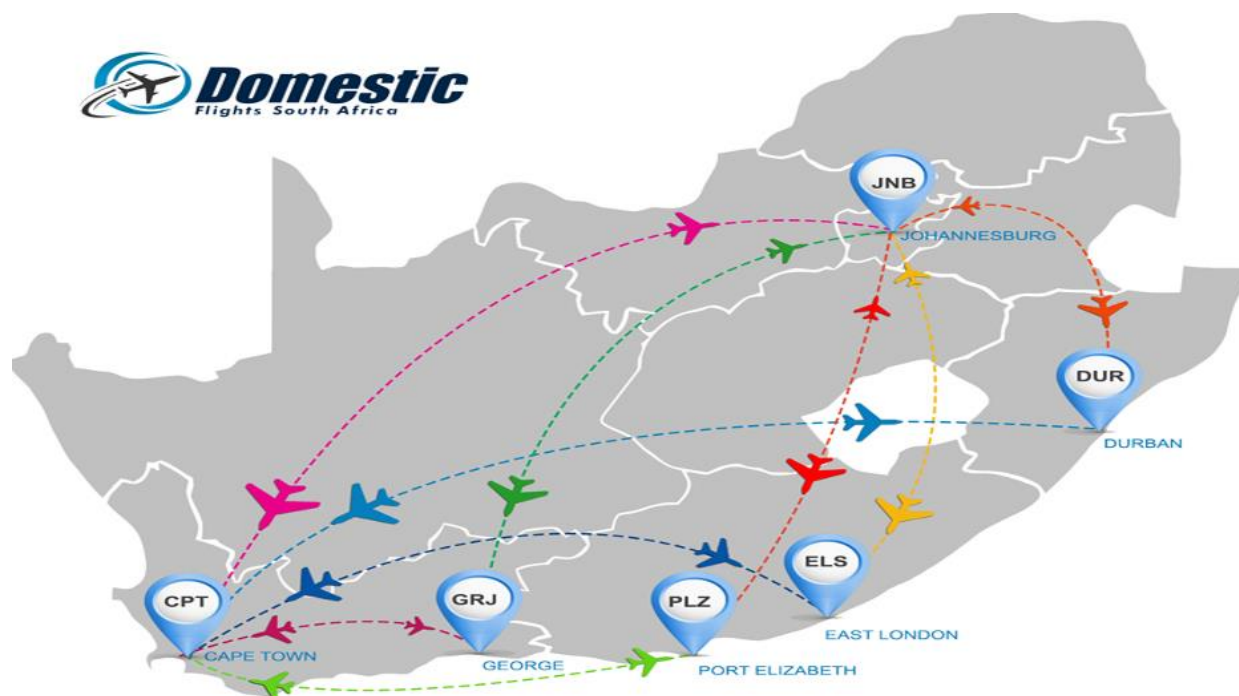
Figure 2.11: FlySafair Route Map (*Source:* https://www.domesticflights-southafrica.co.za/flysafair/)

The airline started operating the cargo and passenger services with only four aircraft (Boeing 737-400s) operating the Johannesburg – Cape Town route, and in 2015 it had a 6% market share (FlySafair, 2017). Five years later, FlySafair boasts of fifteen Boeing 737 aircraft flying to seven airports – OR Tambo International Airport (ORTIA), Lanseria, Cape Town International, King Shaka International, Port Elizabeth, East London and George (Planespotters, 2019b). See Figure 2.11 above for FlySafair's route map.

The airline has invested heavily in securing a stable distribution network system. Its tickets can now be bought from Shoprite Checkers and Pick 'n Pay and are also distributed through companies travel companies within the Bidvest group including

MyMarket and Rennies, as well as within the Tourvest Business via TravelIT (FlySafair, 2017). FlySafair's ticket prices do not include check-in luggage pricing but can be added during the booking process (Mahutolis Magazine, 2017).

2.7 DIFFUSION OF AIRLINE SERVICES IN SOUTH AFRICA

Air transport services came late into the African transport scene (Ssamula, 2014), after road, rail and sea transport. In South Africa, as discussed in Section 2.3, the passenger airline industry is as old as South African Airways. At that time (the 1930s - 1990s), South Africans were reeling under the shackles of colonial and apartheid rule, where racial discrimination was rife, and as such, flying was a preserve of the white minority population - elite and wealthy businessmen (Mhlanga and Steyn, 2016).

Notwithstanding discrimination, the majority of the citizens, even if they wanted to fly, were poor and could not afford the ticket prices. Also, many were unsophisticated due to asymmetric access to information hence did not know about air travel services. As a result of all this, people were more concerned about the core product (transport) than the type of transportation. During this period, the general public relied on rail and road transport systems. Thus, the passenger airline services by Unions Airways was a preserve of a few. Even when new players entered the market; Comair in 1945, Link Airways in 1978 and Bop Air in 1979 (Mhlanga and Steyn, 2016; Gavin, 2013), the competitive slate did not change that much as airline services were still exclusive.

Since the inception of airline passenger services, South African Airways (then Union Airways) enjoyed full protection from the government (Luke and Walters, 2013; Pirie, 2006) with a sole right to service the primary routes (Golden triangle) up 1991. Private airlines competed within the secondary routes and were feeders to the national carrier. When the market was deregulated in 1991 through the Air Services Licensing Act No. 115 (Luke, 2015), South African Airways had to face competition for the first time. Differentiation became a strategy for survival, and at the centre of such strategy were airline service attributes; hence, airlines started paying due attention to them.

Several studies have investigated and identified various airline service attributes as determinants of airline choice in South Africa and beyond. These service attributes are discussed in depth in Chapter 3. Extant literature shows that post-1991 (deregulation), there was a surge in passenger traffic (Intervistas, 2014; Luke, 2015). This has been attributed to the fact that when South Africa gained independence, there were some drastic socio-economic changes. For example, black people who were previously alienated (under colonial and apartheid rule) from various socio-economic activities such as air transport, could fly without any hindrance. Also, a growing black middle-class base, the black diamonds, in particular, meant that more could afford to buy air tickets.

The improved diffusion of airline services, post-deregulation, is also reflected in the number of airlines that entered the domestic market. Sixteen airlines joined the market from 1991 to date, though some exited along the way. When the first low-cost carrier (Kulula) entered the domestic market in 2001(Flightsite, 2013), followed by other low-cost airlines; 1time in 2004, Mango and Cemair in 2006, Velvet Sky in 2011, Fly Go in 2012, Fly Safair in 2012, and Skywise and Fly Blue Crane in 2015 (Mhlanga and Steyn, 2016), passenger numbers further increased while ticket prices were reduced (Schlumberger and Wiesskopf, 2014). Moreira, O'Connelly and Williams (2011) laud low-cost carriers for attracting new passengers who otherwise might not have travelled. With an increased demand for airline services, follow the competitiveness of individual airlines. Another increase in demand for airline services was stimulated by the hosting of the FIFA World Cup competition in 2010 (Schlumberger and Weisskopf, 2014).

To attain a competitive advantage, airlines have to assemble various marketing assets to outwit peers. Neil Borden's twelve elements "marketing mix" concept comes to mind as the key to meet target market's needs (Khan, 2014; Eavani and Nazari, 2012), and speed up the diffusion process. This marketing mix was later popularised by Jerome McCarthy's 4Ps of the marketing mix, which was also extended to 7Ps for services marketing (Booms and Bitner, 1981, cited in Akroush, 2011). These conceptualisations are the basis upon which firms respond to market needs through a mix of controllable elements, which in this study are referred to as the airline service attributes. For example, for airline services,

literature shows that customers evaluate airlines on ticket prices, distribution channels, safety, reliability, seat comfort, legroom and many more.

In the section that follows, the airline business models are discussed to situate the South African domestic industry. Such a discussion is pertinent to articulate how airlines create and deliver value to customers (Teece, 2010). In the next section, an attempt is made to give an overview of how South African domestic airlines integrate their resources and configure airline service attributes to create value.

2.8 THE AIRLINE BUSINESS MODELS

Airlines, like other businesses, are in pursuit of sustainable profitability and competitive advantages (Heinz and O'Connell, 2013). Such plans do cause airlines to be deliberate on the logic of creating, delivering and capturing value. This logic is what is referred to as the business model. There is an enormous amount of literature on the concept of business models in general and airline business models in particular. Clear from the literature is that African airlines are usually categorised as two opposite ends of a continuum, with full-service carriers (FSC) on one end and low-cost carriers (LCC) on the other end.

However, further literature indicates that globally, airlines are beginning to gravitate towards the third option, the hybrid mode, due to deepening competitive pressures (Lohmann and Koo, 2013; Daft and Albers 2013; Fageda, Suau-Sanchez and Mason, 2015; Jean and Lohmann, 2016; Lange, Sieling and Parra, 2019; Azadian and Vasigh, 2019). The convergence between FSCs, also referred to as legacy airlines, and LCCs can be ascribed to various operational and demand-related factors. For example, Jarach, Zerbini and Miniero (2009) cite global business dynamics, growth of middle-class segments as central to hybridisation.

Further contributing to the airline hybridisation discourse; Klophaus, Conrady and Fichert (2012) assessed and compared airline business models in Europe and found that indeed there was convergence, with LCCs adopting an upward stretch strategy while FSCs went for downward stretch strategy. Lohmann and Koo (2013) also argue that airlines can no longer be labelled into an LCC - FSC dichotomy. Airlines are now combining the attributes

from either category to survive competitive pressures and broaden their target demand. In the following subsections, the two business models are discussed broadly about the South African perspective.

A significant point about airline business models is that they differentiate airlines in terms of cost structure, services offered to customers, type of airports used and route network configuration (Lordan, 2014). Thus, business models influence how airline packages various airline service attributes, which are central to the explanation of airline choice in this study.

2.8.1 The Airline Business Models in the South African Domestic Passenger Market

Insomuch as FSCs and LCCs globally are now moving towards a hybrid business model (Loh *et al.*, 2020; Jean and Lohmann, 2016; Pearson and Merkert, 2014; Lohmann and Koo, 2013), the literature on the South African passenger airline sector still views airlines' business models as a dichotomy. It is either a low-cost airline or full-service carrier. On the contrary, a study by Heinz and O'Connell (2013) on business models employed by African airlines, identified seven business model archetypes, namely, the full-service network carriers, established regional carriers, long-haul niche carriers, true low-cost carriers, emerging regional/low-cost carriers, emerging full-service network carriers and small full-service carriers. Translated to the South African airlines, some employ multiple models; for example, Kulula is a low-cost carrier, serving both domestic and regional markets.

2.8.1.1 Full-Service Airlines

Generally, there are currently five full-service passenger airlines operating within the South African domestic market. State-owned South African Airways (SAA) is the leading legacy airline followed by BA Comair. Then there is SA Express, and SA Airline who are SAA's strategic partners and Cemair, like BA Comair, is a privately-owned airline offering both scheduled and non-scheduled airline services.

Traditionally, FSCs operate "hub-and-spoke" (HS) and the "multi-hub-and-spoke" (MHS) route network configuration (Lordan, 2013). More prominent is the wide range of service elements, all attached to the ticket price (Koklic, Kukar-Kinney and Vegelj, 2017). Such is true for SAA and BA Comair, but a little different with SA Airlink, SA Express and Cemair. This fault the dichotomous reference of airlines as either full-service or low-cost. Perhaps, a study needs to be conducted to determine the accurate characterisation of South African domestic airlines. SA Airlink and SA Express as SAA's strategic partners act as feeders to SAA while Cemair, notwithstanding its use of OR Tambo International Airports as its hub, also operate in "point-to-point" (PP) networks.

Furthermore, full-service airlines are known for focusing on providing a wide range of pre-flight and onboard services, including different service classes (business and economy classes) and connecting flights (German Aerospace Center DLR, 2008). FSCs believe that offering comprehensive and superior airline services is key to customer satisfaction and loyalty, even though there are ambiguity and little evidence connecting customer satisfaction and behavioural intention to airline type (Rajaguru, 2016; Koklic, Kukar-Kinney and Vegelj, 2017). These airlines (SAA, BA Comair, SA Airlink, SA Express and Cemair) offer full onboard services, for example, meals and entertainment, and also include luggage fees in ticket prices. The airlines still apportion their seats into business and economy classes. Customers in different categories are treated differently, and ticket prices differ.

The characteristics stated above render the full-service airlines' cost structure significantly high compared to low-cost carriers (Lordan, 2013). As such, they charge higher prices to recoup these costs, which is a disadvantage in a market where customers are price sensitive. The next subsection presents the characteristic of low-cost carriers with particular reference to those that operate within the South African domestic market.

2.8.1.2 Low-Cost Carriers (LCCs)

As the aviation industry evolved, it became apparent that airlines needed to relook at their value creation, delivery and the architecture of their revenues, costs, and profits. Traditional full-service airline business model was no longer enough to build and maintain

competitive advantage and super-profits in the liberalised aviation industry. As a result of deregulation and liberalisation, airlines (especially new entrants) were freed from the capacity and price restrictions, which enabled them to develop a new business model based on cost-minimisation (Whyte and Lohmann, 2017). Thus, the cost-conscious carriers were able to offer lower ticket prices than full-service carriers and gain market share within short-haul networks (*ibid*).

In the United States of America, Southwest Airlines was the pioneer low-carrier and was later joined by New York Air, Jet America and others. Ryanair and Easyjet introduced the low-cost concept in Europe in 1995 and later moved into the Asian market (Francis *et al.*, 2006). In South Africa, the low-cost concept was pioneered by Comair's Kulula in 2001 (Luke, 2015; Mhlanga and Steyn, 2016). After Kulula, several low-cost airlines entered the domestic market. South African Airways also responded to the emerging low-cost market by adopting an 'airline-within-airline' strategy (Whyte and Lohmann, 2017; Raynes and Tsui, 2019) in establishing Mango Airlines to compete for market share.

For this study, it is essential to outline the differences that come with the low-cost model, particularly given airline services configuration and customer needs. As indicated earlier on, low-cost airline business model thrives on cost containment (Belobaba Odoni, Barnhart, 2016; Rouby, 2018) relative to industry rivals or what is referred to as the cost leadership strategy. It, therefore, follows that low-cost carriers have to streamline some operating.

For example, whereas full-service carriers offer a wide range of pre- and in-flight services such as airport lounges, free meals and entertainment, low-cost carriers offer a "no-frills" service at a low and simplified regime fare (Koklic, Kukar-Kinney and Vegelj, 2017; Leick and Wensveen, 2014). Central to the LCC's cost leadership strategy is the reduction of inclusive services (Barnes, 2017). A low-cost carrier ticket price only buys the customer a seat on a flight from point A to point B; subsequently, there is a host of additional charges.

In an intensely competitive airline (passenger) market, Loureiro and Fialho (2016) posit that an in-depth understanding of in-flight cues guiding relationships between passengers

and the airline is crucial. Table 2.3 presents the differences (not exhaustive) between full-service airlines and low-cost airlines. These differences are pertinent to the services these two types of airlines offer to different market segments.

Table 2.3: Low-cost carriers (LCC) and full-service carriers (FSC) compared

Business model feature	FSC	LCC
Market offering	As in the name, FSCs provides frequent service to a wide variety of "hub-and-spoke destinations, and offer several ancillary services such as complimentary beverages, in-flight entertainment, airport lounges, and assigned seating (Huschelrath and Muller, 2012; Leick and Wensveen, 2014) among a plethora of service elements. According to Bitzan and Peoples (n.d.), FSCs aim to be the one-stop air transportation provider to the market segments they serve.	LCCs as an alternative to the FSC focus on cost leadership. Thus, they unbundle their service to its bare basics by pruning the ancillary and complementary services to afford lower ticket prices (Budd and Ison, 2017). Their offering is mainly focused on efficient transportation from point A to B. Ancillary services are paid for outside ticket prices. LCCs operate point-to-point networks, thus saving ground crew, maintenance, gates and other airport expenses from not having to accommodate several arrivals at approximately the same time to facilitate connections (Huschelrath and Muller, 2012; Leick and Wensveen, 2014; Bitzan and Peoples, n.d.)
Generic strategy	FSCs emphasises product differentiation to gain competitive advantage.	LCCs strive to be cost leaders by streamlining operating costs and emphasising on efficiency for competitive advantage.
Pricing strategy	Complex pricing system and a revenue management system that increases revenues by focusing on yields.	Uses a simple fare structure. As part of demand management and to achieve high load factors, LCCs auction seats. For example, Safair's R5 air ticket.
Aircraft fleet and utilisation	Have a mix of narrow- and wide-body aircraft. This leads to higher costs of maintenance and training. Aircraft are configured into business and economy classes and have reclining seats and wide seat pitch to offer comfort to passengers. Also, the galley and aisles are wider to allow for easy serving of meals. This configuration limits the number of passengers per flight, the reason why	LCCs usually operate one type of aircraft to minimise operating costs such as maintenance and training costs. Also, a uniform airline fleet allows the LCC to realize savings in buying parts. To carry more passengers, aircraft are configured not to have reclining seats (Bitzan and Peoples, n.d.), eliminates business class seats (Hazledine, 2011) and has narrow seat pitch and limited galley

	FSCs favour wide-body aircraft. Aircraft utilisation is low due to delays, consolidation of passengers at hub ports, connecting flights and crew rest periods (Budd and Ison, 2017).	space (Budd and Ison, 2017). High aircraft utilisation, and faster and efficient turnaround times (Alamdari and Fagan, 2005).
Marketing communications	Since the overall strategy is that of product differentiation, the emphasis is put on brand image and reputation; hence, the vast marketing communication budgets to amplify the various service elements. Frequent flyer programmes are an integral aspect of promotions to entice repeat purchase and loyalty.	According to Budd and Ison (2017), LCCs' marketing messages are simple; focus on destination and price. Brand positioning revolves around low-cost and does not call for a considerable budget exercise, mostly it is organic.
Organisational structure	Though we have seen some shifts, most FSCs have mechanistic and tall organisational structures. Organisations with such structures, as averred by Lunenburg (2012) are slow in responding to market changes.	Most LCCs (excluding the 'airlines-within-airlines) have an organic and flat structure. As such, they are agile, innovative and can respond quickly to market changes, which is another dimension of competitive advantage.

Source: Adapted from Budd and Ison (2017)

Clearly, the differences between the LCCs and FSCs outlined in the table and subsections 2.8.1.1-2 suggests that these two airlines models have a different design or architecture of the value creation, delivery and capture mechanisms (Teece, 2010). It, therefore, follows that the way they configure the airline service attributes, identified by several studies (Campbell and Vigar-Ellis, 2012; De Jager and Van Zyl, 2012; Namukasa, 2013; Chen and Chao, 2015; Milioti, Karlaftis and Akkogiounoglou, 2015; Sandada and Matibiri, 2016 among others) as decisive choice factors and essential for customer satisfaction and loyalty, is also different. Though it is not the primary purpose of this study, the moderating effect of airline type on airline choice will be tested.

2.9 SUMMARY

This chapter's purpose was to set the context of the aviation industry, taking the reader through the history of the aviation industry in Africa, drawing them to liberalisation/deregulation of airspaces. The chapter paid extensive attention to the South African domestic airline industry as the scope of the study. A timeline-based discussion outlines the benefits reaped from the deregulation of the sector to airline business models.

In so doing, the chapter also showed the tribulations within the industry where nine airlines have entered and unceremoniously exited the industry.

More importantly, the chapter characterises the current airlines in the domestic market as either full-service or low-cost carriers and profiles airline services customers. Such characterisation has a bearing on the service attributes each airline offers to its customers. Airline service attributes are at the centre of this study, as highlighted in Chapter 1. The next chapter is dedicated to exploring literature to support the notion that consumers do not choose airlines based merely on these service attributes, but what they mean to them which Cooper (2014) refers to as buying better versions of themselves (their values).

CHAPTER 3: PERSONAL VALUES AND AIRLINE CHOICE WITHIN THE SOUTH AFRICAN DOMESTIC MARKET.

3.1 INTRODUCTION

Chapter 2 of this study detailed the structure and dynamics of the South African domestic passenger airline market from its inception to date. Such an account was pertinent not only to draw the scope of the study but also to expound on the impact of deregulation of the industry. Extant literature on the market (both empirical and business-related) was reviewed to provide the contextual setting of this study.

Building on Chapter 2, this chapter as the fulcrum of the study seeks to forge a theoretical argument using various models that are key to explaining consumer behaviour in the general and choice phenomenon in particular, and with specific reference to the airline industry. These models which are mostly grounded in other fields such as anthropology, psychology and sociology explicate consumer behaviour from different perspectives, thus providing a holistic explanation of consumer behaviour.

The extensive literature review was intended to evaluate and critique various models popular in explaining consumer behaviour. This was key to setting the tone of the study's discourse and arriving at the best possible explanation of consumer behaviour regarding airline choice among South African domestic travellers. Henceforth, this evaluative process and critical analysis of the consumer behaviour discourse guided answering the research questions derived from the following study's research objectives:

- To examine and identify the consumer (passenger) personal values that underpin the evaluation of airline service attributes used to choose an airline within the South African domestic passenger market.
- To identify the most crucial airline service attributes used by customers to evaluate and choose airlines within the South African domestic passenger market.

- To examine the impact of airline service attributes on customer post-purchase outcomes and behaviour within the South African domestic passenger market.
- To assess if there is a difference in personal values influencing the evaluation of airline service attributes by low-cost carrier customers compared to full-service carrier customers within the South African domestic passenger market.
- To assess if there is a difference in the effect of airline service attributes on post-purchase outcomes and behaviour for low-cost carrier customers compared to full-service carriers' customers within the South African domestic passenger market.
- To evaluate if demographics (income and education) moderate how personal values influence the evaluation of airline service attributes used to choose an airline within the South African domestic passenger market.
- To evaluate if demographics (income and education) moderate the effect of perceived service and post-purchase outcomes and behaviour.
- To investigate if airline marketing communications effort moderate how personal values influence the evaluation of airline service attributes used to choose an airline within the South African domestic passenger market.
- To investigate if airline marketing communications effort moderate the effect of perceived service on post-purchase outcomes and behaviour within the airline industry in South Africa.
- To determine if the consumer personal values also explicate post-purchase outcomes and behaviour within the South African domestic passenger market.

This chapter follows the structure outlined in Figure 3.1, beginning with a detailed discussion on consumer behaviour.
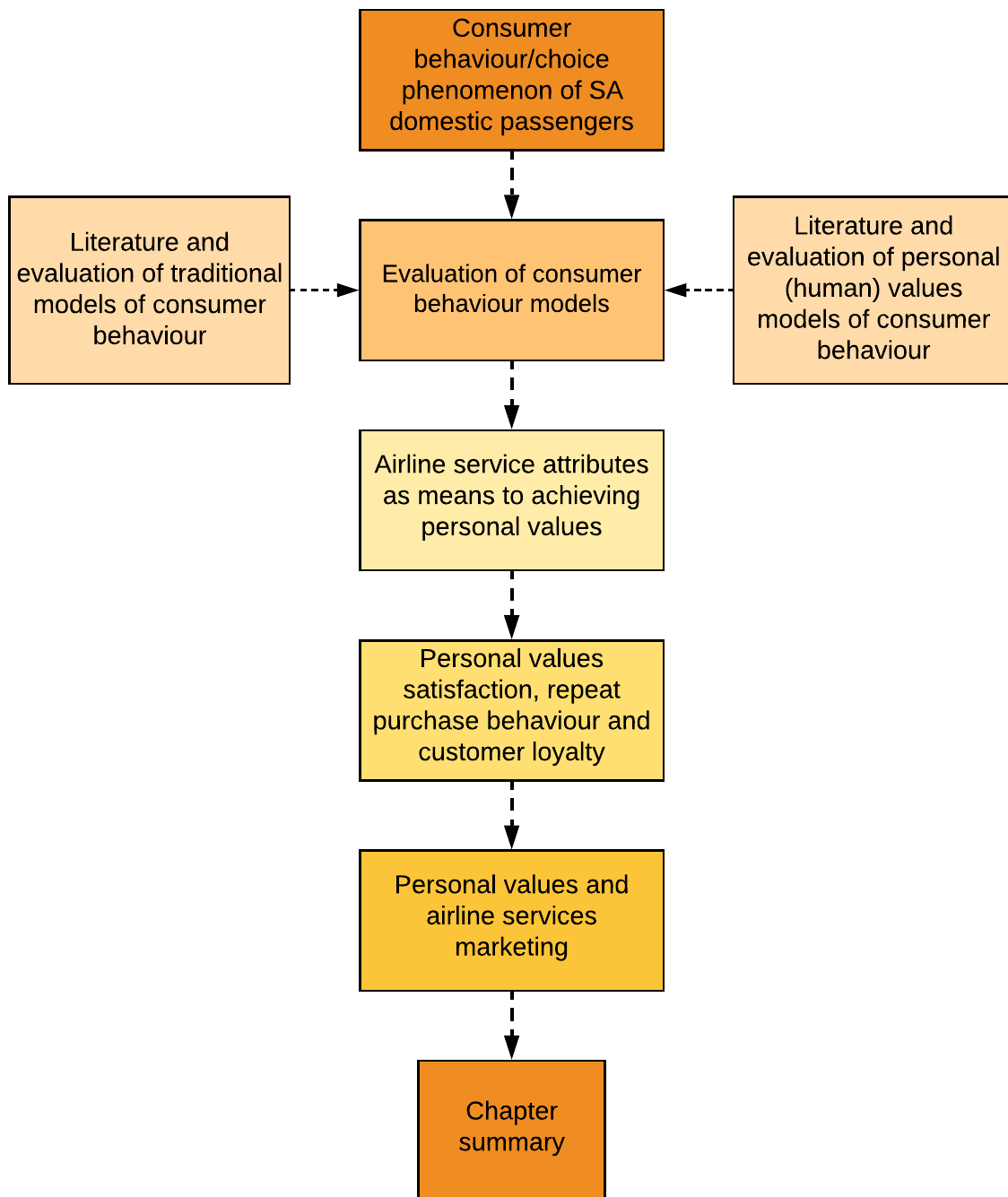
Figure 3.1: Chapter 3 Structure Summary (*Primary Source*)

Various models on consumer behaviour are evaluated to get a comprehensive explication of the consumer's decision processes. Extant literature reveals that consumer behaviour is attributable to a plethora of factors. Therefore, this study evaluates the relevance and

accuracy of these factors in explaining the airline choice phenomenon within the South African domestic passenger market. As indicated, this chapter starts with the review of consumer behaviour literature in general, but with a focus on choice. That, together with the subsequent sections, helps set a foundation for conceptual framework development (in Chapter 4) to model the South African passengers' airline choice, customer satisfaction, patronage (repeat purchases) and customer loyalty.

3.2 CONSUMER BEHAVIOUR AND AIRLINE CHOICE PHENOMENA

Consumer behaviour has in the context of the growth of marketing research, received increased attention (Foxall *et al.*, 2011), and dominates the contemporary marketing literature (Goodhope, 2013). It is one of the broadest and vastly researched phenomena in marketing, and a foundation for planning and implementing marketing activities of a company (Žnideršić, Grubor and Marić, 2014). Several scholars, for example, Schiffman, Kanuk and Wisenblit (2010), Foxall (2015) and Solomon *et al.* (2016) concur that consumer behaviour is how consumers search for, purchase, use, evaluate and dispose of products, services and ideas which they expect will satisfy their needs.

Existing research and discussions around the concept of consumer behaviour reveal that it is a complex subject under marketing theory and practice. Its complexity stems from its genesis; a panoply of heterogeneous factors and fields, all impacting on it in more or less diverse ways. These different sources, if integrated well, can offer marketers with a multi-faceted understanding of the concepts of consumer decision-making processes. Such is key to an improved appreciation and prediction of all activities that consumers partake in; pre-, during and post-purchase of products. It also provides an understanding of motives and frequency of purchase (Wawrzyniak and Furaji, 2013).

Conversely, on the other hand, the diverse perspectives to consumer behaviour present challenges for marketers to know which of the factors best explain how consumers behave in different choice situations. The consumer behaviour theories are undergirded by different epistemological perspectives of fields such as psychology, economics, anthropology, sociology, philosophy and other humanities that inform human behaviour

(Ryynänen, 2010; Foxall *et al.*, 2011). Thus, they (theories) owe it to the different kinds of historical developments of their parent sciences and scientific paradigms (Ryynänen, 2010). As a result, marketers risk developing ill-defined strategies based on these diverse streams of explanations, if not well understood. Marketers are in fact at the receiving end as they are left in a dilemma of trying to reconcile theoretical arguments emanating from these fields, some of which are not familiar to them.

Nevertheless, this complexity does not discount the importance of consumer behaviour to marketing. It can also be applauded for providing multiple lenses for understanding the effect of marketing activities on customer satisfaction (Viksne *et al.*, 2016). Businesses, including airlines, spend colossal amounts of marketing effort (7Ps of the marketing mix) in a bid to woo consumers to behave favourably towards their product offerings. To develop a formidable marketing effort, marketers must, among other factors, draw from consumers' culture, social factors, economic and psychological factors (Jisana, 2014). These factors if explored well, can provide an insight to consumer buying habits. Central to this study are personal values which are a cultural construct of consumers. Literature (Cai and Shannon, 2012; Guiry and Vequist IV, 2015; Madi, 2016) shows that personal values are essential for segmentation, targeting, positioning (STP), and ultimately for the development of effective marketing programs.

Therefore, as stated earlier on about the diversity of consumer behaviour perspectives, hence its complexity, the thought of a general theory of consumer behaviour combining the different variables of concern from across the social sciences fields is cumbersome and somehow impossible (Foxall, 2015). In light of this, various models have been propounded and are being applied in research to explain consumer behaviour. Viksne *et al.* (2016) opine that some of these models have been more successfully approbated in practice than others.

3.3   CONSUMER BEHAVIOUR MODELS

Foxall *et al.* (2011) confirm that consumer behaviour models are rooted in various fields mentioned above. The authors state that the majority of leading models of consumer behaviour have their theoretical foundations leaning towards the disciplines of psychology

and economics. Such models lend their premise towards a more cognitive approach; hence they portray consumer behaviour as a process where thinking, evaluating and deciding prevails and is less about the social phenomena (*ibid*).

Solomon *et al.* (2016) extend beyond Foxall and colleagues' allusion and illuminate the multiple approaches to understanding consumer behaviour through the pyramid of consumer behaviour (Figure 3.2). In this figure, Solomon and his partners present the disciplines in the consumer behaviour research field on a macro-micro behaviour continuum. The domains close to the apex of the pyramid are inclined towards individual focus while those close to the base of the pyramid are interested in aggregate behaviour (social focus).
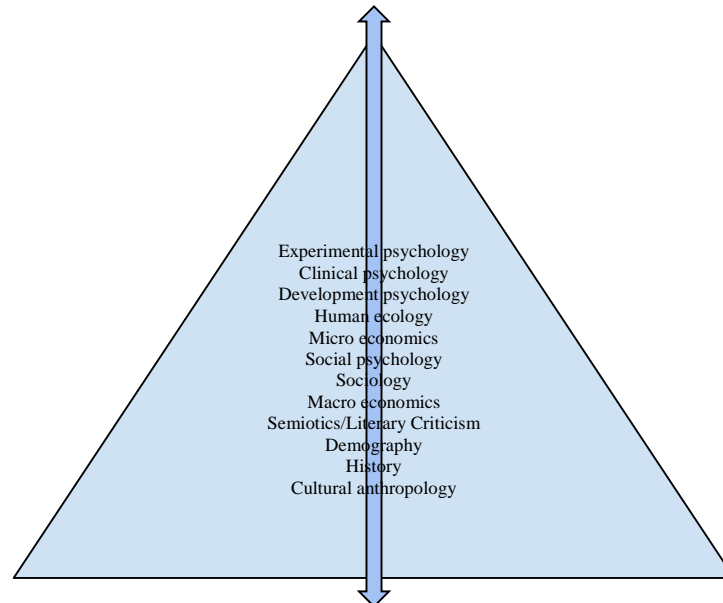
Figure 3.2: The pyramid of consumer behaviour (Solomon *et al.*, 2016)

Solomon *et al.* (2016), through this pyramid of consumer behaviour, and Jisana (2014) concur with others that studying consumer behaviour is challenging. However, one can get solace by likening the multi-faceted approach to consumer behaviour through the famous Indian fable of the blind men and the elephant. That is, consumer behaviour can be understood from different angles which need to be consolidated to get a better understanding of consumer decision-making processes. Thus, no theoretical position can claim superiority over others. From a psychological perspective, Foxall (2015) states that

marketers have examined consumer backgrounds to ascertain the extent to which their attitudes, motives and personality traits influence their buying behaviour. Influences of social factors such as class, status and the family have also been studied to understand consumer decision making (*ibid*).

There are a variety of consumer behaviour models that have been put forward by scholars. However, there seems to be a lack of consensus amongst these scholars on the categorisation of the models. For instance, Goodhope (2013) categorises consumer behaviour models into seven comprehensive classes, namely, (1) quantitative or verbal, (2) physical or behavioural, (3) prescriptive or analytical, (4) partial or holistic, (5) static and dynamic, (6) decision process model (logical flow) and (7) theoretical models. However, Goodhope does not link the various types of consumer behaviour models to his classifications.

Unlike Goodhope, Jisana (2014) comes up with two categories, that is, traditional models and contemporary models. Under the conventional, Jisana includes the economic model, learning model, psychoanalytic model and sociological model. The author ascribed to the Howard-Sheth model, Engel-Kollat-Blackwell model, Nicosia and Stimulus-Response model as contemporary models. However, one cannot help, but question Jisana's categorisation as the models referred to as contemporary are rather very old. On that note, Mohammadi and Mohammed (2011) refer to them as grand models. The authors state that these models are premised on a theory that explains consumer behaviour as a series of multiple staged funnel-like processes.

Another category of models is one that explains consumer behaviour based on the notion of human/personal values (for example, by Rokeach, 1968; Gutman, 1982, and Kahle, 1983, Schwartz, 1992). Insomuch as the concept of personal values has been adopted in consumer behaviour studies, it is noted that there are very few studies of such nature explaining consumer behaviour in South Africa. Personal value models seek to connect consumer behaviour to the underlying individual lifelong goals of existence and are discussed in depth from Section 3.3.2.

Scholars adopt different nomenclature for these models. However, despite the variety of model categories, it is trite to note that consumer behaviour is an aspect of human behaviour in general, which is how humans interact with their environment (Goodhope, 2013). Figure 3.3 provides a simplified version of a decision-making process dependent on three fundamentals omnipresent in all consumer behaviour models (Brooks, 2012). Accordingly, Brooks (2012) states that humans perceive a situation at hand. They then employ the power of reason to assess if taking one or another action will be in their interest, and they use the power of will to execute the decision. In light of this, Viksne *et al.* (2016) opine that it is important to know which factor is emphasised when consumer behaviour is explained.
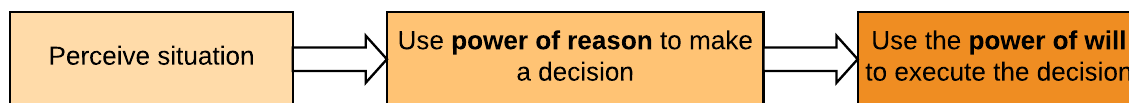
Figure 3.3: Human decision-making process (*Source: Brooks, 2012*)

Insomuch as others emphasise the power of reason and that of will, Brooks argues that it is the perception that is more important as it depends on unconsciousness and past experiences. With so much contention on the nomenclature of the models, this thesis, to provide a sound, critical and straightforward analysis of the consumer behaviour models adopted two categories, that is the traditional (grand models) and the value-based models. The conventional models are presented and discussed in Table 3.1 below, and the value-based models are those that attribute consumer behaviour to human (personal) values discussed from Section 3.3.2.

3.3.1 Traditional Models of Consumer Behaviour

Foxall *et al.* (2011) supported by Milner and Rosenstreich (2013) note that the field of consumer behaviour research lacks a universally accepted theoretical framework, making it necessary to review all available models to get a better explanation of how consumers make decisions. That said, the list of the consumer behaviour models included for discussion under the traditional models are in no way exhaustive. Only those that are popular in literature are included.

Table 3.1: Traditional Consumer behaviour Models.

Consumer Behaviour Models Types	Author & Year	Brief description
Economic model	Drawn from the seminal work of Smith (1776), Marshall (1890) and Robbins (1932)	This model is based on the assumption that consumers are rational beings who follow the principle of utility maximisation in pursuit of satisfying their needs. It depends on the following effects: · Price effect · Income effect · Substitution effect Its main criticism is on its tendency to treat consumers as homogenous, whereas it is known that they are different depending on socio-cultural, psychological, personality and past experiences.
Psychoanalytic model	Kassarjian (1971)	Underpinned by Sigmund Freud's psychoanalytic theory which states that human behaviour is influenced by both conscious and subconscious mind. Based on Freud's three levels of consciousness (i.e. if, ego and superego). This model's criticism stems from the fact that of its base theory's (Freud's psychoanalytic theory) lack of scientific testability (Udo-Ime, Awara and Essein, 2015).
Sociological model	Spaargaren (2003)	Postulates that consumer behaviour is largely dependent upon and shaped by the social groups and forces. These social groups include the reference groups, family, peers and also transcends to the societal cultures, social status and the role one plays (Jisana, 2014). This model is anchored on the Veblen theory.
Learning model	Moschis (1978)	This model was propounded by classical psychologists, for example, the likes of Pavlov and Skinner. The model is premised on the idea that human behaviour depends on the need to fulfil basic and learned needs (Jisana, 2014). The criticism that is often levelled on this model is that it is manipulative.
Nicosia model	Nicosia (1966)	This model tries to explain consumer behaviour by linking the influence of a firm's marketing messages to consumer attitudes. It assimilates the Theory of Planned Behaviour in that marketing messages are instrumental in invoking attitudes which leads to intention to act in a certain way. The downside of this model is that it assumes that before the firm's marketing messages consumers are empty vessels.
Stimulus-Response model	Kotler (1965, 1997)	This model also stems from the learning theory and explains consumer behaviour as a response to a

		stimulus. The model is divided into external stimuli (marketing effort (the Ps) and consumers'' macro-environmental factors), the consumer black box and the responses. The model is simple to understand, but its downside is on its assumption that consumers always follow a mechanistic decision process.
Howard-Sheth model	Howard and Sheth (1969)	They are regarded as one of the most comprehensive models (Jisana, 2014), the Howard-Sheth model, like the learning model, uses the concept of stimulus-response to explicate consumer behaviour. It has four major components, namely: inputs, outputs, hypothetical constructs and some exogenous variables. Paradoxically, its main criticism stems from its comprehensiveness which makes it too complex to explain consumer behaviour.
Engel-Kollat-Blackwell model	Engel, Kollat and Blackwell (1968)	This model is an adjustment of the Nicosia model whose strength lies in the feedback or 'search' loop, which allows for iterations of partial decision-making (Milner and Rosenstreich, 2013). Like the Howard-Sheth model, this model is often criticized for its complexity, and its mechanistic approach, thus impracticality.

Primary Source

The commonality amongst these models (in Table 3.1) is that their theoretical umbilical cords are to a more considerable extent tied to the disciplines of economics, sociology and psychology (Foxall, 2015; Foxall *et al.*, 2011). In support of the traditional models' theoretical links to the discipline of economics, Madhavan and Chandrasekar (2015) point out that it was the early economists that started examining consumer decision-making about 300 years ago. However, Foxall *et al.* (2011) argue that social-cognitive theories and models that have dominated the consumer research discourse. Such theories and models place much emphasis on cognition; hence they portray consumer behaviour as a process of thinking, evaluating and deciding (*ibid*).

Notwithstanding so many positive reviews for explaining consumer behaviour, some scholars have criticised the traditional models, for example, Erasmus, Boshoff and Rousseau (2001). These authors criticise the conventional models for over-emphasising cognition. They argue against the idea of viewing consumers as rational and frugal beings

who spend a considerable amount of time searching for information and evaluating available alternatives to arrive at the best possible choice.

This simplistic and generalist portrayal of the consumer decision-making process is not always accurate in reality. In some situations, consumers may spend a little time and do not follow the sequential steps often presented in such models. Srédl, Soukup and Severová (2013) argue that this kind of reasoning fails to hold since buying situations are fraught with uncertainties and risks. For example, impulsive buying and conspicuous consumption. The other criticism levelled against the grand models, particularly those with a more cognitive approach, is their failure to acknowledge or elaborate on the impact of environment and social experience in the processing of information. Erasmus *et al.* (2001) also mention that some critics are concerned about how some of these models (e.g., Howard-Sheth model and Engel-Kollat-Blackwell model) somehow complicate straightforward decision situations.

Furthermore, these grand models have been criticised for failing to account for product specificity, thus generalising the decision-making process across products. For instance, air travel services are distinct from the physical goods in nature and in how passengers arrive at choosing an airline. Such criticism is noted by Milner and Rosenstreich (2013) in their study of the financial services sector where they lament the failure by various models to account for consumer decision-making. Another criticism centres on the dominance of positivism as the epistemological lens are underpinning most of the cognitive models (Boateng and Boateng, 2014; Kocyigit, 2018). Foxall *et al.* (2011) buttress the epistemological argument by stating that epistemologically diverse consumer research fields are essential to avoid an impoverished intellectual milieu which may hinder the scientific growth of the area.

In addition to these popular models of consumer behaviour discussed above, a new breed of models backed up by the advancement in technology, now incorporate modelling/simulation to explain consumer decision processes. Recently, there has been an increasing move into neuroscience to predict and influence buying behaviour. However, these models, like their predecessors, are positivist in nature and somehow

emphasise cognition. For instance, the agent-based modelling and simulation (ABMS) technique use artificial agents to imitate attributes and behaviours of humans (Wawrzyniak and Furaji, 2013). Cherubino *et al.* (2019) add that they also employ neuroscience techniques such as functional magnetic resonance imaging (fMRI), electroencephalography (EEG) and magnetoencephalography (MEG) to understand and influence consumer behaviour. In light of this, it is clear that human behaviour is more complex than this objectivist view.

In light of the much-needed epistemological diversity as argued for by Foxall *et al.* (2011), the value-based models provide another facet of consumer behaviour. In support of this view, Žnideršić, Grubor and Marić (2014) note that a horde of other factors impacts on consumer behaviour. Therefore, the value-based models provide an anthropological and sociological explanation of consumer behaviour. Unlike the cognitive consumer behaviour models discussed above, the value-based models explain consumer behaviour using personal values which are touted as the non-concrete and deep-rooted motives, which guide, defend or explain consumer attitudes, customs, beliefs and ultimately the choice behaviour (Zhou *et al.*, 2013; Weber, 2017).

In line with this definition, Zinas and Jusan (2017) describe personal values as the life drivers that propel individual preferences and choices. In the following section, personal values are expounded on to articulate them as an alternative for explaining airline choice within the South African domestic market.

3.3.2 Value-Based Modelling of Consumer Behaviour

Whilst the traditional (grand) models often rely on cognition and proximal predictors to explain consumer behaviour, value-based models seek to establish a linkage between behaviour and human (personal) values. Insomuch as humans are portrayed as homo economicus beings (Meyer, 2016; Coyle, 2019), it is trite to note that personal values are the ultimate point of reference for such rational assessments of buying situations. In line with this, Madhavan and Chandrasekar (2015) opine that behaviour is the means to achieve a goal (personal values). The following section will elucidate on how personal values are believed to substantially influence the behaviour of individuals (Rokeach,

1973), hence provides a powerful explanation of consumer behaviour (Gutman, 1982; Schwartz, 2012; Zinas and Jusan, 2017).

3.4   THE CONCEPT OF PERSONAL VALUES

The term 'value' has different connotations in marketing, hence must be applied with caution. Generally, within the marketing field, the term might refer either to the sacrifice customers make to satisfy their needs (Kotler and Keller, 2016). However, in this study, the term will refer to personal values which can be defined as the standards or criteria of a person's conduct which guide and inform decision making. The use of personal values in this study was to a large extent informed Rokeach's (1979) classical reminder that "understanding human (personal) values is a never-ending process — a grouping toward an ultimate objective that can be attained only by a method of successive approximation".

Li and Cai (2012) identify culture as the underlying determinant of consumer behaviour and posit that among other things, culture manifests powerfully through personal values. In the same way, personal values differ across the world in the same way cultures do (Meyer, 2016). As such, Weber (2017) notes that values are deeply personal and individualistic and convey what is essential to us in our lives. This renders personal values relevant in providing the deep-seated and rich explanations of consumer behaviour from various cultural settings. For this study, the aim is to examine the personal values that underlie airline choice; hence, explain consumer (passenger) behaviour within the South African domestic passenger market. In support, Boyd *et al.* (2015) assert that personal values are reliable indicators of how people will think and act in value-relevant situations such as choosing an airline.

The study of human (personal) values, like the traditional models, also has its roots in the fields of psychology, sociology, anthropology and marketing; but were "conceived of as philosophical concepts which were insolubly tied to virtuous living and morality" (Debats, 1996). Over the years, personal values have become widely recognised by many as the yardstick for understanding human attitudes and behaviour (Cieciuch *et al.*, 2014). They are usually thought of as relatively abstract, giving rise to a broad constellation of attitudes and behaviours (Boyd *et al.*, 2015).

Literature shows that classical work by the likes of Rokeach (1968, 1973), the Values and Lifestyles (VALS^TM) methodology developed at SRI International (Mitchell 1983), Kahle (1983) and Gutman (1982) among others, laid the foundation for the application of personal values in explaining human behaviour. After that, Schwartz (1992) building on the classical work of these early scholars developed what has become to be the widely accepted framework on personal values. The value-based models are discussed hereunder.

3.4.1 Rokeach Values Survey (RVS)

According to Debats (1996), the publication of Rokeach's book titled 'The Nature of Human Values' led to a surge of empirical studies which sought to investigate the role of human values in many branches of psychology and sociology. Rokeach (1968) developed a measurement scale, the Rokeach Value Survey (RVS) to operationalise, understand and measure the concept of human (personal) values. Rokeach defined personal values as

> " . . . an organised set of preferential standards that are used in making selections of objects and actions, resolving conflicts, invoking social sanctions, and coping with needs or claims for social and psychological defences of choice made or proposed." (Rokeach, 1973).

In essence, Rokeach's definition emphasises that human values are enduring beliefs that underpin the preferability of specific modes of conduct both personally and socially (Grebitus, Steiner and Veeman, 2015) and act "as internal reference points that people use to formulate attitudes and opinions" (Walls, 2018). As such, it would be correct to attribute passenger attitudes, reactions and airline choice to personal values. In conceptualising human values, Rokeach (1973) divided them into instrumental and terminal values (see Figure 3.4).
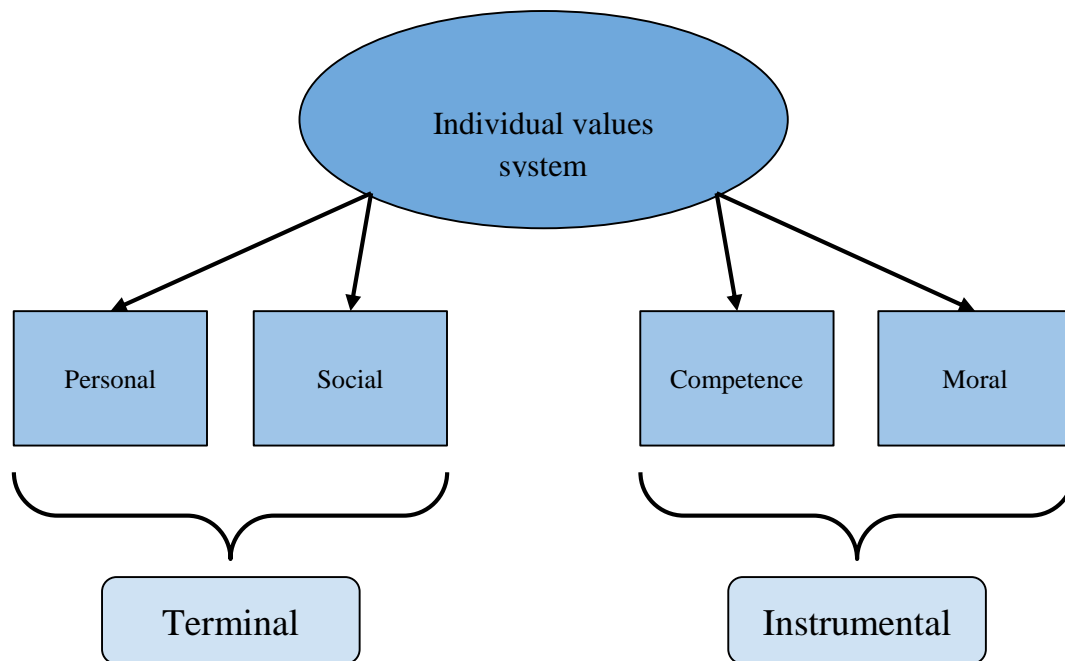
Figure 3.4: Individual's Values System of Rokeach (1973)

For terminal values, Rokeach (1973) states they can be conceived as either intrapersonal (for example, peace of mind) or interpersonal (for instance, world peace) and social (care for others). Instrumental values reflect modes of conduct (moral or competence-based), such as politeness, honesty and obedience. On the other hand, terminal values reflect desired end states, such as freedom, equality, peace, and salvation (Miller *et al.*, 2016). As such, terminal values are more abstract compared to instrumental values. Instrumental values are the pathway to the achievement of terminal values. For example, seeking freedom of action and thought at work as a way to autonomy, and adhering to the requirements defined in the course of your duties leading to conformity.

The Rokeach Value Survey (RVS) has been employed widely across numerous disciplines (Ghazieh and Soltani, 2016; Miller *et al.*, 2016). Table 3.2 presents the original version of RVS, consisting of two sets of values with 18 individual values in each set (Rokeach, 1973). However, due to several limitations, Wang, Rao and D'Auria (1994) state that some researchers resorted to modifying the RVS instrument to bring forth interval measure of value importance. The limitations of the RVS include 1) forced ranking of one value at the expense of others which may be equally crucial to a respondent, 2)

the presentation of the 36 value items may be too much for a respondent's ability to process information accurately, thus distort the ranking procedure, and 3) the reliance on the ranking of the data precludes the use of a wide variety of useful statistical analysis techniques.

Debats (1996) acting on the criticism of the RVS by some scholars (for example, Kelly and Strupp, 1992; Weber, 1993; Braithwaite and Law, 1985), concluded that it was better to use the multiple item operationalisation of the value concept than the RVS' single item operationalisation to avert the dangers of item ambiguity and flexibility of interpretation. Kelly and Strupp (1992) criticise findings from broadly and generally defined RVS values sub-scales for lack of the specificity essential to conclude. Weber (1993) faulted the scarce empirical confirmation of theoretical distinction between personal, social, moral and competence values domains. Braithwaite and Law (1985) questioned the measurement of values using single items is questionable; they argue that "individual differences may reflect variations in linguistic usage rather than variations in underlying constructs."

Table 3.2: Individual's Values of Rokeach (1973)

18 Terminal Values (End states)	18 Instrumental Values
Social (Focus on Others)	*Competence (focus on competence)*
· A World at Peace (free of war and conflict) · A World of Beauty (the beauty of nature and the arts) · Equality (brotherhood) · Family Security (taking care of loved ones) · Freedom (independence, free choice) · Mature Love (sexual and spiritual intimacy) · National Security (protection from attack) · Social Recognition (respect, admiration) · True Friendship (close companionship)	· Ambitious (hard-working, aspiring) · Capable (competent, effective) · Clean (neat, tidy) · Courageous (standing up for your beliefs) · Imaginative (daring, creative) · Independent (self-reliant, self-sufficient) · Intellectual (intelligent, reflective) · Logical (consistent, rational) · Self-Controlled (restrained, self-disciplined)
Personal (Self-Focused)	*Moral (Focus on Morality and Relations)*
· A comfortable life · An exciting life (a stimulating, active life) · A sense of accomplishment (lasting contribution) · Happiness (contentedness) · Inner harmony (freedom from inner conflict) · Pleasure (an enjoyable, leisurely life) · Salvation (saved, eternal life) · Self-respect (self-esteem)	· Broad-minded (open-minded) · Cheerful (light-hearted, joyful) · Forgiving (willing to pardon others) · Helpful (working for the welfare of others) · Honest (sincere, truthful) · Loving (affectionate, tender) · Obedient (dutiful, respectful) · Polite (courteous, well-mannered) · Responsible (dependable, reliable)

Adapted from Tuulik et al. (2016)

Furthermore, other scholars have questioned whether the thirty-six values by Rokeach should be considered as critical (Gibbins and Walker, 1993). They also question the integrity of Rokeach's study whose sample was 130 individuals, raising alarms on statistical significance and validity of results. Gibbins and Walker (1993) performed a factor analysis on Rokeach's findings and discovered that all but one value had more than one significant factor. Accordingly, Walls (2018) states that RVS is not a good measure for the desirability of values.

However, despite all the criticisms, literature shows that Rokeach's work became foundational for values-based analytical work (Walls, 2018). It is clear that most scholars after that rode on RVS to study further the concept of human (personal) values (Borg, Bardi and Schwartz, 2017) to expand on values-based analysis, prediction and explanation of human behaviour. The following discussion is on the Values and Lifestyles framework by Mitchell (1983).

3.4.2 The Values and Lifestyles Framework

The Values and Lifestyles (VALS) typology was initiated around 1979 by the SRI International sociologist and consumer futurist - Arnold Mitchell. Mitchell (1983) founded the VALS typology by extending the Hierarchy of Needs (Maslow, 1954) and work of American sociologist Riesman (1950) who was amongst the first to notice the changes in American character caused by consumerism (Stocki, 2015). Van Acker, Goodwin and Wiltox (2016) posit that Mitchell added a psychographic dimension on Maslow's Hierarchy of Needs. According to Ghosh (2014), the VALS™ was initially meant to examine the real division of US society, distinguishing the "inner-directed" from "outer-directed" individuals (Van Acker, Goodwin and Wiltox, 2016).

Ten years later, the VALS framework was restructured according to criticisms of the initial VALS™ model, as well as changing social values to enhance its ability then to predict consumer behaviour and became to be known as the VALS 2™ (PEKTAŞ, 2018). This was after experts from SRI International, Stanford University, and the University of

California, Berkeley, in pursuit of segmenting consumers based on enduring personality traits rather than the social values which change over time (Van Acker, Goodwin and Wiltox, 2016). Such was in support of the theory of social character by Riesman (1950) cited in Stocki (2015) and PEKTAŞ (2018) that consumption patterns are the key source of identifying a reference group and that segmentation is a mixture of demographic and psychological dimensions.

Upon its (VALS^{TM}) development, Mitchell (1983) categorised consumers into eight groups based on psychographic characteristics based on two dimensions – primary motivation (values) and resources. Mitchell (1983) believed that consumers are primarily guided by ideals, achievement, and self-expression values. As a result, Mitchell argued that people who are motivated by the achievement value want others to know of their success and those driven by self-expression value often seek social activity, variety and risk (Naami, Ashouri and Soleimani, 2017). On the other hand, Mitchell posited that resources included personality traits such as energy, self-confidence, leadership, and vanity. The eight categories of consumers, as per the VALS 2^{TM}, are presented in Figure 3.5.
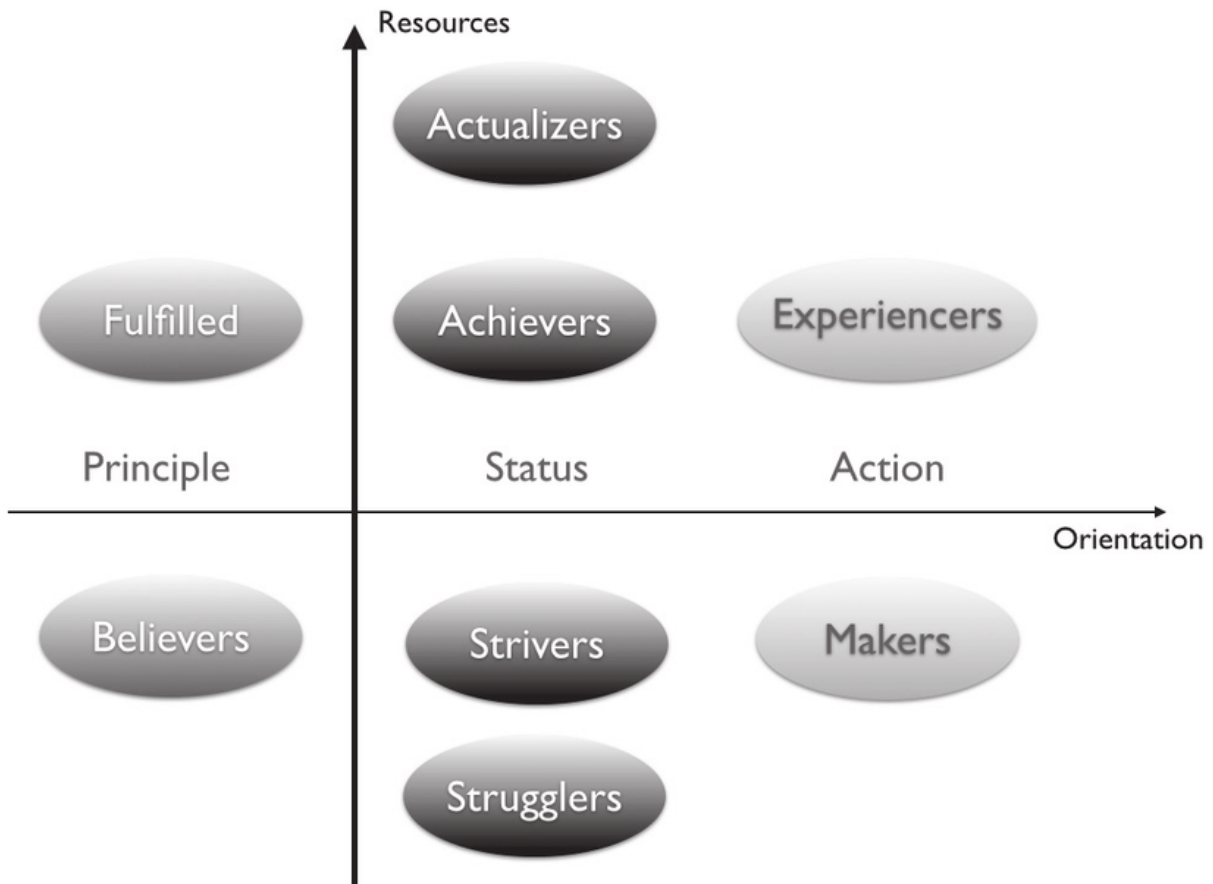
Figure 3.5: Arnold Mitchell's VALS-2^{TM} System (*Adapted from Stocki, 2015*)

Shown in Figure 3.5 above are the eight categories of consumers based on the level of income (resources) and motivational orientation (values). At the base of the resources dimension lies those consumers referred to as the Strugglers, followed by the Survivors, then Achievers and at the apex are the Actualisers (VALS^{TM}, 2015; Stocki, 2015; PEKTAŞ, 2018). For the motivational orientation dimension, it is assumed that an individual's primary motivation determines what meaningfully governs one's activities, both intrinsically and extrinsically. These activities range from the principle, status and action (behaviour). Along these two dimensions, VALS^{TM} isolates patterns that reinforce an individual's identity in the marketplace, making it easy to segment consumers.

The VALS^{TM} fulfils the assumption that people buy products whose consequences (experiences and benefits) resonate well with their preferences and give shape,

substance and satisfaction to their lives (VALS^TM, 2015). Thus, notwithstanding resource levels, individuals may be driven by ideals which for some people, might manifest in intellectual curiosity and ideological searching. For others, it comes as a form of adherence to either personal or social norms, for example, religion, morality and ethical convictions. In both cases, people tend to base their decisions on quality, integrity and traditions as the yardsticks of their behaviour or actions.

Also, people who are driven by symbols of success often seek recognition through social positions. To get approval and recognition from their in-groups (societies/communities), such people focus on collective activities and positive evaluation and reward. Therefore, their decision choices are based on their in-groups' expectations, concerns and desires. Apart from being motivated by ideals and social status, VALS^TM states that self-expression values drive some individuals. Such people are emotionally attached to experiences and place emphasis on self-reliance, hence would resist any form of social controls that threaten their individuality and experimentation.

Furthermore, the VALS^TM framework states that beyond the age, income, education level and physical resources available, the desire for consumption of products and choice decisions thereof is also driven by factors such as confidence, the movement's leadership, open-mindedness, intelligence, arrogance, energy levels, health and desire to earn (VALS^TM, 2015). All these resources play a significant role in indicating different levels of ability to buy, and the impact on (increase or reduce) an individual's primary motivation (Naami, Ashouri and Soleimani, 2017).

In essence, the VALS^TM framework depicts how consumer lifestyle, attributable to resources and motivational orientation, is reflective of an individual's values and their socio-cultural values, hence it is proficient in identifying consumption and behavioural patterns, as well as purchasing decisions (Zepeda and Nie, 2012; Long *et al.*, 2018). However, care must be exercised when approbating the framework as it was solely developed for the American consumer segmentation. Therefore, the external validity of such a framework needs to be investigated when applied outside America, in this case,

South Africa. The two countries differ a lot on socio-cultural and economic factors which are at the core of the VALS typology.

Noting this, it is vital to be reminded that it is not the intention of this study to test the validity of the VALS^{TM} framework in a South African setting. Instead, the main aim of this study is to determine the personal values that underlie airline choice decisions within the domestic market. Furthermore, compared to the RVS and others, this framework does not articulate well the distinct values to which to attribute lifestyles. It only mentions the motivational orientations (ideals/principle, status and action), leaving the specific human values to assumption. That said, the VALS 2^{TM} was found unsuitable for the study.

3.4.3 Kahle's List of Values (LOV)

Kahle (1983), in developing his nine-item List of Values (LOV) scale for the measurement of values in a variety of consumer behaviour contexts, drew from and simplified a number of earlier tools developed for measuring value salience such as the Maslow's (1954) Hierarchy of Needs model, the theoretical base of values (Feather, 1975) and most significantly, Rokeach's (1973) Value Survey (RVS). Veroff, Douvan and Kulka (1981) initiated the LOV scale and Kahle further developed it based on his Social Adaptation theory. The theory states that to improve their adaptive worth (Kahle, 1983), individuals actively filter socio-cultural demands, hence refining and redefining values in the process (Thompson, 2009).

Through the LOV, Kahle (1983) sought to address the shortcomings of the RVS (Rokeach, 1973) by providing a more parsimonious measurement of personal values (Watkins and Gnoth, 2005). Like its predecessor (RVS), the LOV was initially penciled for understanding and predicting American consumers. However, it has been approbated successfully outside America, for example, Yilmaz, Gungordu and Yumusak (2016) applied it to measure the relationship between the list of values and consumer decision styles in Turkey. The authors found the LOV scale extremely reliable with a Cronbach Alpha Coefficient of *0.914*.

In another study in Japan, Thienhirun and Chung (2017) found LOV scale useful in determining values underpinning customer needs, satisfaction and repeat purchase

intention. This could be attributed to Kahle's suggestion that the LOV is a viable and widely accepted measure for cross-cultural comparison of values. Compared to its predecessor (RVS), which only concentrated on Americans, hence raising its application to non-American contexts questionable, the LOV scale has exhibited validity and parsimony (Watkins and Gnoth, 2005).

The LOV scale comprises of nine items, that is, self-respect, sense of fulfilment, sense of accomplishment, sense of belonging, excitement, being well respected, security, warm relationship with others, and fun and enjoyment of life (Webb, Murphy and Brown, 2017; Thienhirun and Chung, 2017). Five years later, Homer and Kahle (1988) reduced the nine LOV item into three groups;

1. **Internal individual values** - values based on individual, for example, excitement, self-fulfilment, self-respect, and sense of accomplishment,
2. **Internal, interpersonal values** - values involving interactions with other people, for example, warm relationship with others, and fun and enjoyment of life), and
3. **External values** are representing the values related to society, such as the sense of belonging, being well respected, and security). Thereafter, Kamakura and Novak (1992) also reclassified the LOV scale into five motivational domains: self-direction (self-respect and self-fulfilment), enjoyment (fun and enjoyment, excitement, warm relationships), achievement (accomplishment, well-respected), security (security) and maturity (belonging, warm relationships).

The LOV is considered as a better methodology than the VALS^{TM} (Yilmaz, Gungordu and Yumusak, 2016; Kahle, Beatty and Homer, 1986) and its other predecessors such as the RVS, the Hierarchy of Needs theory and the theoretical base of values (Thienhirun and Chung, 2017). However, it also has its downsides. One of its limitations is evident when compared to the RVS, as it does not offer to respondents the definitions of the values they are asked to reflect upon (Kahle, Beatty and Homer, 1986). The implication is that due to subjective interpretations of values, respondents might be rating the same values from different premises. This might lead to grouping individuals with heterogeneous

beliefs, attitudes, purchasing habits into one segment, defeating the purpose of segmentation (Thompson, 2009).

Another limitation lies in the fact that the "measured values list does not present the difference of individual's values" (Ghazieh and Soltani, 2016:75). Due to differences in culture, upbringing and life experiences (Rokeach, 1968), each individual has a set of different values (Weber, 2017). With these limitations, the next section presents another values theory and measurement scale – the widely accepted Schwartz human values theory and the Schwartz value survey, respectively. The measurement scale is thought to possess better qualities than the above-discussed scales.

3.4.4 Schwartz' Value Survey (SVS)

Post Rokeach's studies, the theory of basic human values (also known as the Schwartz Values Theory) has become the contemporary theoretical anchor of values-based consumer research studies. The theory has been repeatedly approbated by various studies concerning the application of personal values in explaining human behaviour in general and choice in particular (Schwartz, 2012; Schwartz *et al.*, 2012). In propounding the theory of basic human (personal) values, Schwartz (1992) integrates Rokeach's (1973) understanding of personal values as individual's transsituational life goals. Apart from being transsituational, Schwartz opines that personal values vary in their importance as guiding principles in a person's life and they provide a decision-making framework for one's everyday actions (Boyd *et al.*, 2015).

Schwartz' definition, like all other definitions of personal values, infers that personal values are predictive of attitudinal and behavioural outcomes including choice (Boer and Fischer, 2013; Guiry and Vequist IV, 2015). Therefore, this conveniently places the Schwartz Value Theory as a model for framing and determining personal values for predicting and explaining airline choice within the South African domestic passenger market. In his preliminary work on human (personal) values, Schwartz (1992) conducted a cross-sectional study spanning across eighty-two countries (Schwartz, 2012) seeking to identify a comprehensive set of fundamental (personal) values cutting across all societies.

From the study, Schwartz identified ten personal value domains grouped into four broad categories, as shown in Figure 3.6. and were later refined to nineteen values (Schwartz *et al.*, 2012; Schwartz and Butenko, 2014; Cieciuch *et al.*, 2014). In essence, Schwartz' human values model incorporates the values identified by earlier scholars, for example, Rokeach's values and Kahle's LOV, making it the most comprehensive values model. As such, this study employs the nineteen human (personal) values domains to determine which values underpin airline choice and which ones are dominant amongst airline customers within the South African domestic market.

Figure 3.6:   Schwartz' Values Model (Schwartz, 1994, 2012)

The Schwartz values model above presents the bases which can be critical to predict airline customer behaviour by identifying the dominant personal values amongst passengers within the South African domestic market. The outer circle in Figure 3.6 represents a motivational continuum splitting between values devoted to how travellers cope with anxiety and protecting self from those that focus on growth (self-actualisation) and free from anxiety (Schwartz and Butenko, 2014). The second outer circle shows that travellers' values can either focus on self- or can be socially focused. Then the third circle

breaks personal values into four categories, that is, self-transcendence, openness to change, self-enhancement and conservation (*ibid*).

These categories are placed on two bipolar dimensions, where self-transcendence is contrasted with self-enhancement and openness to change values against the conservation values (Schwartz, 1992; 2012; Cieciuch *et al.*, 2014). Amongst the ten fundamental personal values, Cieciuch, Schwartz and Davidov (2015) postulate that the circular structure of Schwartz' model expresses three assumptions. Firstly, values adjacent to each other are motivationally compatible, for example, a passenger's airline choice motivated by an airline's security profile is likely to be influenced by adjacent values such as tradition and conformity.

Secondly, this compatibility wears off as the distance between personal values increases and lastly, those values located opposite to each other (for example, self-direction and conformity) are motivationally in conflict (Schwartz, 2012; Cieciuch *et al.*, 2014). For instance, passengers whose life end state is underpinned by the tradition/conformity (conservation) values are unlikely to be motivated by the self-direction and stimulation (openness to change) values. Accordingly, when applied to airline choice behaviour, Schwartz values theory posits that it is difficult for passengers to hold in priority two conflicting (personal) values in the same choice act. Instead, they can have adjacent ones as they are theoretically related (Schwartz and Butenko, 2014), for example, to attain the achievement and hedonistic values.

The validity and reliability of the circumplex values theory have been interrogated in different behaviour situations. Borg, Bardi and Schwartz (2017) examined if the circular structure can also be applied to individuals. Their findings strongly supported that the value circle exists within persons, making the model extraordinarily relevant and well suited for the prediction of individual behaviour. Another study by Magun, Rudnev and Schmidt (2016) investigated the cross-country and within-country distributions of typical value systems among European populations. Their findings revealed that all the countries studied are internally diverse in their value class composition.

In South Africa, there have been minimal research studies applying the concept of personal values. Becker *et al*. (2017) conducted a psychometric evaluation of the Schwartz Value Survey in the South African context. They found the SVS promising as a measure to study value priorities, albeit with discriminant validity issues. Other studies using personal values in South Africa include one on University Students in South Africa (Fatoki, 2014), and in small business ownership (Fatoki, 2015). Both studies confirmed Schwartz value dimensions. Therefore, this study will add on to the growing body of knowledge on personal values with a focus on explaining airline choice within the South African domestic market.

3.4.5 The Refined Schwartz Value Model

In 2012, Schwartz and associates refined the theory of basic human values from ten values to nineteen values (Schwartz and Butenko, 2014; Cieciuch *et al.*, 2014; Schwartz *et al.*, 2012). The refined personal values theory is explained in Table 3.3 and depicted in Figure 3.7. This broad-based explanation of, the initially ten values (Schwartz, 1992; 2012) and later on the nineteen values address the construct validity deficiencies raised against the earlier models, the RVS (Rokeach, 1973) and the LOV (Kahle, 1983) in particular.

Table 3.3: The 4 Higher Order Values, the 10 Basic Values, and 19 More Narrowly Defined Values in the Refined Theory of Values

Higher-order values	Basic values	More narrowly defined values
Openness to change	**Self-direction**—Independent thought and action, choosing, creating, and exploring	**Self-direction-thought:** Freedom to cultivate one's own ideas and abilities (three items) **Self-direction-action:** Freedom to determine one's own direction (three items)
	Stimulation —Excitement, novelty, and challenge in life	**Stimulation:** Definition unchanged (three items)
	Hedonism—Pleasure and sensuous gratification to oneself	**Hedonism:** Definition unchanged (two items)
Self-enhancement	**Achievement**—Personal success through demonstrating competence according to social standards	**Achievement:** Definition unchanged (three items)
	Power—Control over people and resources	**Power-dominance:** Power through exercising control over people (two items) **Power-resources:** Power through control of

		material and social resources (two items).
		Face: Security and power through maintaining one's public image and avoiding humiliation (two items)
Conservation	**Security**—Safety, harmony, and stability of society, relationships, and self.	**Security-personal:** Safety in one's immediate environment (two items) **Security-societal**: Safety and stability in the wider society **(**three items).
	Conformity—The restraint of actions, inclinations, and impulses that are likely to upset or harm others and others and violate social expectations or norms	**Conformity-rules:** Compliance with rules, laws, formal obligations (two items) **Conformity-interpersonal**: Avoidance of upsetting or harming other people (three items)
	Tradition—Respect, commitment, and acceptance of the customs and ideas that traditional culture or religion provides	**Tradition:** Maintaining and preserving cultural, family or religious traditions (three items)
		Humility: Recognizing one's insignificance in the larger scheme of things (two items)
Self-transcendence	**Benevolence**—Preservation and enhancement of the welfare of people with whom one is in frequent personal contact	**Benevolence-dependability:** Being a reliable and trustworthy member of the ingroup (two items) **Benevolence-caring**: Devotion to the welfare of ingroup members (three items)
	Universalism—Understanding, appreciation, tolerance, and protection for the welfare of all people and of nature	**Universalism-concern:** Commitment to equality, justice, and protection for all people (three items) **Universalism-nature**: Preservation of the natural environment (three items) **Universalism-tolerance:** Acceptance understanding of those who are different from oneself (two items)

Adapted from Schwartz et al. (2012) and Cieciuch et al. (2014)

See shared locations for face, hedonism and humility in Figure 3.7

3.4.5.1   Self-Enhancement – Self-Transcendence Personal Values Dimension

This dimension shows the conflict between self-enhancement and self-transcendence personal values. Self-enhancement values category includes power and achievement values (see Figure 3.7) and is more concerned with an individual's interests, relative success and dominance over others. Also included under this category is hedonism which is shared with the openness to change values type.

Power values emphasised overcoming the sources of anxiety by actively controlling threats (Cieciuch, Schwartz and Davidov, 2015). They are better described through three subtypes, all contributing to an individual's goal of promoting personal interests by

controlling what happens, hence minimizing or avoiding anxiety-arousing threats. (Schwartz *et al.*, 2012). The subtypes are dominance over other people, dominance over resources and face (see Table 3.3).

Dominance over people refers to the ability or desire of an individual to control other people to do (Schwartz *et al.*, 2017; Li, 2016). Such a value item is far from airline choice, particularly from an individual point of view, hence can only influence airline choice indirectly as have been suggested by Kahle (1980). Dominance over resources entails the power to control events or what happens using one's material assets (Schwartz *et al.*, 2017; Li, 2016). Choice of a specific airline service attribute can be attributed directly to an individual's wealth. For instance, choosing to fly on a low-cost airline or a full-service airline can be as a result of cost differences between the airline models.

The face value subtype is a new value about maintaining the prestige and how to defend oneself from the threat to public image (Schwartz *et al.*, 2012). This subtype is relevant as it relates to an individual traveller's image (social status) which in the eyes of the public is maintained or enhanced by the type of airline one uses. Henceforth, the face subtype is situated between power values and security categories.
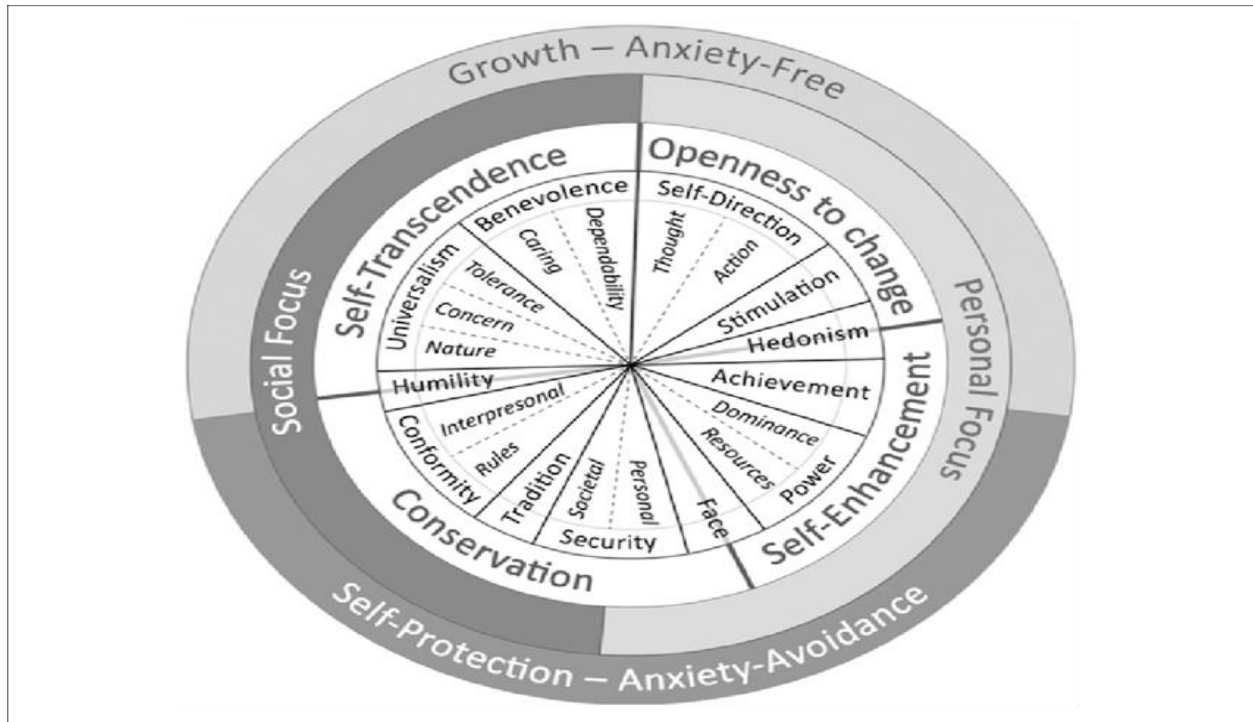
Figure 3.7: Schwartz' Refined Theory of Basic Personal Values (Schwartz *et al.*, 2012)

Achievement values refer to a person's drive for performance excellence based on normative standards of that individual's culture (Schwartz *et al.*, 2012; Elliot and McGregor, 2001). This value type can be split into two subtypes, that is, personal success and demonstrating competence. Schwartz (2012) defined achievement values as the underlying motivation to be judged as successful by others. This definition is relevant to determining airline choice behaviour. For example, flying instead of driving could be viewed by some as a sign of success. Using a particular airline (usually perceived as a premier brand) is also considered as a symbol of success. Such societal, psychological standards become the yardstick on which individuals assess their achievements. Therefore, those who desire to show off their success are often driven by these standards when choosing an airline.

Schwartz *et al.* (2012) identified three subtypes for universalism. These are tolerance, societal concern and protecting nature. Tolerance refers to wisdom, broadmindedness and maturity, while societal concern refers to an individual's desire for peace/harmony, social justice and protection of the weak. Protecting nature is all about caring for the environment or how individuals adapt to nature (*ibid*). Therefore, travellers would choose

an airline if they feel its services or positioning can assist them in attaining such end states (life goals). Airlines can provide these through their mission and vision articulation and implementation, and other marketing interventions such as corporate social responsibility (CSR) initiatives that can keep an airline brand in the minds of travellers.

Benevolence is the other self-transcendence value which initially referred to one's caring for the welfare of those around them (Schwartz *et al.*, 2012). Upon refining the theory, benevolence was split into dependability and caring subtypes. The caring subtype is concerned with responding and "devotion to the welfare of in-group members" whereas dependability speaks to reliability, trustworthiness and loyalty to the members of in-group (Schwartz and Butenko, 2014). Humility is the other new value that came up from the revised theory (Li, 2016). Schwartz *et al.* (2012) placed humility at the border of self-transcendence and conservation value categories as expresses both caring for others and compliance to social expectations. From a self-transcendence point of view, humility is about individual growth and dwells in freedom from anxiety. On the other hand, compliant humility focuses on self-protection and anxiety avoidance (*ibid*).

3.4.5.2 Openness to Change – Conservation Personal Values Dimension

Schwartz juxtaposed openness to change with conservation values to indicate a conflict between the two personal values dimensions (Schwartz *et al.*, 2012). Openness to change values dimension emphasises the independence of thought, action, and feelings and readiness for change (self-direction, stimulation) while conservation values dimension's emphasis is on order, self-restriction, preservation of the past, and resistance to change (security, conformity, tradition) (Schwartz, 2012).

Self-direction values manifest in an individual through the pursuit of independence (Schwartz, 2012). Self-directed individuals aspire for unfettered choices; they need to feel in control and mastery of their lives. In the refined model, Schwartz *et al.* (2012) split self-direction into two subtypes – independence of thought and action. In airline choice, individuals aspire for the freedom to exercise their ideas and abilities and determine their actions (Schwartz and Butenko, 2014) instead of being influenced by others' experiences with an airline. Through airline choice, such individuals would seek to demonstrate their

understanding and intellectual competence and exercise their capacity to attain self-chosen goals.

Stimulation values' conceptual definition and motivational goal (Schwartz, 1992) suggests three possible subtypes – excitement, novelty, and challenge. However, Schwartz *et al.* (2012) chose not to split the stimulation value type as the multidimensional scaling (MDS) measures were located in a narrow spatial region making the subtypes insignificant. Nevertheless, travellers driven by stimulation values need an exciting/daring life and are always seeking for adventures. This might be the underpinning value for people new to airline travel than frequent flyers. On the values model, stimulation values are adjacent to hedonism which sits on the border of openness to change and self-enhancement. However, hedonism only promotes personal growth unlike the self -enhancement values which focus on self-protection and anxiety avoidance.

On the other side of the bipolar dimension (openness to change - conservation values), there are conformity, tradition and security value types. Conformity is adjacent to humility which sits on the border of conservation and self-transcendence. At the same time, security is adjacent to face value subtype, which also sits on the edge of conservation and self-enhancement (Schwartz *et al.*, 2012).

Conformity is split into interpersonal subtype which is an inclination to avoid upsetting others, particularly those within your circles and compliance subtype which refers to an expectation to follow laid down rules. Unlike with self-directed individuals, conformers choose airlines revered by their significant others (e.g., spouse, parents, peers) or as a way of complying with rules. Therefore, airline choice is a way honouring or showing respect to one's significant others or as a way of meeting an obligation or expectations.

Tradition values which lie in between conformity and security value types refer to maintaining cultural and religious traditions (Schwartz *et al.*, 2012). Traditions are symbols, beliefs, and practices shared and valued in a group and become the benchmark of a group's members' behaviour. Members are expected to respect, commit and accept these traditions as part of one's life. As such, some travellers' airline choice is underpinned by the obligation to conform to conventions to maintain group membership.

For example, choosing an airline is seen as a way of showing patriotism, particularly with national airlines.

The last of the initial ten personal values (Schwartz, 2012) is security values which Schwartz *et al.* (2012) split into personal and societal security upon the refinement of the basic human values theory. Security values' motivational goals include safety, harmony, and stability of society, of relationships, and self (Schwartz, 2012). These personal values relate to travellers' concern about an airline's safety standards (both personal and societal) or issues of cabin cleanliness and luggage safety which is a form of personal security.

In his conclusions of a study on personal values, Schwartz (2012) states that personal values are stable over time, hence can serve as predictors of choice behaviour over long periods. As such, and in line with Rokeach's widely accepted definition, personal values can significantly assist South African airline marketers in getting a rich understanding of airline choice behaviour. The refined personal values (Schwartz *et al.*, 2012) can be instrumental in the coding of airline choice behaviour into corresponding narrowly defined personal values. This is critical to enable airlines to develop genuinely customer-centric airline services.

3.4.6 Measurement and Validation of the Schwartz Values Theory

Despite the widespread application of human values to predict, measure and explain human behaviour in general and consumer behaviour in particular, very few approaches describe their contents and methods of measurement in detail (Efremova *et al.*, 2017). However, Schwartz' theory of human values stands above the rest in terms of validity and reliability (Schwartz and Butenko, 2014; Datler, Jagodzinski and Schmidt, 2012). This can be linked to the fact that Schwartz' theory sought to address various issues of concern raised against his predecessors' work, for example, the RVS and the LOV.

Several studies have over the years confirmed the theory of human values (Schwartz, 1992; 2012; Schwartz *et al.*, 2012), for example, Krystallis, Vassallo and Chryssohoidis (2012), Efremova *et al.* (2017), Cieciuch *et al.* (2014), Schwartz and Butenko (2014),

Karadag, Kılıçoğlu and Yılmaz-Kılıçoğlu (2018). Initially, Schwartz (1992) collected data in more than seventy countries (Efremova *et al.*, 2017) across the globe including in South Africa using what became known as the Schwartz Value Survey (SVS) inventory. However, Bouman, Steg and Kiers (2018) raise some concerns about the SVS methodology, for example, comprehensibility and self-presentation biases.

In support of Bouman, Steg and Kiers, Schwartz in self-critique of the SVS pointed out that respondents often find it challenging to answer SVS items and such difficulties resulted in deviations from the theorized value structure (Krystallis, Vassallo and Chryssohoidis, 2012; Schwartz and Boehnke, 2004). As such, they suggested an alternative method of measuring human values – the Portrait Value Questionnaire (PVQ). The PVQ has three variations in pursuit of measuring the ten fundamental human values. Initially, the PVQ had 21 items, followed by the 40-item one and lastly the 57 items recently revised to PVQ-RR (Cieciuch, Schwartz and Davidov, 2015). These variants (PVQ21, PVQ40 and PVQ-RR) carry short verbal portraits of different people with each verbal portrait describing the ten or nineteen values espoused in the basic human values theory.

The verbal portraits describe an alternate person's life goals, aspirations, or wishes and respondents are asked to indicate how much they are like or not like the alternate person. The scale ranges from not like me at all (1) to very much like me (6). The responses to these verbal portraits, when coded and analysed will implicitly reveal which of the ten or nineteen Schwartz human values are important to the respondents (Schwartz *et al.*, 2012; Karadag, Kılıçoğlu and Yılmaz-Kılıçoğlu, 2018).

Cieciuch *et al.* (2014) state that studies using earlier PVQ versions (PVQ21 and PVQ40) to measure the basic ten human values reported some severe transgression of cross-cultural country measurement invariance. This is a concern for this study since South Africa is a multicultural country, hence issues of cross-cultural measurement are pertinent. Horn and McArdle (1992) define measurement invariance as "whether or not, under different conditions of observing and studying phenomena, measurement operations yield measures of the same attribute". It is, therefore, crucial in multi-item

surveys like this that comparisons between specific cultural groups be conducted. As posited by Van de Schoot *et al.* (2015), for latent factor means to be meaningfully compared, the measurement structures of the latent factor and their survey items should be stable, that is "invariant."

Most earlier studies on human values (Rokeach, 1973; Kahle, 1983, etc.) have failed to satisfy the requirements of measurement invariance, thereby settling for latent factor mean scores. As Van de Schoot *et al.* (2015) argues, "when the strict form of measurement invariance is not established, and one must conclude that respondents attach different meanings to survey items, this makes it impossible to make valid comparisons between latent factor means". This argument exposes the flaws of the earlier models on human values. Cieciuch *et al.* (2014) tested the measurement invariance of the PVQ-RR. They found that the nineteen human values demonstrated both the full and partial metric measurement invariance across all cultural groups. This is a confirmation that the refined nineteen human values theory did not only improve the heuristic power (Schwartz *et al.*, 2012), it also enabled the development of a measurement instrument (PVQ-RR) that is more appropriate for cross-cultural comparisons.

Schwartz (2017) points out that most of the shortcomings of other measurement scales were related to prevalent attempt to address multiple, diverse, substantive components in the conceptual definition of each fundamental value with only a few items. The PVQ-RR addresses these shortcomings by defining the ten values from the SVS more narrowly into nineteen values, making it possible to generate more homogeneous sets of items (57 items) to measure each (see figure 3.7). That is, three portrait statements per value which are the minimum necessary for CFA analyses.

The 57 PVQ-RR items portray fifty-seven different people in terms of their goals or aspirations that point implicitly to a value. These items are arranged in no particular order to avoid a situation where respondents form patterns if they are organised under specific value domains (the nineteen human values). Furthermore, these 57 items start with "it is important…." to ascertain that people recognize what follows as a value aspired to, not

as a person's behavioural trait (Schwartz, 2017a). Gender was also discovered to be having a strong mediatory effect to the extent that Schwartz and his colleagues found it necessary for the verbal portrait (PVQ items) to be gender specific.

After such an extensive review of literature on human values models, their phylogenetic and ontogenetic paths (Schwartz, 2017b) indicate that the various values-based models falter on the measurement aspect (Borg, Bardi and Schwartz, 2017; Schwartz and Butenko, 2014). The PVQ-RR have shown better validity and reliability scores (Cieciuch *et al.*, 2014), thus a much-improved explanatory and predictive power of the refined nineteen values theory (Li, 2016). Furthermore, it is expansive (incorporates a wide range of values), yet parsimonious compared to its peers. Whereas, the PVQ-RR has been explored and proven in various cultural settings, e.g., in Russia (Schwartz and Butenko, 2014), China (Li, 2016) and, Estonia and Ethiopia (Lilleoja *et al.*, 2016), no study is known has applied this values measurement tool to explain or predict passenger choice decisions in South Africa.

As such, this study sought to examine the influence of personal values (and determine the dominant ones) underlying the multicultural South African domestic airline services consumers. The study piggybacks on the findings of Borg, Bardi and Schwartz (2017) to the effect that value conflicts and compatibility exist both intra- and interindividual. This is pertinent to explore personal values' influence on airline choice within the South African domestic market.

3.4.7 Value-Attitude-Behaviour (VAB) Model

The Value-Attitude-Behaviour model (Homer and Kahle, 1988) is widespread in investigating consumer behaviour (Mai and Olsen, 2015), particularly as a framework to illustrate the role of personal values and value orientation in consumers' behaviour toward the choice (Teng, Wu and Huang, 2014). The VAB is structured hierarchically suggesting that personal values influence consumer behaviours toward products, including choice thereof. Attitudes are assumed to play a mediatory role between values and behaviour constructs.

However, unlike the values models discussed above, the VAB is only an applicative model. It does not identify its own set of human/personal values. Instead, it employs any collection of personal values determined in the foundational models such as the RVS, LOV and the SVS. For example, Manan (2016) in a study exploring the hierarchical influence of personal values on attitudes toward food and food choices, adopts Kahle's (1983) LOV typology to explain consumer behaviour with the VAB as the theoretical framework.

In another study, Teng, Wu and Huang (2014) adopted personal values from the Schwartz Value Survey to examine the effects of consumers' value–attitude–behaviour (VAB) and environment concern toward green restaurants. These two examples illustrate why the VAB is deemed the applicative model, and it does not necessarily come up or have its own distinct set of personal values. Rather it applies to any of the personal values sets from any of the foundational models to determine and or explain how the concept of human values influence consumer attitudes and behaviour.

3.4.8 The Means-End Chain (MEC) Theory

Similar to the VAB, the MEC model (Gutman, 1982, Zeithaml, 1988) also approbates personal values to predict and explain consumer behaviour in a hierarchically structured fashion. The MEC deems personal values as ends that in any choice situation, consumers seek to attain by selecting product attributes (the means). The product attributes are prioritised with the belief that their consequences are instrumental to the achievement of personal values (Zinas, 2013). Thus, within the air transport services, the means-end theory explains how the choice of a bundle of airline service attributes lead to consequences (behaviours which generate the desired benefits, and which minimize the undesirable effects – Zinas, 2013), which are instrumental to the fulfilment of passenger personal values (Wang and Yu, 2016). The result is a hierarchical attribute-consequence-value (ACV) chain shown in Figure 3.8 below.
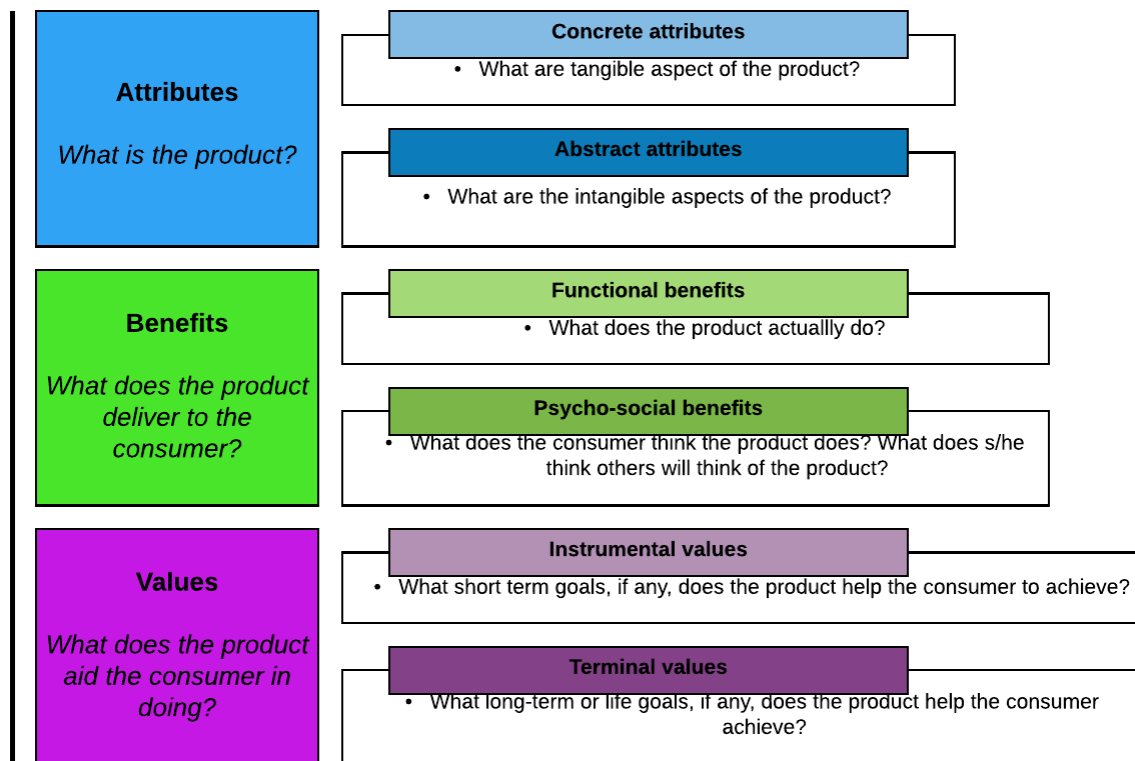
Figure 3.8: The MEC Model (*Adapted from Cole, 2010*)

From the above diagram, the product attributes relate to the consumer knowledge of airline service offerings. These attributes could either be concrete or abstract, and it is through them that airlines propose customer value to consumers. However, as Jeng and Yeh (2016) and Philips (2014) argue that product attributes are not in themselves customer value unless they facilitate the attainment of consumer's life goals (personal values). Thus, what is essential to a traveller's choice of an airline is not the airline service attributes. It is the ability of these attributes to either avail desired benefits and or minimise the undesired effects, ultimately leading to the fulfilment of traveller personal life goals.

Also, the MEC like the VAB uses the personal values inventory identified in any of the foundational models. For example, Kim, Kim and King (2016) used Kahle's (1983) List of Values (LOV) as a measurement scale to identify personal values of travellers that influence the choice of the pilgrimage route in Spain. Conversely, some researchers, for example, Arsil, Li and Bruwar (2016) did not use any of the foundational value inventories

but used the hierarchical value maps (HVMs) to explain how Indonesian consumers' choice of local food over non-local food was influenced by their values.

One thing that sets the MEC distinct from the VAB is its affinity to the qualitative methodology, with the laddering process as a popular technique means-end connection (Zinas, 2013). The laddering process like in the Arsil, Li and Bruwar (2016) example above, enables the determination of context-specific values other than those from the foundational models (Ho, Lin and Huang, 2014). The context-specific values are elicited and labelled directly from the exact words of participants.

3.4.9 Lages and Fernandes' SERPVAL Scale

Since the emergence of service-based economies, service quality concerns have become foregrounded within the marketing literature and practice. However, amongst the many studies attempting to evaluate the concept of service quality, there is an affinity towards disconfirmation models such as the SERVQUAL which have been deplored as too generic by some researchers (Fotiadis and Vassiliadis, 2016). Thereafter, attempts to modify the SERVQUAL were explored, resulting in some sector-specific models such as the THEMQUAL (Tsang *et al.*, 2012), AIRQUAL (Bari *et al.*, 2001) and HEDQUAL (Anil and Icli, 2014).

Lages and Fernandes (2005) raise a concern that all the disconfirmation models seem to over concentrate on service attributes when explaining consumer behaviour in service sectors. Insomuch as service attributes are essential for service improvement, it is instead their meaning to the consumer that is more important. Accordingly, the proponents of the values concept argue that consumers evaluate and choose services based on how they help them attain or show off their personal values (Jeng and Yeh, 2016; Ghazieh and Soltani, 2016; Boyd *et al.*, 2015; Cieciuch *et al.*, 2014). An extensive literature on personal values as presented from Section 3.4 of this chapter succinctly explains how services such as air transport are instrumental to the achievement of individual passenger's goals of existence.

However, despite a widespread application of personal values in research across a range of social disciplines, Lages and Fernandes (2005) are concerned that the concept of

values has never been operationalised for services marketing. In response, they developed the Service Personal Values (SERPVAL) scale - a scale that measures the personal values associated with using a service.

Lages and Fernandes (2005) argued that services marketing literature focused on a limited number of aspects, that is the gap between service performance and customer expectations. In articulating the gap between the SERPVAL and the earlier service quality scales, Mustaffa *et al.* (2016) indicate that service experience, a vital strategic tool to attract and retain customers using service attributes (Garg, Rahman and Qureshi, 2014), is evaluated in the customers' cognitive perspective. Such an evaluation manifests at three hierarchical levels of abstraction, that is, service personal values (SPV), service value (SV) and service quality (SQ). Lages and Fernandes (2005) defined SPV as the highest level of a customer's cognitive structure responsible for how the customer assesses overall service performance against their personal values. The SPV is the one deficient in other service quality scales.

The definition of service personal values by Lages and Fernandes (2005) is in line with Rokeach's (1973) master definition of personal values presented in Section 3.4.1. In pursuit of operationalising personal values in services settings, Lages and Fernandes (2005) built on Zeithaml (1988) means-end chain approach and literature on personal values (Rokeach, 1973; Kahle, 1983; Schwartz, 1992). They developed three-dimensional SERPVAL with twelve value items. The three dimensions of the SERPVAL are:

a)   Service value to peaceful life (SVPL)

b)   Service value to social recognition (SVSR), and

c)   Service value to social integration (SVSI).

The SVPL is a coalescence of values from the Rokeach's RVS. In this dimension, Lages and Fernandes (2005) refer to services that are deemed to promote pleasurable life, bring or improve safety and harmony and tranquility. Then the SVSR and SVSI draw mainly from the RVS and LOV scales. The SVSR is mostly about the belief and perception of how consumption will help individual gain respect, social status and whether it enables

one to achieve a more fulfilled and stimulating life. To gain respect and recognition, individuals seeking peaceful life value engage in behaviour that earns recognition and avoids that will come with social disapproval. This comes across as similar to Schwartz' (1992) conformity and traditional values.

On the other hand, the SVSI is all about the individual need for belonging in the Maslow hierarchy of needs. Such services are perceived as creating or strengthening possibilities of being co-opted into desired groups and promotes better relationships (Lages and Fernandes, 2005). Essentially, the SERPVAL explains consumer motivations in choosing services. Its dimensions were found to be positively and significantly associated with customer satisfaction concerning services that guarantee peaceful life, enable recognition and strengthen possibilities for relationships. Such knowledge is pertinent to the development of highly service-driven business strategy (*ibid*).

3.4.10   A Cross-analysis of Value-Based Models

After such an intense discussion of the personal values models, it would be a travesty of justice not to compare the values models discussed above. Table 3.4 presents a comparative summary of the models, outlining the personal values sets identified in each model and shows if there is variation or similarities amongst the sets of personal values among these models. Also, strengths and limitations are highlighted to justify why this study settled for the Schwartz Values Inventory.

Table 3.4: A cross-analysis of personal values models

Human values theory/measurement scale	Author(s) and year	Human values identified	Strengths, limitations or criticism
Rokeach Value Survey (RVS)	Rokeach (1973)	18 instrumental values (*competence and moral focus*) and 18 terminal values (*social and personal focus*)	Dubbed the "father of values research", Rokeach provided a 36-item measurement scale which became the basis for measuring the predictive power of personal values' influence on human behaviour. However, some researchers have raised concerns that the RVS' development and validation were confined to US respondents and the sample used was of no statistical significance. It has also

			been criticised for its forced ranking, reliance on numerical rating as well as too many value items for respondents to answer accurately. Its use of the ordinal analysis is a violation of an essential requirement of the techniques of causal analysis (Kahle, 1988). Furthermore, the RVS is faulted for dictating to definitions of values respondents are expected to reflect upon. This approach ignores the contextual and cultural effects on interpretation. Despite this criticism, the RVS has been confirmed in other contexts outside the US.
List of Values (LOV)	Kahle (1983)	Sense of belonging, security, being well respected, self-respect, self-fulfillment, sense of accomplishment, excitement, fun and enjoyment and, warm relationship	With the RVS blamed for lack of or low parsimony, Kahle (1983) sought to address these gaps through the LOV. Thus, compared to the RVS, the LOV has exhibited validity. Offer greater parsimony and higher predictive power. Unlike the RVS, the LOV does not dictate to the respondents the definitions of values they are asked to reflect upon. However, this has raised eyebrows amongst scholars. They contend that lack of value descriptors lands the interpretation of values to subjectivity, hence a danger of invalid measure of value salience (Thompson, 2009). Together with RVS and many other earlier measurement scales, the LOV come short on the comparability of the value items across different cultures or countries.
Values and Lifestyles (VALS)	Mitchell (1983)	More of a segmentation tool. People are into nine segments based on the belief that ideals, achievement, and self-expression primarily guide them.	VALS is better referred to as a segmentation tool which relies more on demographic variables and attitudes than relating to consumer behaviour (Kahle, 1988). VALS is often criticised for being a proprietary tool whose data analysis algorithms are part of the intellectual property, thus unavailable and virtually unavailable to be independently validated. Furthermore, Kahle (1988) is concerned like the RVS, VALS' use of nominal analysis breaches an essential requirement of the most advanced and powerful techniques of

			causal analysis.
Schwartz Value Survey (SVS/SVI)	Schwartz (1992, 2012) and Schwartz *et al.* (2012)	Started with ten basic values (S*elf-direction, stimulation, power, hedonism, security, achievement, tradition, conformity, benevolence and universalism).* These were later extended to 19 values by Schwartz *et al.* (2012)	The SVS has had replicability issues within the South African context (Becker *et al.*, 2017). Schwartz (2011) and, Burgess, Schwartz and Blackwell (1994) attributed the variations found to low levels of education, multilingualism issues and low socio-economic standards. However, using the PVQ which presents value items at concrete levels, uses portrait versions to elicit judgments and avoids forced ranking and numerical rating, seven of the ten values were replicated. Furthermore, the extended human values model (Schwartz *et al.,* 2012) which has been validated in various countries such as China and Russia, provides a more substantial predictive power of behaviour through values. Its main strength lies in its all-encompassing circumplex structure of values, which raises issues of value congruence and conflicts.
Value-Attitude-Behaviour (VAB)		No study was found to have identified distinct values; relatively most studies applied values determined in other models such as the RVS, LOV and SVS.	The VAB is blamed for being a bastardisation of the traditional Theory of Planned Behaviour (TPB) which proposes the volitional human behaviour as a function of intention to perform the behaviour and perceived behavioural control (PBC) (Sniehotta, Presseau and Araújo-Soares, 2014). On this basis, the VAB exclusively focuses on rational reasoning to the exclusion of unconscious influences on behaviour Sheeran, Gollwitzer and Bargh, 2013). However, it has also received positive reviews for explaining the hierarchical relationship between personal values and behaviour mediated by attitudes (Teng, Wu and Huang, 2014).
Means-End Chain analysis (MEC)	Gutman (1982)	Due to its qualitative approach, this model identifies values as per participants' perspective	Also applauded for explaining consumer behaviour hierarchically like the VAB. However, the MEC at midrange, describes that it is consequences of using a product that

		(words) and the values are context-specific.	mediates or that determines how instrumental the product is to the attainment of consumer personal values. Again, its affinity to qualitative designs, laddering process, in particular, enables it to elicit values in consumer's exact words. Unfortunately, it also has been criticised. The criticism revolves around repeatedly asking the question "Why….". Thyne (2001) refer to this as forcing the relationship between personal values and product attributes.
Service Personal Values (SERPVAL)	Lages and Fernandes (2005)	This model came up with three broad categories for human values, that is, SVPL, SVSR and SVSI.	SERPVAL has been hailed as the first to operationalise personal values in service environments. The model is key to helping marketers better understand what underlies consumers' evaluation and choice of services. The authors indicated that the limitations of this model were the inflated construct relationships due to method variance created by the final instrument.

Primary Source

This tabular analysis reveals two main issues. Firstly, it undoubtedly confirms and affirms that personal values can be used to predict and provide a rich explanation of consumer behaviour. Despite some methodological differences and limitations, the authors of the various models on human/personal values concur on the power and richness provided by employing values to predict and explain human behaviour in general and choice in particular. Personal values are described as the abstract and are entrenched in the deepest level of cognition, which is key to the determination of important guiding principles in one's life (Kiatkawsin and Han, 2017; Blankenship, Wegener and Murray, 2015). They are acquired from social cognition (culture) and are developed through symbolic social interactions and from the environment (Homer and Kahle, 1988; Li and Cai, 2012).

Secondly, the analysis above indicates that the discourse on human values and their implication to consumer behaviour research is formative. More importantly, the models

on values are a build-up (development) of the other. For instance, Rokeach's RVS was built upon the contributions of Allport, Vernon and Lindzey (1961), Kluckhohn (1951), Maslow (1954) and other earlier scholars. The RVS became the referral model for many of the value models such as the LOV, SVS, MEC and SERPVAL.

Kahle's (1983) LOV theory is a condensed form of Rokeach's RVS, which assumes values to be person-oriented (Ghazieh and Soltani, 2016). The descriptors of the nine values in the LOV reveal that they have the same meaning as those in the RVS. For example, 'warm relationships with others' in Kahle is akin to true friendship in the RVS. Schwartz's value theory, which has also become the contemporary anchor model on human values, is said to have developed on the Rokeach's value survey. According to Ralston, Russell and Egri (2018), Schwartz's work came as a response to the limitation of single-culture validation of the RVS.

Initially, the Schwartz value theory identified ten fundamental human values, most of which can be traced back to the RVS. This theory assumes that values are arrayed as a circular continuum of motivations (Schwartz and Butenko, 2014). This circular structure has been validated in several studies and has been refined from ten to nineteen values to improve its specificity and have "greater universal heuristic and predictive power" (Schwartz *et al.*, 2012; Cieciuch and Davidov, 2012). Schwartz *et al.* (2012) posit that the order of values on the continuum indicates that values next to each other are motivationally compatible, whereas those opposite each other indicate motivational conflict. Moreover, Schwartz value theory provides a comprehensive set of human values with more significant predictor and explanatory power for consumer behaviour research.

Other models which also anchor on Rokeach's value survey include the value-attitude-behaviour (Homer and Kahle, 1988), the means-end chain theory (Gutman, 1982) and the SERPVAL (Lages and Fernandes, 2005). The value-attitude-behaviour (VAB) and the means-end chain (MEC) theory provide a hierarchical architecture of the relationship between consumer behaviour and personal values. However, they differ on the midrange construct mediating the relationship between behaviour and values. Homer and Kahle

(1988) assume that attitudes mediate this relationship, whereas Gutman (1982) argues that it is the consequences of using the product that links values and behaviour.

The other difference is that the VAB has become more of an applicative model, that is, it uses the value sets from other models such as the LOV, RVS and SVS as the unit of analysis. On the other hand, the MEC, due to its methodological approach (laddering), only identifies context-specific values. The list of values specified in a MEC study is subject to the researcher's contextual knowledge; hence, might vary from one researcher to the other, unless where value sets from different models are applied as a unit of analysis. The SERPVAL model (Lages and Fernandes, 2005) was developed from the RVS and provided a three-dimensional approach to service personal values.

For the above analysis of the model, this thesis is convinced that all can be successfully employed to explore the use of personal values to predict and explain airline choice within the South African domestic market. Very few studies have employed personal values to explain behavioural concepts in South Africa, for example, the performance of SMEs in South Africa (Asah, Fatoki and Rungani, 2015), pro-environmental behaviour (Mtutu and Thodhlana, 2016), gender and religiosity (Fatoki, 2016) and measurement of values (Becker *et al.*, 2017). Nonetheless, the findings of these studies confirm the suggestions by classical values theorists (Kluckhohn, 1951; Rokeach, 1968, 1973; Yankelovich, 1981) that personal values provide a full and rich explanation of human behaviour. Despite such evidence, no study was found to have applied personal values to explain passenger airline choice and post-purchase outcomes and behaviour (e.g., satisfaction, loyalty, repeat purchase intentions, etc.) in South Africa.

However, with a litany of models on personal values at disposal, one had to choose the one that is comprehensive and can be applied to samples exhibiting different cultural orientations. Furthermore, other considerations in choosing the measurement model included discriminant validity of the scale, its reliability in cross-cultural evaluations and methodological contribution. Amongst the many models, Schwartz theory of human values topped the list. It is comprehensive, espouses almost the values from other measurement scales. Also, it has been repeatedly tested across cultures and countries,

and its 57-item PVQ-RR variant comes with many advantages, such as avoiding stocking-up respondents' responses by randomly arranging value portrait items.

Furthermore, as stated by Becker *et al.* (2017), despite extensive research conducted worldwide on Schwartz's values scales (e.g., SVS, PVQ, RVQ-RR), there is deafening paucity on their application in the African and South African contexts. This sparked an emergent research objective which is to '…evaluate the validity and reliability of Schwartz' 57-item PVQ-RR within the South African context in general and South African domestic airline market in particular'. Such an objective has the potential of contributing to the prediction and explanation of consumer behaviour in South Africa.

3.5 AIRLINE CHOICE DYNAMICS IN SOUTH AFRICA

Before expounding on airline service attributes, it is pertinent to draw from Chapter 2, which set a scene on the dynamics of airline choice within the South African domestic market. As espoused in Chapter 2, Wu and Cheng (2013) confirm that the demand for air travel services is closely linked to the socio-economic status of a country. For instance, the phenomenal growth in the number of people falling within the middle class who can afford air transport (Visagie, 2013) in post-apartheid South Africa has seen an increase in the demand for domestic air transport services. Furthermore, due to the liberalisation of the domestic market as from 1991 (TravelStart, 2015c), ticket prices steadily decreased to affordable levels. More players entered the market, including the low-cost carriers (LCC).

Thus, as per the economic principle of price elasticity and income effect, the South African domestic airline market has witnessed growth in the number of people flying domestic routes, thus making the market very competitive. Several studies, for example, Luke (2015), Campbell and Vigar-Ellis (2012), Fourie and Lubbe (2006) and many others focusing on the South African domestic airline market have identified some airline service attributes used by travellers to evaluate and choose an airline. Usually, these studies often rank service attributes in order of importance to travellers.

However, a close analysis indicates that most of these studies fail to explain as to why travellers find these attributes are essential. This study, therefore, takes it further to determine the underlying and dominant travellers' values, and their effect on the evaluation and prioritisation of airline service attributes when choosing an airline. Doing so is critical to the provision of a rich explanation of consumer behaviour within the South African domestic airline market.

Such an explanation will assist airlines in appreciating the source of traveller/passenger motivations, preferences, attitudes and buying actions. As the literature on customer value creation shows, understanding what drives customer behaviour is a vital ingredient to effectively tailor marketing efforts, and ascertain that consumers' needs are met (Lin and Yeh, 2013; Kotler and Armstrong, 2018; Kotler and Keller, 2016). Knowledge of the underlying factors of consumer motivations may be the source for building competitive advantage.

3.6   AIRLINE SERVICE ATTRIBUTES

Chapter 2 provided some foundational insights into airlines service attributes. The chapter elucidated on how the airlines' services in South Africa were configured before and after deregulation of the airline industry. At an abstract level, the chapter expounded on the two airline models (FSC and LCC) whose value chains determine the configuration of airlines service attributes. A discussion of the airlines operating with the South African domestic airlines provides an insight as to how they design service attributes in pursuit of customer satisfaction.

Bhasin's (2016) definition of a product helps elucidate what service attributes are. He defines a product as a good, service, or idea consisting of bundles of both tangible and intangible qualities. Simply put, a service is an aggregate of observable characteristics of a product (Sohaimi *et al.*, 2017) that satisfies consumer needs. Thus, faced with a choice situation, travellers use airline service attributes to evaluate an airline's ability to satisfy their travel needs and to differentiate it from the competition. Accordingly, Kim and Park (2017) stress that in a service environment, airline service attributes serve as key decision points for passengers when choosing an airline.

Airline service attributes refer to airline service features perceived by consumers concerning their life goals. These include factors such as airline brand image, reliability, safety rating, ticket prices, staff competence, onboard meals and entertainment. It is through these service attributes that airlines seek to propose customer value as articulated by Kotler and Keller (2016), and to influence the consumer decision-making process (Nugroho and Sihite, 2017). However, as Jeng and Yeh (2016) argue, service attributes are not in themselves customer value unless they facilitate the attainment of consumer's values.

Service attributes can be subdivided into concrete and abstract attributes (Arsil, 2013; Lin and Yeh, 2013). Concrete attributes are tangible (observable) in nature and can be measured physically. They are what travellers can use to describe and physically differentiate airlines, for example, their livery (logo and colour), types of aircraft, and other tangible aspects of service quality. On the other hand, abstract attributes are often intangible, subjective and perceptible, for example, airline reputation and market positioning. Henceforth, at the schematic level, attributes are used to evaluate airline service quality as they are the core of airlines' marketing communication strategy.

There is a considerable corpus of literature on airline service attributes considered by travellers when choosing airlines in South Africa (e.g., Campbell and Vigar-Ellis, 2012; Diggines, 2010; De Jager, Van Zyl and Toriola, 2012; TravelStart, 2015a). Hereunder, is a discussion of various airline service attributes sampled from studies on the airline market, including the South African domestic market. The review of such literature informed and merited the list of airline service attributes included in the research instruments in pursuit to answer the research question - "*Which are the most important airline service attributes used by customers to evaluate and choose airlines within the South African domestic passenger market?*" in particular.

3.6.1 Airline Ticket Prices

Pricing has always been a critical component of any firm's marketing toolkit (West, Schmitt and Kujawski, 2016; Buaphian, 2015). This is so because pricing has an impact on the financial wellness of any organization as it accounts for revenue. To survive in a

highly competitive air transport industry, an airline needs a well-tailored and implemented marketing strategy. At the centre of such a strategy is profitability, which, among other things, is a result of an effective pricing policy (Wehner *et al.*, 2018). Accordingly, airlines have also established specific pricing policies and increased research on air services pricing significantly (Narangajavana et al., 2014).

The airline business is very complex, and to cope with the complexities, airlines adopt a dynamic capacity pricing model called yield management (Bilotkach, Gaggero and Piga, 2015). As part of yield management, Williams (2018) asserts that airlines determine their ticket prices by both intertemporal price discrimination and dynamic adjustment to stochastic demand. With intertemporal price discrimination, airlines tend to charge lower prices for tickets purchased well in time before the date of travel and higher prices for tickets searched or purchased close to their date of travel.

Supporting this notion of intertemporal price discrimination, Udjo, Lubbe and Douglas (2013) posit that passengers are ever trying to optimise their search and purchasing of airline tickets. To do so, passengers strive to become familiar with how the time of purchase relates to the ticket price. On the other hand, dynamic pricing (Williams, 2018) is where airlines adjust their ticket prices on a day-to-day basis in line with seat demand patterns. This makes the effect of pricing to be more profound for the airline services sector since it is difficult to change capacities in the short term, and variable costs are small (Sen, 2013).

Consequently, for airlines, pricing plays a dual role which includes revenue management and positioning. Airlines seek to optimise their revenue collection by dynamically setting prices on both the primary product (flight as in seat) and the ancillary services such as baggage fees, seat selection, priority boarding and cancellation fees (Ødegaard and Wilson, 2016). As a positioning variable, pricing has various strategic effects (for example, customer perceptions, loyalty and repurchase intentions and brand image), which have a significant impact on the success and competitiveness of companies (West, Schmitt and Kujawski, 2016).

The study of prices can be traced back to the elementary economic theory where consumers are seen as rational entities ever seeking to maximise their utility. Since utility was viewed as the only aftermath of consumption, price played an essential role in determining demand and consumption to get utility. Equally, the price also plays a vital role in determining the interests of the supply side. Thus, it is at the centre of any exchange process in contemporary economies, including the airline economy. Pricing is, therefore, one of the prominent service attributes upon which passengers usually evaluate airlines.

For some time, the airline industry was either monopolistic or oligopolistic. Only state-owned (national) carriers or a few big private airlines were allowed to carry passengers since the industry was heavily regulated (Ismaila, Warnock and Hubbard, 2014). This resulted in fewer airlines, leading to higher ticket prices (Surovitskikh and Lubbe, 2015). Then after liberalisation, more players came in, and passenger traffic flow increased substantially (Schlumberger, 2010; Intervistas, 2014; Barnes, 2017). Within the South African market, pricing has become a topical issue. For some airlines, it relates to viability issues, whereas for consumers, it speaks about the affordability of airborne travel.

Again, as indicated in Chapter 2, the liberalisation of airspaces brought the price-based categorization of airlines. That is low-cost carriers (LCCs) in addition to full-service carriers (Luke and Walters, 2013). The low-cost carriers' marketing strategy lies in their ability to curtail operational costs by unbundling the inclusive service, offering passengers a "no-frills" travel at lower prices compared to the full-service airlines (Barnes, 2017). Also, Budd and Ison (2017) state that LCCs are innovative and agile, thus able to respond to market changes quickly. For example, responding to price-sensitive customers, LCCs have managed to strip bare the inclusive ticket prices to only seat prices, and charge for any extra services such as inflight meals, checked-in luggage and pre-assigned seats (*ibid*).

Clearly, this shows that pricing sticks out as the primary indicator of a business model pursued by an airline, a positioning base, and is often perceived to signal the level of airline service quality. Chan's (2014) study on the impact of low-ticket prices and poor

service quality promises in Malaysia demonstrates low price-low quality perceptions. In the study, Chan indicates that despite complaints about cramped cabins, poor seating, and crowding on low-cost carriers (LCCs), passengers continued to patronise LCCs due to low ticket prices. In interpreting this, Buaphian (2015) states that low prices are associated with increased satisfaction because they position an airline in such a manner that consumer quality expectations are kept low and are easily met.

In another study, Baikgaki and Daw (2013) found ticket prices to be positively correlated to the consumption of airline services. Such is confirmed by other studies on airline choice factors within the South African domestic market. Campbell and Vigar-Ellis (2012) found ticket price to be a very important factor (importance mean score of *8.29*) and a critical differentiating factor (differentiating score *2.16*) for customers choosing an airline. De Jager and Bin Dahari (2012) whose study compared airline service quality between the South African and the Malaysian markets, also found ticket prices were rated as the most important service attribute contributing to the overall service quality evaluation.

However, not all passengers are primarily influenced by ticket prices when choosing an airline. For example, business travellers (Fourie and Lubbe, 2006) and full-service airline passengers (Diggines, 2010) are likely to be influenced by other factors such as frequent flier (loyalty) programs, seat comfort, schedule convenience, airline reliability, airline reputation or service quality. Insomuch as low prices can be useful in short-term differential advantages, De Jager and Bin Dahari (2012) indicate that price alone cannot be the winning formula in the long run. Price cutting might lead to price wars. As such, it is crucial that airlines equally understand the underlying motives that make ticket price an important service attribute when choosing an airline. As shown in the literature, personal values can be used to provide this understanding.

3.6.2 Airline Safety and Reliability

Despite aviation (air transport) being recognised as a safe mode of transportation (IATA, 2015), potential travellers use the information on aviation safety to make flight choices (Koo, Caponecchia and Williamson, 2018). Safety concerns became apparent post the airspace deregulation, prompting a proposal of measures to prevent the decline of safety

standards (Fleischer, Tchetchik and Toledo, 2015). Specifically, aviation authorities were ordered to release information about flight safety indicators in addition to accidents' statistics (*ibid*). The rationale for this decision was that providing them with airline safety information is key to their decision-making ability and preferences.

Safety risks could either be perceived or objective. Objective risks are those emanating from information about actual aviation disasters, for example, the disappearance of Malaysia's MH370 flight. On the other hand, perceived risks are a function of safety-related knowledge, for example, where an airline receives low safety rating, evoking imaginations of disaster. Such risks, whether objective or perceived do influence airline choice, though with variations, from short-term to long-term or no effect (Koo, Caponecchia and Williamson, 2018). In support, Savage (2011) who examined the safety issue as a differentiating attribute, suggested that airlines can leverage on safety characteristics.

Unlike the safety attribute, reliability does not pose any risk or threat to passengers' life. Instead, it is more about avoiding inconveniencing passengers by performing the promised service dependably and accurately (Ganiyu, 2016). An airline passes the reliability test if it adheres to flight schedules (punctuality), handles flight bookings well and luggage safely. Reliability also refers to how an airline handles customer queries and complaints. Travellers are interested in the airline's ability to find solutions whenever there is service failure.

In a study to understand factors that passengers emphasise when choosing airlines, Chen and Chao (2015) rated twenty-two service attributes which included safety and reliability of the airline, and baggage handling. They calculated the importance of mean scores and arranged the service attributes in order of priority. Safety and reliability of the airline topped the list with a mean score of *6.85*. It was followed by the punctuality of flights (*6.52*) and efficiency in problem-solving (*6.43*), which are both constructs of reliability. Weighing in on the importance of reliability was the reliability and safety in baggage handling (*6.30*), which sat on position five out of twenty-two service attributes. Campbell and Vigar-Ellis (2012) also found safety and reliability as the most important and differentiating service attribute for customers. These results indicate the importance

129

passengers attach to safety and reliability. Hence any flaws in safety and reliability can seriously dent an airline's image, thus affecting its dependability.

Passengers rely on an airline's strict adherence to flight schedule for pre- and post-flight planning. Any flight delays can interfere with passenger's travel arrangements or diary, an inconvenience that might even lead to financial prejudice (Stone, 2016). However, in some instances, flight delays might not be due to an airline's fault, for example, when air traffic controllers instruct that flights cannot take off due to bad climatic conditions. In such circumstances, airlines must quickly alert their customers through various platforms such as SMS or social media, in addition to the airport's public announcement system.

As a unique mode of transport, air transport safety and reliability record cannot be overemphasised. Fortunately, in South Africa aircraft crashes are rare, but passengers are still livid about their safety even ahead of other attributes such as ticket prices (Luke, 2015). Only recently, a chartered aircraft crashed near Centurion, Gauteng further raising safety issues within the aviation industry. With such fresh experience on safety breaches, it would be interesting to see how it unravels from the data collected for this thesis.

3.6.3 Loyalty Programs (Frequent Flyer Programs)

According to Sandada and Matibiri (2016), customer loyalty programs are well-coordinated membership-based marketing strategies designed to provide rewards to customers in pursuit of marketing exchanges longevity and or strengthening. Within the airline industry, loyalty programs are referred to as frequent flyer programs (FFPs).

Loyalty programs serve a number of purposes. First, it is a customer relationship management (CRM) tool pencilled for securing and maintenance/retention of strong relationships with customers (Hutchinson *et al.*, 2015; Li, Ma and Zhou, 2017). Second, they are used for enhancing customer relationships and competitiveness by offering high value to profitable market segments (Lubbe, Douglas and Mclachlan, 2016). Third, loyalty programs enhance airline's value proposition (Vilkaite-Vaitone and Papsiene, 2016; Thompson and Chmura, 2015) by effectively locking in customers, thereby increasing their perceptions of switching costs (Hossain, Kibria and Farhana, 2017). Last but not

least, FFPs provide airlines with a database of customers, thus enabling data mining to improve the effectiveness of various marketing communication programs, particularly direct marketing campaigns.

In a nutshell, frequent flyer programs provide airlines with benefits such as the number of passengers carried and increased revenue (Vilkaite-Vaitone and Papsiene, 2016). Arbore and Estes (2013) intimate that through loyalty programs, brands can avoid price competition, hence enhance operational profits. Interestingly, Budd and Ison (2017) indicate that frequent flyer programmes were initially a customer relationship management ploy for full-service airlines. However, as a result of the ongoing competition between FSCs and LCCs, Tomová and Materna (2017) and Daft and Albers (2015) state that these two airline models began to influence each other, converging to what is termed as hybridisation. Thus, low-cost airlines have adopted some of the strategies by full-service airlines, for example, the adoption of frequent flyer programs.

Notwithstanding all the positives about loyalty programs, there is some research which highlights their drawbacks. For example, Wieseke, Alavi and Habel (2014) raise a concern that loyal customers often grow a bargaining muscle to request for deeper discounts, thus paying lower prices than non-loyal customers. In addition, loyal customers may burden an airline by asking for privileges such as priority service to the chagrin of other customers. Wetzel, Maik and Alex (2014) note that such a sense of entitlement can erode revenue and profitability prospects, as well as cause reputational damage (Steinhoff and Palmatier, 2016). It is therefore clear that in designing and implementing frequent flyer programs, airlines need to consider such undesired cost-generating behaviours against their strategic imperatives.

Within the aviation sector, almost all airlines have their loyalty program. For example, British Airways' loyalty program is the Executive Club, American Airlines is AAdvantage, and for Japan Airlines; it is JAL Mileage Bank. In the South African domestic market, South African Airways has Voyager while Kulula all along had Avios Travel Rewards Programme which is being wound up in the new FFP named the Travel Bank.

One thing that is critical for the successful adoption of customer loyalty programs is the design aspect. In support of this, Kreis and Mafael (2014) argue that for a loyalty program to be of value, its design elements need to match its member customers' individual personal goals/values. The design elements include the structure of a customer loyalty program, rules of entry (how one qualifies to be a member), number of partner firms included in the program, and the format, types or kind of benefit for members. Airlines can choose between the linear and hierarchical structures (Chaabane and Pez, 2017; Chun and Ovchinnikov, 2018).

From literature, the hierarchical structure appears to be more popular than the linear structure, particularly in the airline industry where they are perceived differently by consumers in the degrees of exclusivity (Arbore and Estes, 2013; Wang, Chen and Chen, 2015). Contrary to the linear design, members in a hierarchical designed loyalty program get assigned to patterns of classes or tiers based on their spending and, or a measure of their patronage criteria (Chaabane and Pez, 2017). An example of a hierarchical loyalty program is SAA's Voyager with five tiers – the blue, silver, gold, platinum and lifetime platinum memberships with different qualification criteria and benefits. These tiers or classes can be the basis of segmentation, and as shown by Goel (2017), can further increase customer motivation and loyalty (Kopalle *et al.*, 2012).

In addition, Steinhoff and Palmatier (2016) state that hierarchically designed loyalty programs foster feelings of gratitude amongst target customers; something meant to strengthen the relationship. This explains why airline customers who are members of loyalty programs and belong to a particular tier can continue patronising an airline to remain at that tier or to scale up. Eggert, Steinhoff and Garnefeld (2015) state that positive feelings and motivation get stronger when progress up the levels is voluntary than endowed. Similarly, losing the tier status invokes negative feelings.

Other than the linear - hierarchical structures dichotomy, Goel (2017) divides loyalty programs into stand-alone and coalition programs. Stand-alone loyalty programs are those run by a brand on its own for its market offerings. On the other hand, coalition (also termed network programs) allow program members to accrue and redeem loyalty points

amongst the members of the network/coalition. These coalitions can range from simplistic to complex ones. Loyalty programs within the aviation industry are mostly complex, for example, SAA's Star Alliance and Comair's OneWorld Alliance. The network loyalty programs transcend industry boundaries. For instance, Kulula's loyalty program brings together Discovery Vitality, Virgin Active, selected stores such as Dischem and Pick and Pay, British Airways, BP Garages, OpenWeb, ABSA Bank's credit card, Standard Bank's UCount, and many more.

Essentially, loyalty programs serve as a mechanism for customer acquisition and retention (Goel, 2017). More importantly, loyalty programs must influence consumer behaviour, particularly continual patronage (Brashear-Alejandro, Kang and Groza, 2016). However, in some studies, loyalty programs are not so effective, and Henderson, Beck and Palmatier (2011) blame it on the tendency by brands to place too much emphasis on the financial rewards of loyalty programs. The authors argue that this is the reason why these programs fail to maintain long-term customer relationships. To counter this, brands must also seek to understand the personal values which can be attained through the various benefits of the programs.

3.6.4 Cabin Servicescape

Generally, airline service can be divided into three service touchpoints, namely the presales, in-flight and post-flight. Cabin servicescape relates to in-flight airline service attributes that passengers typically encounter (De Jager and Van Zyl, 2012). Various studies, for example, Liou *et al.* (2011), SKYTRAX (2015), Wen and Yeh (2010) and Kim and Park (2017) found in-flight service attributes as very important to passengers in evaluating and selecting airlines. These service attributes include in-flight meals and entertainment, cabin crowdedness (legroom) and cleanliness, seat comfort and cabin crew courtesy and responsiveness.

In a study by De Jager, Van Zyl and Toriola (2012), in-flight meals come to the fore as an important consideration by passengers when evaluating airline service quality. For in-flight meals, it is crucial to relate to the differences between low-cost carriers and full-service airlines. LCCs do not offer meals during the flight as freebies but do offer on a

cash sales basis. On the other hand, full-service carriers provide meals to all passengers as part of the airfare value. Other than the question of whether in-flight meals are offered as part of air ticket value or not, another sub-dimension to this attribute could be the quality of the meals offered. However, in a study that included both LCCs and FSCs, De Meyer and Mostert (2011) found that the majority (76.3%) of domestic airline passengers in South Africa were satisfied with the meals provided during flights.

The in-flight entertainment (films/broadcasts and music during flight) also featured with significantly high factor loadings indicating their importance when it comes to cabin servicescape variables (De Jager, Van Zyl and Toriola, 2012). In De Jager and Van Zyl (2012), the cabin crew were also put under scrutiny. Their results reveal that passengers rated cabin crew credibility as one of the essential elements of cabin service followed by cabin crew's ability to answer questions, and lastly their physical appearance.

In support, Campbell and Vigar-Ellis' (2012) result also show that airline staff's (including both ground and cabin crew) friendliness and efficiency were rated highly important by passengers but had low differentiation scores (of .82 and .97 respectively). However, this does not mean airlines must ignore them as they can be determining factors in airline choice. Other important aspects of the cabin servicescape include seat comfort, legroom, cabin cleanliness. On space on board and legroom, Campbell and Vigar-Ellis (2012) found it as moderately important (with an importance score of 6.83) and also as a moderate differentiator when it came to choosing airlines. Interestingly, when passengers were asked which service attributes they could sacrifice for lower prices, 53% indicated that they would sacrifice space on board and legroom. Perhaps this explains the limited legroom in low-cost carriers compared to the higher-priced full-service airlines.

3.6.5 Check-in Services

Due to rapid and intensive technology adoption in the aviation sector, airline service delivery is transforming from face-to-face service encounters to self-service (Lu, Chou and Ling, 2009). Passengers are now able to check-in online, that is, away from airports through self-service technologies (SSTs) such as mobisites or websites or at within

airports using self-service web-based check-in booths (Wang, So and Sparks, 2017; Wirtz and Lovelock, 2018).

However, it should be noted that despite the exponential technological advancements, some passengers still prefer the human staffed service counters as it lessens the perceived risks for them (Wirtz and Lovelock, 2018). However, they also warn that the face-to-face interaction with airline frontline service staff does come with heterogeneity (variation in service quality) problem for passengers.

Therefore, the adoption of online check-in services is one of the solutions to the heterogeneity problem. This is in addition to the interventions on the people element of the services marketing mix (Wirtz and Lovelock, 2018), for example, training and motivating service employees to strengthen the service concept. Apart from the standardisation of the airline service delivery (Lu, Chou and Ling, 2009), Lin and Filieri (2015) state that automation of check-in services provides tech-innovative passengers with convenience (perceived ease of use) as they can check-in using their mobile devices or at check-in kiosks. The authors describe tech-innovativeness as the passenger's willingness to embrace change and try new things. Furthermore, self-service check-in gives such passengers a sense of control over service delivery, more information, and a higher perceived level of customization (Wirtz and Lovelock, 2018).

3.6.6 Luggage Handling

Various studies have identified handling of passenger luggage by airlines as one of the critical touchpoints of service delivery (for example, Chen and Chao, 2015; Namukasa, 2013; De Jager, van Zyl and Toriola, 2012; De Meyer and Mostert, 2011). Complaints of lost luggage are one challenge that airlines are often confronted with and may lead to service failure. Airlines pay close attention to passenger luggage management throughout the passenger's journey as part of service delivery. One-way airlines have managed to improve their service delivery, including luggage management, is through the strategic adoption of technology-enabled services (IATA, 2011).

Misdirected or lost passenger luggage is not only confined to the South African domestic market; it is an airline market problem globally. Franks (2006) indicates that around 2004

in the USA, misdirected luggage complaints increased by about 25 percent, whereas in Europe (in 2006), complaints rose by 63 percent. Such incidents cost airlines large sums of money through reimbursements or atonement and are one of the reasons airlines had to adopt ICT in luggage handling processes. The use of technology for tracking luggage movement has become an integral part of modern airlines. However, such services are not entirely owned or dependent on individual airlines but are in conjunction with airports luggage handling facilities.

Passenger luggage management can be seen from the safety and reliability of handling, movement efficiency and speedy delivery on arrival. To improve luggage management, Chang, Son and Oh (2011) proposed the use of tracking technology such as radio-frequency identification (RFID) system. Such a system, when compared to the traditional barcode system, has distinctive capabilities. These include the ability to track and trace each luggage unit through a unique ID with high levels of accuracy efficiency (*ibid*), and they help reduce service failure due to lost or damaged luggage.

3.6.7 Airline Responsiveness

In addition to efficiency in problem-solving, which Chen and Chao (2015) ranked as the passengers' third most important airline service attribute when choosing an airline, passengers are also influenced by airline staff competence and politeness. Airlines have also tapped in on the benefits of technology advancements by automating their service processes to enhance customer experience. However, people (staff) are still the number one asset of any organisation. Airline sector staff can be divided into two categories: the front service employees and back-office staff.

Frontline staff include those that directly interface with passengers, for example, check-in teller and ticket sales office attendants, flight crews, call centre agents and social media officers. The back-office staff are those who seldom interface with passengers such as technicians. Delcourt *et al.* (2017) analysed "the interaction effect between employee technical and emotional competencies in emotionally charged service encounters (ECSEs)". They describe ECSEs as those service scenarios which can prompt customers to exhibit strong negative emotions and require competent and dedicated employees.

Airline service encounters equally fit into this description, for example, when passengers miss flights when there is a problem with ticket booking, lost luggage, et cetera. In such situations, passengers quickly lose their temper and sometimes even become vicious as such requires dedicated employee attention (Delcourt *et al.*, 2017). How employees handle such scenarios become memorable for passengers and determine customers' perceptions of the airline's service quality and brand choice. Since service quality has been identified in various studies as a precursor of brand equity (Lu, Gursoy and Lu, 2015; Jeng, 2016), airlines must ensure that such moments (ECSEs) are well-handled. Passengers will rely on the perceptions they have about an airline, including those that are a result of a primary interface, including ECSEs.

Various studies have investigated the effect of employees on passenger satisfaction (e.g., Gibbs, Slevitch and Washburn, 2017; Lee *et al.*, 2018). One way of ensuring seamless customer services is for airlines to conduct staff training on various customer interface fronts. Technical competence, particularly the aircraft-related ones which culminate into airline safety, are mandatory and are usually performed by the International Civil Aviation Organization (ICAO), International Air Transport Association (IATA) and aircraft manufacturers such as Boeing and Airbus (Gibbs, Slevitch and Washburn, 2017). On the other hand, non-technical training is the prerogative of individual airlines' management.

Reminiscing that most of the non-technical training is for frontline service staff, management must emphasize it as it forms the core of passenger perceptions about an airline. Training helps enhance staff performance, service proficiency, and to balance service quality with safety issues leading to passenger satisfaction (Gibbs, Slevitch and Washburn, 2017). Whereas literature review indicates in this part of the chapter (subsection 3.3.2.1) that there are some airline service attributes that influence airline choice, responsiveness, to a greater extent through a competent and dedicated staff can make or break an airline.

3.6.8 Airline Image/Reputation

Like all other firms, airlines need to incorporate brand image building and management in their strategic planning. Such is pertinent for corporate reputation, which has become

the emphasis of sustainable marketing (Ding, Ho and Lii, 2015). Erdem and Swait (2004) assert that brand image plays a critical role in influencing choice behaviour. Brand image is customer perceptions about a brand emanating from associations they had with the brand, and this reflects in their memory in buying situations.

These perceptions are based mainly on airline service quality, currently and historically. Graham and Bansal (2007) define airline corporate reputation (brand image) as the travellers' perception of an airline's general operation, safety, and other factors. Buaphian (2015) adds elements such as financial performance, safety endorsements, size and age of the airline, ticket prices and safety record (particularly recent incidents) as pertinent to an airline's image.

In the passenger airline industry, the concept of brand image is foregrounded in the differences between full-service carriers and low-cost carriers. Full-service airlines are perceived to be offering high-quality services compared to their low-cost counterparts. The two airline categories are at the fore differentiated by their pricing strategies, with low-cost airlines' strength arising out of its cost leadership generic strategy (Jeng, 2016). Insomuch as low-cost carriers' image is perceived from its low-ticket prices, Chiou and Chen (2012) argue that passenger perceptions of such an embodiment are least important for low-cost airlines. Furthermore, Luke (2015) claims that passengers who attach importance on airline image are more inclined to choose a full-service airline.

Despite its paucity in the South African airline industry literature (Luke, 2015), airline image has been found in a few studies as directly influencing airlines choice (Chen and Chao, 2015; Bukhari, Ghoneim and Dennis, 2012; Chiam, Soutar and Yeo, 2009). Jeng (2016) investigated "how brand credibility affects consumer purchase intention in the airline sector" and indeed found brand credibility as significantly influential to passenger purchase intention. Brand credibility was found to have a signalling role by eliminating decision uncertainty, mostly where passengers were unsure of the airline's service quality. As a result, this increased purchase intention. Jeng also established that brand credibility is a customer relationship management (CRM) tool that fosters passenger affective commitment.

Bukhari *et al.* (2013) in a study focusing on online ticket sales, confirms Jeng's (2016) assertion that airline reputation signals to passengers about the airline's reliability. Bukhari and colleagues also found airline reputation to be positively correlated to factors such as perceived usefulness and ease of use. Furthermore, in another study on online ticket sales, Chiam, Soutar and Yeo (2009) discovered airline reputation as one of the factors that signal tour quality, hence the selection of deal packages by tour operators. The extensive literature suggesting a relationship between airline image and airline choice merits that this thesis investigates its effect on South African travellers' airline choice decision making.

3.6.9 Airline Service Quality

Though often referred to as a service attribute, service quality is the resulting combinational effect of all the airline service attributes as judged by the customer. It is the measurement of the airline's total service outputs against passenger perceptions, and or expectations. Naik and Savant (2016) define it as a function of the variance between service expectations and customers' perceptions of the actual service delivered. Put merely; airline service quality is the extent (or fitness) of service attributes (and consequences therefrom) in meeting or exceeding passenger expectations.

From a human values point of view, consumer expectations are a manifestation of consumer personal values. Accordingly, it is the satisfaction of the personal values that opens up the opportunity for repeat purchase (Barnes, 2017; Paul *et al.*, 2009). Namukasa (2013) states that [improved] service quality is the panacea for success and survival in a highly competitive airline market. As such, understanding the customers' values is crucial for airlines to define and deliver high-quality services. Seeking to understand passenger behaviour from a personal values perspective will give airlines some rich and in-depth explanation of what underpins airline choice.

Service quality is also one of the extensively researched aspects of a business and the prevalent theoretical framework used to assess and explain service quality is the SERVQUAL model (Wu and Cheng, 2013). This model has been widely applied by both academics and practising managers across industries in different countries, including the

airline industry (Buaphian, 2015; Leong *et al.*, 2015; Ganiyu, 2016). However, the SERVQUAL model has been criticised by various researchers for paradigmatic flaws related to its focus on the use of difference scores, dimensionality, predictive validity, and the length of the survey (Wu and Cheng, 2013; Barnes, 2017).

There is a quite a number of studies on airline service quality in South Africa (for example, De Jager and Van Zyl, 2012; Campbell and Vigar-Ellis, 2012; De Jager and Bin Dahari, 2012; Lambert and Luiz, 2011) and elsewhere (Chen and Chao, 2015; Chow, 2014). Again, like with pricing, the airline service is discussed from a dichotomous position, that is, from a full-service point of view and low-cost carrier point of view. As a result, full-service airlines are perceived to offer high-quality services compared to their low-cost counterparts. However, Diggines' (2010) findings show service quality as one of the critical factors influencing airline choice to both LCC and full-service airlines' passengers. It is similarly essential to both business and leisure travellers when choosing among airlines. Airline's service quality has a bearing on its brand image/reputation.

The above review reveals a wide diversity of airline service attributes which can be used to evaluate South African domestic airline services. Figure 3.5 presents airline service attributes which are indicated as important to passengers.

Table 3.5: Service Attributes identified as Important in Choosing Airlines

Service Attributes	Author of study where mentioned
Ticket Prices	Boetsch, Bieger and Wittmer (2011), Jung and Yoo (2014), Chen and Chao (2015), Kurtulmusoglu, Can and Tolon (2016), Chan (2014), Narangajavana *et al.* (2014)
Reliability (adherence to flight schedules)	Barnes (2017), Chow (2014), Stone (2016), Khanh (2017), Rajaguru (2016), Surovitskikh and Lubbe (2008)
Safety (flight incidents/accidents)	Buaphian (2015), Koo, Caponecchia and Williamson (2018)

Friendliness and courtesy from staff	Delcourt *et al.,* 2017), Lee *et al.* (2018), Wen and Yeh (2010), SKYTRAX (2015)
Customer service	Chen and Chao (2015), Fourie and Lubbe (2006)
Luggage handling	Chow (2014), Franks (2006), SKYTRAX (2015), Surovitskikh and Lubbe (2008)
History and reputation of an airline	Jeng (2016), Campbell and Vigar-Ellis (2012), Chen and Chao (2015)
Staff competence	Delcourt *et al.* (2017), Jeng (2016), Gibbs, Slevitch and Washburn (2017),
Loyalty programs	Mantey and Naidoo (2017), Chen and Chao (2015) (2017), Suki (2014), Chen and Chao (2015)
On-board entertainment and, or meals	Buaphian (2015), Namukasa (2013), Lambert and Luiz (2011)
Comfort (to include seat quality and seat configuration, i.e., space on-board and legroom, and due to size and type of aircraft)	Namukasa (2013), Buaphian (2015), De Jager and Van Zyl (2012), De Jager, Van Zyl and Toriola (2012)
Booking and Check-in services [to include manual (teller) services and SSTs (online booking and check-in services)]	Chow (2014), De Meyer and Mostert (2011), Lin and Filieri (2015), Chen and Wang (2016), Lu, Chou and Ling (2009), Wang, So and Sparks (2017)

Primary Source

A closer look at attributes in the table would reveal that they are similar to those found in SKYTRAX studies. The SKYTRAX World Airline Awards have been dubbed as the most prestigious. They are respected across the airline industry globally as they offer about forty-two attributes for evaluating airline service quality (SKYTRAX, 2015). These attributes are grouped into three domains, that is, ground/airport, onboard product and cabin service. It is, however, important to note that not all of the airline service attributes identified by SKYTRAX would apply to the South African domestic market. This is because the SKYTRAX' attributes are for the global market; hence they encompass long-haul regional and international dimensions of airline service. For this study, only those in

table 3.5 were identified to apply to the South African domestic airline market. As such, their level of importance to travellers will be explored in this study.

3.7 POST-PURCHASE OUTCOMES AND BEHAVIOUR

As indicated in section 3.6.9, service quality is central to post-purchase outcomes and behaviours. Customers often evaluate and judge airline service delivery based on some criteria; for example, promises made implicitly or explicitly by an airline, resulting in customers' expectations. From the outcome of the evaluation, which can either be negative, positive or leave the customer indifferent, respective behaviours are expected. For instance, if an airline's service quality is judged to have adequately met customer expectations, the result is a satisfied customer who is likely to imbue positive behaviours such as continued patronage, recommending to others also to patronise the airline; hence, being loyal.

According to Zeithaml, Bitner and Gremler (2010), the disjuncture between customer expectation and perceptions of service performance is the heartbeat of services marketing, and airline marketers have to pay attention to understand post-purchase outcomes and behaviour. In the following subsections, the outcomes and behaviours resulting from service quality evaluation against customer expectations, service quality of other airlines and aviation standards.

3.7.1 Customer (Passenger) Satisfaction in the South African Airline Market

Excellent service quality is the heartbeat of any business; hence airlines also focus on service quality to increase chances of satisfying customers, prolong patronage and ultimately attain loyalty (Jiang and Zhang, 2016; Namukasa, 2013; Archana and Subha, 2012). Confirming the intricate connection between customer satisfaction and service quality (Rahim, 2015; Ganiyu, 2016; Mantey and Naidoo, 2017) avers that passenger satisfaction is a consequence of excellent service quality which in turn leads to high rate of customer retention. Furthermore, extant literature (Chow, 2014; Koklic, Kukar-Kinney and Vegelj, 2014; Atulkar and Kesari, 2017; Farooq *et al.*, 2018) also indicate a steadily

growing global trend of the linkages between airline service quality and customer satisfaction.

On its own, customer satisfaction is one of the well-researched essential concepts in the marketing literature (Oliver, 2014; Hussain, Nasser and Hussain, 2015). There is no one single definition of the concept of satisfaction, but in all descriptions, customer satisfaction is understood as a highly personal evaluation of a product's performance which is greatly influenced by individual expectations (Oginnaike and Kehinde, 2011). It is based on the context, 'moment of truth' and personal outcomes (*ibid*).

The simplistic definition that customer (dis)satisfaction is the variance between customer expectation and actual product performance is rooted in Oliver (1981) and Parasuraman, Zeithaml and Berry (1988) studies. These studies infer that satisfaction occurs when a customer believes that service performance fits well with their personal framework and where performance does not meet expectations, the customer is dissatisfied. This understanding of satisfaction is referred to as the confirmation and disconfirmation models (Hau and Thuy, 2012). However, one of the shortcomings of these models is their failure to expatiate on the constructs of the customers' frameworks for evaluating service performance.

The personal frameworks are the personal values which have been extensively defined earlier on. Personal values are assumed to provide an in-depth and sustainable explanation of customers' judgement of service performance (Schwartz, 1992, 2012). They are an integral and daily part of people's lives which motivate, guide and influence attitudes, behaviour and evaluations (Boer and Fischer, 2013; Fischer and Boer, 2016). Personal values will differ from one individual to the other and can apply across contexts and time (Schwartz, 2012). As such, the (in)ability of airline service to satisfy customer personal values can be referred to as airline service quality. Moreover, various studies (e.g., Weber, 2017; Hu, Geertman and Hooimeijer, 2016; Grebitus, Stiner and Veeman, 2015; Schwartz and Butenko, 2014) have confirmed that personal values can reliably predict and explain consumer behaviour in various situations.

Sadly, a closer review of the existing literature reveals that there is a lack of studies exploring the linkages between personal values and satisfaction within the South African context. Thus, in addition to determining the critical personal values that explain airline choice, this study also sought to assess passenger satisfaction within the South African domestic passenger market. If personal values can provide a decision-making framework that guides people's everyday actions (Boyd *et al.*, 2015), and influences how people evaluate situations (Fischer and Boer, 2016), indeed, they can be linked to customer satisfaction.

The few studies (for example, Argan and Argan, 2017; Arambewela and Hall, 2011; Oginnaike and Kehinde, 2011) that have studied the relationship between personal values and satisfaction indicate that personal values are positively linked to satisfaction. Argan and Argan (2017) explore the relationships between service personal values, service value, satisfaction, and loyalty within the health services sector. Their findings reveal that personal values affect satisfaction directly (β = .04).

Arambewela and Hall (2011) studied the role of international postgraduate personal values on students' satisfaction using the LOV as the measurement scale. Despite the variances in nationality, gender and age, the study found the LOV scale to be highly reliable high reliability of the LOV across all national groups in explaining that personal values do exert a significant influence on students' satisfaction. Using the SVS (Schwartz, 2012), Ogunnaike and Kehinde's (2011) study in the banking services sector also supports and confirms that personal values have a significant relationship with customer satisfaction.

Other than Hau and Thuy (2012) whose sample of 1 069 cases included 308 cases in airline services, the researcher could not find any studies (both in South Africa and elsewhere) that explore the influence of personal values on airline customers' satisfaction. This makes this study so relevant to the contribution to the body of knowledge on passenger satisfaction from a South African perspective.

3.7.2 Passenger Personal Value Satisfaction, Repeat Purchase Behaviour and Loyalty

Notwithstanding Nor and Wan's (2013) concern about the ambiguity on the relationship amongst service quality, satisfaction and loyalty, there is abundant literature on services marketing that quells such concerns. Existing literature, for example, Farooq *et al.* (2018); Mantey and Naidoo (2017); Leong *et al.* (2015); Chow (2014); Namukasa (2013), and Wu and Cheng (2013) show that high service quality leads to satisfaction and is positively correlated to customer intention to return (Ganiyu, 2016; Alerge and Cladera, 2009). Furthermore, it is now clear from the literature that personal values provide the decision criteria for customers to evaluate the delivered service.

As such, this study sought to investigate further if satisfaction of passenger personal values is critical to repeat purchase behaviour and ultimately to the creation of loyal customers. Almost for all companies, satisfied customers are a prime asset and a hope for repeat purchases (Terblanche, 2015; Fornell in Lee *et al.*, 2010). Thus, understanding why customers repeatedly purchase from a firm is essential for building long term relationships, which is a behavioural dimension of customer loyalty.

There have been numerous studies focusing on the relationship between service quality and customer satisfaction, repeat purchase and loyalty in the airline sector. For example, Leong *et al.* (2015) used the SERVPERF with an SEM–artificial-neural-networks predictive analytic approach to measure service quality and how it relates to satisfaction and loyalty. Another study by Ganiyu (2016) used correlation and multiple regression analysis to investigate the relationship between service quality, customer satisfaction and loyalty in the Nigerian airline industry. Myungsook and Yonghwi (2009) also studied the impact of service quality on airline customer satisfaction and loyalty. What is common amongst these studies is that satisfaction is a precursor to customer loyalty.

However, Jiang and Zhang (2016) who also explored the link between service quality, customer satisfaction and loyalty cautioned that insomuch as satisfaction do influence loyalty, the influence is not a direct one. This is corroborated by Suki (2014), who states that satisfaction does not automatically lead to loyalty. Instead, customer satisfaction

plays a mediatory role and function (Argan and Argan, 2017). From a litany of studies on customer satisfaction and loyalty, it is clear that like with customer satisfaction, very few studies explore the influence of personal values on repeat purchase behaviour and customer loyalty across disciplines.

In addition to Argan and Argan (2017), one of the few studies that indicate the influence of personal values on repeat purchase intentions and customer loyalty is that by Chiu *et al.* (2014). The study draws on the means-end chain (Gutman, 1982) to explore customers' repeat purchase intentions in B2B e-commerce. Chiu *et al.* (2014) focused on utilitarian and hedonic values which are deemed to be ever-present in all consumption situations. The findings of their study showed that utilitarian and hedonic values have direct effects on repeat purchase intention. Another study which explores the concept of personal values on customer loyalty is that by Jamaludin *et al.* (2016). In this study, Jamaludin and friends examined the factors that predict international students' destination-loyalty intention. Their findings also confirm that personal values do positively influence customer loyalty.

Based on the literature, this thesis explores the personal values that underpin the selection of the various airline services attributes and the meaning they have for travellers. Identification of passengers' values is pertinent to the airlines' product development strategies. Knowing what is important to customers is also essential for airline services positioning, and ultimately the ability to create and retain loyal customers. This is critical for survival, success and viability of any airline. How an airline configures its service attributes to satisfy passengers' personal values determines its service quality, customer satisfaction level, repeat purchase intentions and ultimately, customer loyalty.

Customers' expectations around the breadth of airlines service attributes, for example, on ticket prices, airline safety, reliability and many other service attributes should not be taken at face value. Airline marketers must understand the motivations of their customers to position their services appropriately. These motivations are what customers use as the post-purchase evaluation criteria (Zeithaml, Bitner and Gremler, 2010). They also enable airlines to precisely identify, anticipate and satisfy consumer needs, which in this case

would allow customers to achieve their end-states of existence (personal values). If done well, this results in positive outcomes such as customer satisfaction.

Emanating from the positive outcomes would be positive behaviours, for example, repeat patronage and loyalty, which breeds the concept of 'customer voluntary performance'. This concept is the discretionary customer behaviour that assists a service organisation like an airline to deliver better service quality by providing constructive feedback and suggestions on the services offered and delivered by the service firm (Eisingerich, Auh and Merlo, 2014). Such is very important to ease out the difficulty of marketing services in general and airline services in particular. For example, in Figure 3.9, satisfied Safair passengers play an ambassadorial role, spreading the positive brand elements by digital word of mouth.

Figure 3.9: Example of a Digital Word of Mouth by a Satisfied Customer (*Source:* @FlySafair on www.twitter.com).

Whereas airlines spend considerable amounts of resources to satisfy their customers (Chow, 2014), frequently based on disconfirmation models (Oliver, 1980), they tend to confine their effort on proximal factors (e.g., airline service attributes and consequences) and disregard the underlying customer lifetime motives driving their choice behaviour. These motives are what customers use to form their expectations and to evaluate service quality (Cieciuch, Schwartz and Davidov, 2015; Schwartz and Butenko, 2014).

3.8 PERSONAL VALUES AND PROMOTION OF AIRLINES SERVICES

Fundamentally, the ability to develop and promote airline services stems from the preciseness with which an airline segments its markets. Segmentation has been defined as the process of breaking down the mass market into smaller consumer groups (Kotler and Keller, 2012, 2016; Kaciak, 2011). Traditionally, segmentation is based on social and geo-demographics. However, there is a general consensus among consumer research scholars that the socio-demographic is not a sufficient basis for segmenting markets, nor have they been good predictors of buying behaviour (Iversen, Hem and Mehmetoglu, 2016).

On that note, Hofstede and Hofstede (2005) propound the effect of culture on human behaviour, and that culture manifests through social and personal values (Li and Cai, 2012). Personal values are known as enduring beliefs or motivational goals that guide individuals to consider what is essential in their lives (Lee and Lyu, 2016). Thus, personal values are seen as the rudiment for segmenting, targeting and positioning brands (Kaciak, 2011), and the key to sustaining consumer motivations. However, the segmentation exercise is often done without due consideration of the individual lifelong goals (personal values) which guide human behaviour across specific situations (Schwartz, 2012).

Given the above, South African airlines can segment the domestic market primarily on personal values, which are described as enduring and stable (Schwartz *et al.*, 2012; Grebitus, Steiner and Veeman, 2015), and be able to develop customised (targeted) market offerings (Shimp and Andrews, 2013). Accordingly, if segmentation is based on

personal values, it could also be the basis for the development of value-based targeting and positioning strategies.

As such, it can be assumed that when positioning (that is, planning and communicating the desired image), the use of passenger personal values is paramount to developing and promoting airline services that enable an airline to be the consumers' self-expressive brand. This is a brand which a passenger tends to think of as an extension of self, hence use the symbolic design of the brand to construct their self-identities (Leckie, Nyadzayo and Johnson, 2016). Such is critical if airlines want to deliver high-quality services from customer view, increase customer satisfaction and ultimately improve revenue streams and profitability (Chow, 2014). Also, Pike (2012) indicates that effective positioning is not only beneficial to the brand, but it also helps simplify a consumer's decision making.

3.8.1 Application of Personal Values on Marketing Communications

One model that has become the yardstick of employing personal values in developing market communications (positioning) programs is the Means-End Conceptualisation of Components for Advertising Strategy (MECCAS) presented in Table 3.6. This model provides a procedure for applying personal values from means-end chains (MEC) theory perspective to formulate positioning strategies and messages (Shimp and Andrews, 2013). Airlines can employ the MECCAS model to develop integrated marketing communications which systematically links airline services (through service attributes) that benefits travellers' pursuit to achieve their desired end-states (personal values).

Table 3.6: MECCAS Model in Developing an Airline Advertisement

Component	Definition
Customer **V**alue orientation	The end level (personal values) to be focused on in the advertisement or any other marketing communication tool; it serves as the driving force for the advertising execution. Espousing values in marketing communications intrinsically connect the airline service or an attribute to the customers.
Airline service attributes **C**onsequences	The significant positive consequences of using the brand, the advertisement verbally and, or visually communicates to travellers/passengers in using their own words, not the manufacturers. Also includes the avoidance of adverse outcomes.
Airline service **A**ttributes	The airline's service attributes that are communicated as a means of supporting the

Creative strategy and leverage point	consequences of choosing the airlines or its services.
	The overall scenario of communicating and the manner (leverage point) by which the advertisement or any other marketing communication tool will tap into, reach, or activate the value that serves as the advertisement's driving force.

Adapted from Reynolds and Gutman (1984)

Effective marketing of airline services will be one that circumvents putting too much emphasis on service attributes and consequences (means) but demonstrates to the customer how certain aspects of airline services can enable them to attain their desired life goals. Such goals (personal values) are described in literature (Lin and Chang, 2012; Lee *et al.*, 2014; Jeng and Yeh, 2016) as the core and stable motivations of human behaviour including choice.

The implications of the unique characteristics of airline services are more prominent on the positioning of services. Since airline service quality is also measured on tangibles (Koklic, Kukar-Kinney and Vegelj, 2017; Leong *et al.*, 2015; Suki, 2014; Parasuraman, Zeithaml and Berry, 1988), it suffers a setback on this criterion, for it is mostly intangible. Even though airlines have physical facilities such as offices and the aircraft, such facilities are homogeneous (Wu and Cheng, 2013), hence do not create any competitive advantage.

Often airlines' offices which passengers interact with are either within airport infrastructure or out of travellers' site. At that point, airline employees manning the service counters are central to the airline's service quality as espoused by Zeithaml, Bitner and Gremler (2010), through the service marketing triangle. It is for this reason that internal marketing is vital to improve employee service knowledge, responsiveness and courtesy as crucial service attributes. As such, this study only included those service elements that are within the airlines' locus of control.

On the equipment front, airlines usually use more or less the same types of aircraft, for example, Boeing 737, Airbus A320 and Jetstream aircraft types. Therefore, aircraft type like offices, do not provide the competitive leap for an airline from the customer's viewpoint, save for safety reasons and with environmentally avid customers. They favour

flying on newer aircraft seen as safer, and ecologically friendly aircraft. However, as Koo, Caponecchia and Williamson (2018) posit, the perceptions on aircraft safety and environmentally friendliness results from access to such information, which in most cases is not within the realm of many South African travellers.

In the absence of tangibility, Citeman (2007) states that airline customers rely more on subjective impressions and less on concrete evidence. This implies that passengers put their faith on the service provider (often through its employees) and to a large extent rely on perceptual instincts in judging the service quality. On this backdrop, positioning airline services becomes key to the creation of the desired image of the airline or its services and to modelling passenger expectations and perception. Personal values-based positioning could likely provide tangible evidence for the majority of non-physical aspects of airline services. Most importantly, airlines would be able to make an impression on the travellers' mind that the airline service will enable them to achieve their end-states of existence (personal values).

Kotler and Armstrong (2010) note that consumers (in this case passengers) can position services with or without the aid of airline marketers, confirming that personal values and not mere marketing effort underpin consumer behaviour (Schwartz, 2012). On this basis, this study sought to investigate, first, the moderating effect of airlines' marketing communications effort on the relationship between personal values and airline service attributes evaluation and prioritisation when choosing an airline. Second, this study intended to investigate if airlines' marketing communications effort moderate the relationship between airline service attributes (perceived service quality) and post-purchase outcomes and behaviour.

Von Possel (2010) sums up positioning into four main aspects, that is, target group (from segmentation and targeting exercise), their desires, the competition and believable positioning claims. In line with Von Possel (2010), the target market needs to be identified through their personal values which is key to positioning. After identifying and targeting the market segment(s), then the importance shifts to how the positioning message accounts for passenger personal values (Shimp and Andrews, 2013). Airlines must avoid

trying to be everything to everybody. Positioning is about selecting the most salient buying motives of consumers (Von Possel, 2010).

Zhang, Lin and Newman (2016) see positioning as the essential and strategic attempt by management to modify market offering's tangible characteristics and the intangible perception of customers. Thus, the results of this study enable airlines to identify the salient personal values prominent amongst air travellers which they could use in line with Zhang and friends' perspective.

3.10 CHAPTER SUMMARY

Despite its unpopularity with South African scholars, particularly in airline studies, personal values can be useful in explaining airline choice within the South African domestic airline market. Extensive review of literature in this chapter outlined both theoretical and empirical evidence from various studies, mostly by Asian and European scholars (for example, Chiu *et al.*, 2014; Arsil, Li and Bruwar, 2016; Cai and Shannon, 2012; Ho. Lin and Huang, 2014; Lagerkvist *et al.*, 2012). Through this review, it was shown that personal values provide a profound explanation of human behaviour in general and consumer choice in particular.

Therefore, on the backdrop of such enormous evidence, this chapter sought to justify the use of using personal values to explore and explain airline choice within the South African domestic market as set out in the study's research objectives. The chapter expatiates on various consumer behaviour models, that is, from the traditional models to value-based models. Notwithstanding the important contribution made by the conventional models, this chapter highlighted their shortcomings. Further, the chapter comparatively reviewed the value-based models to lay the foundation for the argument to apply personal values in explaining airlines.

In the next chapter, a conceptual framework depicting the interrelationships between personal values and other variables in the model, which have been discussed extensively in this chapter is presented. Chapter 4 draws to a large extent from this chapter (Chapter

3) to submit an argument and hypothesise on the application of personal values to explain various choice related issues within the South African domestic passenger airline market.

CHAPTER 4: CONCEPTUAL FRAMEWORK

4.1 INTRODUCTION

This chapter draws from the previous chapters, Chapter 3, in particular, to elicit the variables that make up the research problem presented in Chapter 1. Then, building on chapters, this chapter presents the study's conceptual framework drawn from an intensive review of the literature on consumer research in general and the value-based models, in particular. The chapter intends to provide a map or rudder that guided the realisation of the research objectives, and also to illustrate the hypothesised relationships amongst the research variables drawn from the literature.

4.2 CONCEPTUAL FRAMEWORK OF THE STUDY

According to Ravitch and Carl (2016), conceptual frameworks are generative frameworks that reflect the thoughts behind a research study. On that note, the conceptual framework in Figure 4.1 below is a reflection of consumer behaviour theories and models used to explain airline choice within the South African domestic market. Intensive literature review of the traditional approaches and models of consumer behaviour reveal their apparent weaknesses in explaining consumer behaviour. As such, to avoid perpetuating the raised criticisms, this study sought to augment these grand models by adopting the value-based models to provide rich and deep insights about airline choice.

By applying personal values to explain traveller/passenger behaviour, it alludes that it is individual personal values that influence or determine which of the airline's services attributes are considered as important when evaluating airline services. In support of this, Wu and Cheng (2013) suggest that airline passengers when faced with a choice situation; evaluate different airlines on how their service attributes provide the consequences which would enable them to attain their life goals (personal values). The conceptual model presented below seeks to illustrate the relationships between personal values, airline service attributes (culminating into choice behaviour), demographics, airline model type, marketing communications and post-purchase outcomes and behaviour.
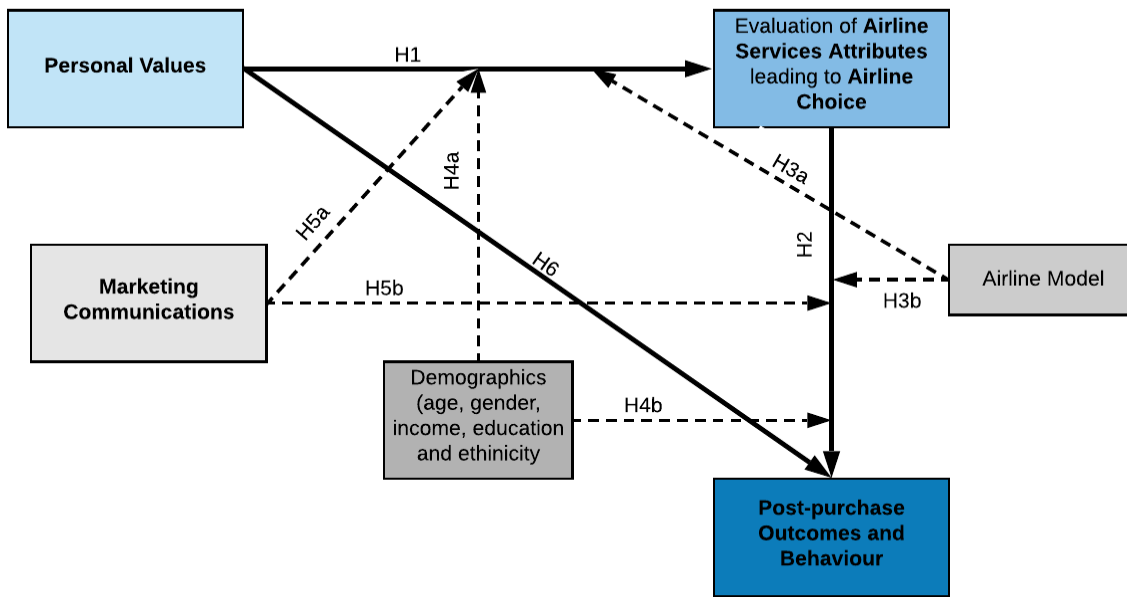
Figure 4.1: Research Conceptual Framework (*Primary source*)

In the conceptual framework above, passenger (consumer) personal values are the independent variable while airline service attributes and post-purchase outcomes and behaviour are dependent variables. Demographics, promotional effort (marketing communications) and airline model type were hypothesised as moderators. Boyd *et al.* (2015) state that personal values provide a decision-making framework that guides consumers' daily actions, including airline choice. This statement corroborates the definitions of personal values by various early psychologists, anthropologists, historians and sociologists such as Kluckhohn (1951), Rokeach (1968, 1973), Yankelovich (1981), Vincent, Scott and Lamont (1977). Despite defining personal values from different perspectives, these earlier scholars concur that personal values are the standard or criteria by which individuals evaluate objects, ideas and products.

As such, when people evaluate airline services, they do so in line with how various airline service attributes can enable them to attain their values. That said, it is hypothetically correct to claim that the evaluation and preference/choice of an airline depends on the extent to which airline service attributes address customers' personal values. Also, based on this hypothesis, the performance of airline service attributes against value-based

customer expectations (perceived service) influences customer post-purchase outcomes and behaviour.

The moderator variables are hypothesised to conditionally influence the effect of the independent (predictor) variable on the dependent variable (Hayes, 2018). The application of the proposed model would be vital in explaining airline choice within the South African domestic market. More important in this study is how airlines can use personal values to predict and explain consumer behaviour, hence package their services accordingly.

4.3 RESEARCH HYPOTHESES

A hypothesis is defined by Park (2019) as the alternative possibilities that could potentially explain an observed phenomenon, in this case, the dependencies amongst the research variables. According to Leatherbee and Katila (2019), hypothesis testing reduces the distance between perception and reality about a phenomenon, thus making the interpretation of reality more objective. Resultant from the conceptual model above in pursuit of achieving the research objectives, the following hypotheses (*H1 to H6*) were formulated to test the dependencies amongst the variables presented in the conceptual model.

4.3.1 Hypothesis 1

Choice behaviour manifests through the selection of product attributes that are deemed as instrumental to the achievement of personal values (Gutman, 1982; Zinas and Jusan, 2017; Huff, 2017; Tey *et al.*, 2018). Therefore, in this hypothesis, it was claimed that when evaluating airline service attributes, consumers prioritise those service attributes that are instrumental to the achievement of their personal values. Thus, the alternative hypothesis posed was:

$H1_1$: Personal values influence the evaluation and prioritisation of airline service attributes when choosing an airline within the South African domestic passenger market.

The concept of personal values has been adopted in various behavioural studies, particularly within consumer research. Amongst the many studies, personal values have

been used to explain food consumption choices (Lee *et al.*, 2014; Manan, 2016), housing preferences and choices (Sohaimi *et al.*, 2017; Zinas and Jusan, 2012, 2017; Hu, Geertman and Hooimeijer, 2016), destination positioning (Pike, 2012), and travel services (Li and Cai, 2012). In these studies, personal values are viewed as the guiding principles in people's lives and behaviour (Lyu, Hahn and Sadachar, 2018; Hu, Geertman and Hooimeijer, 2016); hence they provide standards or criteria for evaluating choice alternatives.

For example, Ladhari and Tchetgna (2015), in their study of the influence of personal values on Fair Trade consumption, found that 13 of the refined Schwartz values correlated significantly with Fair Trade consumption. The most positively correlated were equality ($r = .453$), unity with nature ($r = .419$), and social fairness ($r = .394$). Lee *et al.* (2014) focused on the role of personal values in food consumption choice. They found hedonism, security and benevolence and self-direction as the underpinning choice behaviour. Personal values have been found to reflect what is primarily of importance to a person, thus consequently forming a central part of an individual's identity that guides their action (Jamaludin *et al.*, 2016).

Thus, in this study, it was hypothesised that airline customers evaluate airlines based on how the service attributes enable them to achieve their personal values. This hypothesis is supported by abundant literature, for example, Orsingher, Marzocchi and Valentini (2011:731) state that "the extent to which customers achieve their goals depends in part on the attributes of the service experience." This is in line with Gutman's (1982) and many others' view, that product attributes are the means to an end.

Based on such extensive literature supporting the relationship between personal values and product/service attributes, this hypothesis sought to address the two research questions. That is, **RQ 1a**: *What is the most parsimonious set of consumer (passenger) personal values that influence airline choice within the South African domestic passenger market?* and **RQ 1b:** *Which are the most important airline service attributes used by customers to evaluate and choose airlines within the South African domestic passenger market?*

4.3.2 Hypothesis 2

If consumers choose airlines based on the promises, they make through their airline service attributes (Grönroos, 2015), it follows therefore that airlines that deliver on such promises meet the expectations of their customers (Lambert and Luiz, 2011). When perceived service performance matches the expected service, there is a high likelihood of positive post-purchase outcomes and behaviour. For example, continued patronage by satisfied customers (Koklic, Kukar-Kinney and Vegelj, 2017; Grönroos, 1984, 2001; Parasuraman, Zeithaml and Berry, 1988) and possibly unsolicited brand ambassadorship or customer advocacy (Berlianto, 2019; Moliner-tena, Monferrer-tirado and Estrada-guillén, 2019; Sashi, Brynildsen and Bilgihan, 2019).

Numerous studies have explored the influence of service quality (airline service attributes performance) on various post-purchase outcomes and behaviour. For example, Sandada and Matibiri (2016) found that service quality had a positive effect on customer satisfaction ($β = .72$), and that satisfaction had a positive effect on customer loyalty ($β = .80$). A study by Khanh (2017) also confirms the positive relationship between service quality and customer satisfaction. Khanh found all the six service attributes to be positively impacting on customer satisfaction as follows: boarding/deplaning/baggage ($β = .54$), Check-in ($β = .42$), inflight services ($β = .33$), reservations ($β = .16$), aircraft ($β = .15$) and flight crew ($β = .11$).

Based on the literature, an alternative hypothesis was posed:

H2₁: Airline service attributes positively influence the post-purchase outcomes and behaviour for the customer within the South African domestic passenger market.

4.3.3 Hypothesis 3

There is extensive literature on the differences between airline models. The differences are premised on the strategic and operational approaches, particularly the competitive strategy of the two models (Acar and Karabulak, 2015). Full-service carriers (FSCs) offer a full bouquet of service attributes in pursuit of differentiation strategy (Bitzan and

Peoples, 2016; Huschelrath and Muller, 2012; Leick and Wensveen, 2014). On the contrary, low-cost carriers' (LCCs) competitive strategic thrust is based on cost leadership strategy.

LCCs employ stringent cost-cutting measures to attain affordability as the core of their 'no-frills service' strategy (Koklic, Kukar-Kinney and Vegelj, 2017; Bitzan and Peoples, 2016). This kind of strategic positioning filters down to how LCCs configure their service attributes. Among other various service attributes, several studies (Ferrer-Rosell, 2012; Dolnicar *et al.*, 2011; Anuwichanont, 2011) have found ticket prices to be the most abstract differentiator between the two models. However, Forgas *et al.* (2010) argue that low prices do not necessarily result in customer satisfaction. Rajaguru (2016) states that despite lower prices, LCCs still face a challenge of customer retention and building a loyal customer base. Akamavi *et al.* (2015) aver that price is not even a critical deciding factor for low-cost airline customers.

In this study, LCCs were compared to FSCs on service attributes such as; reliability, luggage handling, safety, reliability, loyalty programs, onboard (during flight) services, cabin features and experiences, booking and check-in services, and staff competence, courtesy and responsiveness in addition to ticket prices. However, the two models have of late been found to be converging (Daft and Albers, 2015), showing no or small differences or becoming blurry (Loureiro and Fialho, 2016; Lohmann and Koo, 2013; Ferrer-Rosell and Coenders, 2017; Ferrer-Rosell, Martínez-Garcia and Coenders, 2014). For this reason, Lohmann and Koo (2013) suggest that a new hybrid business model consolidating the traits of the two models has emerged.

Based on these arguments, the study proposed two hypotheses. The first claim was; when choosing an airline, customers with an affinity for low-cost airlines will evaluate airline services attributes differently from those favouring full-service attributes. Similarly, the second claims dealt with the effect of the airline model on the relationship between airline service attributes and post-purchase outcomes. Thus, the alternative hypotheses posed were;

H3a$_1$: There is a difference in personal values influencing the evaluation of airline service attributes to low-cost carrier customers compared to full-service carrier customers within the South African domestic passenger market.

H3b$_1$: There is a difference in the effect of airline service attributes on post-purchase outcomes and behaviour for low-cost carrier customers compared to full-service carriers' customers within the South African domestic passenger market.

4.3.4 Hypothesis 4

As indicated in the conceptual model in Figure 4.1, the assumption was that some demographic variables have a moderate; 1) the influence personal values have on airline service attributes when choosing an airline, and 2) the impact of service attributes and post-purchase outcomes and behaviour. The moderating effect of demographic variables has been reported in many consumer behaviour studies.

Several studies on consumer behaviour have investigated the moderating effect of demographic variables. For example, Schwartz and Butenko (2014) focused on the moderating effect of gender, and they found it as a significant moderator. Similarly, Henrique and de Matos (2014) also found gender, age and income as moderators of the effect of personal values and loyalty. Furthermore, gender and age were found to contribute to customer behaviour differences in-store loyalty (Audrain-Pontevia and Vanhuele, 2016), concerning service quality evaluations (Deshwal, 2016) and in determining repeat purchase intention (Amin, Rezaei and Tavana, 2015).

Deshwal (2016) investigated the effect of demographic variables on customer experience and found that there was a significant difference among income categories for "all four dimensions of customer experience quality such as peace of mind, a moment of truth, product experience, and outcome focus" (pp. 950). Ethnicity has also been well-researched and found to be significant in some studies (Ting *et al.*, 2016; Mansori, Sambasivan and Md-Sidin, 2014).

However, some have made findings to the contrary. For example, Jiang and Zhang (2016) found no significant relationship between education level and post-purchase outcomes

such as satisfaction. Xue *et al.* (2020) findings indicate that gender does not moderate the influence of perceived competence on purchase intention. In this study, the focus was on the moderating effect of one's income and education levels. These were pertinent to the study in the following sense. The South African economy is reported to be highly unequal with disparities in income levels (Stats SA, 2019). Furthermore, there is an increased number of educated people joining the mainstream economy, including the domestic airline passenger market.

Therefore, it was interesting to explore the moderating effect of income and education on the evaluation and prioritisation of airline service attributes as factors of airline choice, and also on the impact of these (perceived service) on the post-purchase outcomes and behaviour. The pertinent research questions addressed here were 1) ***RQ4a:*** *Do demographics (income and education) moderate how personal values influence the airline service attributes used to choose an airline within the South African domestic passenger market? and* 2) ***RQ4b:*** *Do demographics (income and education) moderate the effect of airline service attributes on post-purchase outcomes and behaviour within the South African domestic passenger market?*

The hypotheses posed were:

H4a$_1$: Income and education levels significantly moderate how personal values influence the airline service attributes used to choose an airline within the South African domestic passenger market.

H4b$_1$: Income and education levels significantly moderate the relationship between airline service attributes and post-purchase outcomes and behaviour.

4.3.5 Hypothesis 5

Again, a duet of hypotheses was posed. The first hypothesis dealt with the claim that marketing communications effort moderates the [pre-purchase] effect of personal values on the evaluation and prioritisation of airline service attributes when choosing an airline. The second claim was that marketing communications moderate the impact of airline

service attributes (perceived service) on post-purchase outcomes and behaviour such as customer satisfaction, repeat purchase intentions, loyalty and advocacy.

The role of marketing communications abounds in the existing literature (see Abdelhady, Fayed and Fawzy, 2019; Guolla, Belch and Belch, 2017; Angowski, Domańska and Komor, 2017; Law, 2017; Lin and Ryan, 2016; de Oliveira Santini *et al.*, 2015; Sihite, Harun and Nugroho, 2014). According to Campbell and Vigar-Ellis (2012), promotional strategies are derived from brand positioning, which must be relevant and visible to the target populations/segments (Malaval, Bénaroya and Aflalo, 2014; Shimp and Andres, 2013).

Camilleri (2018) and Malaval, Bénaroya and Aflalo (2014) further state that effective marketing communications articulate an airline's position in the minds of customers and determine how the market reacts to the service, both pre- and for post-purchase evaluation. In simple terms, marketing communications can be assumed to modify the effect of service offering on consumer behaviour. After an extensive literature search, the researcher was left convinced that there has not been any study known that has attempted to explore the moderating effect of airlines' marketing communications effort on; (a) the relationship between personal values and airline service attributes, and (b) the relationship between airline service attributes and post-purchase outcomes and behaviour.

Thus, this study sought to contribute to the body of literature through testing the hypotheses posed were:

H5a$_1$: Airline marketing communications effort moderates the influence of valued-based airline service attributes used to choose an airline within the airline industry in South Africa.

H5b$_1$: Airline marketing communications effort moderates the impact of airline service attributes on post-purchase outcomes and behaviour within the airline industry in South Africa.

4.3.6 Hypothesis 6

Several studies have been conducted on the relationship between personal values and post-purchase outcomes and behaviour such as customer satisfaction, repeat purchase intention and loyalty. These studies which are proponents of the values-based consumption (Santosa and Guinard, 2011; Schwartz, 2012; Schwartz and Butenko, 2014; Manan, 2016; Tey *et al.*, 2018), indicate that airline service attributes should be viewed as how passengers achieve their personal values.

Contrary to abundant existing literature on the influence of personal values on product/service preference, behavioural intention and choice, there is a paucity of studies exploring the direct impact of personal values on post-purchase outcomes and behaviour. Of the few studies on this subject, a positive relationship between personal values and post-purchase outcomes and behaviour. For example, a study by Atlukar and Kesari (2017) found that hedonic shopping values influenced the creation of satisfaction, loyalty and re-patronage intentions. To contribute to the corpus of literature, this study hypothesised that personal values (through a bundle of airline service attributes) would lead to positive post-purchase outcomes and behaviour. As such, the researcher hypothesised that:

$H6_1$: Consumer personal values directly impact on post-purchase outcomes and behaviour within the South African domestic passenger market.

4.4 SUMMARY

This chapter presented the conceptual framework which elucidates the relationship of the variables under study. Six hypotheses were posed and supported with evidence from the extant literature. As such, the chapter laid the foundation for the next chapter (Chapter 5), which will expound on the methodological aspects of the thesis. For example, hypothesis development is key to the research design, sampling techniques, questionnaire development and data analysis in pursuit of addressing research questions.

CHAPTER 5: RESEARCH METHODOLOGY

5.1 INTRODUCTION

The previous chapters provided a detailed account of this study's background (Chapter 1), the context within which the study is conducted (Chapter 2), intensive literature review of the theoretical concepts underpinning the study (Chapter 3) and the conceptual framework culminating in the development of the hypotheses (Chapter 4). This chapter was considered as a critical aspect of the study, to set up procedures for testing the hypotheses posed in Chapter 4 and consequently, the research questions. As such, the chapter espouses the study's philosophical lens, and research design and strategy employed to achieve the research objectives. Consistently, the chapter also articulates the sampling related issues and data collection procedures used in this study. Also, it addresses the reliability and validity concerns.

After that, the chapter outlines the data analysis procedures adopted by the researcher, paying careful attention to the analytical tool and statistical model. The chapter also presents a detailed discussion on ethics, followed by a summary of the chapter. The structure of this chapter is drawn from Strang's (2015) research design typology (full model) presented in Figure 5.1 overleaf.
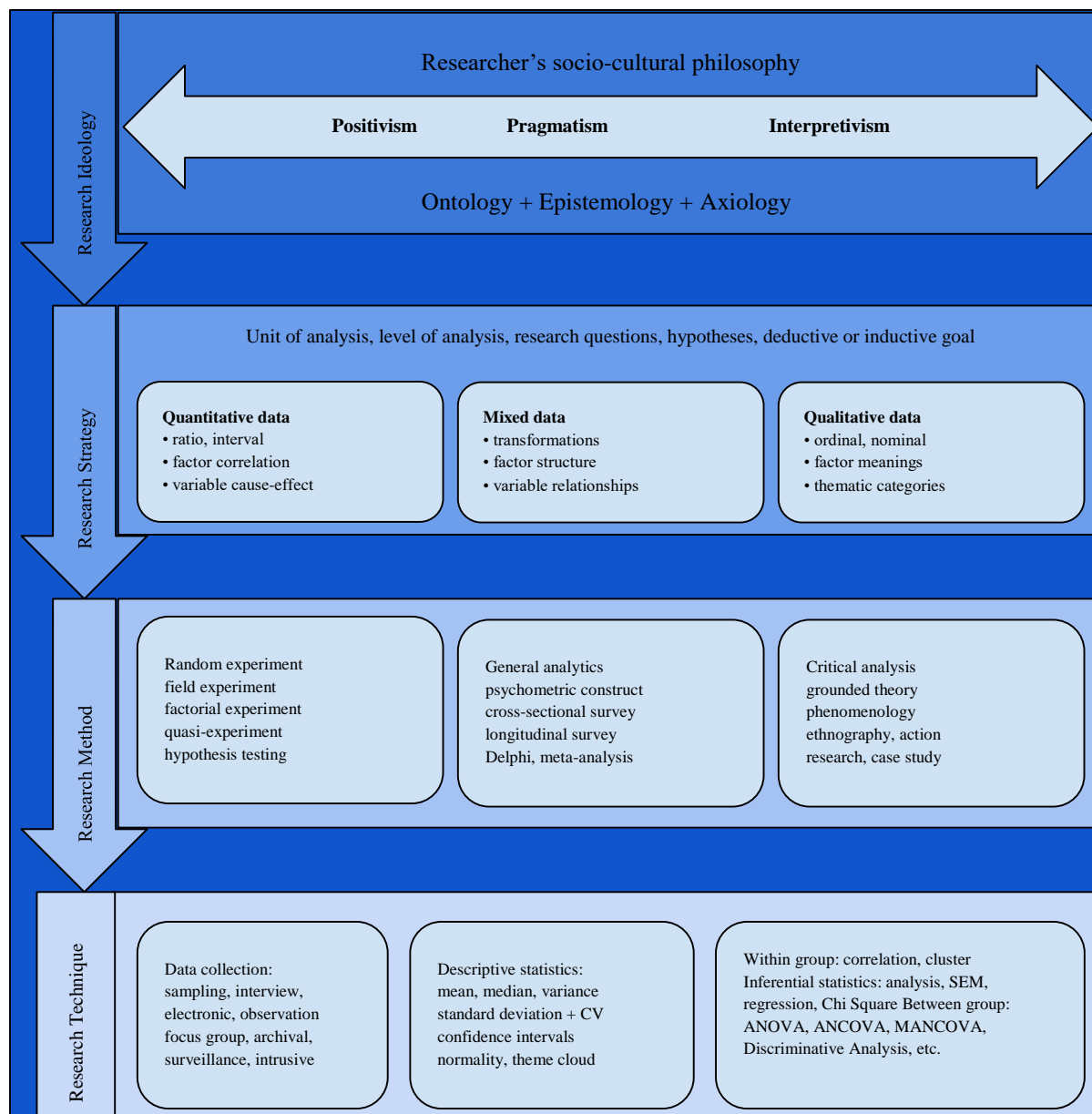
Figure 5.1: Research design "typology" full model (*Adapted from Strang, 2015:8*)

5.2 NATURE OF THE STUDY

In the business world, research does not exist in a bubble (Bryman and Bell, 2015); it is tied to different ideological (philosophical) views of how social scientists view reality. Kuhn (1962) cited in Kivunja and Kuyini (2017) introduced these philosophical views into the world of research in his book titled "*The Structure of Scientific Revolutions*". Kuhn (1962) referred to the philosophical thinking abound in research as the research paradigms.

Before Kuhn's concept, Shepherd and Challenger (2012) state that information production was thought of as a rational, apolitical and accretive process built on foundations laid by past researchers.

In contrast, Kuhn's (1962) concept of paradigms rejected the thought that scientific observations were theory-neutral. Instead, it emphasises that researchers often form communities of practice and develop philosophical assumptions and theoretical frameworks which guide or inform the way they relate to social reality, create knowledge and interpret meaning (Chilisa and Kawulich, 2012). What follows is a detailed account of the research paradigms (ideologies) as shown in Figure 5.1, and subsequently, the justification of the paradigm choice for this study.

5.3 RESEARCH PARADIGMS

Drawing on Kuhn's (1962) work, various scholars have defined paradigms. A paradigm can be defined as a fundamental belief system and theoretical frameworks shared by scientists (researchers) that guide how they relate and study social reality (Rehman and Alharthi, 2016; Rahi, 2017). Also, Kivunja and Kuyini (2017) aver that these shared beliefs are critical to the meaning or interpretation of research data. Similarly, Antwi and Hamza (2015) contend that for research to be considered valid, it must be underpinned by some philosophical assumptions.

These assumptions determine the ontological, epistemological, methodological and axiological perspectives (Rehman and Alharthi, 2016; Hope, 2016) which are suitable for the development of knowledge in a given field of study. The perspectives determine the research design, strategy and method(s) which allow researchers to understand how their perceptions of human nature impact on the approach they purposely use to reveal social truths (Bracken, 2010; David and Sutton, 2004).

The ontological perspective is about the nature of social reality (Chilisa and Kawulich, 2012; Rehman and Alharthi, 2016). Antwi and Hamza (2015) relate that the etymology of this perspective is from Greek words '*onto'* referring to the study of 'being' and '*logia'* meaning science, study or theory. Then, epistemology is simply defined as a way of

knowing. Iofrida *et al.* (2018) argue that it is the relationship between the knower and what is under study, and Cooksey and McDonald (2011) describe it as what counts as knowledge within the world. Novikov and Novikov (2013:14) summarise epistemology as "the theory of scientific cognition, a branch of philosophy which studies the laws and capabilities of cognition, as well as analyse the stages, forms, methods, and means of cognition process, the conditions and criteria of scientific knowledge validity". As such, epistemology is critical to the adoption of the research methodology as it is set to validate the knowledge obtained through different methodological processes.

On the same breath, a methodology is a theory of the organization of scientific activity (Novikov and Novikov, 2013). In essence, methodology refers to the ways through which the reality can be known (Shek and Wu, 2018) or how we should study the world (Chilisa and Kawulich, 2012). Ellen (1984:9) cited in Rehman and Alharthi (2016) define methodology as "an articulated, theoretically informed approach to the production of data". In other words, the methodology is the operationalisation of the ontological and epistemological views of the research study. These views are intertwined with researchers' axiology - the ethics and values that need to be considered when planning research (Kivunja and Kuyini, 2017; Strang, 2015; Chilisa and Kawulich, 2012). Core to the methodology is the research methods which are how data is collected and analysed to solve a research problem, for example, questionnaires and open-ended interviews.

Returning to the broad issue of research paradigms, it is trite to address the question about the different paradigms found in the literature. Research paradigms are thought of as a continuum with positivism on one end, and interpretivism/constructivism on the extreme opposite end (Parahoo, 2014; Strang, 2015; Marcella, Maura and Michelle, 2018). This kind of thinking has led to incompatibility thesis. The proponents of each paradigm claim distinctive and completely opposing research processes and knowledge validation of each paradigm (Iofrida *et al.*, 2018).

The research onion (Figure 5.2) developed by Saunders, Lewis and Thornhill (2016) delineates the differences among the research paradigms and the principle of complementarity as advanced by Novikov and Novikov (2013). At the same time, Saunders Lewis and Thornhill's (2016) research onion presents a testimony to the choice

dilemma faced by researchers when planning to conduct research. The research onion provides the options essential for guiding the choice of research and sampling designs, research methods and data analysis approaches. Kuhn (1962) found it critical that the choices be underpinned by some philosophical assumptions to achieve high-quality research outcomes.
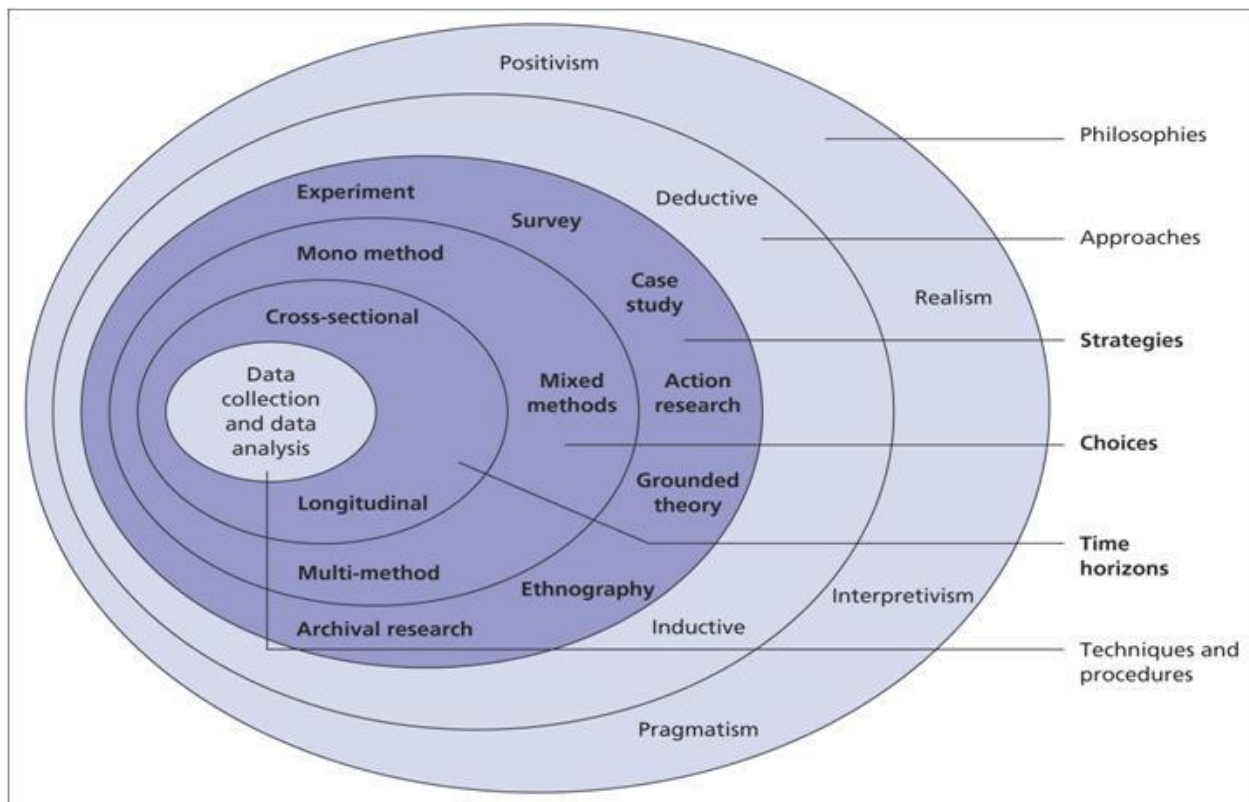
Figure 5.2: The Research Onion (*Source: Saunders, Lewis and Thornhill, 2016*)

The following subsections (5.3.1 - 3) provide a detailed review of the literature supporting the conceptualisation of paradigms into a research onion presented in Figure 5.2 above. Section 5.3.4 offers a justification for the choice of a paradigm that underpins this particular study.

5.3.1 Research Paradigm

Over the years, there has been a proliferation of research paradigms. However, in business research, the three broad and ubiquitous paradigms are; positivism, interpretivism and pragmatism. To achieve the research objectives, and in line with the

research questions and hypothesis, this study was underpinned by positivism. According to Kivunja and Kuyini (2017) and Marcella, Maura and Michelle (2018), the origins of positivism are attributable to the French philosopher Auguste Comte (1789-1857). As a paradigm, positivism became prominent around the nineteenth century (Rehman and Alharthi, 2016).

Crotty (1998) in Strang (2015:23) refers to the positivist paradigm as "the oldest and best-known 'researcher' philosophy, which is evidence and theory-driven". The prominence of positivist paradigm coincides with the time business management researchers (for example, Frederick Taylor, Elton Mayo, Kurt Lewin and many others) were involved in seeking ways of optimising businesses. Boeije, Slagt and van Wessel (2013) opine that positivism has become popular within the social sciences research domain, particularly business research.

Positivism has been criticised for its objectivist and empiricist ontological and epistemological views. Another criticism is how positivists treat the researcher and the 'researched' as separate independent structures of reality (Marcella, Maura and Michelle, 2018). However, regardless of such criticism, positivism is still regarded to possess some incredible strengths which have seen it withstand the test of time. Some of the notable strengths are:

- Research findings can be generalised when they have been replicated on many different populations and subpopulations (Johnson, Onwuegbuzie and Turner, 2007).
- The quantitative approach enables future predictions to be made.
- The tenets of precision and parsimony make it useful for studying a large number of people, therefore saves time (Cohen, Manion and Morrison, 2007).
- According to Johnson (2014), quantitative data provides objective information to make valid and reliable scientific assumptions and inferences, thus paves the way for further scientific research.
- Through careful sampling, appropriate instrumentation and appropriate statistical treatment of the data, reliability and validity might be improved (Cohen, Manion and Morrison, 2007).

In the following section, the research strategy adopted in this study is discussed.

5.4 RESEARCH STRATEGY

According to Saunders, Lewis and Thornhill (2016), a research strategy is a plan for answering research questions, and it links all methodological aspects of a study to the research philosophy/paradigm (see Figure 5.2). As discussed above, and in pursuit of addressing the research questions, this study employed a quantitative research approach. To avoid the weaknesses associated with quantitative studies, the researcher opted for *quantitative criticalism* (critical/contextualised quantitative research) as the research strategy.

Like mixed methods research, critical quantitative research draws from the possibilities of integrating quantitative and qualitative methods in the same study but does not necessarily juxtapose the two research strategies. It only avoids dogmatism and binary perspective of research approaches. Despite being unfamiliar in business research, critical quantitative research has been adopted and is being popularised in education research and the public health sector (Kilgo, 2016; McLaren, 2017).

In the education and health sectors, critical quantitative research often refers to issues of equity; thus, it is operationalised through social theories such as the critical race theory (CRT), queer theory and others (Stage, 2007; Malcom-Piqueux, 2015). It is also used to question the traditional quantitative research practices to provide better models, measures and analytical techniques (Stage and Wells, 2014) and conduct culturally relevant research (Wells and Stage, 2015). In this study, deductive reasoning (quantitative) is enhanced by integrating with inductive approaches. Such is achieved by employing the concept of personal values as the undergirding driver of airline choice behaviour, at the same time questioning the traditional approaches used by previous studies.

5.5 RESEARCH METHOD

Before discussing the research design in detail, it is essential to highlight that the research process nomenclature seems to be laden with inconsistencies. For instance, whereas

Bryman and Bell (2015), Malhotra (2015) and others refer to the research design, Strang (2015) refers to it as the research method. Furthermore, to Rahi (2017), research methods refer to qualitative, quantitative and mixed methods research approaches. In contrast, Bryman and Bell (2015) and Strang (2015) view qualitative, quantitative and mixed methods research as the research strategy.

However, it was not this study's objective to elucidate on and solve these inconsistencies, but only to note them in the process of choosing the befitting research method. To avoid getting immersed in these inconsistencies, this thesis adopted Strang's reference to research methods (see Figure 5.1). Also, a synthesised definition of research method/design, from Bryman and Bell (2015) and Malhotra (2015), was adopted. Thus, the research design is the fundamental guiding framework, which acts as the blueprint for data collection, measurement and analysis for the rest of the research process.

Again, there seems to be no consensus on the types of research designs. On the one hand, we have the University of Southern California Libraries' (2016) comprehensive list of twelve research designs. On the other hand, Bell, Bryman and Harley (2019) and Bryman and Bell (2015) identify five different types of research designs, with only the comparative design as the new one. Malhotra (2015) and Shukla (2008) suggest two broad types of research designs, the exploratory and conclusive designs (see Figure 5.3). In addition to these, Saunders, Lewis and Thornhill (2012, 2016) also mention the explanatory design.
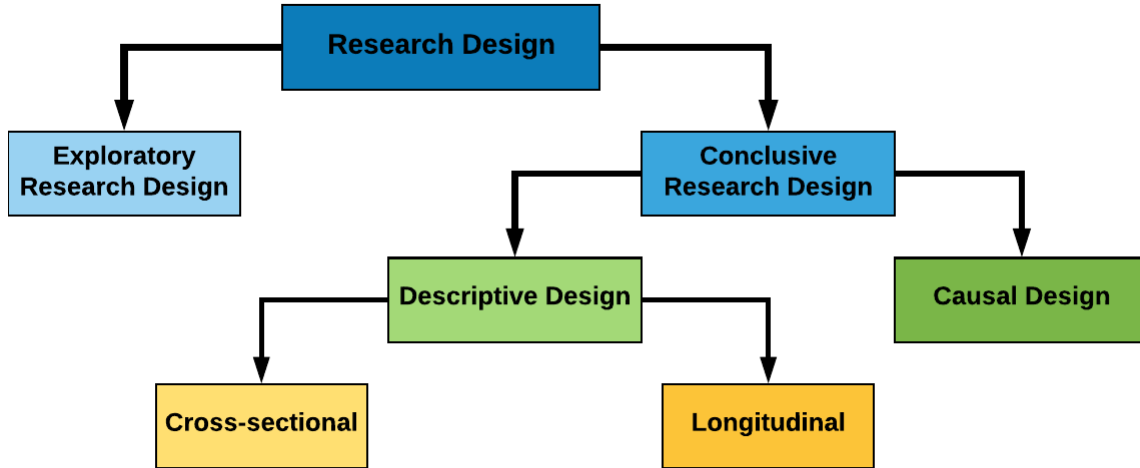
Figure 5.3: The classification of marketing research designs (*Adapted from Malhotra, 2015:86*)

Descriptive designs are so popular with many marketing studies (Malhotra, 2015) for predicting the market and consumer behaviour (Shukla, 2008). Descriptive studies provide a dashboard of the variables being investigated. Saunders, Lewis and Thornhill (2012, 2016) assert that descriptive studies portray an accurate profile of the variables. In this study, the descriptive aspect of the research method was adopted to elicit the characteristics and patterns of airline choice behaviour within the South African domestic passenger market.

Conversely, Malhotra (2015) also highlights that descriptive studies alone cannot conclusively explain the characteristics and patterns of airline choice. Supporting Malhotra's view; Saunders, Lewis and Thornhill (2016) state that descriptive studies may be an extension of exploration research or a forerunner to explanatory research. Thus, this study co-opted the exploratory flair to provide rich insights and the explanation of airline choice.

Saunders, Lewis and Thornhill (2016) referred to this amalgamation of descriptive design and the explanatory designs as the *descripto-explanatory* study. The main aim was to extend beyond has been covered by most of the previous studies. Majority of the earlier

studies dwelt in identifying and describing the factors influencing airline choice by incorporating a relatively unfamiliar concept of personal values to explain the basis of customers' evaluations of airline service attributes when choosing an airline, and when evaluating service performance. As such, this adds some level of criticality into investigating airline choice behaviour. At the centre of this methodical conundrum, the researcher was guided by the research questions depicted in Figure 5.4.
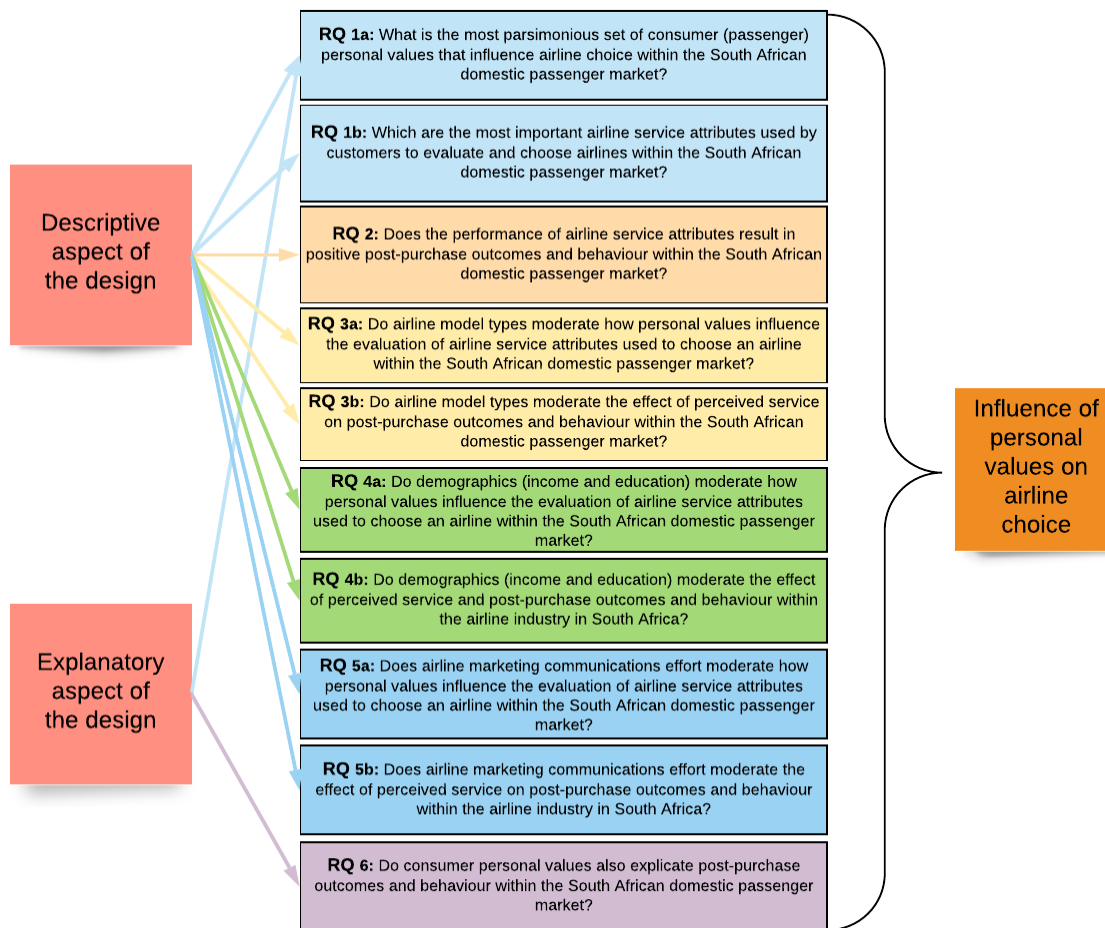
Figure 5.4: Alignment of Design Aspects to Research Questions (*Primary Source*)

Personal values (used as the explanatory variable) are, by nature complex and abstract, usually operating at a subconscious level (Zinas and Jusan, 2017; Boyd *et al.*, 2015). Extant literature identifies personal values as the source of motivation guiding human behaviour in general (Becker *et al.*, 2017; Schwartz, 1992, 1994, 2012; Rokeach, 1973) and consumer behaviour in particular (Gutman, 1982; Mana, 2016; Hu, Geertman and

Hooimeijer, 2016). The following section details the population and sampling aspects of the study.

5.6 POPULATION AND SAMPLING

In addition to paying due attention to the choice of research strategy and design, researchers have to decide as to whether they collect data from the entire population, or they need to get a sample of the population (Saunders, Lewis and Thornhill, 2016). Asiamah, Mensah and Oteng-Abayie (2017) define the research population as "the group of individuals having one or more characteristics of interest." However, it is important to note that in research, the population does not only refer to human beings; it also includes any non-human objects whose characteristics are under study.

If the population is too large (which is often the case for many social studies), more consideration must be paid on the sampling technique and sample size for the study. A sample is defined as a subset of a population selected to participate in a study (Plano Clark and Creswell, 2014; Sekaran, 2003; Etikan, Musa and Alkassim, 2015). Likewise, research objectives and questions are critical to the determination of the sampling technique and the sample size. Also, the population under investigation must be well defined. Sekaran (2003) reminds us of the harm of failing to target the correct population for the study.

Sekaran (2003:264) submits that "if data are not collected from the people, events, or objects that can provide the correct answers to solve the problem, the survey would be in vain." That might mean data collected, and analysed does not help solve the research problem. Besides, Asiamah, Mensah and Oteng-Abayie (2017) state that population definition is key to the credibility of a study as the source of data. Thus, Creswell (2014) asserts that the sampling and data collection process must be preceded by a clear and precise definition of the target population.

5.6.1 The Study's Population

The study's population was identified as the South African residents (also described on the questionnaire) who have used or are currently using domestic airlines to travel within South Africa. To be precise, only those aged eighteen years and above were targeted. Beyond that, there was no further stratification based on age, gender or any other population characteristic. The framing of the targeted population was as inclusive as possible to offer a cross-sectional data to understand airline consumer behaviour. However, due to customer attrition, either through switching or death, airlines are also curious to understand potential customers' behaviour, especially the young people joining mainstream economics and are likely to use air transport. Thus, in addition to current and past users, the study also included those who have never but are likely to use air transport in future, possibly bringing the population size into millions.

In defining the target population, the researcher drew from the South African Department of Transport's (DoT) (2015) National Airports Development Plan. This plan reported the dominance of the domestic traffic within the South African aviation industry. That is, out of approximately 24 million passengers (both arrivals and departures in 2014), more than two-thirds were on domestic flights (DoT, 2015). The information in the National Airports Development Plan is corroborated by the Airports Company South Africa's (ACSA) consolidated passenger traffic. It is estimated that as from 2015, domestic passenger traffic stood slightly above 2 million passengers per month up to April 2019 (ACSA, 2019) translating to approximately 24 million domestic passengers per year.

5.6.2 Sampling Techniques

For some studies with manageable population size, it is possible to collect data from an entire population to answer the research questions. In the contrary, where the population size is so large (Singh, 2016), as was for this study, it was difficult or impractical to sample the entire population for the problem under study. Plano-Clark and Creswell (2014) explain that it would take too much time, cost too much, or be also challenging to access everyone in a group, thus making it impractical to collect data to answer the research questions. In such a case, Saunders, Lewis and Thornhill (2016) state that a sample which is representative of the population must be drawn to provide data that will help the researcher respond to the research questions.

Generally, there are many techniques of selecting a sample of the required size to answer the research questions or test the hypotheses (Muthén and Muthén, 2002; Wolf *et al.*, 2013; Strang, 2015). According to Rahi (2017); Saunders, Lewis and Thornhill (2016), among other scholars, sampling techniques can be broadly categorised into probability sampling and non-probability sampling. Probability sampling is known as a representative sample. It is often associated with survey research strategies where each element of the population has a known and equal chance of being selected (Saunders, Lewis and Thornhill, 2016; Singh, 2016; Walliman, 2011; Sekaran, 2003). Probability sampling is appropriate for studies where the intent is to generalise the results. Probability sampling techniques include simple random sampling, systematic random sampling, stratified random sampling, cluster sampling, and multistage sampling (Omair, 2014, Plano-Clark and Creswell, 2010).

On the other hand, in non-probability sampling, elements of the population are selected into the sample by non-random means (Walliman, 2011). Saunders, Lewis and Thornhill (2016) aver that the inclusion of the elements of the populations in the sample is based on availability, convenience, and whether they possess characteristics or meet some criteria pertinent to the study. However, the non-random approach is riddled with subjectivity, something that precludes the generalisation of results. There is quite a number of non-probability sampling techniques, for example, purposive sampling, convenience sampling, quota sampling and snowball sampling (See Table 5.1 below).

Table 5.1: Types of Sampling Techniques

Category	Technique	Characteristics
Probability sampling	**Simple random sampling**	The researcher randomly selects individuals from a list of all members of the population of interest. It has the least bias and offers the most generalizability.
	Systematic random sampling	The researcher randomly picks a starting point within a list of all members of the population of interest and then selects every n^{th} individual on the list.
	Stratified random sampling	The researcher divides the population into subgroups and randomly selects participants from each group.

Non-probability sampling	Cluster sampling	The researcher divides the population into separate groups known as clusters. Then elements thereof can be selected into those clusters randomly or purposively.
	Multistage sampling	The researcher carries out sampling in several stages such that the sample size gets reduced at each stage.
	Purposive sampling	The researcher selects participants "on purpose" because they are considered to be most appropriate for the study.
	Convenience sampling	The researcher selects participants who are available and accessible.
	Quota sampling	The researcher assemblies proportionally based on absolute respect to known characteristics, traits or focused phenomenon.
	Snowball sampling	The researcher identifies the potential participants for the study who are then encouraged to recruit others in the form of a referral process.

Source: Adapted from Plano Clark and Creswell (2014:235)

These sampling techniques (listed above and many others) have strengths and weaknesses. It is, therefore, essential to interrogate the strengths and weaknesses presented in Table 5.1 against the purpose of the study and the research when choosing a sampling technique.

A hybrid of convenience and snowball sampling techniques was employed for this study. The choice of the sampling techniques was informed firstly by the researcher judgment on the data needed to answer the research questions. The researcher's judgment was based on extensive review of literature on non-probability sampling techniques. The researcher approached respondents in airports and tourist accommodation centres (e.g., Pumula Lodge and Zimbali Fairmont Hotel) and asked if they were interested in completing the questionnaire. A thorough explanation of the purpose of the study was provided, and respondents would either agree or disagree to participate. Those who participated were asked to recommend any of their acquaintances who could complete the questionnaire. Some requested the hard copy version while some preferred the online version to share with their friends and families.

According to Strang (2015), sampling has two fundamental tenets. Firstly, the elements must possess similar characteristics or attributes, and secondly, they must be adequately representative of the population. The hybrid sampling technique employed, dutifully took care of the first principle. Respondents were chosen based on the inclusion criteria outlined in sub-section 5.6.1. It is common in the literature that non-probability sampling is often criticised for violating the second tenet. However, that as it may be, Walliman (2011) reminds us that no sample is precisely representative of a population regardless of the sampling technique used. Walliman (2011) also indicates that sampling, in general, is susceptible to what is known as the sampling errors, which brings us to the contentious aspect of sample size in the next section.

5.7 SAMPLE SIZE

A sample size (*n=324*) was drawn from domestic (including potential) travellers within South Africa. However, upon checking for multivariate analysis, 30 cases were removed after being identified as outliers. Determination of the sample size is a significant challenge for both emerging and seasoned researchers, and even for peer reviewers and grant writers (Wolf *et al.*, 2013; Bryman and Bell, 2015). Several factors can influence the size of the sample in a study. For example, the population size, the purpose of the study, allowable sampling error (confidence level), the degree of variability and risk of selecting a bad sample (level of precision) as some of the factors to be considered when determining the sample size (Israel, 2003; Mohammed, 2010).

In'nami and Koizumi (2013) contend that the determination of the required sample size is a crucial aspect which influences various other elements of a study, for example, model fit, the precision and power of parameter estimates and suitability of methods to be use. It also determines the degree to which the statistical and, or analytic generalizations can be made (Onwuegbuzie and Collins, 2007). Thus, researchers are expected to report on how the sample size was determined (American Psychological Association, 2010; Wilkinson and the Task Force on Statistical Inference, 1999).

The prevalent practice when it comes to sample size is that which Onwuegbuzie and Collins (2007) refer to as a false dichotomy. In practice, bigger sample sizes are

associated with quantitative research and smaller sample sizes with qualitative research. Scholars such as Singh and Masuku (2014) and Bradley and Brand (2013 argue that sample size is dependent on the research objective, question/hypothesis first and foremost, and subsequently on the research design. Since this study adopted the exploratory factor analysis (EFA), confirmatory factor analysis (CFA) and regression analyses, the determination of the sample size was based on the requirements of such analyses.

5.7.1 Sample Size Required For EFA, CFA and Regression

According to Tabachnick and Fidell (2014) and Wang *et al.* (2013), statistical power refers to the determination of an appropriate sample size for statistical analysis. Wolf *et al.* (2013) opine that statistical power contributes to the observation of how variables relate in a data set. In general, exploratory factor analysis (EFA) and confirmatory factor analysis (CFA) and structural equation modelling (SEM) including regression analysis are large sample methods (Kyriazos, 2019; Kline, 2016; Brown, 2015; Schumacker and Lomax, 2016). However, Costello and Osborne (2005) indicate to the contrary, that when the data is more robust, a smaller sample can achieve adequate accuracy for these methods.

In response to the large sample rule, Kline (2016) raises a good question of "How large is large enough?" Such a question is pertinent as there is no consensus on what is deemed a small and a large sample. This lack of consensus is evident in literature, where various rules of thumb for the determination of sample size are cited, each suggesting a different minimum figure (Wolf *et al.*, 2013; Kyriazos, 2019).

 Kline (2016) and Muthén and Muthén (2002) regard samples of less than 100 ($n < 100$) as too small to achieve statistical power suggested in Cohen (1988, 1990). Another rule of thumb is based on the ratio of the number of people (n) to the number of measured variables (p) known as the $n{:}p$ rule. A ratio of 5 to 10 participants per item for $n = 300$ is deemed as acceptable (Tinsley and Tinsley, 1987; Tabachnick and Fidell, 2014) while Devellis (2017) notes that beyond $n > 300$, such a ratio becomes progressively lower.

Schumacker and Lomax (2016) propose that for traditional multivariate statistics, a ratio of 20 cases per measured variable $n = 300$ is sufficient. Another rule in addition to the *n:p* rule is that of the number of cases (*n*) to the number of estimated parameters (*q*), referred to as the *n:q* rule by Kyriazos (2019). Like in the *n:p* rule, 5-10 observations per parameter are required for $n > 100$ (Nunnally, 1967; Nunnally and Bernstein, 1967; Bentler and Chou, 1987). However, Hoogland and Boomsma, 1998) cited in Wang and Wang (2012) proposed an even higher ratio ($n:q > 10$) for data that is highly kurtotic.

With so many rules of thumb, it is clear that they cannot be universally applied. Wolf *et al.* (2013) see the rules of thumb as problematic since "they are not model-specific and may lead to grossly over or underestimated sample size requirements" (Pg. 914). As the confusion from the multiplicity of the rules of thumb reigns high for researchers, many consider the Kaiser-Meyer-Olkin (KMO) test for sampling adequacy for checking sample size adequacy for EFA (Yasir Arafat, 2016). Kaiser (1974) benchmarked the KMO value as follows; *.50* as the minimum acceptable value, *.51 - .70* as mediocre, *>.71* to *.80* as good and above *.80* as great value. Recently, Pallant (2013) deemed the sample size as sufficient if the KMO value is greater than *.60*.

Also, there has been an increase in the employment of the Monte Carlo Analysis (Muthén and Muthén, 2002). Through the Monte Carlo Simulation, Muthén and Muthén (2002) concluded that for a CFA model, sample size requirements range 150 to 315 and 150 to 1025 result in a *.81* score to reject the null hypothesis. Cohen (1992) suggested that the desired level of statistical power is *.80*, and the minimum probability of detecting an existing effect is *.50*. Therefore, considering all the above-stated sample size rules and assumptions, this study's final sample size of 294 was deemed adequate for statistical analysis and was confirmed through KMO sampling adequacy value during the EFA and subsequent tests.

5.8 DATA COLLECTION

Notwithstanding the inconsistencies of the research process nomenclature discussed in section 5.4, Ngulube (2015) indicates that data collection is a methodical issue. Besides concurring with Strang (2015), Sarantakos (2013) and many others that research design

often guides research action, Ngulube (2015) also points out the lack of consensus amongst methodologists on what research design is, and whether it is a similar concept to research methods. Elsewhere, Ngulube (2005 cautions that it is vital for researchers to critically reflect on the purported alignment of ontological and epistemological foundations of research with research strategy and research design/method. Such reflectivity is essential to avoid methodical provincialism (Johnson and Duberley, 2015).

That said, the data collection exercise for this study was a reflective one, in pursuit of a contextualised quantitative inquiry, as noted by Yanchar (2006). The choice of the research instrument (questionnaire) was in addition to reflection on the research design principles (Ngulube, 2005), and the evaluation of the suitability of other methods (Saunders, Lewis and Thornhill, 2015); informed by the resources (financial and otherwise) available for data collection purposes. Discussed in the following sections are the design elements of the data collection instrument and how it was administered.

5.8.1 Research Instrument Design

According to Krosnick and Presser (2010), a questionnaire is the heart of a survey; hence its design is critical to answering the research questions. Concerning the questionnaire design, Brace (2018) reminds us that the questionnaire is a remote medium between researchers and respondents. For that reason (remoteness), Brace emphasises that the questionnaire and the questions therein must be designed in such a manner that the respondents perceive the purpose of the questionnaire and understands the questions therein precisely as desired by the researcher. Mathers, Fox and Hunn (2007) also add the need for questions to be clear and precise to get meaningful and valid results. As such, the effectiveness of the questionnaire depends on the writing skill of the researcher (Brace, 2018).

There is a considerable amount of literature on designing good questionnaires and writing right questions, but as Alwin and Beattie (2016) observe, there is no consensus on the specifics of question design, lending the exercise to be viewed as an art rather than a science. However, despite the lack of consensus, efforts have been made to identify

characteristics of "good questionnaires" and/or "good questions" (*ibid*). For example, Payne (1951), in his seminal work, suggested that questions must not exceed more than twenty words. Alwin and Beattie (2016) refer to such a suggestion as to the acronym 'KISS' standing for '*keep it short and simple*'. Nevertheless, the authors admit that there is a school of thought that argues that longer questions might help elicit more accurate responses.

Like Alwin and Beattie (2016) and Payne (1951), Taherdoost (2018) calls for attention to be accorded to the wording of the questions. This call is supported by Somekh and Lewin (2011). They stress, among other things and in addition to clarity, that questions in a questionnaire must be unambiguous and must desist from using technical language or language that is inappropriate for the respondents. Krosnick and Presser (2010), and Taherdoost (2018) also cautions against using leading or double-barreled questions. Kachroo and Kachen (2018) indicate that all of the questionnaire design principles are meant for attaining instrument validity and reliability.

In designing the questionnaire for this study, the above views were kept in mind and cautiously applied to get optimal responses. The guiding principle, as stated in Alwin and Beattie (2016), was to be as parsimonious as possible by avoiding unnecessary redundancy and complexity to secure respondents' comprehension of the questions. Albeit, in the interest of covering all the study's variables, the questionnaire was a bit lengthy to the chagrin of many respondents. Luckily, this did not affect the attainment of the intended sample size discussed in section 5.7.1.

5.8.2 Questionnaire Structure and Content

Saunders, Lewis and Thornhill (2015) assert that in designing a questionnaire and the questions therein, as hard as it may be (Bell and Waters, 2014), one needs to ensure that they collect adequate data to answer the research questions and achieve research objectives. To address all the variables (in pursuit of answering the research questions) of the study presented in the conceptual framework (Chapter 4), Table 5.3 depicts how the questionnaire was structured.

In the table, variables were classified into Diliman, Smyth and Christian's (2014) categorisation of data variables. The categories are factual and demographics, attitudes and opinions, and behaviours and events variables. Factual and demographic variables include respondents' characteristics such as gender, age, occupation, education and income. Such information is readily available to the respondents, hence can be easily disclosed. Attitudes and opinions variables are context-bound; thus, respondents need to think considerably before answering. For example, how respondents perceive a firm's service quality. Like the attitudes and opinions variables, behaviours and events variables are also influenced by the context. On the contrary, respondents often rely on the question's context rather than on real experiences in responding to such questions.

Table 5.2: Questionnaire Structure

Variable	Question and Section	Specific conceptual framework variable addressed and supporting literature	Level of measurement
Factual and demographic	Q3 - Section A Q4 - Section A Q21 - 25, Section F	No specific variable, but these questions are essential for describing the sample from which the data is drawn from and also for analysis thereof.	Nominal, ordinal and interval scales.
	Q5 - Section A	This question is pertinent to the **airline choice**. Preference is an individual's attitudinal disposition that is indicative of the likelihood of choice and evaluation of airline services (Luke, 2015), hence can be used as a proxy for choice. It is often influenced by the collective effect of various airline service attributes (service quality). In this thesis, it is argued that over and above the service quality, personal values are considered as the primary source of preferences and choice (Schwartz, 1992, 2012; Rokeach, 1968; Cieciuch, Schwartz and Davidov, 2015).	Nominal scale
	Q6 - Section B	This question builds on from Q5, specifically to identify and evaluate airline service offering through their **service attributes** key to the **choice** of airlines. There is no definite number of airline service attributes, and there are various names for sometimes the same attributes. Airline service attributes are what air transport customers interface with and upon which they evaluate airline service delivery. The list of airline service attributes for this study was drawn from literature, both South African and elsewhere (for example, De Jager and Van Zyl,	Ordinal scale

Attitudes and opinions		2013; Campbell and Vigar-Ellis, 2012; Fleischer, Tchetchik and Toledo, 2015; Kim and Park, 2017; Koo, Caponecchia and Williamson, 2018).	
	Q8 - Section C	Drawing from Q6, this question sought to elicit the most important airline service attribute as a precursor to the hard-laddering questions, that is, Q9 - 12. Such is referred to by Jeng and Yeh (2016) and Zinas (2013) as elicitation of attributes stage.	Nominal scale
	Q13 - Section D		
	Q14 - Section D	These questions were specifically intended to elicit the impact (on customer behaviour) of various **promotional activities** (marketing messages) by airlines, identify marketing communication channels used by airlines and evaluate the effectiveness in conveying marketing messages. The questions were drawn from several readings, including Menon *et al.* (2019), Shimp and Andrews (2013), Sihite, Harun and Nugroho (2014), Mughal *et al.* (2014), de Oliveira Santini *et al.* (2015), Clow and Baack (2018) and Angowski, Domańska and Komor (2017).	Ordinal scales
	Q15 - Section D		
	Q16 - Section D		
	Q17 - Section E	This question was for probing **satisfaction** levels as a post-purchase outcome from the performance of airline service attributes (perceived service) identified in Q6. Together with other post-purchase outcomes and behaviour such as repeat purchase and loyalty, satisfaction has for so long been associated with Oliver's (1980) expectation-disconfirmation paradigm. In this study, in line with Rahim's (2015) assertion satisfaction was intricately related to how service quality is evaluated, we investigate personal values as the yardstick of service quality evaluation, thus instrumental to the determination of the level of satisfaction. The statements for this question were, in addition to the articles mentioned above, informed by studies by Argan and Argan (2017), Jiang and Zhang (2016), Namukasa (2013), De Meyer and Mostert (2011), and El-deen, Hasan and Fouzy (2016).	Ordinal scale
Behaviours and events	Q1 - 2, Section A	These questions are meant to draw out from the sample, the frequency of flying and the routes flown. Such questions are essential in building up data for cross-analysis.	Nominal scales
	Q7 - Section C	This question is the differentiator for this study compared with previous studies on airline choice and related concepts. The question is the adoption of Schwartz *et al.* (2012, 2017) portrait value questionnaire (PVQ-RR), an approach that uses **personal values** to explain human behaviour. Methodologically, this question qualifies this study to be descripto-explanatory research (Saunders, Lewis and Thornhill, 2015) which is then described by Yanchar (2006) as a contextualised quantitative inquiry. The question is pertinent for framing South African air transport customers in terms of Schwartz' (1992) basic human values, which has been extended to nineteen (Schwartz *et al.*, 2012). Human values have been used to understand human behaviour in	Ordinal scale
	Q9 - 12, Section C		Not applicable (open-ended question)

	general from various perspectives - sociology, anthropology, psychology and marketing. A more detailed discussion on the adoption of personal values in this study is presented hereunder.		
Q18 - Section E	The statements in this question were meant to extract data about the other post-purchase outcomes and behaviour (**repeat purchase** intention and **loyalty**). Cross-analysed with the evaluation of the importance of various airline service attributes underpinned by the concept of personal values, the data from this question will reflect on repeat purchase behaviour and loyalty. The question was guided by Paul *et al.* (2009) assertion that repeat purchase intention "results from the three-general means-end categories of attributes, benefits, and motivational values" and loyalty as the commitment to future purchases. Both repeat purchase intention and loyalty are hypothesised as positively correlated to satisfaction (Argan and Argan, 2017; Das 2014).	Ordinal scale	

Primary Source

As indicated in the table, and in pursuit of the research purpose and objectives, the development of the questions contained in the data collection instrument was drawn from the airline passenger services dimensions and various theoretical foundations. Of note, the choice of the list of airline service attributes and the personal values model (the PVQ-RR) are further discussed as they form the core of the study.

5.8.2.1 Airline Service Attributes

In Chapter 2 and Chapter 3 (sections 3.5.1 to 3.5.9), airline service attributes were discussed in detail. Furthermore, a tabular summary (Table 3.5) in Chapter 3 was presented showing some of the literature sources from which the service attributes were drawn. From the list given in the Table (above), the researcher came up with ten airline service attributes that were included in Question 6 of the questionnaire. The ten attributes are airline; ticket prices, reliability, safety, airline staff competency/knowledge, courtesy and responsiveness, luggage handling, airline reputation, loyalty programs, onboard (in-flight) services, cabin features and experience, and booking and check-in services. Chen and Chao (2015) note that the evaluation of airline service attributes is moderated by variables such as age, income, flying frequency, and purpose of travel.

5.8.2.2 Personal Values

The application of personal values to explain and predict consumer behaviour is what sets this study apart from many previous studies. It contextualises the airline customer behaviour, thus offering a rich and in-depth explanation of airline choice within the South African domestic passenger market. Such is the reason why this study is not a mere quantitative study but critical quantitative research. The use of personal values in this study was discussed in detail in Section 3.4 of Chapter 3 where work of early human values theorists (Rokeach, 1973; Gutman, 1982; Kahle, 1983; Schwartz, 1992, 2012) and their disciples (for example, Zinas and Jusan, 2012, 2017; Hau and Thuy, 2012; Lee *et al.*, 2014; Arsil, Li and Bruwar, 2016, among others) was reviewed.

The review of the literature on airline industry indicated that researchers studying airline service quality, choice, and related issues had not favoured the application of personal values in South Africa and elsewhere. This lack of interest in using personal values has rendered most of the previous studies on airline choice and service quality purely quantitative research, which has been derided for decontextualising consumer behaviour (Garcia and Mayorga, 2018; Saunders, Lewis and Thornhill, 2015; Yanchar, 2006). Among many others, Antwi and Hamza (2015) highlight the weakness of mere quantitative research, arguing that quantitative analysis has failed to identify with any universal or unerring laws of human behaviour, prompting researchers to rely on probabilistic causes. Thus, to bridge this weakness, the researcher sought to apply personal values to explain airline customer behaviour.

As discussed in Chapter 3, there are quite many theorists on human/personal values. For this particular study, Schwartz's (1992, 2012) and Schwartz *et al.* (2012) theory of basic human values was used to categorise human values. Table 3.4 in Chapter 3 presents an analysis of the various values models. From this analysis, Schwartz' theory of basic human values stands above the rest in terms of universality and that it was founded on a large and diverse sample. Another characteristic that made Schwartz's fundamental human values theory more appealing is its circumplex structure that espouses the compatibility – incompatibility thesis among the 19 human values. This feature of the

model allows for the interpretation of values that simultaneously (and those that cannot) influence human behaviour in choice situations.

Before adopting the Schwartz model, the researcher engaged Professor Schwartz about his model (see Appendix E). He (Schwartz) then furnished the researcher with the updated 57-item PVQ-RR, which was adopted as Question 7 of the questionnaire. The respondents were asked to think about the person described by the 57 portrait statements and indicate if the person was like or not like them using a six-point scale from '*not like me at all*' (1) to '*very much like me*' (6).

As such, the PVQ does not require the participant to engage in deep thinking. It taps on their (respondents) self-reported similarity to the person described implicitly in the portrait/statement in terms of particular values. The portraits depict the other person in terms of what is important (goals and aspirations) to him or her. Hence, the portrait/statements seek the respondent to compare this other person to themselves (and not vice versa). Schwartz (2012, 2017) exalts this kind of comparison as it directs focus on the value aspects of the other person that are portrayed, rather than on their whole self-concept (Saris, Knoppen and Schwartz, 2013). This ascertains that similarity judgment is only made on the values espoused in the portrait and not a person as a whole. Therefore, the personal values of the respondents are inferred from these self-reported similarities.

In the next section, measurement scales are briefly discussed and tabulated as applied in the questionnaire.

5.8.3 Measurement Scales

Whereas the previous section sought to explain the questionnaire structure and the rationale of formulating the questions therein, this section discusses the measurement scales adopted to elicit the responses of the participants. Culminating from some seminal work on measurement by the Committee of the British Association for the Advancement of Science, Stevens (1946) divided the measurement scales into four classes: nominal, ordinal, interval, and ratio. Stevens went beyond classifying the scales and also assigned proper statistical procedures to the scales as depicted in Table 5.3.

Table 5.3: Measurement Scales and Corresponding Statistical Operations

Levels of Measurement	Measures of Central Tendency	Question
Nominal scale: Nominal variables are the lowest and most straightforward of all (Dalati, 2018; Flannelly, Flannelly and Jankowski, 2014), and the level of measurement is about figuratively assigning numbers for identification and classification of objects (Malhotra, 2015). As stated by Stevens (1946) that some rules govern the measurement scales, Cooper and Schindler (2013) and Malhotra (2015) remind us that the data from a nominal variable must be grouped into collectively exhaustive and mutually inclusive categories.	Mode, Contingency correlation	2, 3, 4, 5, 8, 20, 21 & 23.
Ordinal scale: Like the nominal variables, ordinal variables are category variables, but the difference is, ordinal variable categories express a different value (Flannelly, Flannelly and Jankowski, 2014). Mishra *et al.* (2018) posit that the difference between nominal and ordinal is that ordinal data have some way of ordering which Williams (2019) regard as an observation that "some objects are noticeably greater than others concerning some attribute." A vital characteristic of the ordinal variable scale is, the ranks follow a specific order, but the distance in between the ranks is not necessarily equal.	Mode, Median, Percentiles	1, 6, 7, 13, 14, 15, 16, 17, 18 & 25.
Interval scale: Literature on Likert scale indicate controversies between ordinal scale and interval scale, whether they can be interchangeably applied. In distinguishing the two, over and above that the former is a categorical variable and the latter is a continuous one, Stevens (1946) described the interval scale as the "form that is quantitative in the ordinary sense of the word." It is a numerical scale for rating objects with equal intervals; hence it is referred to as the equal-interval scale (Flannelly, Flannelly and Jankowski, 2014).	Mode, Median, Mean, Standard deviation, Rank-order correlation, Product-moment correlation	22 & 24
Ratio scale: Similar to the interval scale, the ratio scale is also a continuous/numerical variable (Gadrich, Bashkansky and Zitikis, 2014). Together with Dalati (2018), the authors state that the ratio scale is all-encompassing, with characteristics of the other three variables/scales. Stevens (1946) referred to these characteristics as; equality, rank-order, equality of intervals and equality of ratios, hence all statistical measures can be performed on ratio scale including logarithmic transformations. What makes ratio variable different from others, mainly its numerical counterpart (interval scale), is it has a real, absolute, natural or defined zero with an empirical meaning (Flannelly, Flannelly and Jankowski, 2014; Malhotra, 2015) which may not be changed (Velleman and Wilkinson, 1993). In the questionnaire for this study, no question was assigned to elicit ratio data.	Mode, Median, Mean, Coefficient of variation	Nil

Adapted from Jankowski and Flannelly (2015) and Stevens (1946).

Explaining Stevens' (1946) reasoning, Velleman and Wilkinson (1993:66) state that "a scale that preserves meaning under some class of transformations should be restricted to statistics whose meaning would not change any of those transformations applied to the data." As such, this affects the analysis of data elicited from questions with these four measurements.

The assigning of the measurement scales to questions determine the type of variable each question measures. In this case, since questions in the questionnaire culminate from the conceptual framework presented in Chapter 4, the assigning of Stevens' scales also delineate the variable type each question addresses. There are two variable types into which the Stevens' measurement scales can be set to, that is, the categorical and numerical variables (Gadrich, Bashkansky and Zitikis, 2015). Nominal and ordinal scales measure categorical variables, while interval and ratio scales measure numerical variables. Table 5.4 also indicates the corresponding levels of measurement for each question in this study.

5.9 VALIDITY AND RELIABILITY OF THE INSTRUMENT

Scale evaluation is a critical exercise to ensure the applicability and accuracy of any multi-item scale (Malhotra, 2015). It is a form of ascertaining rigour in quantitative research (Heale and Twycross, 2016). This kind of evaluation involves assessment of validity and reliability of the instrument, which can be understood in terms of measurement, systematic and random errors (*ibid*). According to Mohajan (2017), measurement error is the variance between the actual value and the measured value, and Malhotra (2015) states that systematic and random errors cause it.

The systematic error stems from the instrument's structural factors such as poor design, poor printing or overcrowding that always affect measurement every time the instrument is used. Random errors are those that stem from a sudden change during measurement conditions (Mohajan, 2017); hence they are measurement point specific; for example, the mood or attitude of a participant.

Thus, in a bid to mitigate measurement errors, the researcher strived to reduce systematic errors during instrument design, for example, by using a branching technique for the online version of the questionnaire. Also, for both hardcopy and online versions, the researcher applied design principles to enhance ease of navigation for respondents. As for the random errors, the researcher observed that most travellers were time-pressed as they got to the airports. Usually, those flying out came rushing for check-in times while those arriving were rushing for transport (taxis or private). This affected the attitude of people towards completing the questionnaire.

To counter such random errors, the researcher sought the assistance of taxi drivers operating in airports (King Shaka International Airport (KSIA) to be specific) to distribute the questionnaire, a convenience sampling approach. Also, the researcher distributed the questionnaire during flights to various cities and at some prominent resort facilities (Pumula Hotel and Zimbali Hotel), again as a matter of convenience and accessibility. These strategies, together with the online version of the questionnaire, mitigated the time pressure issue often raised by travellers. It allowed them to complete the questionnaire at their own time without any pressure, thus increasing their involvement when answering the questions.

Research instrument evaluation is a quality issue, and as stated by Malhotra (2015), Kimberlin and Winterstein (2008) view validity and reliability of the measures as the key quality indicators of a research study. On this basis, Mohajan (2017) states that reliability and validity are critical and fundamental in evaluating research instruments and must be reported on in all studies as part of the research methodology chapter. In the ensuing two subsections, the researcher discusses the two research quality issues - validity and reliability and how they were observed or enhanced in this study.

5.9.1 Measurement Validity

The most important criterion of research quality is validity, which is concerned about the integrity of the conclusions of the study (Bryman and Bell, 2015). In simple terms, validity is the extent to which an instrument measures what it purports/intends to measure (Saunders, Lewis and Thornhill, 2016; Kimberlin and Winterstein, 2008), or represents

the truthfulness of research findings (Altheide and Johnson cited in Mohajan, 2017). Sekaran and Bougie (2016) refer to it as the goodness of measures. Literature is awash with different types of tests to establish the validity of an instrument, and according to Cooper and Schindler (2013), the list grows due to a concern for quality scientific measurement.

There are two forms of validity, that is, internal and external (Cooper and Schindler, 2013). In this section, only internal validity is discussed since external validity has been discussed as part of sampling procedures. Saunders, Lewis and Thornhill (2016) also refer to internal validity as measurement validity. The authors present content validity, criterion-related (predictive) validity and construct validity as the core internal validity tests. They further add convergent validity and discriminant validity as alternatives to construct validity. Bryman and Bell (2015) add face validity and concurrent validity to Saunders *et al.* (2016) list. However, Sekaran and Bougie (2016) state that face validity is another name for content validity. Cooper and Schindler (2013) summarise these tests in the table below.

In Table 5.6 below, different types of validity are discussed, and the last column of the table outlines how this was accounted for in this study.

Table 5.4: Summary of Validity Estimates

Types of validity	What is measured?	Methods
Content	The degree to which the content of the items, in our case, the questions in the questionnaire, adequately represents the universe of all relevant items under study.	As suggested by Saunders, Lewis and Thornhill (2016) and Cooper and Schindler (2013) that one can use their judgment or enlist the services of a panel of persons (disciplinary experts) to judge, I relied on literature and supervisors who are experts in the fields and seasoned researchers.
Criterion-related ● **Concurrent** ● **Predictive**	Criterion-related validity can be achieved by establishing concurrent validity and, or predictive validity (Sekaran and Bougie, 2016; Mohajan, 2017). As a subset of criterion-related validity, concurrent validity uses a criterion known to differ, but relevant to the concept under study (Bryman and Bell, 2015). Unlike concurrent validity, predictive validity uses future criterion in place of a contemporary one (Bryman and Bell, 2015). Cooper	For this study, there was no need to prove concurrent validity, as there were no predetermined criteria. Predictive validity was evaluated through the analysis of variance of predictor variables on outcome variables. The results of such analyses are presented in Chapter 6 under hypotheses testing results presentation section.

	and Schindler (2013) state that a measurement scale which correctly forecasts an outcome has predictive validity.	
Construct	Construct validity is therefore crucial for the empirical measures and hypothesis testing for the construction of theories (Mohajan, 2017; Pallant, 2011) and whether inferences can be drawn about the obtained test scores related to the concept in question (Heale and Twycross, 2015). Accordingly, and as noted by Saunders, Lewis and Thornhill (2016) and Mohajan (2017), such inferences can only be made if the construct(s) has been validated as a correct measure of the concept under study.	Construct validity was tested using the average variance extracted (AVE) from the factor loadings derived from both exploratory and confirmatory factor analyses. The results of such analyses are presented in Chapter 6 under section 6.3

Source: Adapted from Cooper and Schindler (2013)

5.9.2 Reliability

According to the classical test theory (CRT), scores obtained by a measuring instrument (the observed scores) comprise the [unknown] "true score" and the measurement error (Kimberlin and Winterstein, 2008). On that note, there is a need to test the reliability of the measurement process and instrument. Reliability, in contribution to the goodness of measure, "indicates the extent to which an instrument is without bias (error-free). It thus ensures a consistent measurement across time and the various items in the instrument" (Sekaran and Bougie, 2016: 223).

Cooper and Schindler (2013) view reliability as a necessary contributor to validity, though not a sufficient condition of validity. There are three categories of reliability tests, and these include *stability, equivalence* and *internal consistency* (Heale and Twycross, 2015; Cooper and Schindler, 2013). In Table 5.7 below, the different categories of reliability are presented to show how they were taken care of in this study.

Table 5.5: Reliability Concerns of the Study

Categories of Reliability Tests	Sub-types of Reliability Tests	How they were treated in this study

Stability Tests: According to Sekaran and Bougie (2016) and Mohajan (2017), a stable measure is one with an ability to remain the same over time in the face of uncontrollable testing conditions or the state of the respondents themselves - not vulnerable to situational changes. The two methods of testing measurement stability are; test-retest reliability and parallel-form reliability.

Test-retest reliability:
Measurement stability (denoted as test-retest coefficient) is obtained by repeating the same measure now and again to the same respondents. More important is the timing of the repeat administration of the measurement process, as noted by Cooper and Schindler (2013) that it may reduce the reliability coefficient. Too much time in between tests might lead to situational factor changes while less time in between the tests might mean the respondents still remember last responses, hence defeating the whole purpose of the retest.

Parallel-form reliability: Contrary to test-retest reliability, parallel-form reliability involves administering to the same participants in subsequent tests a different form of the original instrument (Mohajan, 2017). These various instruments both measure the same concepts, but with varied wording. Then the level of instrument stability is indicated by the correlation between the scores obtained from the different instruments. When the correlation coefficient value is less than 0.3, measurement stability is deemed weak, 0.3 to 0.5 is moderate and greater than 0.5 is strong (Heale and Twycross, 2015).

As stated by Cooper and Schindler (2013), it is unlikely for researchers to have the luxury to administer the same measurement instrument repeatedly (or different tools subsequently measuring the same concept) to the same respondents. By nature, due to constrained resources (time and financial), it is difficult to get passengers to complete the questionnaire, let alone twice within a reasonable time. Therefore, these stability tests were avoided.

Equivalence Tests: Apart from the stability of an instrument, goodness of measure can be affected by inter-investigator error or differences, and the differences between samples (Cooper and Schindler, 2013). Therefore, to test for equivalence scores of different investigators or samples are compared. Equivalence of measurements is a process of determining the level of agreement between two or more investigators within the same study (Heale and Twycross, 2015).

N/A

This study had no multiple investigators, nor did it have different clusters of samples. That meant there was no need for the inter-rater reliability test or parallel forms of the same test for the sampling aspect. Furthermore, there were no equivalence issues on having an online and hardcopy format of the questionnaire as the online version was downloaded verbatim and only the hardcopy design/outlook was the difference.

Internal Consistency Tests: Internal consistency (homogeneity) of measures only looks at one measurement process (instrument administration). Heale and Twycross (2015) define internal consistency as the extent to which all the items on an instrument measure one construct. The aim is to assess the homogeneity among the items in an instrument (Cooper and Schindler, 2013). Sekaran and Bougie (2016:224) summarise that for internal consistency to obtain, "the items should hang together as a set, and be capable of measuring the same concept so that the respondents have the same overall meaning to each of the items."

The desire is the items and subsets of items in the measuring tool must positively correlate. Heale and Twycross (2015) identify four ways to measure internal consistency, that is, item-to-total, correlation, split-half reliability, Kuder-Richardson coefficient and commonly the Cronbach's α. Only correlation scores (Cronbach's α) that are 0.7 and higher are acceptable reliability scores. To determine internal consistency, researchers often use the *inter-item* consistency reliability, and *split-half* reliability tests explained below.

***Inter-item* consistency reliability:** This type of reliability test assesses the correlation of respondents' answers to all [independent] items measuring the same concept (Sekaran and Bougie, 2016). As is the norm in most studies, in this study the Cronbach's coefficient alpha was used to test inter-item consistency for all the multi-point scaled items, for example, the airline service attributes, promotion, satisfaction and loyalty scales. Results thereof are presented in the next chapter (Data analysis and presentation).

***Split-half* reliability:** With this type of tests, computation of internal consistency is based on a single administration of a scale (Yang and Green, 2011; Furr and Bacharach 2013; Field 2013). As such, split-half reliability tests are not suitable for assessing transient errors (Yang and Green, 2011). However, Becker (2000) does offer some interesting ways of adapting split-half for impermanent errors. To obtain the split-half coefficient, results of a test or an instrument are dichotomised, and the scores from the halves correlated, with the scores ranging from 0 - 1.

Splitting results may be challenging as there are multiple ways to divide the items of a test into two halves (Warrens, 2015). This problem can be averted by calculating Cronbach's coefficient alpha only if the scale items are not *tau equivalent* (Yang and Green, 2011). Henceforth, an inter-item consistency reliability test, was conducted using the Cronbach Alpha and composite reliability (CR).

Results from SPSS (including reporting on reliability) are presented in the next chapter.

Primary Source

5.9.3 Validity and Reliability of Schwartz' PVQ-RR

In the discussion about the questionnaire construction in subsection 5.8.2.2, it was indicated that measurement items (statements) on personal values (Question 7) were adopted from Schwartz' (1992, 2003, 2006, 2016, 2017b; Schwartz *et al.*, 2012; Schwartz and Butenko, 2014; Schwartz *et al.*, 2017) work on basic human values. Schwartz's (1992) theory of basic human values as it is known, spans over two decades and has been replicated numerous times. The approach uses the Schwartz Value Survey scale (SVS: Schwartz, 1992, 2006) and the Portrait Value Questionnaire (PVQ: Schwartz, 2006; Schwartz *et al.*, 2001) as data collection instruments.

Some researchers (for example, Davidov *et al.*, 2008; Saris, Knoppen and Schwartz, 2013) noted problems with the SVS, specifically on "multicollinearity between adjacent values, low internal reliabilities of some indexes, and cross-loadings of items on multiple factors" (Schwartz, 2017a). The problems noted by researchers were mainly as a result of stretching the initial ten-value domains to cover multiple, diverse, substantive components in the conceptual definition. This problem, he says, had to be addressed and the revised Portrait Values Questionnaire (PVQ-RR) was brought in to measure the values in the refined values model.

The validity and reliability of the PVQ instrument have been tested in various studies, for example, Torres, Schwartz and Nascimento (2016), Schwartz and Butenko (2014), Krystallis, Vassallo and Chryssohoidis (2012), Cieciucch *et al.* (2018), Cieciuch *et al.* (2014) just to name a few. Most of the studies have adopted either the Confirmatory Factor Analysis (CFA) and, or the multidimensional scaling (MDS) on data from various samples across the world and have confirmed PVQ's reasonable meaning equivalence across cultures, and substantial discriminant validity and predictive validity (Schwartz, 2012; Schwartz *et al.*, 2012; Saris, Knoppen and Schwartz, 2013).

In Torres, Schwartz and Nascimento's (2016) study of the Brazilian samples, the predictive validity of the refined theory of human values was found despite the changes in the measuring instrument. Furthermore, the results also supported the discriminant validity of the PVQ substantially. It is important to note that, perhaps the positive reliability and validity scores realised in many studies about the refined theory of values and the PVQ (all versions) stems from the well-thought-out design. The PVQ was introduced to address the cognitive complexity of the SVS (Saris, Knoppen and Schwartz, 2013), thus cater for those who were not educated in Western schools that emphasize abstract, context-free thinking (Simón *et al.*, 2017; Schwartz, 2012).

5.10 DATA COLLECTION PROCEDURE

Traditionally, the questionnaire has been the most popular primary data collection instrument in quantitative studies. Also, data can be collected through face-to-face surveys. For this study, a self-administered questionnaire (detailed in the sections 5.8.2-

3) was used. As stated by Bradley and Brand (2013), the choice of data collection method is informed primarily by the sample profile. As such, the self-administered questionnaire was deemed more appropriate for collecting data from large and sparsely located people.

Initially, the researcher intended to use an online questionnaire, but due to the slow response pace, a hardcopy version was added. The online version was distributed using a small flier with QR code randomly within the vicinity of King Shaka International Airport (KSIA) and during flights to and from Johannesburg, Cape Town and Port Elizabeth. The choice of an online questionnaire was based on the numerous advantages it offers.

Firstly, an online questionnaire provides an easy and speedy way to collect and administer data, leading to reduced costs (Fox, Murray and Warm, 2003). Also, the aviation and travel and tourism industries have been at the forefront of digital innovation (WEF, 2017). These industries use innovations such as mobile self-service technologies, airline and flight information search engines, ticket purchasing and check-in and check-in kiosks in addition to aircraft technologies to meet the expectations of the growing digital natives' customer base (Smit, Roberts-Lombard and Mpinganjira, 2018; Ku and Chen, 2013). As such, it was easy to deploy electronic data collection methods where digital communication is the norm.

Secondly, the WEF (2017) also indicates a growing middle-class airline services consumer base in emerging markets such as South Africa. Such consumers (who were part of the sampling frame) place extreme importance on digital experiences; hence a web-based questionnaire (online survey) was deemed to be the most appropriate for data collection. Supporting the World Economic Forum (WEF) data, Stats SA (2017) shows improvements in ICT advancements, with internet penetration in South Africa standing at 62% as at 2017 (Stats SA, 2017). Of the 62% with access to the internet, about 50% of them accessed it using mobile devices (Statista, 2019). Subsequently, the questionnaire was also designed to be mobile device-friendly through the use of QR codes for ease of distribution and completion.

Thirdly, the online questionnaire eliminated the problems of social desirability (impression management and self-deceptive positivity) due to high levels of anonymity and reduced

social anxiety often caused by researcher/interviewer presence (Zhang *et al.*, 2017; Szolnoki and Hoffman, 2013; Kreuter, Presser and Tourangeau, 2008; Uziel, 2010; Joinson, 1999). Furthermore, it allowed the researcher to access participants that would otherwise have been impossible to reach, for example, people in smaller cities like Bloemfontein and Port Elizabeth.

Furthermore, using an online questionnaire offered several other advantages, for example, real-time database creation upon questionnaire completion by respondents, thus eliminating transcription errors and questionnaire clutter elimination (Andrews, Nonnecke and Preece, 2003). Evans and Mathur (2005) add convenience, flexibility, controlled answering order and branching technology. Hoerger (2010) also notes that online surveys fulfil a critical aspect of the research process, that is, voluntary participation, particularly for those respondents who want to stay anonymous. Kılınç and Firat (2015) argue that face-to-face surveys cannot offer such to participants as they get known to the interviewer.

However, on implementation, the response rate from the online questionnaire was not encouraging. This was explained by Evans and Mathur (2005), who reported low response rates as one of the disadvantages of online surveys and is evident in most online studies. For example, in Cunningham *et al.* (2015), the response rate was 35%. Baldus, Voorhees and Calantone (2015) achieved a response rate of 21%, which increased to 25% on second data collection as part of their test-retest reliability testing.

As indicated, the slow response rate of the online version necessitated the addition of offline (hard copy) questionnaires in addition to improving data collection. These were distributed to visitors of Zimbali Fairmont Hotel and Pumula Lodge, who are to a large extent, visitors from other cities or towns. Aware of the equivalence concerns of employing two different instruments, the researcher transposed the online questionnaire word for word into the hard copy.

5.11 ETHICAL ISSUES OBSERVED IN THE STUDY

Ethics, a concept rooted in the ancient Greek philosophical inquiry of morality (Fouka and Mantzorou, 2011), is defined as the standards or norms that guide human behaviour and relationships (Sekaran and Bougie, 2016; Cooper and Schindler, 2013). Ethics can be best described using the concept of beneficence (Beckmann, 2017; Horner, 2003) which aims to benefit others and balance good results over potential harm. In social sciences research, like in all other research studies dealing with human beings, the goal of ethics is to ensure that no participant is harmed and, or suffers adverse consequences from the research activities (Cooper and Schindler, 2013). Horner (2003) refers to this act as 'nonmaleficence'.

However, due to the blurring lines of transdisciplinary and multidisciplinary research, ethics also extends to include the preservation of the society in general, animals (if involved) and the physical environment. In this study, the research population as human beings; hence, the discussion is biased towards human-related ethical issues. Sekaran and Bougie (2016) state that ethical issues permeate the entire research process, from data collection, data analysis, reporting, and security and dissemination of information. In support of this statement, Qamar (2018) argues that ethics must govern the conduct of research from its initiation to completion and publication of results and beyond.

On that basis, researchers must be careful when deciding on these methodological issues. For example, sample framing of respondents should be done with caution, especially in South Africa, where people are generally sensitive to racial frames and inequality. A careless approach to methodology might land a study into ethical crosshairs. For example, an article authored by academics from the University of Stellenbosch (which had used Coloured women as the sample) had to be retracted from a journal owing to its racial insensitivity in using women of colour as the sample, a statistically insignificant one for that matter (Grobler, 2019). Aware of this, the researcher identified the sample in terms of their demand (past, current and potential) of airline services to avoid such ethical fallout.

In this study, ethical consideration was not the aftermath; it was the guiding precept from the very beginning leading to the ethical clearance by the Departmental Ethics Review Committee (attached as Appendix A) and throughout the study. Also, as part of satisfying

the conditions of the ethics clearance, the researcher sought and obtained permission from the Airport Companies South Africa (ACSA) which is attached as Appendix B. Beyond that, ethics continued to exist through all the research process activities as pronounced by Qamar (2018). The broad ethical themes (voluntariness, anonymity, confidentiality, and data management and storage) which were central to the study are discussed below.

5.11.1 Voluntariness

When recruiting the respondents, the researcher ensured that those who chose to participate did so in their own volition (see Appendix C for the information and consent letter). In research, this is known as voluntariness. Voluntariness manifests through participants' informed consent and is defined by Wasunna, Tegli and Ndebele (2014:57) as the "practical application of the principle of autonomy and respect for persons" capable of making decisions. Informed consent is ensured through adequately informing potential research participants of the "study aims, methods, potential risks and anticipation benefits" (*ibid*).

However, despite voluntariness being a key component and the pillar of the ethical conduct of research; Appelbaum, Lidz and Klitzman (2009) lament the lack of the concept in the research literature. Berg *et al.* (2001) suggest that informed consent is based on three components, that is, the participant must be: (1) a competent decision-maker, (2) have adequate information, and (3) afforded a voluntary decision process.

In this study, the issue of competent decision-making was achieved by recruiting participants who were old enough (18 plus years of age) to make decisions and comprehend the benefits of the study. There was no form of beneficence (direct benefits/incentives) that could have swayed participants' voluntariness. Adequate information about the study was furnished through an information section on the first page of the questionnaire. Also, as per Beckmann's (2017) caution, the researcher ensured that there was no deception in the information provided. Upon distribution, the researcher also fully disclosed the procedures of the study and explained its purpose to enable sample units to exercise their options to participate in the study.

Notwithstanding Cooper and Schindler (2013) assertion that it is sufficient to obtain oral consent in business research, participants in this study were requested to append their signatures (on hard copy version) and tick 'I agree to participate' (online version) to indicate their consent to be part of the study. To ensure a voluntary decision process (Bjerg *et al.*, 2001; Qamar, 2018), even after consenting to participate, respondents were alerted that they had the right to withdraw from the study for any or no reason, and at any time without any repercussions.

5.11.2 Anonymity, Confidentiality and Privacy

Beyond voluntariness, it is essential to note that informed consent ensures participants' right to anonymity, confidentiality and privacy (Le Roux, 2015; Henderson, 2005). Participants consent to participate in a study based on the understanding that their anonymity, privacy and confidentiality were guaranteed. The principle of anonymity refers to the fact that individuals have the right to want their involvement in a study and identity to be kept a secret (Beckmann, 2017) and that should be respected (Mouton, 2001).

Interestingly, though not the intention of this study to debate the concept of anonymity, Le Roux (2015) and Tilley and Woodthorpe (2011) bring the flip side of the call for anonymity. They argue that anonymity might not necessarily be an ethical given. In instances where the participant wishes to be identified, the authors raise a concern that the application of anonymity might trample on participant's autonomy and loss of ownership. For example, the opportunity to bequeath a personal legacy and bequest to posterity (Le Roux, 2015). Tilley and Woodthorpe (2011) further argue that in some instances, revealing the identity of participants might be beneficial to the credibility and authenticity of the information.

In instances where it is necessary to be waived as part of the research aims, the researcher must assure confidentiality which often resides with the participant (Le Roux, 2015). According to Wiles *et al.* (2008), the notion of confidentiality is undergirded by the respect for autonomy and protection of information collected from a participant. In light of the contrarian argument on anonymity (Le Roux, 2015; Tilley and Woodthorpe, 2011), Boschma, Yonge and Mychajlunow (2003) also suggest a two-step process involving,

firstly, assurance of anonymity and confidentiality followed by an opportunity to waive these.

In South Africa, the right to privacy, anonymity and confidentiality are enshrined in Section 14 of the Constitution, the Protection of Personal Information Act (POPIA) and the common law. Researchers are expected to operate within the confines of these laws. To ascertain anonymity, privacy and confidentiality in conformance to these laws, the researcher avoided collecting identifiable personal information such as names, addresses and contact numbers that could link the information provided to participants. Due to the power of sign-in data harvesting in search engines, the researcher averted this by ensuring that respondents who completed the online questionnaire were never asked to sign-in to access the questionnaire. Furthermore, as part of respecting respondents' right to privacy/comfort, questions were refined to re-word or eliminate those questions that were deemed intrusive to individuals.

5.11.3 Data Management and Storage

Whereas the earlier subsections were related to ethical concerns before and during data collection, it is equally important to note that ethics are also essential in data analysis, management (including publishing results) and storage (Sekaran and Bougie, 2016). For this study, all data collected was stored on cloud storage with encrypted passcode to protect it from hackers, and hard copies were kept under lock and key in the office of the researcher. On data analysis, an expert statistician was engaged and made to sign a confidentiality form to protect data pilfering. This thesis was the primary means of sharing the results. However, as indicated in the information sheet, the findings of this study will be published as research articles in research journals.

5.12 DATA ANALYSIS PROCEDURE

All the previous sections and subsections of this chapter propounded on all methodological issues up to data collection. In this part of the chapter, data analysis procedures employed in this study are presented and discussed. This section is foundational to the ensuing Chapter 6 (Data Presentation and Analysis). Since the study adopted a *descripto-explanatory* strategy, data analysis was performed from both

descriptive and explanatory perspectives. These analyses were performed using (SPSS 26) and AMOS 26.

5.12.1 Data Cleaning

Data cleaning draws a lot from the famous 'garbage in, garbage out' adage. It is paramount that data is cleaned before any analysis to get quality results (Van den Broeck *et al.*, 2016; Ahad *et al.,* 2011). For this study, data were cleaned to detect any outliers, strange patterns and missing data. From the 326 respondents, two online cases were eliminated as the respondents declined to continue with the survey, leaving a sample of 324 respondents. Initially, the normality test was conducted through the Fisher coefficients of skewness and kurtosis (Kellar and Kelvin, 2012; Löfgren, 2013), and the results indicated a violation of normality.

Since the intention was to adopt multivariate analyses (see Figure 5.5), data were also checked for multivariate normality using the Mahalanobis distance test, and 30 cases were further eliminated as they were found to be outliers. That effectively reduced the sample to 294 cases. This sample was still deemed adequate for statistical analysis as detailed in section 5.7.1.

Furthermore, symptoms of multicollinearity were also diagnosed. Multicollinearity is a concept that describes the dependence (high correlation) among independent variables; hence, making them redundant. There are several ways of diagnosing multicollinearity, but in this study, the determinant of the correlation matrix in exploratory factor analysis (EFA), tolerance of variable (TOL) and variance inflation factor (VIF) statistics were used. According to Field (2013), highly correlated independent variables (with a determinant that is ≤ .00001) can cause problems in EFA. The initial EFA solution indicated that there was multicollinearity in the data. This was solved through iteratively running the EFA, eliminating highly correlated variables. As suggested by Child (2006), items whose communality scores were less than 0.2 were systematically removed from the analysis until the determinant of the correlation matrix was > .00001.

Hair *et al.* (2019:312) define TOL is "the amount of variability of the selected independent variable not explained by the other independent variables." Smaller TOL values indicate

a high likelihood of multicollinearity (Thompson *et al.*, 2017). After the exploratory factor analysis, further multicollinearity assessments were conducted using TOL and VIF value. Though there is no formal criterion for VIF, the rule of thumb has been that VIF <10 indicates significant multicollinearity (Khalaf and Iguernane, 2016). Since VIF is the inverse of TOL [$1/(1−R2i)$], using the rule of VIF <10 would mean TOL not <.1. For this study, the TOL values were all > .1 and VIF values were < 10 which indicated that there were no multicollinearity issues. See Table 6.6 for the TOL and VIF values. Homoscedasticity was also checked, and the resulting QQ plots indicated that the distribution of residual errors was acceptable for multivariate analysis.

Figure 5.5 below outlines the analysis techniques employed to address the research questions and test hypotheses.
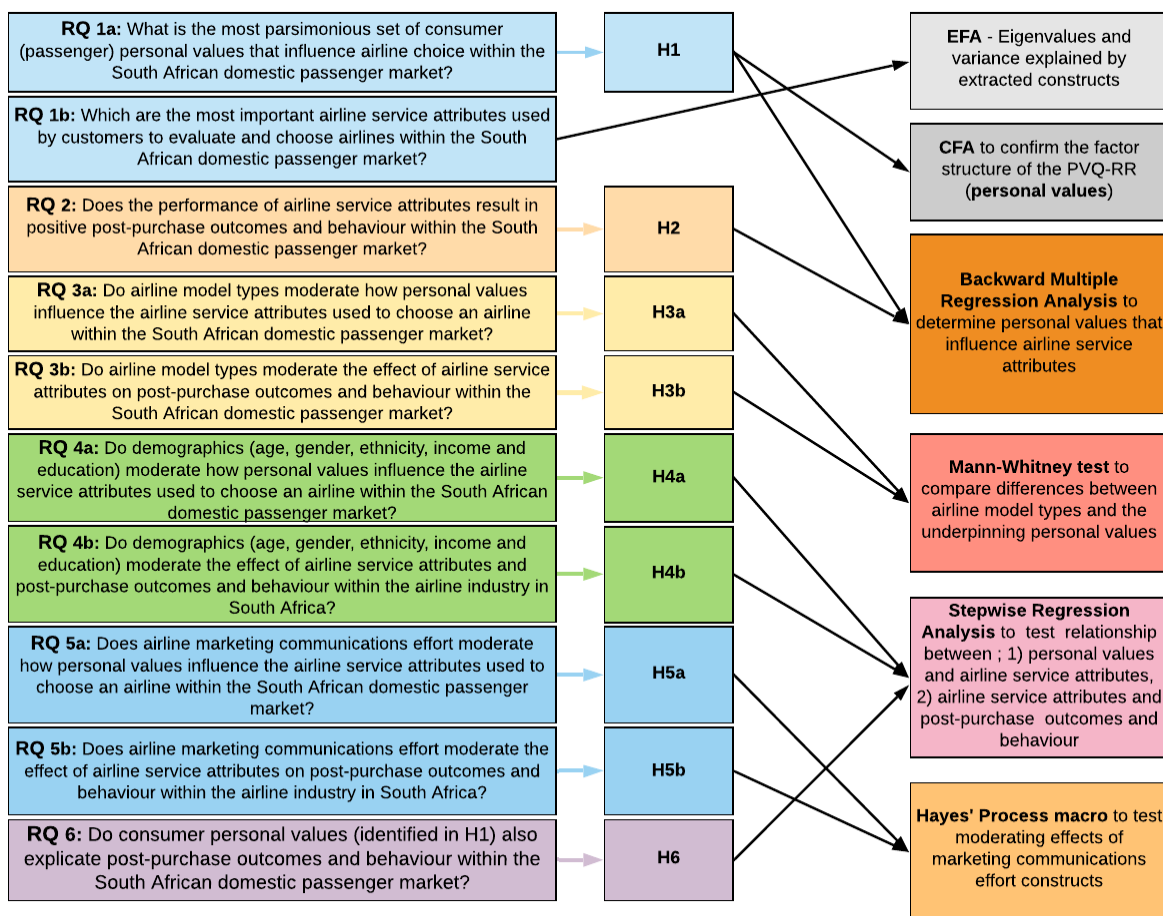
Figure 5.5: Data Analysis Plan (*Primary Source*)

Descriptive statistics in the form of frequencies for demographic variables (age, gender, income, education, ethnicity and occupation) and other background information such as preferred airline, most popular routes, frequency and purpose of flying were analysed to understand the characteristics of the sample. According to Kaushik and Mathur (2014), descriptive statistics provide simple summaries about the data and the observations made. They reveal any peculiarities of the data which shape further analysis (Johnson, 2014).

Figure 5.5 graphically outlines the analysis procedures that were conducted to (dis)confirm the hypotheses and answer research questions. Exploratory factor analysis (EFA) is a multivariate data reduction technique widely used in various fields. It uses Eigenvalues (EV), defined as the squared loadings of variables on a factor (Kline, 2014; Hair *et al.*, 2019) to indicate "variances in measured variables accounted for by each of the common factors" (Fabrigar and Wegener, 2012:45). EFA retains factors with EVs of >1. According to Chen (2016), Eigenvalues > 1 indicate their importance in interpreting large proportions of variance, thus making it a yardstick of ranking factors.

CFA is recommended where the relationship is tested among factors, and when related items are known (Orçan, 2018; Kline, 2014). In this study, CFA was employed to confirm the factor structure/pattern of the PVQ-RR which had already been tested empirically elsewhere and all the items known. The intention was to test the extent to which the instrument's (PVQ-RR) *a priori*, theoretical pattern of factor loadings on personal values represented the actual data as specified in Hair *et al.* (2019). Both EFA and CFA analyses were critical to testing the convergence validity and composite reliability.

When a model has a large number of independent variables, Hair *et al.* (2019) state that researchers have to decide whether to use all the original variables. The authors point out that using a large number of independent variables makes interpretability of the results quite tedious if not impossible. As a solution, backward multiple regression analysis is recommended.

In line with this recommendation and light of nineteen values as the independent variables of the model, backward elimination regression was used to determine the personal values

that were significant to the evaluation of airline service attributes used to choose airlines. The backward elimination technique retains only those variables with a *p*-value <.05, in the process gradually eliminating the variables (one variable for one step, in a sequence of decreasing p) that do not meet the statistical significance conditions (Godlewska-Dzioboń, Klimczyk and Witoń, 2018; Hair *et al.*, 2019).

With Likert data often in violation of normality tests, the use of the normal distribution *t*-test to evaluate if there were differences among customers of the airline model types was avoided in favour of Mann–Whitney U test. Lastly, the Process macro (Hayes, 2018) was used to assess the moderating effect of demographic variables, airline model types and marketing communications, first on the influence of personal values on the evaluation of airline service attributes, and secondly on the effect of airline service attributes on post-purchase outcomes and behaviour.

5.13 SUMMARY

In this chapter, which is the nucleus of the research study, methodological issues critical to the operationalisation of the study were discussed. The chapter discussed the philosophical (paradigmatic) stances broadly, outlining the paradigm undergirding this study. Flowing from the philosophical view of the study were the methodological and axiological issues. The chapter propounded on the research strategy, design, sampling techniques and data collection issues as the methodological aspects of the study.

On data collection, the discussion detailed the aspects of instrument design and administration, something which later ties into the reliability and validity discourse. A questionnaire was used for data collection. This chapter also expounded the ethical considerations which were observed continuously throughout the study. The discussion centred on; voluntariness, anonymity, confidentiality, privacy, how data is analysed, handled and stored. A data analysis plan was presented at the end of the chapter. In a nutshell, this chapter is a precursor to the following chapter of data analysis and presentation.

CHAPTER 6: DATA ANALYSIS, PRESENTATION AND INTERPRETATION

6.0 INTRODUCTION

This study's main objective was to examine and determine the consumer personal values that influence airline choice within the South African domestic passenger market. The previous chapter detailed methodological aspects of the study, outlining how data would be analysed. As such, this chapter presents the results from the analysis procedure as outlined in the data analysis plan. This is in line with Cooper and Schindler (2014) suggestion that results must be interpreted in line with the research questions, hypotheses and in conjunction with literature. The chapter is divided into two broad sections, that is, presentation and interpretation of descriptive statistics, followed by the presentation and interpretation of inferential statistics.

6.1 PRESENTATION AND INTERPRETATION OF DESCRIPTIVE STATISTICS

By nature, descriptive statistics are a summary, observation and description of the characteristics of a data set (Malhotra, 2015; Vanlalhriati and Singh, 2015; Ali and Bhaskar, 2016). Due to its low reliance on the starting premises (Kern, 2013), it allows for the quick identification of high/low-magnitude patterns. As a result, Johnson (2014) exalts descriptive statistics for its ability to distil the complexities of raw data to small manageable patterns. He says such a capability is crucial to "reveal any peculiarities of the data that may shape further analysis" (p.288). However, descriptive statistics do not adequately answer questions (make inferences), hence the need for inferential statistics.

The most popular forms of descriptive statistics are frequencies, measures of central tendency (mean, mode, and median), measures of variability (range, variance and standard deviation), measures of relationship and measures of asymmetry (Vanlalhriati and Singh, 2015). In the following subsection, the sample is characterised using the background information and demographics data drawn using the questionnaire (See Appendix D) are presented.

6.1.1 Sample Characteristics

This section outlines the characteristics of the sample in terms of demographics (gender, race, age, occupation, income and highest qualification) and other background information such as frequency and purpose of travel, ability to make a choice, and airline preference.

6.1.1.1 Gender

As depicted in Figure 6.1 below, the sample had a relatively equal distribution in terms of gender, with males being the most frequently observed category with 54.4% while females were 44.2%. Few respondents (1.4%) preferred not to disclose their gender.
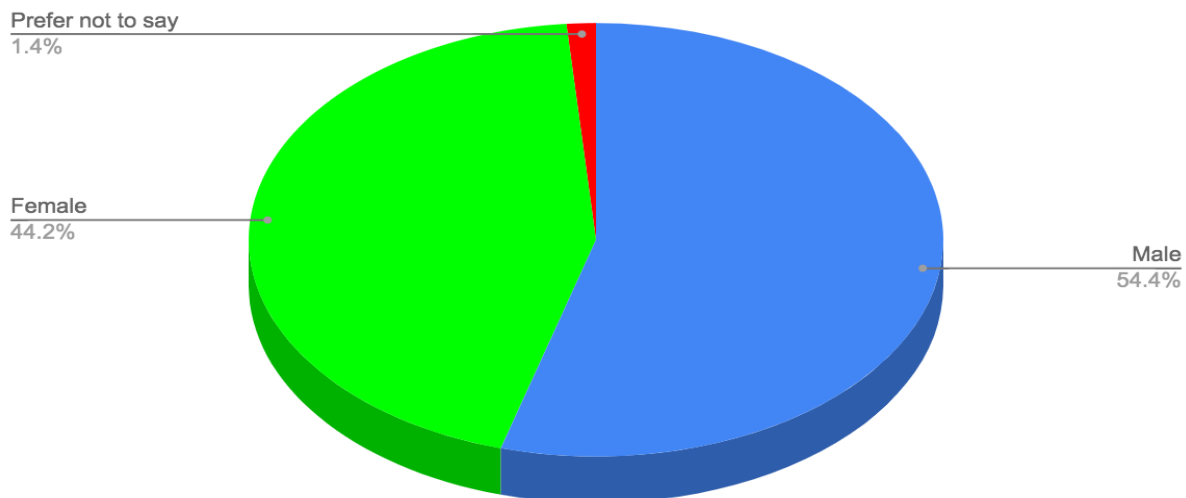
Figure 6.1: Frequencies for Gender Variable (*n=294*)

6.1.1.2 Population Groups

In Section 5.6 of Chapter 5, the target population for this study was outlined. In Figure 6.2, the target population is further broken down into various population groups as identified by Statistics South Africa (Stats SA, 2019). The figure shows that the majority of respondents were Blacks (54.1%), followed by Indians at 21.8%, Whites at 19.4%, and

Coloureds at 4.8%. Considering the stratification of the total South African population (Stats SA, 2019), the distribution of the sample is near representative of broader population groups' in South Africa. As such, the analysis of the sample data is likely to provide a correct picture of phenomena (personal values, airline choice and post-purchase outcomes and behaviour) of the broader South African domestic travellers.
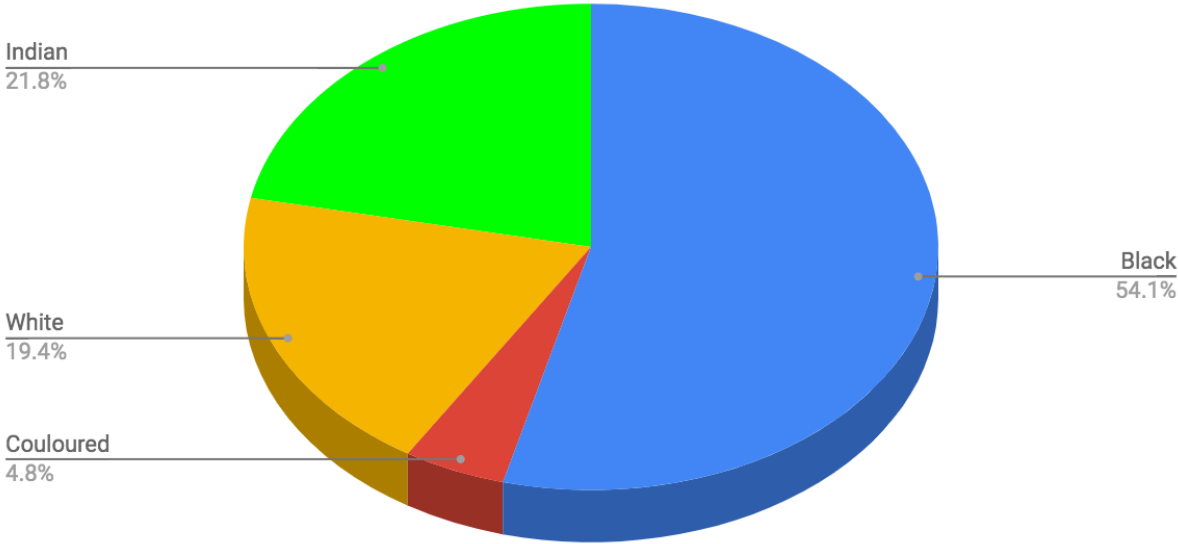
Figure 6.2: Frequencies for Population Groups (ethnicity) Variable (*n=294*)

6.1.1.3 Age

In Figure 6.3, the distribution of age groups of the sample is presented. The most frequently sampled age group was that of 31 - 40 years at 35.0%. The second most sampled age group was 18 - 30 years (31.6%), followed by 41 - 50 years (16.3%), 51 - 60 years (15.3%) and the 60 years and above at 1.7%. Again, the age distribution of the sample is well spread, depicting the South African age profile as per the Stats SA (2019) report.
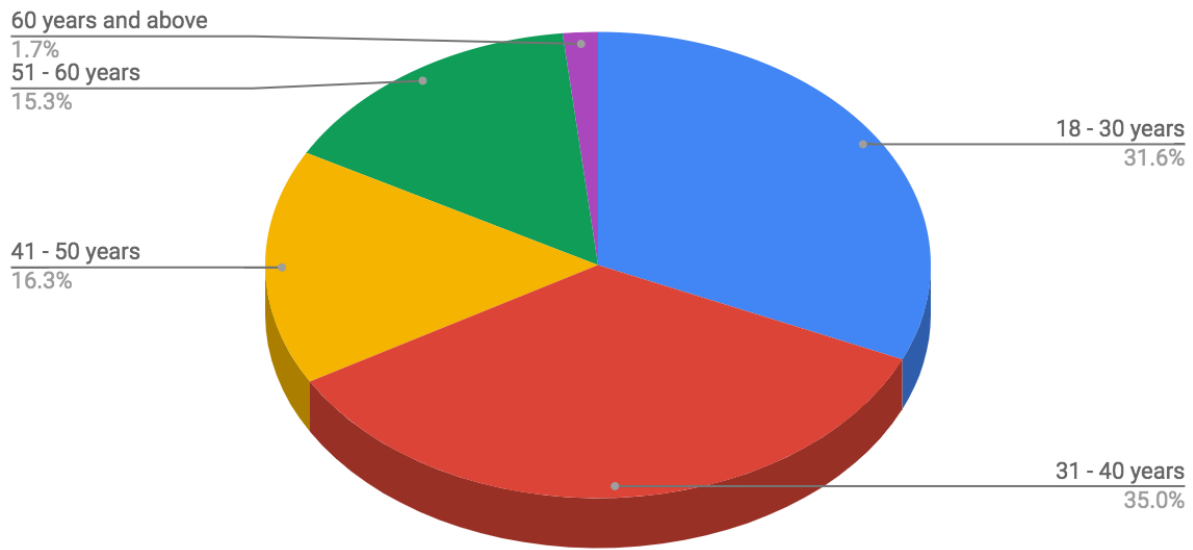
Figure 6.3: Frequencies for Age Groups Variable (*n=294*)

6.1.1.4 Occupation

Figure 6.4 below depicts the occupation categories of the sample. It is indicated there that the majority of the respondents were employed, accounting for 76.5%. Also, a sizable number of 13.6% stated that they were self-employed. The retired came last with 1.0%, and 8.8% indicated some other form of occupation.
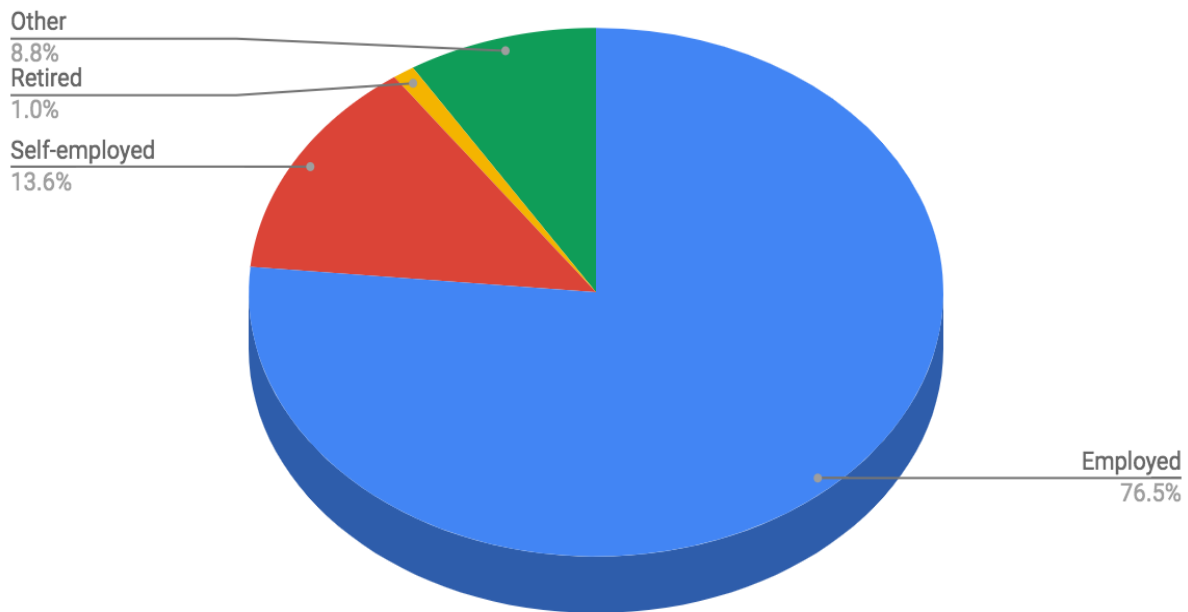
Figure 6.4: Frequencies for Occupation Variable (*n=294*)

One peculiar thing about the occupation variable is that most employed people had their flight arrangements, including the choice of an airline being handled by either an internal procurement department or a travel agency. As such, respondents were asked to indicate if they could make airline choice decisions even though travel arrangements were handled by their employers or employer agents. The response options were as follows; 1) Yes I can make a decision, 2) Travel arrangements dealt with by the buying department or an agency, but I can make an airline choice decision, 3) Travel arrangements handled by the buying department or an agency, and I cannot make an airline choice decision, 4) Can't make a decision at all and 5) Not applicable. The results are presented in Figure 6.5.
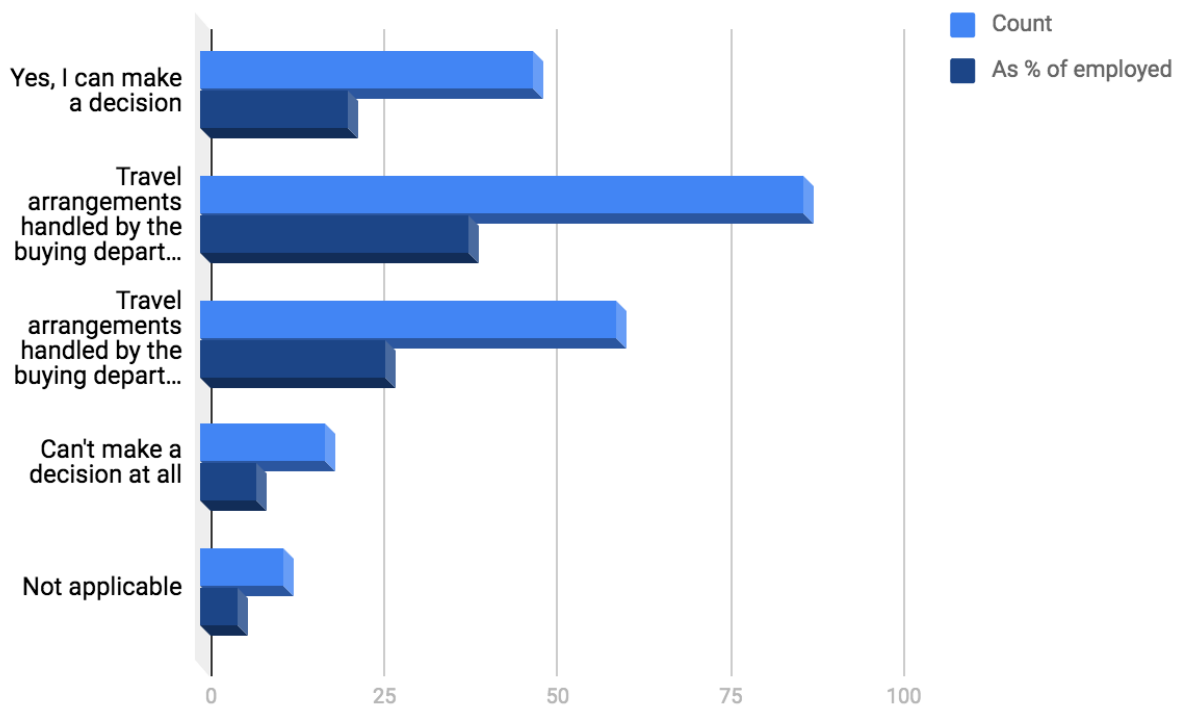
Figure 6.5: Airline choice decision among employed respondents

The figure (above) shows that those who could make an outright airline choice decision were 21.3%. Then, 38.7% indicated that despite their travel arrangements being handled by their employer or a travel agent contracted by their employer, they still could make an airline choice decision. In comparison, 26.7% said that they could not. 8% could not make a decision at all while the remaining 5.3% chose not applicable. What is interesting with these statistics is that, with the majority (60%) of the employed respondents able to make airline choices, it meant that the data reflected the individual personal values than organisational values appropriately and buying criteria for airline choice.

6.1.1.5 Income

Figure 6.6 shows that the majority (33%) of the respondents belonged to the low income (1 - 200 000 Rands) bracket. 19.7% earned between R201k - R400k bracket often referred to as the missing middle or the vulnerable middle class (Stats SA, 2019). The R401k - R600k income bracket accounted for 21.1% while those earning between R601k - R800k income bracket were 12.6%. The high-income earners (income range; R801 -

R1m and Above R1m) accounted for 6.5% and 7.1% respectively.
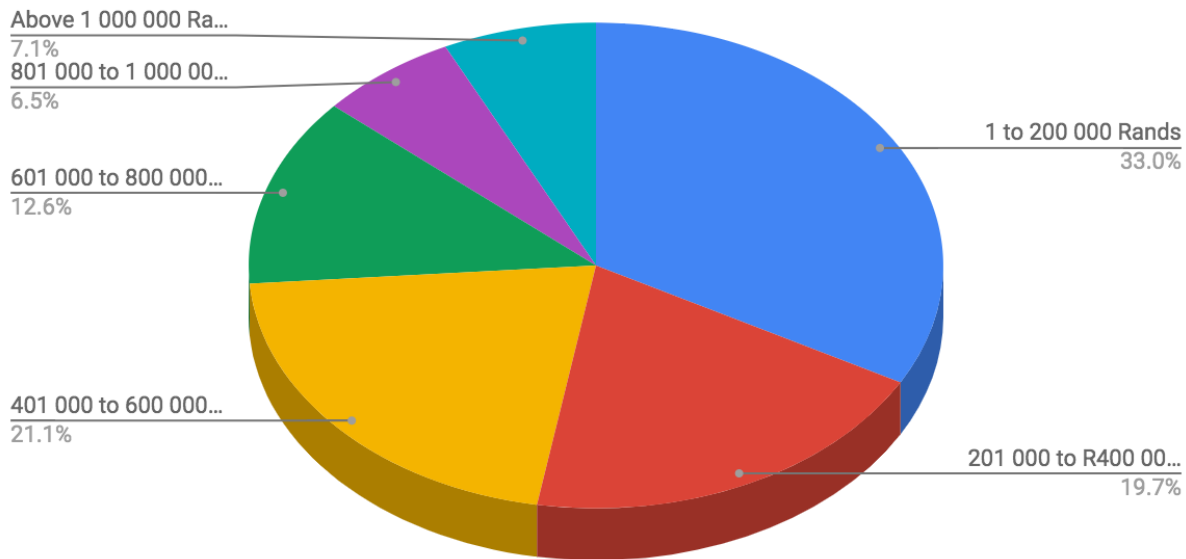
Figure 6.6: Income distribution among the Sample (*n=294*)

The income distribution among respondents (depicted in the above figure) can be interpreted in two ways. First, it reflects that the majority of travellers were employed; hence, it could be that their employers were paying for their travel. Secondly, it might be due to lower ticket prices as a result of the heightened competition after the entry of low-cost carriers (Intervistas, 2014).

6.1.1.6 Highest Qualification

Figure 6.7 depicts an even distribution among various educational characteristics of the sample. 22.4% of the respondents had a Bachelor's (Honours) degree as their highest qualifications, followed by 17.3% with a Master's degree. Closely tailing each other were those with a Bachelor's or an Advanced Diploma and Diploma at 17% and 16.7% respectively. Holders of Doctoral degrees accounted for 9.9% while those with School leaving certificates were 9.2%, and Certificate holders were 7.5%. These results indicate that the respondents were fairly educated. As such, it could be assumed that they were capable of making informed and rational decisions when choosing an airline.
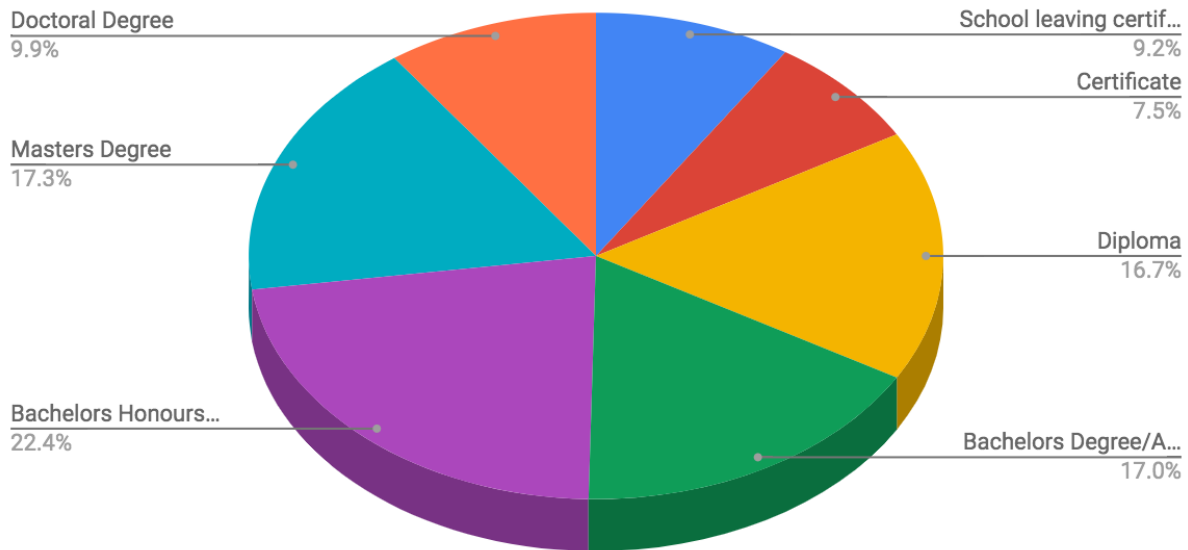
Figure 6.7: Educational Qualifications of Respondents (*n=294*)

6.1.1.7 Airline Travel Frequency

Respondents were asked to indicate their travel frequency, and Figure 6.8 depicts the responses thereof. A majority (47.6%) of the respondents stated that they were not frequent travellers and would travel once in many months. 27.6% rarely travelled. They indicated that they travelled once in a blue moon. Those who often travelled, like twice in a month constituted 7.5% while the frequent flyers (those who travel like more than twice in a month) were 9.2%. As indicated in Chapter 5, that it was necessary also to capture the behaviour of potential air travellers, there were among the respondents those who had never travelled by air transport but were thinking of doing so in future, and these made up the 8.2% of respondents.
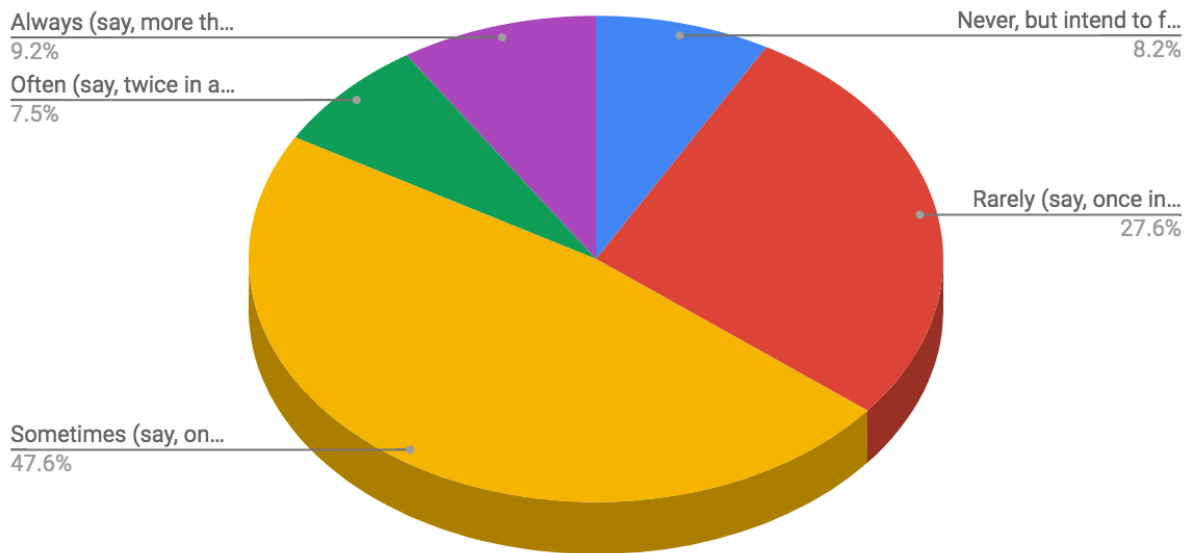
Figure 6.8: Airline Travel Frequency (*n = 294*)

6.1.1.8 Purpose of Travel

As is depicted in Figure 6.9, 37.8% of the respondents indicated that they travelled private journeys compared to 22.4% who travelled for business purposes. In support of this distribution, previous studies suggest that many people fly to various vacation destinations (Fourie and Lubbe, 2006; Van Vuuren and Slabbert, 2011; Mhlanga, 2017; McKelly *et al.*, 2017), Durban and Cape Town being two of the popular tourist destinations. A sizable section (31.6%) of the respondents indicated that they usually mix business travels with leisurely (private) trips. 8.2% represents respondents who stated that they had never travelled.
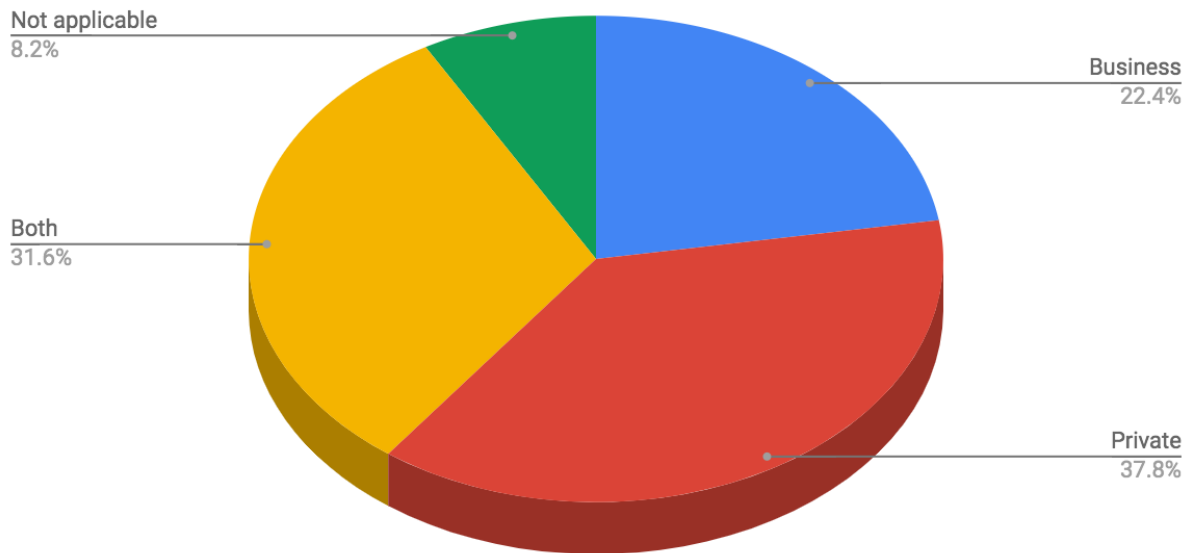
Figure 6.9: Purpose of Travel (*n = 294*)

6.1.1.9 Airline Preference Within South African Domestic Market

Figure 6.10 presents the respondents' preferences of the domestic airlines within South Africa. The most preferred airline, according to the results, was South African Airways (SAA) at 34%. This was despite all the bad publicity it was receiving on corruption and financial failures. The second most preferred airline was also surprisingly the SAA-related SA Express, also embroiled in financial scandals at 18.7%. SA Express was followed by British Airways operated by Comair, with 14.3% respondents indicating their preference. It is noteworthy that these three airlines are all full-service carriers, perhaps enjoying first-mover advantage ahead of low-cost airlines.

Mango, a low-cost carrier wholly owned by SAA, was preferred by 12.9% while Kulula was preferred by 11.6% of the respondents. 5.8% of the respondents indicated their preference for the reasonably new low-cost airline - Safair. SA Airlink and Cemair were preferred by 2.4% and 0.3% respondents respectively. Since preference is a precursor of airline choice, it is used as a proxy of choice in this study.
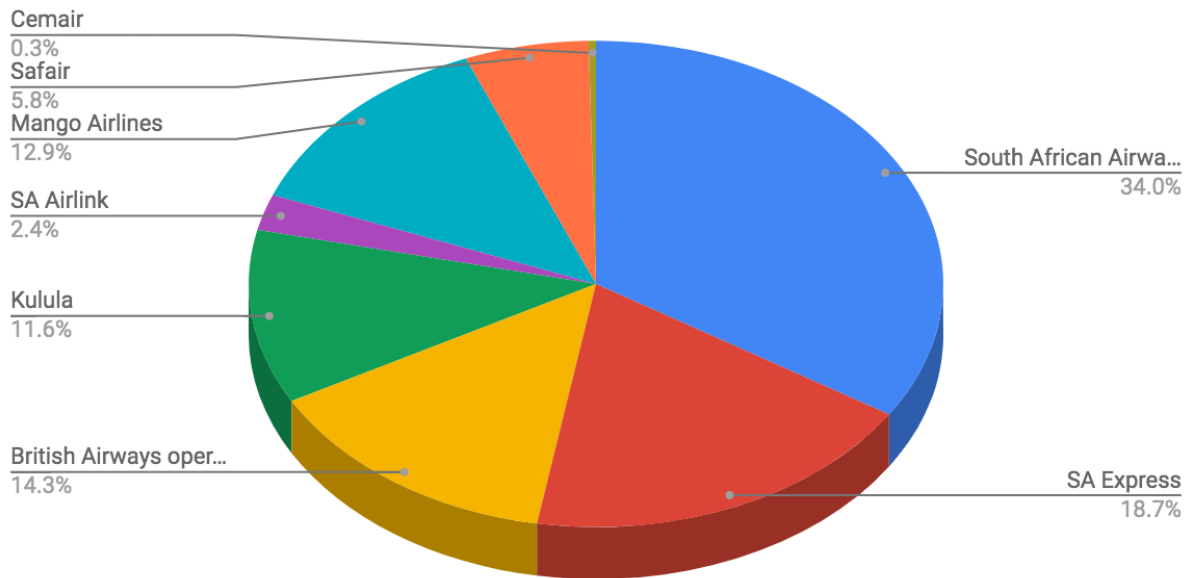
Figure 6.10: Airline Preference (*n=294*)

To further elicit a further understanding of the sample, a cross-analysis of population groups and airline preference was conducted. Such an analysis foregrounds most of the moderating hypotheses of this study. Figure 6.11 provides the results.
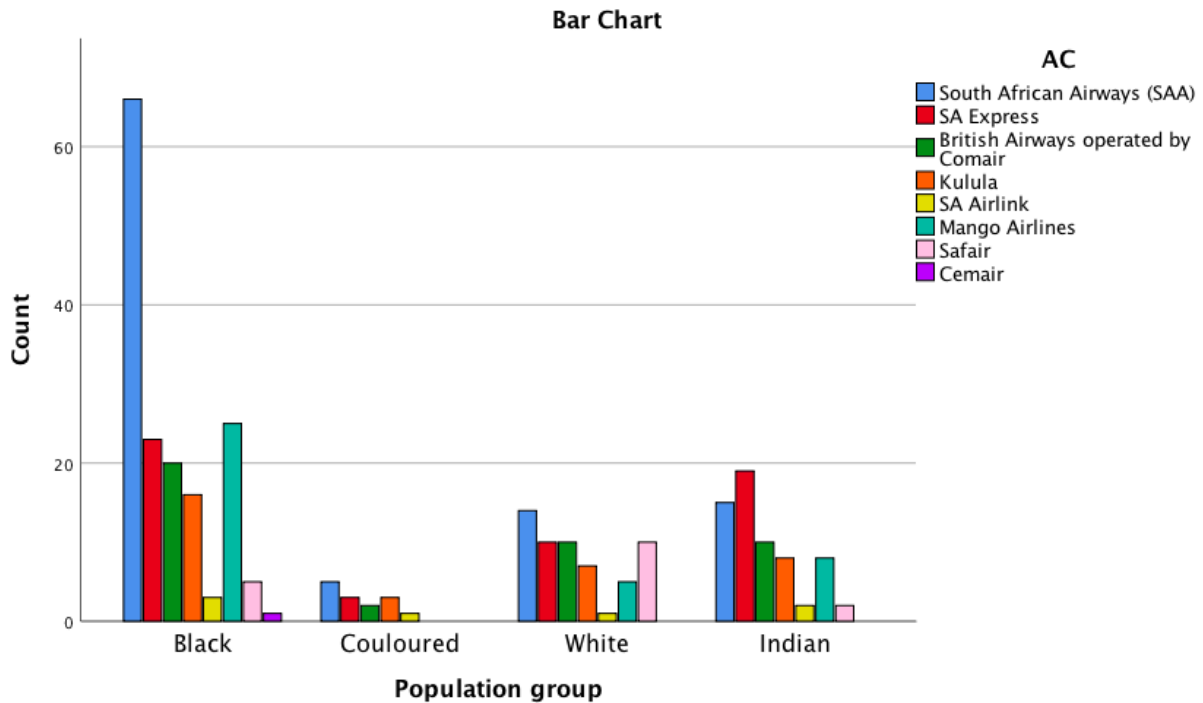
Figure 6.11: Cross-analyses between Population Groups and Airline Preference

As expected, and reported in Figure 6.2, the cross-analysis results shown in Figure 6.11 confirm that Blacks were the majority in the sample. What is interesting about these results is a high preference for SAA by blacks compared to other ethnic groups. Such sharp differences: 66% compared to 15% (Indians), 14% (Whites) and 5% (Coloureds) foregrounds the hypothesis 4a and 4b. Another noticeable difference is the preference for Safair by the White respondents.

Analysing patterns of both descriptive data enable businesses to understand and profile consumers (Kotler and Armstrong, 2018; Murugan, 2017). In this section, descriptive results were presented and discussed to profile and understand the passenger airline market. In the following section, inferential statistics to answer research questions and test hypotheses are presented.

6.2 PRESENTATION AND INTERPRETATION OF INFERENTIAL STATISTICS

Whereas the first part of this chapter (descriptive statistics) was vital for profiling and understanding the sample and patterns from the data, this second part of the chapter focuses on inferential statistics. The essence is to make conclusions beyond the observation of data characteristics to answer the research questions and hypotheses for the study. The primary objective of this study from the hypothesis was *to examine and identify the consumer (passenger) personal values that underpin the evaluation of airline service attributes used to choose an airline within the South African domestic passenger market*.

To achieve this objective, data were assessed for multivariate normality as detailed in Section 5.12 of Chapter 5. The results indicated that collinearity was not problematic; the VIF values were all <10 while tolerance scores were all >.20 as suggested by Thompson *et al.* (2017). Further collinearity tests were performed during the exploratory factor analysis (EFA).

Exploratory factor analysis has been used to explore correlative relations among manifest variables, map these relations onto one or more latent variables (Goretzko, Pham and Bühner, 2019), and summarise emerging relationships into patterns that can be easily interpreted (Yong and Pearce, 2013). According to Hair *et al.* (2019), EFA can analyse the structure of large interrelationships among a large number of variables. In this study, the Likert items that needed to be explored included 55 items of airline service attributes, 57 items of personal values, 17 items of marketing communications effort and 15 items of post-purchase outcomes and behaviour.

All the observed variables save for the 57 items of personal values were included in the exploratory factor analysis. For personal values, Schwartz and his friends (Schwartz, 2017a; Schwartz and Butenko, 2014; Schwartz *et al.*, 2016; Schwartz *et al.*, 2012) caution against using EFA for analysing PVQ-RR data (see his Coding and Analysis Instructions in Appendix E). They contend that EFA fails to reveal that personal values are quasi-circumplex; hence not suitable for discovering the theorized set of relations among

values. Alternatively, they recommend that the structure of the 57 items personal values be analysed using confirmatory factor analysis (CFA). As such, this study adopted the recommendation to use CFA, which is lauded for its ability to confirm *a priori* relationship and goodness of fit of the measurement instrument (Sarmento and Costa, 2017).

6.2.1 Exploratory Factor Analysis and Results

The EFA was performed using the maximum likelihood extraction (MLE) with a Promax rotation technique. Although MLE is popular with normally distributed data, Gasking and Happell (2014) suggest that it can also be used in situations where assumptions of normality are violated. Instead of Tabachnick and Fidell (2014) suggestion to suppression and exclusion of factor loadings <. 30 from the latent constructs, the researcher favoured the factor exclusion cut off (suppression level) of .45 suggested by Liu *et al.* (2018) to reduce clutter.

The Kaiser-Meyer-Olkin (KMO) Measure of Sampling Adequacy coefficient obtained for the final model was .843, conforming to Pallant's (2013) minimum criterion. The Bartlett's Test of Sphericity was significant ($p < .001$), indicating a good 'factorability of the correlation matrix (Hair *et al.*, 2010; Treiblmaier and Filzmoser, 2010). The sample also conformed to the suggestion that for factor analysis, the sample size must be over 300 cases (Tabachnick and Fidell, 2007, 2014; Devellis, 2017). The determinant of the correlation matrix was monitored. The resulting determinant of the correlation matrix was > .00001, which, according to Field (2013) indicates that the assumption of positive definiteness was not violated.

6.2.1.1 Extracted Factors

Upon running the EFA, some issues needed to be observed; for example, checking on the communalities and cross-loadings. Items with communality scores less than 0.2 were eliminated as suggested by Child (2006). After that, the pattern of factor loadings was examined to identify variables that have a complex structure. A complex structure is obtained when an item that loads at .32 or higher on two or more factors (Tabachnick and Fidell, 2001, 2014; Costello and Osborne, 2005) or when the ratio of loadings is > 75% (Samuels, 2017).

All cross-loaded items with a ratio of loadings greater than 75% were removed to address the complexity of the structure matrix. In iteration 8, a more straightforward structure was achieved after removing other items in violation of the minimum communality value (Child, 2006) and Samuels' (2017) ratio of loadings criterion. Nine factors explaining 57% of the total variance (see Table 6.1) were extracted using Kaiser's criterion (Eigenvalues > 1).

Table 6.1: Total Variance (of Extracted Factors) Explained

Factor	Initial Eigenvalues			Extraction Sums of Squared Loadings		
	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %
1	13.190	19.686	19.686	12.596	18.800	18.800
2	8.243	12.303	31.989	7.962	11.883	30.683
3	5.250	7.836	39.825	4.868	7.265	37.948
4	4.724	7.051	46.876	4.349	6.491	44.440
5	2.832	4.227	51.103	2.438	3.639	48.079
6	2.181	3.255	54.358	1.745	2.604	50.683
7	1.833	2.736	57.094	1.445	2.157	52.840
8	1.760	2.627	59.721	1.345	2.007	54.847
9	1.602	2.392	62.113	1.185	1.769	56.616
10	1.238	1.848	63.961	.834	1.244	57.860
11	1.161	1.732	65.693	.825	1.231	59.091
….	….	….	….			
46	.111	.240	100.000			

Extraction Method: Maximum Likelihood.[a]
a. When factors are correlated, sums of squared loadings cannot be added to obtain a total variance.

From the EFA, eleven factors (latent constructs) were extracted with Eigenvalues (EV) greater than 1 and accounting for 59% of the variance. The last two latent constructs appeared to be made up of items with factor loadings less than the Liu *et al.* (2018) suggested suppression level. This meant that the remaining latent constructs accounted for 57%, which is acceptable within the social sciences (Peterson, 2000). In Table 6.2 below, the extracted factors are identified and labelled based on existing literature.

Table 6.2: Common Extracted Factors (Excluding PVQ-RR Data)

Item				Factor						Extracted Factors
	1	2	3	4	5	6	7	8	9	
Q17.5	.805									
Q17.4	.805									
Q17.6	.796									
Q17.10	.754									
Q17.9	.744									
Q17.11	.741									*Post-purchase Outcomes and Behaviour*
Q17.3	.740									
Q17.2	.701									
Q18.2	.673									
Q17.1	.635									
Q17.7	.599									
Q17.8	.568									
Q18.4	.567									
LUGG3		.749								
STFCOMP1		.741								
STFCOMP2		.736								
STFCOMP4		.668								
LUGG4		.666								
STFCOMP5		.651								
REL1		.640								*Overall Airline Reliability*
LUGG1		.639								
REL5		.564								
SAF3		.536								

Item	1	2	3	4	5	Factor
LUGG2	.525					
REL2	.474					
Q13.4		.817				
Q13.3		.775				
Q13.2		.767				
Q14.3		.741				
Q14.2		.737				*Marketing Messages*
Q13.1		.736				
Q14.1		.729				
Q15.1		.565				
Q15.3		.472				
BKNGCI4			.813			
BKNGCI6			.792			
BKNGCI3			.765			
BKNGCI5			.666			*Booking and Check-in*
BKNGCI2			.560			
BKNGCI7			.521			
BKNGCI1			.485			
AREP4				.774		
AREP5				.765		
AREP2				.748		*Airline Reputation*
AREP3				.683		
AREP1				.601		
ONBSERV4					.711	
ONBSERV3					.621	
ONBSERV5					.610	
ONBSERV2					.593	*Onboard Services*

	Col1	Col2	Col3	Col4	
ONBSERV1	.578				
ONBSERV6	.517				
LOYPROG5		.767			
LOYPROG3		.714			
LOYPROG4		.692			***Loyalty Program and Ticket Price***
LOYPROG2		.595			
TP6		.493			
Q16.6			.660		
Q16.4			.660		
Q16.3			.653		***Marketing Communications Mix***
Q16.1			.609		
Q16.2			.595		
Q16.5			.557		
CABFE4				.760	
CABFE1				.651	***Cabin Features and Experiences***
CABFE3				.597	
CABFE5				.520	

Extraction Method: Maximum Likelihood.[a]
Rotation Method: Promax with Kaiser Normalization
Rotation converged in 8 iterations.

As can be seen from Table 6.2, the identified latent constructs are; 'Post-purchase outcomes and behaviour' with an eigenvalue of 13.190 accounting for 18.8% variance, followed by 'Overall Airline Reliability' (EV = 8.243, var = 11.9%), 'Marketing messages' (EV = 5.250, var = 7.3%), 'Booking and Check-in' (EV = 4.274, var = 6.5%), 'Airline reputation' (EV 2.832, vari = 3.6%), 'Onboard (inflight) services' (EV = 2.181, var = 2.6%), 'Loyalty programs' (EV = 1.833, var =2.2%) and 'Marketing communications mix elements' (EV of 1.760, var = 2%) and 'Cabin features and experiences' with an EV of 1.602 with variance 1.8%. According to Burton and Mazerolle (2011), such results are

indicative of construct validity. In the ensuing two subsections, confirmatory factor analysis for personal values is presented followed by reliability and validity discussion.

6.2.2 Confirmatory Factor Analysis for PVQ-RR Data

As indicated earlier, that exploratory factor analysis was deemed unsuitable for analysing personal values (PVQ-RR data), this subsection presents the confirmatory factor analysis results performed on the PVQ-RR data. The 57-item refined PVQ instrument (Schwartz *et al.* 2012; Schwartz and Butenko, 2014; Cieciuch *et al.*, 2014) was adopted without any modification and incorporated as part of this research questionnaire. Thus, it was analysed as instructed by Schwartz and his colleagues who have validated it across various research setups and countries.

Confirmatory factor analysis was employed to evaluate the structure of values (distinctiveness of the 19 values) using AMOS 26. The standard errors for the parameter estimates were estimated using maximum likelihood estimator (Schafer, 1997). For model identification, the researcher adopted Schwartz and Butenko's (2014) approach of fixing the latent factors to 1, enabling the loadings to be estimated freely, but allowing no covariances between uniqueness.

However, as Harrington (2008) suggests, calculating distinctiveness for the 19 latent variables and 57 value items may be virtually impossible. Also, it might introduce misspecification (Schwartz and Butenko, 2014). In response to Harrington (2008) and Schwartz and Butenko (2014) concerns, some esteemed scholars (Cieciuch and Schwartz, 2012; Schwartz and Butenko, 2014; Becker *et al.*, 2017) recommend that each of the four higher-order categories of values is run separately. This study also adopted these recommendations and CFA (path analyses) models for the four higher-order values are depicted in Figures 6.12 to 6.15.
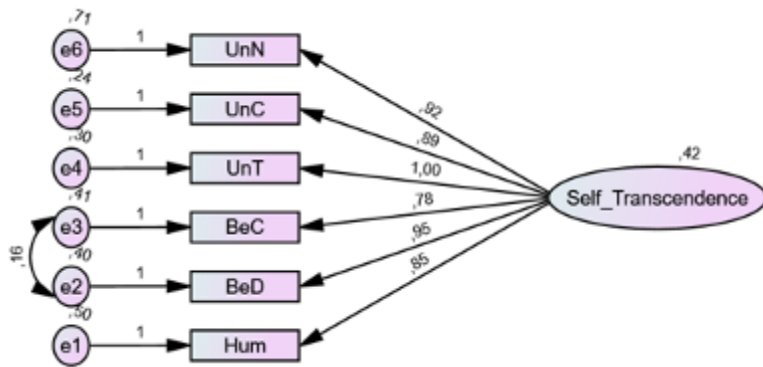
Figure 6.12: Self-transcendence Values Model (*Amos CFA Output*)
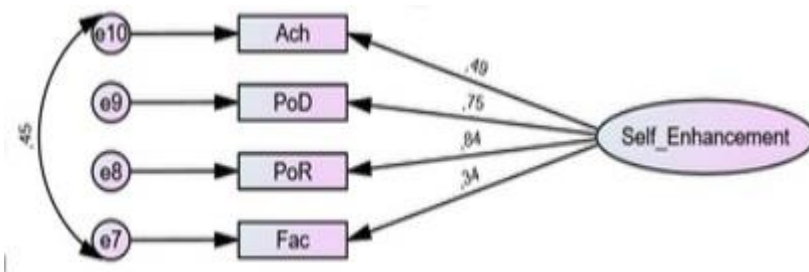
Figure 6.13: Self-enhancement Values Model (*Amos CFA Output*)
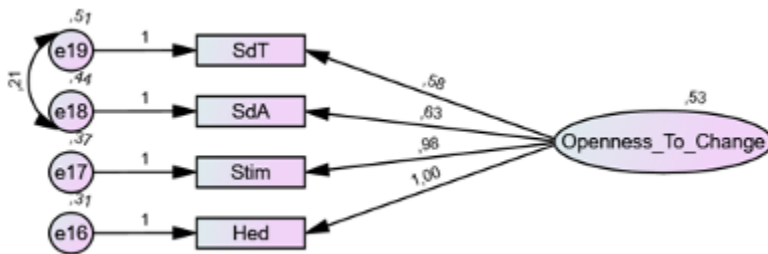
Figure 6.14: Openness to Change Values Model (*Amos CFA Output*)
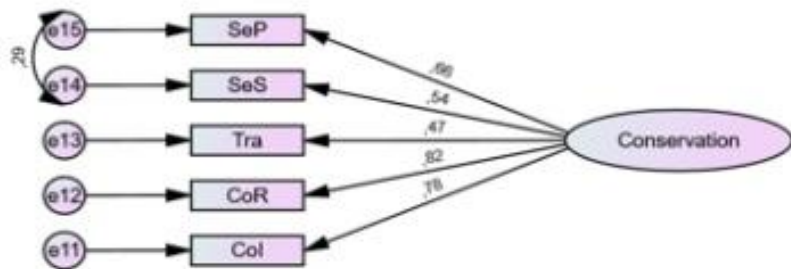
Figure 6.15: Conservation Values Model (*Amos CFA Output*)

225

Along with the Chi-square goodness of fit test, the other fit indices used to assess the model fit included comparative fit index (CFI), root mean square error of approximation (RMSEA), and standardized root mean square residual (SRMR). These indices were benchmarked as follows, CFI values ≥ .90 (Bentler, 1990), RMSEA values ≤ .08 (Browne and Cudek,1993), and SRMR values ≤ .06 (Hu and Bentler, 1999) as indicating a reasonable model fit. All analyses were performed with AMOS 26.0 (J. L. Arbuckle, AMOS Development Corporation, Crawfordville, FL, USA) (Arbuckle, 2016).

Table 6.3 below reports the means and standard deviations of the 57 items and the respective 19 values, together with the standardised regression weights of each value item.

Table 6.3: Means and standard deviations of 57 value items and 19 values, and standardized regression weights for the revised CFA model (n = 294)

Value	Item	-1 Item mean	-2 Item *SD*	-3 Value means	-4 Value *SD*	-5 Factor Loading
Self-direction thought	SdT1	4.68	1.29			0.52
	SdT2	4.97	0.98	4.73	0.83	0.64
	SdT3	4.54	1.15			0.48
Self-direction action	SdA1	5.12	1.03			0.42
	SdA2	4.53	1.31	4.79	0.81	0.47
	SdA3	4.72	1.2			0.46
Stimulation	Stim1	4.66	1.18			0.58
	Stim2	4.39	1.44	4.52	0.94	0.48
	Stim3	4.52	1.2			0.58
Hedonism	Hed1	4.79	1.13	4.53	0.91	0.61
	Hed2	4.54	1.1			0.6

	Hed3	4.27	1.38			0.59
	Ach1	5.16	1.01			0.55
Achievement	Ach2[a]	4.62	1.27	4.62	0.88	--
	Ach3[a]	4.09	1.47			--
	PoD1[a]	4.36	1.43			--
Power dominance	PoD2	3.45	1.75	3.75	1.18	0.62
	PoD3	3.45	1.56			0.9
	PoR1	3.83	1.55			0.57
Power resources	PoR2	3.95	1.53	3.7	1.25	0.53
	PoR3	3.32	1.66			0.83
	Fac1	4.66	1.2			0.41
Face	Fac2	4.71	1.25	4.68	0.96	0.55
	Fac3	4.65	1.3			0.75
	Sep-01	5.07	1.01			0.64
Security personal	Sep-02	5.09	1.01	4.95	0.79	0.54
	Sep-03	4.71	1.19			0.54
	SeS1	4.94	1.17			0.52
Security societal	SeS2	4.6	1.16	4.77	0.92	0.7
	SeS3	4.78	1.27			0.63
Tradition	Tra1	4.5	1.38	4.22	1.1	0.56
	Tra2	4.11	1.38			0.72

	Tra3	4.05	1.4			0.74
	CoR1	4.89	1.15			0.62
Conformity-rules	CoR2	4.31	1.3	4.55	0.96	0.69
	CoR3	4.46	1.29			0.51
	CoI1	4.78	1.18			0.62
Conformity-interpersonal	CoI2	4.4	1.44	4.55	1.04	0.69
	CoI3	4.48	1.3			0.68
	Hum1[a]	4.38	1.47			--
Humility	Hum2	4.83	1.24	4.5	. 90	0.53
	Hum3[a]	4.3	1.42			--
	UnN1	4.83	1.06			0.68
Universalism-nature	UnN2	4.21	1.43	4.54	1.03	0.69
	UnN3	4.59	1.28			0.76
	UnC1	4.98	1.08			0.55
Universalism-concern	UnC2	4.79	1.09	4.92	0.76	0.57
	UnC3	5.01	0.94			0.64
	UnT1	4.91	1.18			0.59
Universalism-tolerance	UnT2	4.69	1.07	4.77	0.85	0.61
	UnT3	4.72	1.16			0.52
Benevolence Care	BeC1[a]	5.12	1.025	4.92	0.82	--
	BeC2	5.12	0.988			0.7

	BeC3	4.53	1.279		0.6
	BeD1	4.87	1.11		0.57
Benevolence Dependability	BeD2	4.94	1.19	4.78	0.88	0.6
	BeD3	4.54	1.374		0.51

[a]*Items dropped in CFA for which no standardized regression weight (factor loading) is therefore reported.*

According to Schwartz *et al.* (2012), the means of the 57 values items are indicative of the value priorities for respondents. These priorities are based on the relative importance of each value to each person derived by centering each person's responses on his or her mean score (Schwartz, 2006).

As part of improving the model fit indices, six value items with poor indicator reliability (indicators with outer loading below 0.40) were dropped from the measurement model as suggested by Brown (2015) and Ab Hamid, Sami and Mohmad Sidek (2017). However, the dropping of these value items did not result in complete erasure of any of the 19 values. For example, for benevolence care value, only item BeC[1] was dropped for poor loading.

In Table 6.4 below, the model fit results for the higher-order values depicted in Figures 6.12 to 6.15 above, presented in the first four, are higher-order value models. In contrast, the last row offers model fit indices for the aggregate values model (see Figure 6.16). In the aggregate model, subset item parceling (Matsunaga, 2008) was adopted to categorise the 57 value items into the high-order values, thus, avoiding model complexity.

Table 6.4: Confirmatory factor analyses: fit indices for higher-order values

Model	# factors (items)	χ^2/df	CFI	RMSEA	SRMR
Self-Transcendence Model	5 (15)	1.860	.98	.05	.03
Self-Enhancement Model	4 (12)	2.446	.99	.07	.01
Openness to change Model	6 (18)	5.785	.98	.13	.01

Conservation Model	4 (12)	1.228	.99	.03	.02
Aggregate Personal Values Model	4(57)	1.935	.99	.06	.01

As can be seen from the table above, all the fit indices for the models were reasonably acceptable, save for Openness to Change value with a root mean square error of approximation (RMSEA) > .8. When CFI and RMSEA indices are inconsistent, Lai and Green (2016) concluded after numerous simulations, that it does not necessarily mean the model must be outrightly rejected. Instead, the authors suggest that researchers must try to explain why the indices disagree and the implications thereof. As such, in this study, it was thought that the reason could have been the nonnormal data, a large number of manifest variables and a not so large sample (Moshagen, 2012). Also, the four models were aggregated into one model, as shown in Figure 6.16. The model fit results are presented as the bottom row of Table 6.4.
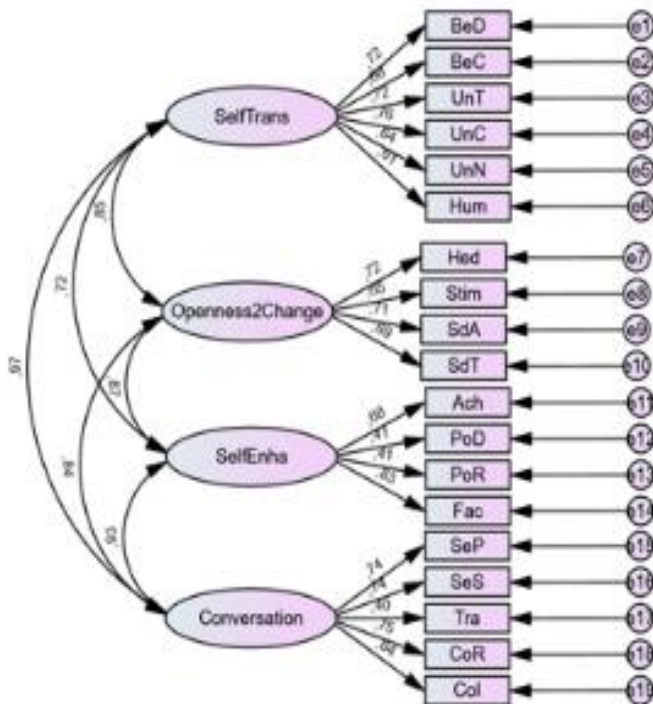
Figure 6.16: Aggregate Personal Values Model (*Amos CFA Output*)

Since the concern of validity is on the 19-value theory rather than its 57 items or the broad higher-order values (Torres *et al.*, 2015; Cieciuch and Davidov, 2012), the aggregate model was used to assess the average variance extracted score for convergent validity. The reliability and validity results are summarised in Table 6.5 in the following section.

6.2.3 Reliability and Validity

Reliability testing was done to assess the consistency of responses among a group of questions included in the instrument. In essence, reliability provides us with statistical apparatuses to create estimates of precision using observed data components (Chalmers, 2018). Heale and Twycross (2015) categorise reliability testing into homogeneity/internal consistency, equivalence and stability attributes.

These attributes of these reliability tests are expounded in-depth in Table 5.7 (Chapter 5). In the same table, indications as to how these are dealt with in this study are presented. Therefore, this section only focuses on homogeneity/internal consistency as earlier discussed. According to Heale and Twycross (2015), internal consistency can be assessed using Cronbach's alpha coefficient, Kuder-Richardson coefficient, Composite reliability (CR), split-half or item-to-total reliability. For validity, the average variance extracted (AVE) scores were used. This study employed both Cronbach's α and to assess internal consistency.

The criteria suggested by George and Mallery (2010, 2016) was used as a guideline for interpreting Cronbach's α coefficient. The authors state that α values > .9 are excellent, > .8 good, > .7 acceptable, > .6 questionable, > .5 poor, ≤ .5 unacceptable. For AVE, the criterion of Fornell-Larcker (1981) commonly used to assess the degree of shared variance between the latent variables of the model was employed. AVE values must be > .05 to be considered adequate for convergent validity (Ab Hamid, Sami and Mohmad Sidek, 2017; Hair *et al.*, 2014). Table 6.5 below presents the reliability and validity scores.

Table 6.5: Internal Consistency and Convergent Validity for Constructs (*n* =294)

Scale	No. of items	Mean	SD	Cronbach α	AVE
Post-purchase outcomes and behaviour	13	53.63	8.94	.93	.55
Overall airline reliability	12	49.79	7.59	.90	.58
Marketing messages	9	30.31	7.50	.91	.51
Booking and check-in services	6	25.31	4.44	.89	.55
Airline reputation	4	13.17	4.25	.86	.52
Onboard (in-flight) services	6	21.13	5.53	.87	.51
Loyalty programs and Ticket price	5	16.79	4.51	.84	.54
Marketing communications mix elements	6	19.83	5.27	.86	.60
Cabin features and experiences	4	16.21	3.23	.85	.50
Personal Values	4(19)	86.82	11.26	.85	.66

Primary source

Part of the results in this table (above) is the mean scores of the constructs (column 3). For airline service attributes, the mean scores were used for ranking in terms of importance in response to research question 2 (RQ2): *Which are the most important airline service attributes used by customers to evaluate and choose airlines within the South African domestic passenger market?* The results showed that overall airline reliability was the most important attribute (*M=47.79, SD=7.59*), followed by booking and check-in (*M=25.31, SD=4.44*), onboard (in-flight) services (*M=21.13, SD=5.53*), loyalty programs and ticket price (*M=16.79, SD=4.51*), cabin features and experiences (*M=16.21, SD=3.23*) and lastly airline reputation (*M=13.17, SD=4.25*).

The table also provides reliability (column 5) and validity (column 6) scores of the constructs. All the internal consistency scores ranged from .84 (good) to .94 (excellent) as suggested by George and Mallery (2010, 2016). The AVE scores, though all teetering on the margin of the 'cut-off' values indicate an acceptable level of convergent validity of ≥ .5 (Ab Hamid, Sami and Mohmad Sideki, 2017; Hair *et al.*, 2019). After exploring and determining the latent constructs through EFA, evaluating the structure of the 19-values

model using CFA and assessing these constructs reliability and validity, it was safe to proceed to address the hypotheses and answer specific research questions.

6.3 HYPOTHESIS TESTING

The main aim of this research was to examine and identify the consumer (passenger) personal values that underpin the evaluation of airline service attributes used to choose an airline within the South African domestic passenger market. In this section, statistical analyses results are used to address this primary objective, answer the research questions raised in Chapter 1 and the hypotheses.

6.3.1 Hypothesis 1 Testing

The pertinent research question which sought to be answered through testing this hypothesis was, "*What is the most parsimonious set of consumer (passenger) personal values that influence airline choice attributes within the South African domestic passenger market?*" Before testing hypothesis 1 (see the conceptual model in Figure 4.1 in Chapter 4), a set of the most parsimonious values needed to be determined. For that purpose, a backward multiple regression analysis (BMRA) was conducted to identify the most parsimonious personal values out of Schwartz *et al.* (2012) refined 19 values.

The assumptions of linearity, homoscedasticity and uncorrelated errors were checked and addressed as described under section 5.12.1 in Chapter 5. The results of the backward regression are displayed in Table 6.6 below.

Table 6.6: Backward Multiple Regression Analysis Summary for Parsimonious Personal Values (*N = 294*)

Model		B	Std. Error	Beta	R^2	Adjusted R^2	R^2 Change	Tolerance	VIF
1		4.44	.977		.17	.113			
	SdT	-.282	.206	-.116				.42	2.382
	SdA	-.213	.203	-.086				.452	2.212
	Stim	.796	.168	.371**				.491	2.037

Hed	.053	.186	.024					.421	2.376
Ach	-.383	.177	-.168*					.499	2.005
PoD	.102	.128	.061					.52	1.924
PoR	-.12	.13	-.075					.459	2.18
Fac	-.272	.19	-.13					.367	2.724
SeP	-.10	.217	-.039					.423	2.366
SeS	.22	.201	.101					.356	2.811
Tra	-.02	.129	-.011					.604	1.656
CoR	.244	.187	.116					.38	2.634
CoI	.117	.155	.06					.468	2.136
Hum	-.025	.164	-.011					.563	1.776
UnN	-.311	.154	-.16*					.48	2.082
UnC	-.408	.231	-.154					.402	2.49
UnT	-.375	.189	-.158*					.476	2.099
BeC	.731	.21	.297**					.416	2.407
BeD	-.057	.198	-.025					.399	2.509
....	....	....	....	.....	....	....	....	....	....
13		4.185	.887		.15	.129	-.003		
SdT	-.358	.174	-.148*					.578	1.731
Stim	.744	.143	.347**					.67	1.492
Ach	-.427	.143	-.188*					.75	1.334
UnN	-.198	.136	-.102					.608	1.645
UnC	-.288	.196	-.109					.548	1.825
UnT	-.398	.17	-.168*					.577	1.734

	B	Std. Error	Beta				Tolerance	VIF
BeC	.666	.183	.271**				.537	1.863
14	4.25	.887		.144	.126	-.006		
SdT	-.358	.174	-.148*				.578	1.731
Stim	.67	.134	.312**				.767	1.303
Ach	-.435	.143	-.192*				.751	1.332
UnC	-.324	.194	-.122				.557	1.797
UnT	-.436	.168	-.184*				.590	1.694
BeC	.619	.181	.251**				.554	1.804

Dependent Variable: Airline Preference, SdT = Self-direction thought value, Stim = Stimulation value, Ach = Achievement value, Unc = Universalism - Concern value, UnT = Universalism - tolerance value and BeC = Benevolence - care value. *p<.05, **p<.001

Table 6.6 provides summary statistics (e.g., Beta weights, R^2 and significance values) of the BMRA. It should be noted that the analysis produced 14 models, but only models 1, 13 and 14 are shown in the table. Nineteen (19) personal values as suggested by (Schwartz *et al.*, 2012; Schwartz and Butenko, 2014; and others) were entered as the predictor variables in the initial model and eliminated using the backward criterion (*p > .1*).

Model (Model 14) answers research question 1 (RQ1). Out of 19 personal values, the most parsimonious set of values influencing airline choice within the South African domestic passenger market are self-direction thought, stimulation, achievement, universalism-tolerance and benevolence-care values. Tolerance and VIF statistics suggest that there were no multicollinearity problems.

Note, as found in previous studies where airline choice was attributed to the evaluation of attributes (Tey *et al.*, 2018; Zinas and Jusan, 2017; Hu, Geertman and Hooimeijer, 2016), in this study airline choice was assumed to be the customer decision resulting from the evaluation of the airline service attributes. With about 36% of the respondents indicating that they could not make airline choice decisions, the researcher prudently excluded such respondents during the analysis. However, this would have a substantial

effect on the same on the sample size, thus airline preference was used as the proxy for airline choice. Regardless of the inability to choose which airline to fly in, all respondents had sufficiently answered the question on which airline they would prefer when flying domestic routes. Drawing from Shimp and Andrews (2013) that preference [affective] is a precursor to the [conative] choice decision, airline preferences were used to capture each respondent's assessments of airlines. Abundant literature on human values, for example, Gutman (1982), Schwartz (2012), Grebitus, Steiner and Veeman (2015), Tey *et al.* (2018) suggest that such assessments are based on consumer personal values.

From Table 6.6 above, the model statistic, $F(6,287) = 8.02$, $p < .001$, adjusted $R^2 = .126$ shows that 13% of variance in airline preference (choice) can be explained by this model with the resultant equation for airline preference (choice) = 4.25 - .36SdT + .68Stim - .44Ach - .32UnC - .44UnT + .62BeC + *e*.

After determining the parsimonious set of personal values underpinning airline choice, it was time to address the hypothesis - *H1₁: Personal values influence the evaluation and prioritisation of airline service attributes used to choose an airline within the South African domestic passenger market.* The second set of backward regression analyses were conducted, now to determine the influence of each of the five personal values (retained in the backward multiple regression analysis) on the different airline service attributes. Table 6.7 below presents the regression results predicting the influence of personal values (PVs) on overall airline reliability.

Table 6.7: Relationship between PVs and Overall Airline Reliability

Model		B	Std. Error	Beta	*t*	R^2	Adj. R^2	R^2 Change	Tolerance	VIF
3	(Constant)	2.331	.208		11.230	0.181	0.173	-0.002		
	SdT	.123	.041	.186*	3.007				.738	1.355
	Stim	.139	.034	.237**	4.109				.848	1.180
	UnT	.084	.039	.131*	2.140				.756	1.323

Dependent Variable: Overall Airline Reliability, SdT = Self-direction thought value, Stim = Stimulation value, and UnT = Universalism - tolerance value. *p<.05, **p<.001

The analysis converged at model 3 presented in the above table. The results show that out of the five personal values identified as the most parsimonious set of consumer (passenger) personal values that influence airline choice within the South African domestic passenger market, only three (self-direction thought $t = 3.01$, $p = .003$; Stimulation $t = 4.11$, $p < .001$ and universalism tolerance $t = 2.14$, $p = .033$) were identified as significant predictors of evaluation of overall airline reliability attribute.

The model statistic $F(3, 290) = 21.38$, $p < .001$, adjusted $R^2 = .173$ indicates that 17% of variance in overall airline reliability is explained by this model. The resultant equation for overall airline reliability $= 2.33 + .12SdT + .14Stim + .08UnT + e$. This equation can be translated in the following manner. Firstly, for every one-unit change in the importance of self-direction thought value to a traveller, the prioritisation of overall airline reliability increases by .12 units, with other two values held constant. Secondly, for every one-unit change in the importance of stimulation value to a traveller, the prioritisation of overall airline reliability increases by .14 units, with the other two values held constant. Lastly, for every one-unit change in the importance of universalism - tolerance value to a traveller, the prioritisation of overall airline reliability increases by .08 units, with other two values held constant.

Table 6.8 below presents the regression results predicting the influence of personal values (PVs) on overall airline reliability.

Table 6.8: Relationship between PVs and Booking and Check-in Services

Model		B	Std. Error	Beta	t	R^2	Adj. R^2	R^2 Change	Tolerance	VIF
4	(Constant)	2.480	.223		11.120	.077	.071	-.001		
	Ach	.067	.039	.104	1.711				.862	1.160
	BeC	.156	.043	.222**	3.661				.862	1.160

Dependent Variable: Booking and check-in services, SdT = Self-direction thought value, Stim = Stimulation value, and UnT = Universalism - tolerance value. *p<.05, **p<.001

The analysis produced four models, but only the fourth model is presented in the table above. The model statistic was $F(2, 291) = 12.17$, $p < .001$, adjusted $R^2 = .07$. This suggests that this model explains 7% of the variance. At a glance, the adjusted R^2 seems

lower than that acceptable within the social sciences research (Cohen, 1992). However, Frost (2020) argues that low adjusted R^2 does not negate the importance of any significant variable. Of the two values retained in model 4, only BeC was a significant predictor ($t = 3.66$, $p < .001$) of the prioritisation of booking and check-in services when choosing an airline. The resultant equation for Booking and Check-in = 2.48 + .16BeC + e. This implies that, for every one-unit change in the importance of benevolence care value to a traveller, the prioritisation of overall airline reliability increases by .16 units.

The following Table 6.9 shows that the five personal values are not significant predictors of the evaluation and prioritisation of the airline reputation when choosing an airline among the South African domestic travellers.

Table 6.9: Relationship between PVs and Airline Reputation

Model		Sum of Squares	df	Mean Square	F	Sig.	R^2	Adj R^2
1	Regression	1.841	5	.368	.512	.767[b]	.009	-.008
	Residual	207.007	288	.719				
	Total	208.848	293					
2	Regression	1.832	4	.458	.639	.635[c]	.009	-.005
	Residual	207.016	289	.716				
	Total	208.848	293					
3	Regression	1.82	3	.607	.85	.468[d]	.009	-.002
	Residual	207.028	290	.714				
	Total	208.848	293					
4	Regression	1.791	2	.895	1.258	.286[e]	.009	.002
	Residual	207.057	291	.712				
	Total	208.848	293					
5	Regression	1.737	1	1.737	2.448	.119[f]	.008	.005
	Residual	207.111	292	.709				
	Total	208.848	293					
6	Regression	.0000	0	.0000	.	.[g]	.0000	.0000
	Residual	208.848	293	0.713				
	Total	208.848	293					

a Dependent Variable: AIRREP; b Predictors: (Constant), BeC, Stim, Ach, UnT, SdT; c Predictors: (Constant), BeC, Stim, UnT, SdT; d Predictors: (Constant), BeC, Stim, SdT; e Predictors: (Constant), BeC, Stim; f Predictors: (Constant), Stim; g Predictor: (constant). *p<.05, **p<.001

Table 6.10 below provides results of regression analysis to predict evaluation and prioritisation of onboard services when choosing an airline using personal values (self-direction thought, stimulation, achievement, universalism tolerance and benevolence care).

Table 6.10: Relationship between PVs and Onboard Services

Model		B	Std. Error	Beta	t	R^2	Ad. R^2	R^2 Change	Tolerance	VIF
2	**(Constant)**	2.657	.258		10.302	.081	.068	-.002		
	SdT	.106	.053	.144*	1.997				.614	1.629
	Stim	.097	.041	.149*	2.343				.789	1.268
	Ach	.108	.044	.157*	2.447				.769	1.300
	BeC	-.136	.054	-.182*	-2.522				.613	1.630

Dependent Variable: Onboard services, SdT = Self-direction thought value, Stim = Stimulation value, Ach = Achievement value and BeC = Benevolence - care. *p<.05, **p<.001

The analysis ran in two models, with only model 2 presented in the table above as the model of interest. Four values (self-direction thought t = 1.997, p = .047; stimulation t = 2.34, p = .020; achievement t = 2.447, p = .015 and benevolence care t = -2.522, p = .012) had significant partial in the model statistic $F(4, 289)$ = 6.34, p < .001, adjusted R^2 = .081. The model eliminated only one value (UnT), resulting in the equation for onboard services = 2.66 + .11SdT + .10Stim + .11Ach - .14BeC + e. This equation can be translated as, for every one-unit change in the importance of self-direction thought value to a traveller, the prioritisation of onboard services increases by .11 units, with other three values held constant.

Similarly, for every one-unit change in the importance of stimulation value to a traveller, the prioritisation of onboard services increases by .10 units, with other three values held constant. Again, for every one-unit change in the importance of achievement value to a traveller, the prioritisation of onboard services increases by .11 units, with other three values held constant. Lastly, for every one-unit change in the importance of benevolence - care value to a traveller, the prioritisation of onboard services decreases by .14 units, with other three values held constant.

In Table 6.11 below, the results of a model for predicting loyalty programs and ticket price attributes based on personal values are presented. The analysis produced two models, and only model 2 results are shown in the table overleaf.

Table 6.11: Relationship between PVs and Loyalty Programs/Ticket Price

Model		B	Std. Error	Beta	t	R^2	Adj. R^2	R^2 Change	Tolerance	VIF
2	(Constant)	2.953	.272			.071	.064	-.008		
	Stim	.216	.047	.275**	4.621				.899	1.112
	UnT	-.117	.052	-.135*	-2.271				.899	1.112

Dependent Variable: Loyalty programs and Ticket price, SdT = Self-direction thought value, Stim = Stimulation value, and UnT = Universalism - tolerance value. *p<.05, **p<.001

From the analysis, both values (stimulation $t = 4.62$, $p < .001$; universalism tolerance $t = -2.27$, $p = .02$) significantly contributed to the final model $F(1, 291) = 11.04$, p < .001, adjusted $R^2 = .071$. The model explains 7% on the variance of the evaluation and prioritisation of booking and check-in services when choosing an airline within the South African domestic passenger market.

The final model equation for loyalty programs and ticket price = 2.953 + .22 Stim - .12UnT + e suggests that for every one-unit change in the importance of stimulation value to a traveller, the prioritisation of loyalty programs and ticket price attribute increases by .22 units, with universalism - tolerance value held constant. Also, for every one-unit change in the importance of universalism - tolerance value to a traveller, the prioritisation of loyalty programs and ticket price attribute decreases by .12 units, with stimulation value held constant.

Table 6.12 is the last table of results in response to hypothesis H1₁. In this table, a regression analysis, backward elimination was employed to build a model to predict the evaluation and prioritisation of cabin features and experiences when choosing an airline based on personal values. Like with airline reputation, the analysis of variance results in the table shows that the identified set of parsimonious (five) personal values were not

significant predictors of the evaluation and prioritisation of cabin features and experiences attribute when choosing an airline among South African domestic travellers.

Table 6.12: Relationship between PVs and Cabin Features and Experiences

Model		Sum of Squares	df	Mean Square	F	Sig.	R^2	Adj. R^2
1	Regression	2.792	5	.558	1.488	.194[b]	.025	.008
	Residual	108.073	288	.375				
	Total	110.864	293					
2	Regression	2.787	4	.697	1.863	.117[c]	.025	.012
	Residual	108.077	289	.374				
	Total	110.864	293					
3	Regression	2.683	3	.894	2.398	.068[d]	.024	-.014
	Residual	108.181	290	.373				
	Total	110.864	293					
4	Regression	1.990	2	.995	2.660	.072[e]	.018	.011
	Residual	108.874	291	.374				
	Total	110.864	293					
5	Regression	1.444	1	1.444	3.853	.051[f]	.013	.010
	Residual	109.420	292	.709				
	Total	110.864	293	.375				

a Dependent Variable: CABINFE; b Predictors: (Constant), BeC, Stim, Ach, UnT, SdT; c Predictors: (Constant), Stim, Ach, UnT, SdT; Predictors: (Constant), Stim, UnT, SdT; Predictors: (Constant), UnT, SdT; Predictors: (Constant), UnT, SdT; g Predictor: (constant). *p<.05, **p<.001

Summarily, the above results confirm hypothesis H1[1], which claimed that personal values influence airline service attributes used to choose an airline within the South African domestic passenger market. The regression analyses result above (Tables 6.7 to 6.12) indicate that indeed personal values have from small to moderate predicting power as the basis of how travellers evaluate and prioritise the airline service attributes when choosing an airline. However, the results in Figure 6.9 and 6.12 show that there was no significant relationship between the parsimonious set of personal values and two service attributes (airline reputation and cabin features and experiences).

6.3.2 Hypothesis 2 Testing

There is abundant literature on the relationship between the post-purchase evaluation of product/service attributes, also referred to as perceived service quality (Namukasa, 2013; Leong *et al.,* 2015; Jiang and Zhang, 2016; Koklic, Kukar-Kinney and Vegelj, 2017).

Nevertheless, the findings of these studies have differed on statistical significance, direction and the magnitude that the perceived service has on post-purchase outcomes and behaviours such as satisfaction and loyalty (Ganiyu, 2016; Nor and Wan, 2013). Likewise, this study also hypothesised on the relationship between airline service attributes (service quality) and post-purchase outcomes and behaviour as follows;

H2₁: Airline service attributes positively influence the post-purchase outcomes and behaviour for the customer within the South African domestic passenger market.

To test this hypothesis, another set of backward multiple regression was performed to build a model that reveals the relationship between airline service attributes (perceived service quality) and post-purchase outcomes and behaviour. The results of the analysis are provided in Table 6.13.

Table 6.13: Relationship between Airline Service Attributes and Post-purchase outcomes and behaviour.

Model		B	Std. Error	Beta	t	R^2	Adj. R^2	R^2 Change	Tolerance	VIF
5	**(Constant)**	3.566	.286			.064	.058	-.001		
	ONBSERVICE	.285	.065	.252**	4.355				.961	1.041
	CABINFE	-.120	.065	-.107	-1.854				.961	1.041

Dependent Variable: Post-purchase outcomes and behaviour, ONBSERVICE = Onboard services, CABINFE = Cabin features and experiences. *$p<.05$, **$p<.001$

As illustrated in the table above, the analysis ran five models with the final results (model 5) depicted in the table above. The model $F(2, 291) = 9.99$, $p < .001$, adjusted R^2 of .058. Through a backward elimination method, four predictor variables (overall airline reliability, booking and check-in service, air reputation and loyalty programs and ticket price) were removed leaving onboard services, and cabin features and experiences in the final model. These results are surprising and inconsistent with the findings of some previous studies (Ganiyu, 2016; de Jager and Van Zyl, 2012).

Despite having cabin features and experiences retained in the final model, it was nevertheless insignificant ($t = -1.85$, $p = .065$). That leaves the resultant equation for post-purchase outcomes and behaviour as $= 3.57 + .29ONBSERVICE + e.$ The equation

implies that every one-unit improvement to the onboard services attribute would result in .29 units increase to customer post-purchase outcomes and behaviour. These results, albeit quite unexpectedly different from findings of previous studies, still confirm that airline service attributes positively influence post-purchase outcomes and behaviour. As such, hypothesis $H2_1$ is partially supported with only one service quality attribute (onboard services) found significant. A detailed discussion of these results is presented in the following chapter.

6.3.3 Hypotheses 3 Testing

Several scholars both in South Africa and elsewhere have studied the role played by airline model types on airline choice or service quality appraisals and the resultant outcomes (satisfaction, repeat purchase, attitudes/preference). The results of these studies are mixed, with some studies' findings showing that the airline customers did not differentiate between the two airline types when evaluating their service delivery (Loureiro and Fialho, 2016). On the other hand, other studies found that airline model types were influential to the evaluation of airline service delivery against customer expectations.

In the same spirit, this study also investigated the differential effect of airline model type of airline service evaluation. Firstly, to determine if personal values influencing the evaluation and prioritisation of airline service attributes when choosing an airline were similar among low-cost carrier and full-service carrier customers. Secondly, if airline model types affect the relationship between airline service attributes (perceived service quality) and post-purchase outcomes and behaviour. As such, two hypotheses were formulated and are addressed under the following two subsections (sections 6.3.3.1 - 2).

6.3.3.1 Hypothesis 3a$_1$ Testing

H3a$_1$: There is a difference in personal values influencing the evaluation of airline service attributes by low-cost carrier customers compared to full-service carrier customers within the South African domestic passenger market.

To test this hypothesis, Mann-Whitney tests were run. Since for two independent samples tests such as Mann-Whitney tests, the grouping variable must be defined dichotomously;

the airline preference variable was transformed into a dummy (airline model type - AC_Model) variable. This new variable differentiated the two airline model types (i.e., low-cost carriers - LCC and full-service carriers - FSC) as espoused in the literature (Rajaguru, 2016; Curras-Perez and Sanchez-Garcia, 2016; Suhartanto and Noor, 2012).

At the centre of this hypothesis was the evaluation of airline service attributes; hence, the researcher started with determining whether airline customers distinguish between the low-cost carriers and the full-service carriers when evaluating airline service delivery. Table 6.14 provides the results thereof.

Table 6.14: Mann-Whitney Test - Airline Model Type and Airline Service Attributes

	OverallRel	BKNGCI	AIRREP	ONBSERVICE	LOYPROGTP	CABINFE
Mann-Whitney U	8645.500	8482.000	9009.500	7703.000	8719.500	8396.000
Wilcoxon W	12561.500	12398.000	12925.500	11619.000	12635.500	29717.000
Z	-.628	-.875	-.082	-.518	-1.232	-1.008
Asymp. Sig. (2-tailed)	.530	.381	.935	.604	.218	.313

a. Grouping Variable: AC_Model. OverallRel = Overall Airline Reliability, BKNGCI = Booking and Check-in, AIRREP = Airline Reputation, ONBSERVICE = Onboard Services, LOYPROGTP = Loyalty Programs and Ticket Price and CABINFE = Cabin Features and Experiences.

The results displayed in this table (above) provide interesting and unexpected results. Whereas literature points to significant differences between low-cost carriers and full-service carriers (Wehner *et al.*, 2018; Lubbe, Douglas and Mclachlan, 2016; Campbell and Vigar-Ellis, 2012), the results indicate otherwise, airline customers do not significantly differentiate airlines into the two models based on the airline service attributes (overall airline reliability U = 8646, p = .53; Booking and Check-in, U = 8682, p = .38; Airline Reputation, U = 9010, p = .94; Onboard Services, U = 7703, p = .61; Loyalty Programs and Ticket Price, U = 8720, p = .22; and Cabin Features and Experiences, U = 8396, p = .31). This implies that such categorisation might not be meaningful to consumers.

The second part was pertinent to answering the research question "*Is there a difference in the personal values influencing the evaluation of airline service attributes to low-cost*

carrier customers compared to full-service carrier customers within the South African domestic passenger market?" Another difference test (Mann-Whitney test) was conducted, and the results are displayed in Table 6.15 below.

Table 6.15: Mann-Whitney Test - Airline Model Type and Personal Values

	SdT	Stim	Ach	UnT	BeC
Mann-Whitney *U*	8577.000	7327.000	7886.500	7590.500	8834.000
Wilcoxon *W*	12493.000	28648.000	11802.500	11506.500	12750.000
Z	-.735	-2.620	-1.776	-2.225	-.348
Asymp. Sig. (2-tailed)	.462	.009	.076	.026	.728

a. Grouping Variable: AC_Model. SdT = Self-direction thought value, Stim = Stimulation value, Ach = Achievement value, Unc = Universalism - Concern value, UnT = Universalism - tolerance value and BeC = Benevolence - care value.

As can be seen from the table; for SdT, Ach and BeC values, the results were not statistically significant (*U* =8577, *p* = .46; *U* =7887, *p* = .08 and *U* =8834, *p* = .73 respectively). Such results indicate that there is no difference in these values guiding or influencing the buying behaviour of both low-cost and full-service airline customers. However, for the other two values (Stim, *U* =7327, *p* = .009 and UnT, *U* =7591, *p* = .026), the results were statistically significant, showing that these two values differently influence or underpin consumer choice behaviour among customers of low-cost airlines and those of full-service airlines.

Since the Mann-Whitney test only assesses the significance of association or relationship between two attributes (Chavan and Kulkarni, 2017), and not measure the direction and magnitude of the relationship (Kothari, 2010), a correlation test of the two values with the two airline model types (LCC and FSC) was conducted. The intention was to assess the degree or form of the relationship between the values (stimulation and universalism - tolerance) and airline model types.

The results indicated that someone driven by the stimulation value would likely choose a low-cost carrier (*rho* = .16, *p* = .007) compared to full-service airlines. Similarly, an individual with universalism-tolerance value will have an affinity towards full-service

carriers (rho = .13, p = .03) compared to low-cost airlines. Conventionally, these correlation scores are often deemed weak or small (Cohen, 1988, 1992; Hemphill, 2003; Gignac and Szodorai, 2016) or negligible (Mukaka, 2012). Therefore, regarding the claim in hypothesis H3a$_1$, these correlations, coupled with the results in Table 6.14 and 6.15 point out a minimal to no differential effect of airline model types on the influence of personal values on airline service attributes.

In the following subsection, hypothesis H3b$_1$ analysis and results are presented and briefly discussed.

6.3.3.2 Hypothesis H3b$_1$ Testing

H3b$_1$: There is a difference in the effect of airline service attributes on post-purchase outcomes and behaviour for low-cost carrier customers compared to full-service carriers' customers within the South African domestic passenger market?

Similar to H3a$_1$, this hypothesis was assessed using the Mann-Whitney test. However, in this case, the intention was to determine if the effect of airline service attributes (perceived service quality) on post-purchase outcomes and behaviour for low-cost carrier customers was the same for full-service carrier customers. Table 6.16 below displays the results.

Table 6.16: Mann-Whitney Test - Airline Model Type and Post-purchase Outcomes and Behaviour

	PPOB
Mann-Whitney U	8921.000
Wilcoxon W	12837.000
Z	-.215
Asymp. Sig. (2-tailed)	.830

a. Grouping Variable: AC_Model. PPOB = Post-purchase Outcomes and Behaviour

It can be seen from the table (above) that the results are insignificant, PPOB U =8921, p = .830. As such, the null hypothesis is accepted. This result means that there is no difference in the effect of airline service attributes on post-purchase outcomes and

behaviour for low-cost carrier customers compared to full-service carriers' customers within the South African domestic passenger market. Such was expected based on the results in Table 6.14, which indicated that there was no difference in how both low-cost and full-service airlines' customers evaluated airline service attributes.

6.3.4 Moderating Effect of Demographic Variables

According to Hayes and Montoya (2016), the concept of moderation is such that a variable M is said: "to moderate X's effect on Y if the effect of X on Y depends on M". The moderating effect of demographic variables has been investigated and reported in many studies across all human-related fields.

For example, Schwartz and Butenko (2014) and Schwartz *et al.* (2017) investigated the moderating role of gender on personal value - behaviour relations. Whilst in Schwartz *et al.* (2017), gender was found to have no moderating effect, Schwartz and Butenko (2014) reported otherwise. Furthermore, and within the airline industry, researchers (Chen and Chao, 2015; Jiang and Zhang, 2016; Pitchayadejanant and Nakpathom; 2016; Murugan, 2017; Sugianto, 2017) have also attempted to elucidate the moderating role of different demographic values, again with mixed outcomes.

In a bid to contribute to the demographic's moderation discourse, this study also explored the moderating effect of the two demographic variables on the personal values - airline service attributes relations and even on the airline service attributes - post-purchase outcomes and behaviour relations. The all-encompassing hypotheses posed were;

H4a$_1$: Income and education levels significantly moderate how personal values influence the airline service attributes used to choose an airline within the South African domestic passenger market.

H4b$_1$: Income and education levels significantly moderate the relationship between airline service attributes and post-purchase outcomes and behaviour.

To test these hypotheses, dependent variables were regressed on the independent (predictor) variables in a three-step process. In the first step, each airline attribute was regressed on each personal value. Then, in the second step, a moderator was added.

For the last step, an interaction variable (product of the moderator and personal value variables) was created and then added to each analysis, turning it into a hierarchical regression model.

6.3.4.1 Hypothesis H4a₁ Testing

To calculate the moderation effect, interaction term variables were created through standardizing the predictor and moderator (to z scores) and then multiplying the Z predictor variable by the Z moderator variable to get the interaction variables. Then using the hierarchical regression, the conditional effects of the income and education levels were tested on the relationships between the five values (identified in H1a₁) and each of the six airline service attributes as per the three steps indicated under section 6.3.4. The results are provided in Tables 6.17 and 6.18.

Table 6.17: Income Moderated Regression Analyses

Model	R^2	R^2 adj.	F	Sig.	Change statistics	
					R^2 change	Sig F change
1a	.009	.006	2.793	.096	.009	.009
2a	.016	.009	2.374	.095	.007	.164
3a	.044	.034	4.420	.005	.028	.004
1b	.118	.115	39.089	.000	.018	.000
2b	.132	.126	22.166	.000	.014	.030
3b	.132	.123	14.732	.000	.000	.904
1c	.019	.016	5.763	.017	.019	.017
2c	.020	.013	2.911	.056	.000	.780
3c	.035	.025	3.537	.015	.016	.031

Model	Predictors				t	P value
	Constant				17.977	.000
3a	Stim				1.733	.084
	Income				1.789	.075
	Int_Stim_Income				-2.897	.004
	Constant				18.029	.000
3b	Stim				6.444	.000
	Income				2.138	.033
	Int_Stim_Income				.121	.904

248

	Constant	14.223	.000
3c	SdT	1.887	.021
	Income	-.167	.867
	Int_SdT_Imcome	-2.171	.031

a = the relationship between Stimulation value and Booking and Check-in attribute; b = the relationship between Stimulation value and overall airline reliability attribute; c = the relationship between Self-direction thought value and Onboard Services attribute. Moderator variable = Income. Int_Stim_income and Int_SdT_Income are the product variables.

Table 6.17 provides the summary statistics for the three models which were statistically significant. Model 3a $F(3, 290) = 4.42$, $p = .005$, $R^2 = .04$ shows that both stimulation value ($t = 1.73$, $p = .08$) and income ($t = 1.79$, $p = .08$) did not have significant direct effect on booking and check-in attribute. However, the interaction variable thereof was significant at $t = -2.90$, $p = .004$, implying that there is a conditional effect between stimulation value and booking and check-in.

Model 3b $F(3, 290) = 14.73$, $p < .001$, $R^2 = .13$ give us a different result, both stimulation value ($t = 6.44$, $p < .001$) and income ($t = 2.14$, $p = .03$) have significant direct effect on airline's overall airline reliability while their product (Int_Stim_Income $t = .12$, $p = .90$) is not significant, implying that income does not moderate the relationship between stimulation value and overall airline reliability.

Also, model 3c $F(3, 290) = 3.537$, $p = .016$, $R^2 = .04$ shows different results where the predictor variable (self-direction thought value $t = 1.89$, $p = .021$) have significant direct effect, but the moderator (income $t = -.17$, $p = .867$) does not have direct effect on onboard services. The product of the two variables (Int_SdT_Income $t = -2.17$, $p = .031$) was significant indicating that income does moderate the effect of self-direction thought value and onboard services.

Table 6.18: Education Moderated Regression Analyses

Model	R²	R² adj.	F	Sig.	Change statistics	
					R² change	Sig F change
1a	.008	.005	2.448	.119	.008	.119
2a	.026	.019	3.819	.023	.017	.024
3a	.032	.022	3.190	.024	.006	.168
1b	.043	.040	13.200	.000	.043	.000
2b	.046	.040	7.091	.001	.003	.322
3b	.062	.052	6.369	.000	.015	.030
1c	.035	.031	10.497	.001	.035	.001
2c	.036	.029	5.370	.005	.001	.604
3c	.036	.026	3.636	.013	.001	.657

	Predictors		*t*	*P-value*	
3a	Constant		11.520	.000	
	Stim		1.210	.227	
	Education		-2.249	.025	
	Int_Stim_Education		1.382	.168	
3b	Constant		13.201	.000	
	Stim		3.767	.000	
	Education		.959	.339	
	Int_Stim_Education		-2.178	.030	
3c	Constant		15.806	.000	
	Ach		3.270	.001	
	Education		-.519	.604	
	Int_Ach_Education		.445	.657	

a = the relationship between Stimulation value and Airline reputation attribute; b = the relationship between Stimulation value and Onboard Services attribute; c = the relationship between Achievement value and Booking and Check-in attribute. Moderator variable = Education. Int_Stim_Education and Int_Ach_Education are the product variables.

As can be seen from the table above, out of the three significant models, only one model revealed a significant moderation effect of education on the relationship between personal values and airline service attribute. Model 3b in Table 6.18 with statistic $F(3, 290) = 6.37$, $p < .001$, $R^2 = .06$ shows that even though education does not have a direct effect ($t = .96$, $p = .339$) on onboard services, it however moderates (Int_Stim_Education $t = -2.18$, $p = .03$) the effect of stimulation value on onboard services.

In respect of hypothesis H4a$_1$, the results indicate that the income only moderates two relationships between the predictor variables (personal values) and outcome variables (airline service attributes). That is the relationship between stimulation value and booking and check-in services and between self-direction value and onboard services. On the other hand, education was found to be a moderator of the effect of stimulation value on onboard services.

6.3.4.2 Hypothesis H4b$_1$ Testing

This hypothesis focused on assessing if the effect of airline service attributes (perceived service) on post-purchase outcomes and behaviour depends on income and education levels. Like in H4a$_1$, the same process of standardizing the predictor and moderator (to Z scores) to create an interaction variable was followed. After that, hierarchical regression analyses of the relationship between each of the airline service attributes and post-purchase outcomes and behaviour was performed. The results are presented in Tables 6.19 to 6.20 below.

Table 6.19: Effect of Income on the Relationship Between Airline Service Attributes and Post-purchase Outcomes and Behaviour.

Model	R^2	R^2 adj.	F	Sig.	Change statistics	
					R^2 change	Sig F change
1a	.020	.016	5.887	.016	.020	.016
2a	.051	.045	7.889	.000	.032	.002
3a	.057	.047	5.850	.001	.006	.189
1b	.005	.002	1.586	.209	.005	.209
2b	.034	.028	5.193	.006	.029	.003
3b	.036	.026	3.571	.015	.001	.555
1c	.005	.002	1.520	.219	.005	.219
2c	.032	.026	4.856	.008	.027	.005
3c	.033	.023	3.250	.022	.000	.794
1d	.053	.050	16.407	.000	.053	.000
2d	.080	.073	12.603	.000	.027	.004
3d	.082	.073	8.685	.000	.003	.354
1e	.016	.013	4.782	.030	.016	.016
2e	.045	.038	6.799	.001	.029	.003
3e	.045	.035	4.550	.004	.000	.761
1f	.003	.000	.959	.328	.003	.328
2f	.030	.023	4.506	.012	.027	.005
3f	.031	.021	3.107	.022	.001	.566
Predictors				*t*		*P value*

3a	Constant	12.213	.000
	Over_Rel	2.830	.005
	Income	-3.182	.002
	Int_Over_Rel_Income	1.316	.189
3b	Constant	15.548	.000
	BKNGCI	1.485	.139
	Income	-2.869	.004
	Int_BKNGCI_Income	-.591	.555
3c	Constant	23.566	.000
	AIRREP	1.264	.207
	Income	-2.862	.005
	Int_AIRREP_Income	-.262	.794
3d	Constant	14.854	.000
	ONBSERVI	4.031	.000
	Income	-2.930	.004
	Int_ONBSERVI_Income	-.928	.354
3e	Constant	19.865	.000
	LOYPROGTP	2.327	.021
	Income	-2.944	.003
	Int_LOYPROGTP_Income	-.305	.761
3f	Constant	19.108	.000
	CABINFE	-.915	.361
	Income	-2.774	.006
	Int_CABINFE_Income	.575	.566

a = the relationship between Overall Airline Reliability (Over_Rel) and Post-purchase outcomes and behaviour; b = the between Booking and Check-in (BKNGCI) and Post-purchase outcomes and behaviour; c = the relationship between Airline Reputation (AIRREP) and Post-purchase outcomes and behaviour; d = the relationship between Onboard Services (ONBSERVI) and Post-purchase outcomes and behaviour; e = the relationship between Loyalty Programs and Ticket Price (LOYPROGTP) and Post-purchase outcomes and behaviour; f = the relationship between Cabin Features and Experiences (CABINFE) and Post-purchase outcomes and behaviour. Moderator variable = Income.

The results in Table 6.19 indicate that income does not moderate any of the relationships between airlines service attributes and post-purchase outcomes and behaviour. This is shown by interaction variables; Int_Over_Rel_Income t = 1.32, p = .189 (model 3a), Int_BKNGCI_Income t = -.59, p = .555 (model 3b), Int_AIRREP_Income t = -.26, p = .794 (model 3c), Int_ONBSERVI_Income t = -.93, p = .354 (model 3d), Int_LOYPROGTP_Income t = -.31, p = .761 (model 3e) and Int_CABINFE_Income t = .58, p = .566 (model 3f) that were not significant. Rather, the results confirm that income has a direct effect on post-purchase outcomes and behaviour as an independent variable than a moderator.

Table 6.20: Effect of Education on the Relationship Between Airline Service Attributes and Post-purchase Outcomes and Behaviour.

Model	R^2	R^2 adj.	F	Sig.	Change statistics	
					R^2 change	Sig F change
1a	.020	.016	5.887	.016	.020	.016
2a	.060	.054	9.334	.000	.041	.000
3a	.064	.054	6.572	.000	.003	.308
1b	.005	.002	1.586	.209	.005	.209
2b	.043	.036	6.492	.002	.037	.001
3b	.046	.037	4.701	.003	.004	.292
1c	.005	.003	1.520	.219	.005	.219
2c	.040	.033	6.052	.003	.035	.001
3c	.064	.055	6.640	.000	.025	.006
1d	.053	.050	16.407	.000	.053	.000
2d	.093	.087	14.987	.000	.040	.000
3d	.095	.085	10.097	.000	.001	.538
1e	.016	.013	4.782	.030	.016	.030
2e	.050	.043	7.657	.001	.034	.001
3e	.052	.043	5.339	.001	.002	.398
1f	.003	.000	.959	.328	.003	.328
2f	.041	.035	6.245	.002	.038	.001
3f	.041	.032	4.179	.006	.000	.769

	Predictors	*t*	*P-value*
3a	Constant	12.566	.000
	Over_Rel	2.623	.009
	Education	-3.478	.001
	Int_Over_Rel_ Education	1.022	.308
3b	Constant	15.315	.000
	BKNGCI	1.282	.201
	Education	-3.310	.001
	Int_BKNGCI_ Education	-1.056	.292
3c	Constant	21.940	.000
	AIRREP	.721	.471
	Education	-3.472	.001
	Int_AIRREP_ Education	2.746	.006
3d	Constant	14.993	.000
	ONBSERVI	4.218	.000
	Education	-3.593	.000
	Int_ONBSERVI_ Education	-.617	.538
3e	Constant	18.831	.000
	LOYPROGTP	1.945	.053
	Education	-3.243	.001
	Int_LOYPROGTP_ Education	-.847	.398
3f	Constant	19.003	.000
	CABINFE	-.978	.329
	Education	-3.395	.001
	Int_CABINFE_ Education	.294	.769

a = the relationship between Overall Airline Reliability (Over_Rel) and Post-purchase outcomes and behaviour; b = the between Booking and Check-in (BKNGCI) and Post-purchase outcomes and behaviour; c = the relationship between Airline Reputation (AIRREP) and Post-purchase outcomes and behaviour; d = the relationship between Onboard Services (ONBSERVI) and Post-

purchase outcomes and behaviour; e = the relationship between Loyalty Programs and Ticket Price (LOYPROGTP) and Post-purchase outcomes and behaviour; f = the relationship between Cabin Features and Experiences (CABINFE) and Post-purchase outcomes and behaviour. Moderator variable = Education.

As can be seen from the table, all the regression models (labelled 3a, 3b, 3c, 3d, 3e and 3f in the upper part of the table) between each of the airline service attributes and post-purchase outcomes and behaviour were significant. However, a closer inspection of the results of the effect at the bottom of the table indicates that education was not a significant moderator on all the models, except on model 3c.

Model 3a $F(3, 290) = 6.57$, $p < .001$, $R^2 = .06$ reveal that education had a direct effect ($t = -3.48$, $p = .001$) on post-purchase outcomes and behaviour and an insignificant moderation effect with Int_Over_Rel_ Education $t = 1.02$, $p = .308$. Similarly, in model 3b, education did not have any moderating effect with Int_BKNGCI_ Education $t = -1.06$, $p = .292$, but a direct effect ($t = -3.31$, $p = .001$) on post-purchase outcomes and behaviour. This lack of moderating effect is also visible in model 3d, 3e and 3f where interaction statistics are $t = -.62$, $p = .538$; $t = -.85$, $p = .398$ and $t = .29$, $p = .769$ respectively.

As indicated earlier, education was found to be a significant moderator (Int_AIRREP_ Education $t = 2.75$, $p = .006$) on the relationship between airline reputation and post-purchase outcomes and behaviour. Also, education had a direct effect ($t = -3.47$, $p = .001$) on the dependent variable. Interestingly, air reputation, on its own, did not exhibit any main effect ($t = .72$, $p = .471$) on the dependent variable, implying that its influence on post-purchase outcomes and behaviour depends only on education levels.

In response to H4b$_1$, the above results show that income does not moderate any of the relationships between the six airline service attributes and post-purchase outcomes and behaviour. Education was found to moderate only the effect of airline reputation on post-purchase outcomes and behaviour. In the next section, results for moderation hypotheses for marketing communications effort is presented and narrated.

6.3.5 Moderating Effect of Marketing Communications (H5a$_1$ and H5b$_1$)

The focus of the analyses was twofold. The first set of analyses (H5a$_1$) intended to investigate the moderating effect of marketing communications effort on the influence of personal values on the evaluation of airline service attributes. The second set (H5b$_1$) focused on the moderating effect of airline service attributes (perceived service) on post-purchase outcomes and behaviour. Thus, the hypotheses were as follows:

H5a$_1$: Airline marketing communications effort moderates the influence of personal values on the evaluation of airline service attributes used to choose an airline within the airline industry in South Africa.

H5b$_1$: Airline marketing communications effort moderates the impact of airline service attributes on post-purchase outcomes and behaviour within the airline industry in South Africa.

The analyses were conducted using Hayes Process Version 3.5 macro extension for SPSS. Unlike with regression analysis where an interaction variable has to be created, Process macro takes off such computation burden (Hayes and Montoya, 2016). Furthermore, the Process macro allows for data to be treated for heteroscedastic variances. For this analysis, Davidson-MacKinnon (HC3), which according to Long and Ervin (2000) is a superior version of a heteroscedasticity consistent covariance matrix estimator (HCCME).

Each of the six airline services latent constructs were regressed against each of the personal values identified under hypothesis H1$_1$, bringing to thirty models. Airline marketing communications effort was divided into two constructs (marketing messages and marketing communications mix), which were applied as the dual moderators. To avoid cluttered presentation, only models wherein the moderators were found significant are presented hereunder.

6.3.5.1: Regression of Airline Service Attributes on Self-direction Though Value

When airline service attributes were regressed on the self-direction thought value, four models emerged significantly, and the results are provided in Tables 6.21 - 6.23.

Table 6.21: Moderation of the Effect of Self-direction Thought Value on Overall Airline Reliability.

Model Summary

R	R²	MSE	F(HC3)	df1	df2	p
.3913	.1531	.2585	14.3950	5	288	.0000

	Coeff	Se(HC3)	t	p	LLCI	ULCI
Constant	3.9398	.0307	128.4200	.0000	3.8794	4.0001
SdT	.2059	.0410	5.0173	.0000	.1251	.2867
MarkMess	.0298	.0539	.5535	.5804	-.0763	.1359
Int_1	.2256	.0837	2,6947	.0075	.0608	.3904
MarkMix	.0299	.0455	.6576	.5113	-.0596	.1194
Int_2	-.0840	.0675	-1.2442	.2144	-.2169	.0489

	R² change	F(HC3)	df1	df2	p
X*W	.0310	7.2613	1	288	.0075
X*Z	.0080	1.5481	1	288	.2144
Both	.0312	3.8249	1	288	.0229

Dependent (Y) variable: Over_Rel = Overall Airline Reliability. Independent (X) variable: SdT = Self-direction Thought value. Moderator (W) variable: MarkMess = Marketing Messages and Moderator (Z): MarkMix = Marketing Communications Mix Elements. Int_1 = SdT x MarkMess and Int_2 = SdT x MarkMix.

From Table 6.21, it can be seen that the model for all predictors was significant at $F_{(5, 288)}$ = 14.40, $p < .001$ and R^2 = .15. The results also reveal that SdT significantly predicted the evaluation and prioritisation of overall airline reliability $b = .21$, $t(288) = 5.02$, $p < .001$. However, marketing messages $b = .03$, $t(288) = .55$, $p = .580$ and marketing communications mix $b = .03$, $t(288) = .66$, $p = .511$ were found not to predict the evaluation and prioritisation of overall airline reliability when choosing an airline.

The results further reveal that the addition of Int_1: SdT x MarkMess $F(1, 288) = 7.26$, p = .008, R^2-change = .03 contributed 3% of the variance explained by the full model (R^2 = .015) while the addition of Int_2: SdT x MarkMix $F(1, 288) = 1.55$, $p = .214$, R^2-change = .008 was not significant. The addition of both interaction terms above, though significant $F(1, 288) = 3.82$, $p = .022$, R^2 change = .03 did not bring any marginal contribution to the variance explained by the model. As such, the results point out that only marketing messages moderate the effect of self-direction thought value on the evaluation and prioritisation of overall airline reliability when choosing an airline. Figure 6.17 depicts the relationship among the variables in the model.
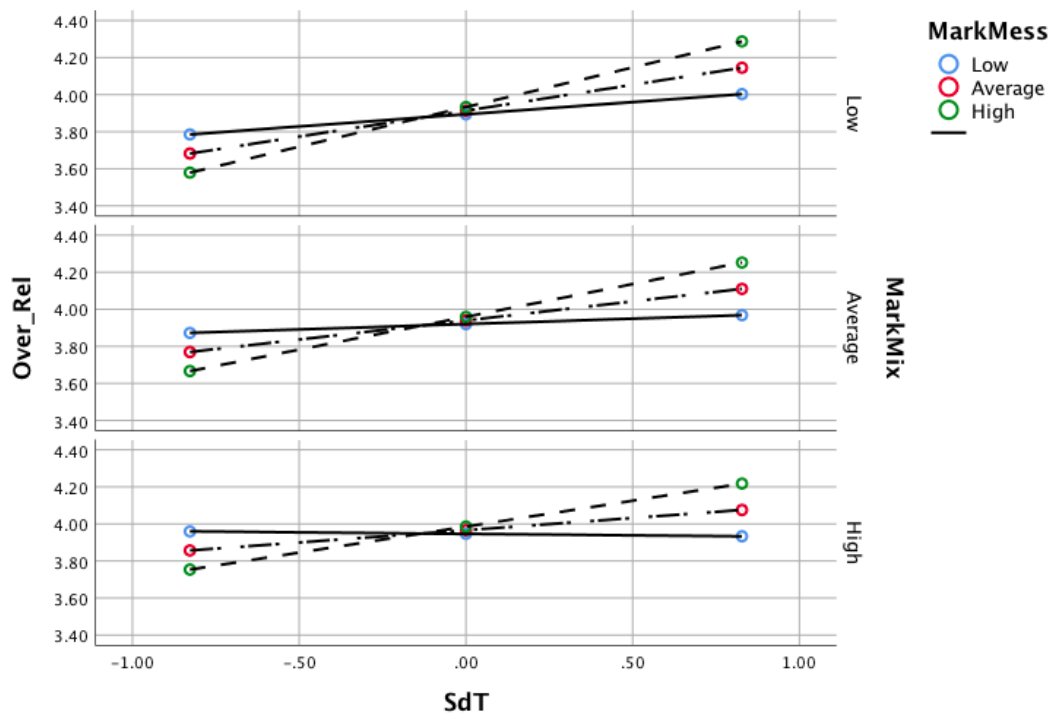
Figure 6.17: Moderation of Self-direction Thought on Overall Airline Reliability.

Table 6.22 below provides results for the moderation effect of marketing communications effort (marketing messages and marketing communications mix) on the influence of self-direction thought value on the evaluation and prioritisation of onboard services when choosing an airline. For all predictor variables, the model $F(5, 288) = 5.10$, $p < .001$, $R^2 = .07$ was significant.

Table 6.22: Moderation of the Effect of Self-direction Thought Value on Onboard Services.

Model Summary

R	R	MSE	F(HC3)	df1	df2	p
.2655	.0705	.3506	5.0986	5	288	.0002

	Coeff	Se(HC3)	t	p	LLCI	ULCI
Constant	3.4253	.0350	97.9418	.0000	3.3564	3.4941
SdT	.0819	.0436	1.8778	.0614	-.0039	.1678
MarkMess	.0297	.0695	.4274	.6694	-.1072	.1666
Int_1	.1923	.0875	2.1968	.0288	.0200	.3646
MarkMix	.0918	.0469	1.9591	.0511	-.0004	.1841
Int_2	-.0722	.0531	-1.3589	.1752	-.1767	.0324

	R^2 change	F(HC3)	df1	df2	p	
X*W	.0182	4.8258	1	288	.0288	
X*Z	.0048	1.8467	1	288	.1752	
Both	.0183	2.4176	1	288	.0909	

Dependent (Y) variable: ONBSERVI = Onboard Services. Independent (X) variable: SdT = Self-direction Thought Value. Moderator (W) variable: MarkMess = Marketing Messages and Moderator (Z): MarkMix = Marketing Communications Mix Elements. Int_1 = SdT x MarkMess and Int_2 = SdT x MarkMix.

As shown in the table above, the desire to achieve self-direction thought value by individuals does not directly influence the evaluation and prioritisation of onboard services when choosing an airline. This is indicated by the obtaining regression statistic for self-direction thought value b = .08, t = 1.88, p = .061 on the dependent variable. Furthermore, the results indicate that airline's marketing messages b = .03, t = .43, p = .669 and

marketing communications mix $b = .09$, $t = 1.96$, $p = .051$ does not predict the evaluation and prioritisation of onboard services as an attribute of airline choice.

Since the focus of the analysis was on the moderation effect of the marketing communications effort, the interaction terms statistics show that the addition of Int_1: SdT x MarkMess $F(1, 288) = 4.83$, $p = .029$, R^2 change $= .02$, significant contribution considering that R^2 for the entire model was .07. On the other hand, the marginal contribution of adding Int_2: SdT x MarkMix to the model was not significant $F(1, 288) = 1.85$, $p = .175$, R^2 change $= .005$. Therefore, it can be concluded that the influence of self-direction thought value on the evaluation and prioritisation of onboard services is partially dependent on the values of marketing messages crafted by an airline.

This relationship among the variables in this model, that is, the focal predictor variable (self-direction thought value), the moderators (marketing messages and marketing communications mix) and the dependent variable (evaluation and prioritisation of onboard services) graphically presented in Figure 6.18.
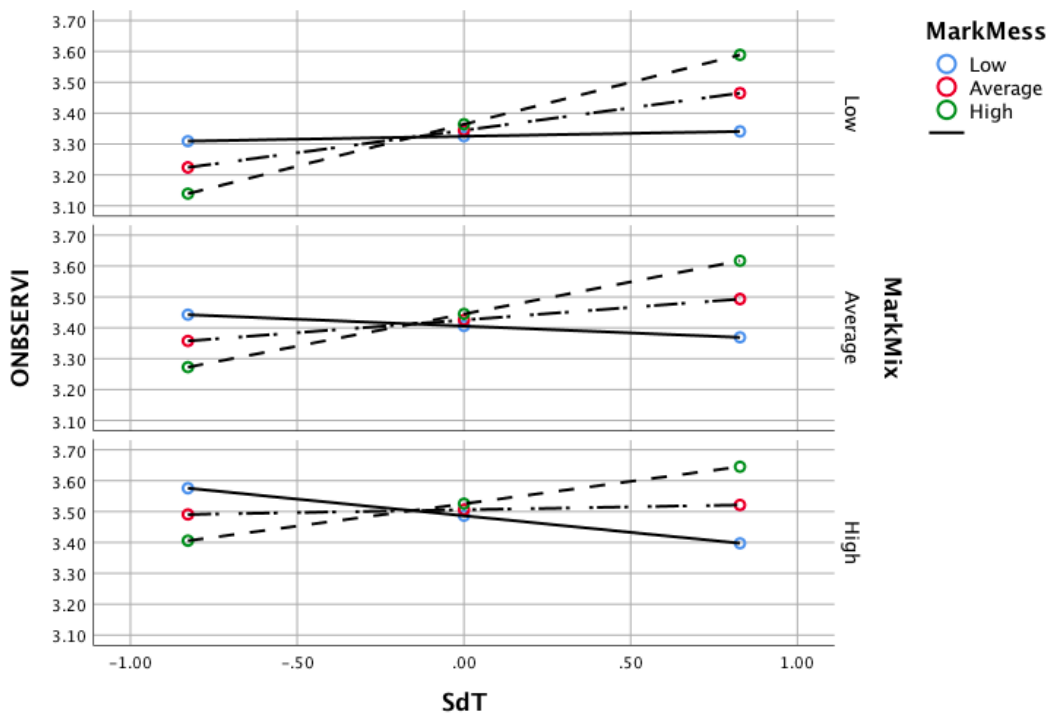
Figure 6.18: Moderation of Self-direction Thought on Onboard Services.

The last significant moderation model of the effect of self-direction thought value on airline service attributes was the one on loyalty programs and ticket price $F(5, 288) = 2.73$, $p = .02$, $R^2 = .06$. Table 6.23 below provides the regression results thereof.

Table 6.23: Moderation of the Effect of Self-direction Thought Value on Loyalty Programs and Ticket Price.

Model Summary

R	R	MSE	F(HC3)	df1	df2	p
.2388	.0570	.5169	2.7266	5	288	.0200

	Coeff	Se(HC3)	t	p	LLCI	ULCI
Constant	3.3794	.0423	79.8236	.0000	3.2961	3.4627
SdT	-.0322	.0572	-.5629	.5740	-.1447	.0804
MarkMess	.2037	.0846	.4274	.0167	.0371	.3703
Int_1	.1579	.1233	2.4071	.2014	-.0848	.4005
MarkMix	.0151	.0592	1.2804	.7995	-.1015	.1317
Int_2	-.1698	.0857	-1.9822	.0484	-.3385	-.0012

	R² change	F(HC3)	df1	df2	p
X*W	.0085	1.6395	1	288	.2014
X*Z	.0183	3.9290	1	288	.0484
Both	.0186	1.9751	1	288	.1406

Dependent (Y) variable: LOYPROGTP = Loyalty Programs and Ticket Price. Independent (X) variable: SdT = Self-direction Thought Value. Moderator (W) variable: MarkMess = Marketing Messages and Moderator (Z): MarkMix = Marketing Communications Mix Elements. Int_1 = SdT x MarkMess and Int_2 = SdT x MarkMix.

The results show that self-direction thought value $b = -.03$, $t = -.56$, $p = .574$ does predict the evaluation and prioritisation of loyalty programs and ticket prices as an airline choice attribute. For marketing communications latent constructs, airline marketing messages b

= .20, t = .43, p = .017 were found to be significantly related to the evaluation and prioritisation of loyalty programs and ticket price while marketing communication mix b = .02, t = 1.28, p = .800 was not significant.

As a test of moderation effect, the results show that the addition of the Int_1: SdT x MarkMess $F(1, 288)$ = 1.64, p = .201, R^2 change = .008 was not significant. On the other hand, the statistic $F(1, 288)$ = 3.93, p = .048, R^2 change = .02 indicate that the addition of the interaction variable (Int_2: SdT x MarkMix) was significant and it contributed 33% (that is 2% of the 6%) variance explained by the model. The combined addition of the two interaction terms, though with a small effect on R^2 change, was not significant at $F(1, 288)$ = 1.98, p = .141, R^2 change = .019.

In line with the hypothesis (H5a$_1$), these interaction results indicate that airline marketing mix does moderate the effect of self-direction thought value on the evaluation and prioritisation of loyalty programs and ticket price when choosing an airline. Figure 6.19 provides a graphical depiction of how the two moderators interact with the focal predictor and dependent variables.
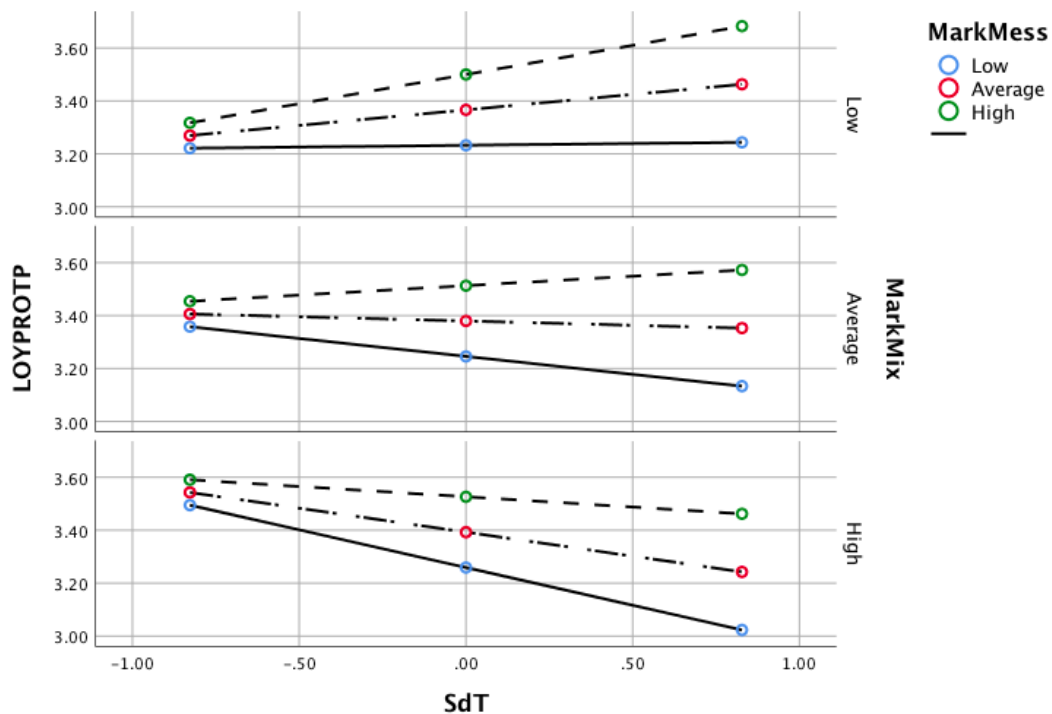
Figure 6.19: Moderation of Self-direction Thought on Loyalty Programs and Ticket Price.

6.3.5.2: Regression of Airline Service Attributes on Stimulation Value

Another set of regression analysis was run to determine if airline marketing messages and marketing communications mix moderated the relationship between stimulation value and the evaluation of all the six airline service attributes identified through exploratory factor analysis (see Table 6.2). In the table below, results for moderation analysis for the effect of stimulation value on overall airline reliability as a factor of airline choice are shown. The results of these analyses are presented in Tables 6.24 and 6.25.

Table 6.24: Moderation of the Effect of Stimulation Value on Overall Airline Reliability.

Model Summary

R	R	MSE	F(HC3)	df1	df2	p
.4156	.1727	.2526	6.8216	5	288	.0000

	Coeff	Se(HC3)	t	p	LLCI	ULCI
Constant	3.9703	.0281	141.2438	.0000	3.9150	4.0256
Stim	.1947	.0371	5.2417	.0000	.1216	.2677
MarkMess	.0378	.0536	.7056	.4810	-.0677	.1434
Int_1	.0868	.0918	.9455	.3452	-.0939	.2675
MarkMix	.0327	.0376	.8713	.3843	-.0412	.1067
Int_2	-.1945	.0652	-2.9838	.0031	-.3228	-.0662

	R^2 change	F(HC3)	df1	df2	p
X*W	.0047	.8939	1	288	.3452
X*Z	.0434	8.9032	1	288	.0031
Both	.0500	4.8779	1	288	.0083

Dependent (Y) variable: Over_Rel = Overall Airline Reliability. Independent (X) variable: Stim = Stimulation Value. Moderator (W) variable: MarkMess = Marketing Messages and Moderator (Z): MarkMix = Marketing Communications Mix Elements. Int_1 = Stim x MarkMess and Int_2 = Stim x MarkMix.

The model for all predictors was significant at $F_{(5, 288)} = 6.82$, $p < .001$ and $R^2 = .17$. Looking at the main effects in the model, it can be seen that stimulation value $b = .19$, $t = 5.24$, $p < .001$ predicts the evaluation and prioritisation of overall airline reliability when choosing an airline. From the table, the statistics for marketing messages $b = .04$, $t = .71$, $p = .481$ and marketing communication mix elements $b = .03$, $t = .87$, $p = .384$ indicate that the two constructs of marketing communications effort does not predict the evaluation and prioritisation of overall airline reliability as an airline choice attribute.

On the interactions, it can be seen that the addition of Int_1: Stim x MarkMess $F_{(5, 288)} = .89$, $p = .345$, R^2 change $= .005$ was not significant, implying that airline market messages do not moderate the effect of stimulation value on the evaluation and prioritisation of overall airline reliability when choosing an airline. To the contrary, the addition of Int_2: Stim x MarkMix was significant $F_{(5, 288)} = 8.90$, $p = .003$, R^2 change $= .04$, implying that the addition of this interaction term contributed 4% of the 17% variance explained by the entire model. More so, it suggests that the marketing communication mix does modify the influence of stimulation value on the evaluation and prioritisation of overall airline reliability when choosing an airline.

Also, the combined addition (marked as 'Both' in the table) of the above interaction terms was significant $F_{(5, 288)} = 4.88$, $p = .008$, R^2 change $= .05$, indicating that together, the two moderators affect the relationship between stimulation value and overall airline reliability. A graphical presentation of the main (direct) and interaction (moderation) effects are provided in Figure 6.20.
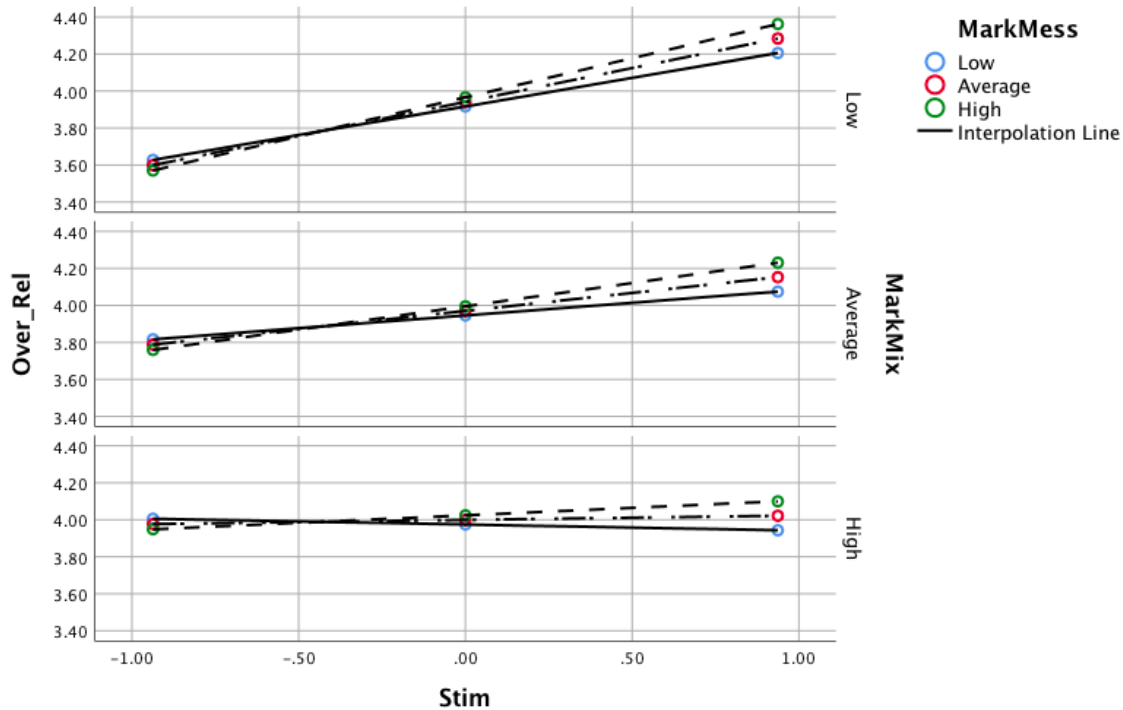
Figure 6.20: Moderation of Stimulation Value on Overall Airline Reliability.

The next table presents the results for moderation analysis of the effects of stimulation value on the evaluation and prioritisation of onboard service as an important factor when choosing an airline. The model $F(5, 288) = 5.36$, $p < .001$, $R^2 = .08$ for all predictors was significant; hence, worth interpreting. Table 6.25 below presents the analysis results thereof.

Table 6.25: Moderation of the Effect of Stimulation Value on Onboard Services.

Model Summary

R	R	MSE	F(HC3)	df1	df2	p
.2855	.0815	.3464	5.3621	5	288	.0001

	Coeff	Se(HC3)	t	p	LLCI	ULCI
Constant	3.4440	.0346	99.4485	.0000	3.3758	3.5122
Stim	.1124	.0362	3.1071	.0021	.0412	.1837
MarkMess	.0380	.0662	.5745	.5660	-.0922	.1682

264

Int_1	.0688	.0834	.8245	.4103	-.0954	.2329
MarkMix	.0929	.0437	2.1266	.0343	.0069	.1788
Int_2	-.1262	.0543	-2.3257	.0207	-.2331	-.0194

	R^2 change	F(HC3)	df1	df2	p
X*W	.0024	.6799	1	288	.4103
X*Z	.0148	5.4087	1	288	.0207
Both	.0161	2.9817	1	288	.0523

Dependent (Y) variable: ONBSERVI = Onboard Services. Independent (X) variable: Stim = Stimulation Value. Moderator (W) variable: MarkMess = Marketing Messages and Moderator (Z): MarkMix = Marketing Communications Mix Elements. Int_1 = Stim x MarkMess and Int_2 = Stim x MarkMix.

The main effect results indicate that both stimulation value $b = .11$, $t = 3.11$, $p = .002$ and marketing communication mix $b = .09$, $t = 2.13$, $p = .034$ are significant predictors of the evaluation and prioritisation of onboard services when choosing an airline. Marketing messages $b = .04$, $t = .57$, $p = .566$ was found not to predict the evaluation and prioritisation of onboard services when choosing an airline.

As for moderation effect, the unconditional interactions statistic $F(1, 288) = .68$, $p = .410$, R^2 change = 002 indicates that the impact of stimulation value on the evaluation and prioritisation of onboard services when choosing an airline is not moderated by marketing messages. The results also show that the addition of the Int_2: Stim x MarkMix $F(1, 288)$ = 5.41, $p = .021$, R^2 change = 014 was significant, implying that marketing communications mix elements do moderate the effect of stimulation value on the evaluation and prioritisation of onboard services when choosing an airline. Figure 6.23 depicts how the model variables relate to each other.
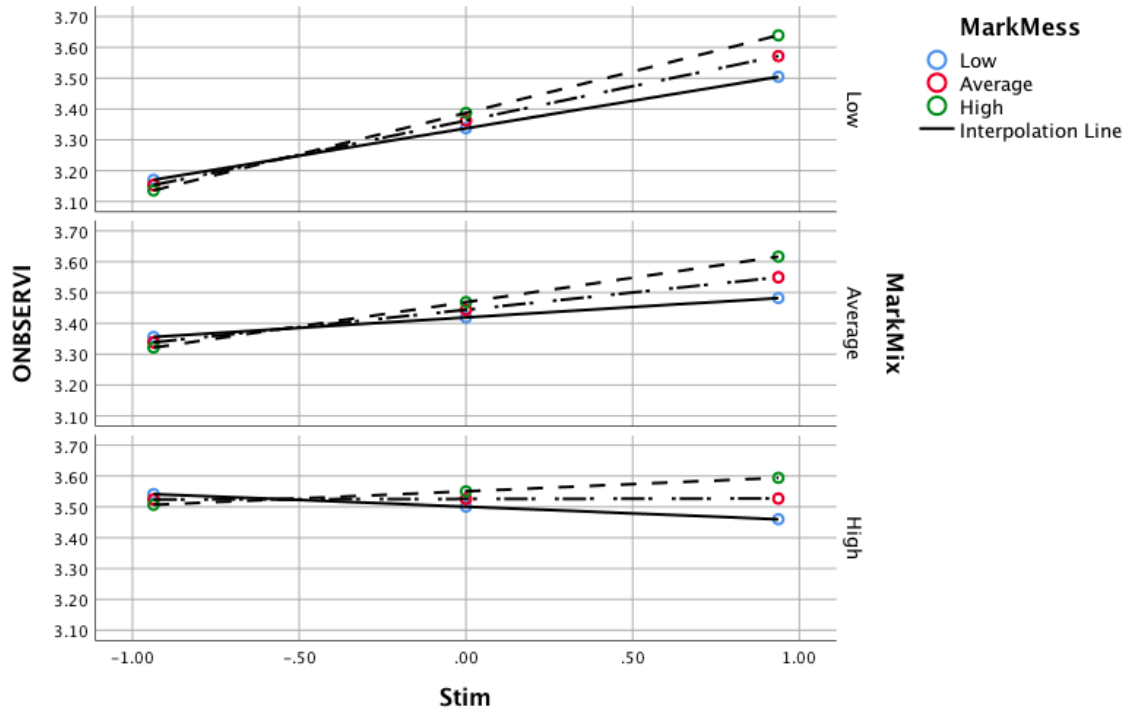
Figure 6.21: Moderation of Stimulation Value on Onboard Services.

6.3.5.3: Regression of Airline Service Attributes on Universalism Tolerance Value

Out of the six sets of regression of each airline service attribute on the universalism tolerance value, only one had a significant interaction variable. The results of this model are presented in Tables 6.26.

Table 6.26: Moderation of the Effect of Universalism Tolerance Value on Overall Airline Reliability.

Model Summary						
R	R	MSE	F(HC3)	df1	df2	p
.3337	.1114	.2713	7.0298	5	288	.0000

	Coeff	Se(HC3)	t	p	LLCI	ULCI
Constant	3.9409	.0295	133.6891	.0000	3.8829	3.9989
UnT	.1807	.0336	5.3849	.0000	.1146	.2467
MarkMess	.0328	.0546	.6003	.5487	-.0747	.1402

Int_1	.1389	.0646	2.1489	.0325	.0117	.2661
MarkMix	.0473	.0490	.9660	.3348	-.0491	.1437
Int_2	-.0966	.0565	-1.7101	.0883	-.2079	.0146

	R² change	F(HC3)	df1	df2	p
X*W	.0121	4.6177	1	288	.0325
X*Z	.0108	2.9243	1	288	.0883
Both	.0143	2.4487	1	288	.0882

Dependent (Y) variable: Over_Rel = Overall Airline Reliability. Independent (X) variable: UnT = Universalism Tolerance Value. Moderator (W) variable: MarkMess = Marketing Messages and Moderator (Z): MarkMix = Marketing Communications Mix Elements. Int_1 = UnT x MarkMess and Int_2 = UnT x MarkMix.

The main effects results in the table above show that universalism tolerance value $b =$ .18, $t = 5.38$, $p < .001$ do predict the evaluation and prioritisation of overall airline reliability when choosing an airline. The results also reveal that airlines' marketing messages $b =$ .03, $t = .60$, $p = .549$ and marketing communications mix elements $b = .05$, $t = .97$, $p =$ .334 were not significant; hence, does not predict the evaluation and prioritisation of an overall airline reliability when choosing an airline.

Regarding moderation effect, the statistic for the addition of Int_1: UnT x MarkMess $F(1, 288) = 4.62$, $p = .033$, R^2 change = .01 shows that marketing messages do modify the effect of universalism tolerance values on the evaluation and prioritisation of overall airline reliability when choosing an airline. On the contrary, the addition of Int_2: UnT x MarkMix $F(1, 288) = 2.92$, $p = .088$, R^2 change = .01 indicates that marketing communications mix elements does not moderate the relationship between the focal predictor and the dependent variables. The relationship between the variables in this model is depicted in Figure 6.22.
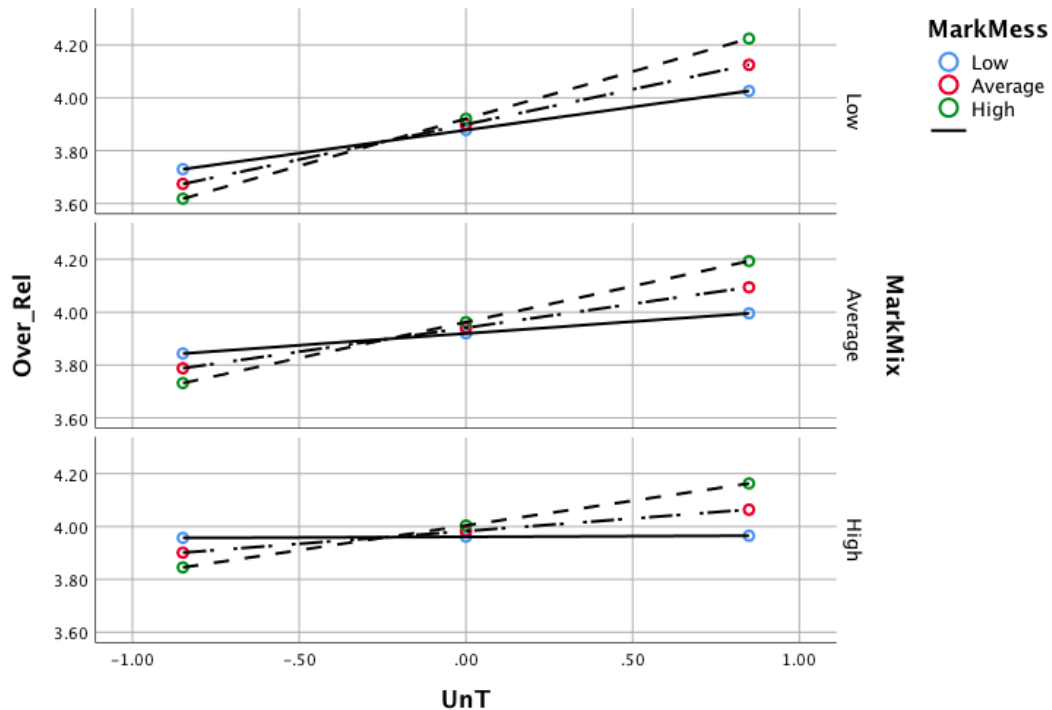
Figure 6.22: Moderation of Universalism Tolerance Value on Overall Airline Reliability.

In summary and to answer hypothesis H5a$_1$, airline marketing messages moderate the effect of self-direction thought value on the evaluation and prioritisation of overall airline reliability and onboard services and the impact of universalism tolerance value on the evaluation and prioritisation of overall airline reliability. On the other hand, marketing communications mix moderate the effect of self-direction thought value on the evaluation and prioritisation of loyalty programs and ticket price. The construct was also found to modify the relationships between stimulation value and overall airline reliability, and also stimulation value and onboard services.

The two constructs had a significant combined unconditional effect on the relationships between self-direction thought value and overall airline reliability and between stimulation value and overall airline reliability. A closer inspection of the conditional effects of the focal predictors at values of the moderators reveals an inverse relationship of the two latent constructs of marketing communications effort (see the graphical depictions in Figures 6.17 and 6.20).

That is, at all levels of marketing messages, when marketing communications mix elements are increased, the effect of the focal predictor on the dependent variable decreases. Such is expected from an integrated marketing communications perspective, which emphasises the integration of the various aspects of marketing communications effort (Shimp and Andrews, 2013; Clow and Baack, 2018; Belch and Belch, 2018). As a result, there has been an increase in studies on omnichannel marketing emphasising on integrating the promotional mix elements and marketing messages, for example, Hansen and Sia (2015), Verhoef, Kannan and Imnan (2015), Fulgoni (2016), and Payne, Peltier and Barger (2017).

The following subsection addresses hypothesis $H5b_1$ which focused on the moderation effects of airline marketing messages and the marketing communications mix on the relationship between airline service attributes and post-purchase outcomes and behaviour.

6.3.5.4: Regression of Post-purchase Outcomes and Behaviour on Airline Service Attributes ($H5b_1$ Testing)

To test the moderation effect of marketing communications effort constructs (marketing messages and marketing communications mix), post-purchase outcomes and behaviour construct were regressed on each of the six airline attributes. All six models were significant. However, a closer inspection of these models indicated that save for the one regressing post-purchase outcomes and behaviour on onboard services, the predictor and moderator variables were not significant in the other models.

As such, only the results for the model regressing post-purchase outcomes and behaviour on onboard services are presented in Table 6.27.

Table 6.27: Moderation of the Effect of Onboard Services on Post-purchase Outcomes and Behaviour.

Model Summary

R	R	MSE	F(HC3)	df1	df2	p
.3401	.1157	.4257	10.6500	5	288	.0000

	Coeff	Se(HC3)	t	p	LLCI	ULCI
Constant	4.1245	.0397	103.9989	.0000	4.0464	4.2025
ONBSERVI	.1989	.0644	3.0906	.0022	.0722	.3256
MarkMess	.0954	.0658	1.4499	.1482	-.0341	.2248
Int_1	-.1344	.1075	-1.2504	.2122	-.3460	.0772
MarkMix	.1480	.0486	3.0420	.0026	.0522	.2437
Int_2	.0944	.0717	1.3153	.1894	-.0468	.2356

	R^2 change	F(HC3)	df1	df2	p	
X*W	.0043	1.5636	1	288	.2122	
X*Z	.0038	1.7301	1	288	.1894	
Both	.0051	1.0433	1	288	.3536	

Dependent (Y) variable: PPOB = Post-purchase Outcomes and Behaviour. Independent (X) variable: ONBSERVI = Onboard Services. Moderator (W) variable: MarkMess = Marketing Messages and Moderator (Z): MarkMix = Marketing Communications Mix Elements. Int_1 = ONBSERVI x MarkMess and Int_2 = ONBSERVI x MarkMix.

As can be seen from the table (top part), the model for all the predictors was significant at F(5, 288) = 10.65, p < .001, R^2 = 12. Further inspection shows that only onboard services b = .20, t = 3.09, p = .002 and marketing communication mix b = .15, t = 3.04, p = .002 were significant predictors of post-purchase outcomes and behaviour. Marketing messages construct was not significant, implying that it does not have a direct effect on post-purchase outcomes and behaviour.

However, despite marketing communication mix having a direct effect on the dependent variable, the results indicate that addition of interaction terms (Int_1: ONBSERVI x MarkMess b = -.13, $t(288)$ = -1.25, p = .212 and Int_2: ONBSERVI x MarkMix b =.09, $t(288)$ = 1.32, p = .189) did not contribute significantly to the variance explained by the model. These results signify that both marketing messages and marketing mix do not moderate the effect of onboard services on post-purchase outcomes and behaviour. Figure 6.23 depicts the relationship among the variables in the model.
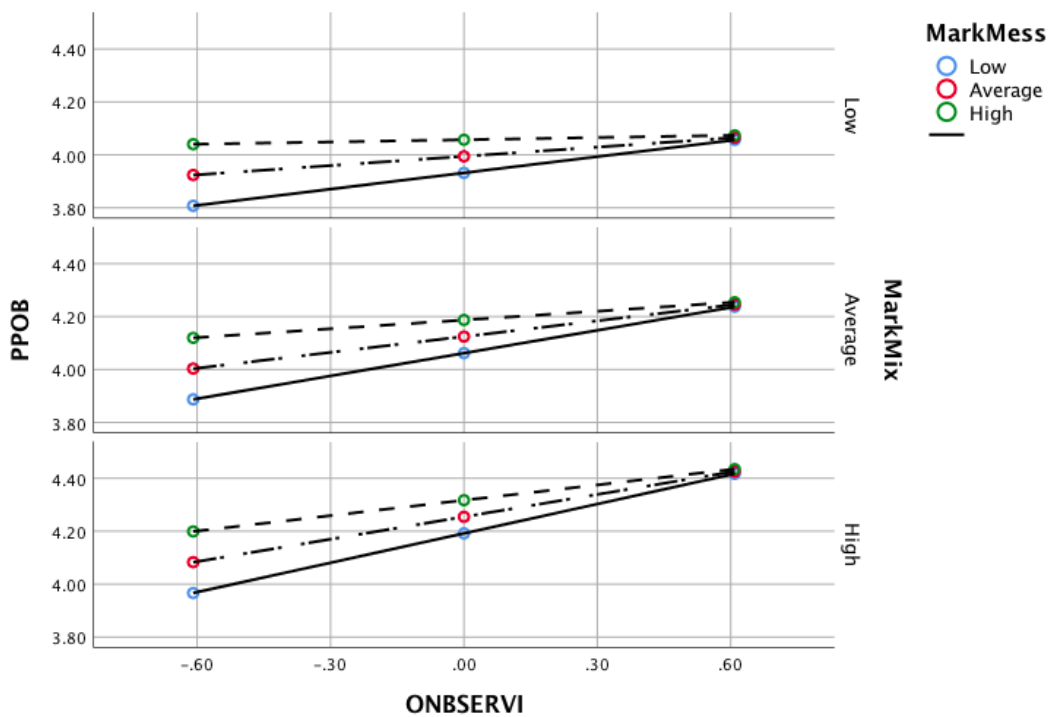
Figure 6.23: Moderation of Benevolence Care Value on Booking and Check-in Services.

The interaction results of the model in Table 6.27 and all other models (not presented) suggest that airline marketing messages and marketing communication mix does not moderate the relationship between airline service attributes and post-purchase outcomes and behaviour. This is possible mainly where marketing communications effort does not capture how airline services assist passengers in achieving their personal values. In the next subsection, results for testing the last hypothesis of the study (H6$_1$).

6.3.6: Hypothesis (H6₁) Testing

H6₁: Consumer personal values directly impact on post-purchase outcomes and behaviour within the South African domestic passenger market.

The focus of this hypothesis was to determine if the consumer personal values (identified in H1) also explicate post-purchase outcomes and behaviour within the South African domestic passenger market. Regression analysis was conducted to build a model that explains the relationship between personal values and post-purchase outcomes and behaviour. The results of the analysis are provided in Table 6.28 below.

Table 6.28: Relationship between Personal Values and Post-purchase outcomes and behaviour.

Model		B	Std. Error	Beta	t	R^2	Adjusted R^2	R^2 Change	Tolerance	VIF
4	(Constant)	3.787	.271		13.965	.052	.046	-.002		
	Stim	.173	.044	.235**	3.947				.915	1.093
	Bec	-.090	.050	-.107	-1.788				.915	1.093

Dependent Variable: Post-purchase outcomes and behaviour. Independent Variable: Stim = Stimulation value, BeC = Benevolence Care value. *$p<.05$, **$p<.001$

The results depicted in the table above are from a backward regression analysis which ran four models. All the models were significant with the fourth model summary statistics being $F(2, 291) = 8.01$, $p < .001$, adjusted $R^2 = .05$. The results further reveal that only stimulation value ($t = 3.95$, $p < .001$) was found to predict post-purchase outcomes and behaviour. Save for benevolence care ($t = -1.79$, $p = .075$), other personal values were eliminated in the first three models run. Therefore, concerning H6₁, the results indicate that only stimulation value can significantly explain post-purchase outcomes and behaviour.

6.4 SUMMARY

This chapter provided the meeting point for literature-based theorisations with empirical evidence. The first part of the chapter dealt with the descriptive statistics for the study. This was important as it painted a clear picture and grounding of the analytical framework.

The descriptive part of the chapter focused on characterising the sample from which the data analysed was drawn from.

Firstly, the data were tested for any violations of various assumptions before inferential statistical analysis. Secondly, all the observed variables, except for the 57 item personal values, were assessed for factorability using the exploratory factor analysis (EFA). Six latent constructs for airline services attributes, two latent constructs for marketing communications effort and composite post-purchase outcomes and behaviour were retained. Personal values (57 items) were assessed using the confirmatory factor analysis (CFA) to confirm their distinctiveness and structure. The outputs of both EFA and CFA were then used for further hypothesis testing.

To simplify the models for hypothesis testing, a backward regression analysis was employed to streamline the nineteen personal values into only those that could significantly predict airline preference (a proxy of airline choice). Of the nineteen values, only five were found significant and were used for answering hypotheses $H1_1$, $H3b_1$, $H4b_1$, $H5b_1$ and $H6_1$. In the following chapter, the hypotheses testing results presented in this chapter are discussed in detail and conclusions and recommendations drawn to complete the study.

CHAPTER 7: DISCUSSION OF RESULTS, CONCLUSIONS, RECOMMENDATIONS AND FUTURE RESEARCH

7.1 INTRODUCTION

This research study's main focus was to get a rich understanding of the factors undergirding airline choice within the South African domestic passenger market. This was deemed necessary as the literature on airline choice or service quality evaluation showed a surface approach in explaining these and other consumer behaviour concepts. Research to date has tended to focus on the proximal factors of airline service quality evaluation and choice, which has been criticised for being superficial by several early human/personal values theorists such as Rokeach (1968, 1973), Vinson, Scott and Lamont (1977), Gutman (1982), and Schwartz (1992).

Even the present-day consumer research scholars cited in Chapters 3 to 6 of this study (e.g., Cieciuch and Davidov, 2012; Schwartz and Butenko, 2014, Boyd *et al.*, 2015 and many others), who are proponents of the classical work on human/personal values indicate that the expositions of airline service quality and choice by many studies are unsatisfactory. They argue that the studies that use product/service attributes only to explain consumer behaviour fall short as they do not explain why consumers prioritise specific attributes ahead of others. Their argument is backed by a corpus of literature that indicates personal values as the underlying motives pursued by consumers in majority buying situations.

In light of the above and the omnipresent paucity of the application of personal values in consumer research by South African researchers, this study sought to contribute to the corpus of knowledge on consumer behaviour in general and airline choice in particular. The study had six objectives which are detailed in the next section below.

7.2 RESEARCH OBJECTIVES REVISITED

Research objectives presented in Chapter 1 provide a framework of intentions and pursuits of a study. They give the purpose of the research study, guide several research decisions and activities such as research design and strategy, and data collection methods and analysis. Chapters 3, 4, 5 and 6 in this thesis were guided by research objectives listed below, from which research questions and hypotheses were formulated.

The primary objective of this research was *to examine and identify the consumer (passenger) personal values that underpin the evaluation of airline service attributes used to choose an airline within the South African domestic passenger market*. Additional objectives were also formulated, and these included:

SRO 1: To identify the most important airline service attributes used by customers to evaluate and choose airlines within the South African domestic passenger market.

SRO 2: To examine the impact of airline service attributes on customer post-purchase outcomes and behaviour within the South African domestic passenger market.

SRO 3a: To assess if there is a difference in the personal values influencing the evaluation of airline service attributes by low-cost carrier customers compared to full-service carrier customers within the South African domestic passenger market.

SRO 3b: To assess if there is a difference in the effect of airline service attributes on post-purchase outcomes and behaviour for low-cost carrier customers compared to full-service carriers' customers within the South African domestic passenger market.

SRO 4a: To evaluate if demographics (income and education) moderate how personal values influence the evaluation of airline service attributes used to choose an airline within the South African domestic passenger market.

SRO 4b: To evaluate if demographics (income and education) moderate the effect of perceived service and post-purchase outcomes and behaviour.

SRO 5a: To investigate if airline marketing communications effort moderate how personal values influence the evaluation of airline service attributes used to choose an airline within the South African domestic passenger market.

SRO 5b: To investigate if airline marketing communications effort moderate the effect of perceived service on post-purchase outcomes and behaviour within the airline industry in South Africa.

SRO 6: To determine if the consumer personal values also explicate post-purchase outcomes and behaviour within the South African domestic passenger market.

In the following section, hypotheses testing results obtained in section 6.3 in the previous chapter are discussed in tandem with the above-highlighted research objectives to answer the pertinent research questions. In doing so, the results are also compared to existing literature to arrive at some not necessarily absolute but critical conclusions.

7.3 FINDINGS FROM STUDY OF LITERATURE

The interest to understand airline customer behaviour has seen phenomenal growth over the last two decades in South Africa and elsewhere (see Chapter 3). A review of the literature shows an upward spiral in the number of studies in airline choice factors or service quality evaluation by South African scholars post the year 2010 (Lambert and Luiz, 2011; Campbell and Vigar-Ellis, 2012; De Jager, 2012; Luke and Walters, 2013; Henama, 2014; Luke, 2015). However, a close analysis of these studies indicates an affinity towards the use of airline service airline attributes as the only gateway to understanding and explaining the airline choice phenomenon.

In the context of the above, this study problematised such a trend; hence, aimed to usher in a new perspective to provide a rich explanation of airline choice within the South African domestic passenger market. The study drew both from seminal literature (for example, Thomas and Znaniecki, 1927; Allport and Vernon, 1931; Tolman, 1932; Becker, 1941; Kluckhohn, 1951; Maslow, 1954; Tonnies, 1957; Rokeach, 1973; Vinson, Scott and Lamont, 1977; Clawson and Vinson, 1978) and contemporary literature (e.g., Gutman, 1982; Zeithaml, 1988; Schwartz, 1992, 2012, 2017; Schwartz and Butenko, 2014; Torres

et al., 2015) to employ the concept of personal values to bridge the gap. Thus, the main aim of the study was *to examine and identify the consumer (passenger) personal values that underpin the evaluation of airline service attributes used to choose an airline within the South African domestic passenger market*.

In pursuit of this primary objective and subsequent secondary objectives, the main variables that were key for reviewing existing literature for this research were personal values, airline service attributes, post-purchase outcomes and behaviour such as customer satisfaction, repeat purchase intention and loyalty. These variables constitute a significant part of Chapter 3. Below is a summary of findings from the literature on these variables.

7.3.1 Personal Values

Chapter 3 of this study was dedicated to reviewing the literature on consumer behaviour in general, and the application of personal values in understanding consumer behaviour in particular. Extensive literature affirms that personal values are a manifestation of culture (Hofstede and Hofstede, 2005; Schwartz, 1994); hence they underlie human behaviour (Manan, 2016). According to Schwartz (1992, 2012), personal values are transsituational, and Tey *et al.* (2018) view them as a standard or rationale for choosing a specific action. More important for understanding and explaining consumer behaviour, is the assertion that each person may hold multiple values in varying degrees of importance (Weber, 2017; Clow and Baack, 2018).

The chapter also reviews the different values models, which include the Rokeach Value Systems (Rokeach, 1968), List of Values (Kahle, 1983), Values and Lifestyles Framework (Mitchell, 1983), Means-end theory (Gutman, 1982; Zeithaml, 1988), Schwartz Value Survey (Schwartz, 1992), Value-Attitude-Behaviour model (Homer and Kahle, 1988), and Service Personal Values (SERPVAL) scale (Lages and Fernandes, 2005). All the models suggest that personal values are the ultimate goals which individuals seek to fulfil during their lifetime. As such values guide their behaviour across different situations and can be used to understand and explain various phenomena, including consumer behaviour.

Among the human values theorists, literature shows that Schwartz has consistently improved his basic theory of human values (SVS), working with various scholars across the globe to test the theory in multiple countries such as German, Finland, Israel, Poland, Russia, Brazil, Russia, New Zealand, Portugal and Switzerland (Torres, Schwartz and Nascimento, 2016; Cieciuch *et al.*, 2014; Schwartz and Butenko, 2014; Beierlein *et al.*, 2012). The SVS has been adopted by several scholars in various settings, for example, Roszkowski, Kinzler and Kane (2014), Torres *et al.* (2015), Becker *et al.* (2017), and Karadag, Kılıçoğlu and Yılmaz-Kılıçoğlu (2018) among many others. In all these studies, personal values have been confirmed as the underlying motivations of human behaviour.

Notwithstanding this enormous body of knowledge, no scholar investigating the concept of airline choice has adopted personal values nor the SVS. A cross-analysis of the values theories in Chapter 3 also corroborated the richness of the Schwartz Value Survey (SVS), the portrait value questionnaire in particular, hence its adoption in this study.

7.3.2 Airline Service Attributes

In the section above, it was indicated that previous studies on airline choice or service quality seem to favour the use of airline service attributes to explain airline choice or preference. These studies cited particularly in section 3.6 of Chapter 3, (for example Diggines, 2010; Campbell and Vigar-Ellis, 2012; De Jager, 2012; Wu and Cheng, 2013; Lohmann and Koo, 2013; Luke and Walters, 2013; Jung and Yoo, 2014; Luke, 2015; Che and Chao, 2015) provided a corpus of literature for the review to situate the airline service attributes as one of the critical variables of this study.

What is clear from these studies is that each exploratory study seemed to have identified a different set of service attributes. Also, the investigative studies tested different sets of service attributes as factors of airline choice. For example, Wu and Cheng (2013) proposed a hierarchical model of service quality consisting of eleven attributes grouped into four higher-order attributes, that is, interaction quality, physical environment quality, outcome and access quality. Diggines (2010) tested the importance attached by customers to ten attributes, namely, frequent flyer programs, fares, quality, safety, comfort, quality, connections/airport destination, reliability and company policy. In an

exploratory study to determine what customers perceive to be the most important attributes when choosing an airline, Campbell and Vigar-Ellis (2012) identified eleven factors which are quite different from those of Wu and Cheng (2013) and Diggines (2010).

In addition, it was clear that the importance attached by passengers to airline service attributes (even the common ones) differed among the studies. For instance, in Campbell and Vigar-Ellis (2012), the three most important attributes were safety, punctual/reliable flights and low price. In another study, Luke (2015) found cheaper ticket price, flight frequencies and schedule, and punctuality/reliability as the three most important attributes. Another inconsistency amongst the previous studies is the inclusion or exclusion of those attributes that are not directly controlled by an airline, for example, boarding procedures, and other airport-controlled features.

On the backdrop of these inconsistencies, this study established fifty-five attribute related items (see Section of Appendix D), which were processed using exploratory factor analysis to identify six latent constructs of airline service attributes. These were used to test the hypotheses, whose findings are discussed in Section 7.4 below. The other key variable which is detailed in Chapter 3 is the post-purchase outcomes. The results/conclusions from an extensive literature review are discussed in the subsequent section.

7.3.3 Post-purchase Outcomes and Behaviour

Consumer behaviour can be divided into pre-purchase and post-purchase. From the conceptual model of this study (see Figure 4.1, Chapter 4), the discussions of the findings from literature pertain to the pre-purchase perspective of airline customer behaviour. As such, this section discusses the findings from the literature about post-purchase outcomes and behaviour.

By definition, post-purchase outcomes and behaviour are the perceptual states which a customer attains after interacting with an organisation, experiencing or consuming its products, often evoking some behaviour, which could either be positive, negative or indifference. According to Santos and Boote (2003), there are four types of post-purchase affective states, and these include delight, satisfaction (or positive indifference),

acceptance (or negative indifference) and dissatisfaction. These states are a product of expectations, which can either be customer-based, for example, the pursuit of their personal values, or can emanate from persuasion-based or marketer supplied standards.

Unlike literature on the application of personal values in airline choice behaviour, the literature on airline customers' post-purchase outcomes and behaviour abounds. Several studies have propounded on airline customer satisfaction and loyalty (Namukasa, 2013; Leong *et al.*, 2015; Jiang and Zhang, 2016; Ganiyu, 2016; Mantey and Naidoo, 2017), repeat purchase intention (Terblanche, 2015; Rajaguru, 2016).

From the existing literature, it is clear that high airline service quality leads to positive post-purchase outcomes, which in turn evoke or generate positive behaviour (Sugianto, 2017; Jiang and Zhang, 2016; Leong *et al.*, 2015; Namukasa, 2013). De Meyer and Mostert (2011) further corroborate this by stating that satisfied customers are inclined to form a long-term relationship with an airline while those dissatisfied do not develop relationships. However, there have been mixed empirical findings on whether a positive outcome, such as satisfaction or not. Whilst some studies found a significant positive relationship (Leong *et al.*, 2015; Namukasa, 2013), some research studies found otherwise (Koklic, Kukar-Kinney and Vegelj, 2017; Jiang and Zhang, 2016).

Mantey and Naidoo (2017) explain that in a market like the South African domestic market where passengers have a limited choice of airlines, they tend not to be loyal or patronise a specific airline. Such customers usually accept the kind of service they receive and become indifferent to airline service variations, a state well explained by Santos and Boote (2003) and grounded in the Herzberg dual-factor theory (Herzberg, 1974).

As is the case with research, a literature review was vital in setting out this study's context and background, identifying the gap in the existing body of knowledge and formulating the research objectives in Chapter 1. The chapter leveraged literature to depict the aviation (passenger) services globally, in Africa and then South Africa. Chapter 3 extended from Chapter 1, extensively reviewing the literature on critical variables and culminated in the formulation of the conceptual framework and hypotheses in Chapter 4. In Chapter 5, literature review enabled the researcher to frame the methodological issues.

Then Chapter 6, albeit also leveraging on extant literature, allowed this study's empirical contributions which are discussed in the following section.

7.4 DISCUSSION OF EMPIRICAL FINDINGS

Before deliberating on the hypotheses results, discussions and conclusions, a brief discussion of the demographic characteristics concerning the research objectives and questions is given. Also, the results of the scale measurements are briefly discussed as they were inputs into hypotheses testing.

7.4.1 Demographic Profile of the Respondents

Demographic characteristics of the sample are essential when discussing the results as they provide an insight into the quality and relevance of the results. There is a vast literature that confirms the importance of demographic factors when investigating or exploring consumer behaviour (Yaylali, Çelik and Dilek, 2016; Leung, Yen and Lohmann, 2017; Henrique and de Matos, 2014), and can be used for segmenting markets (Camilleri, 2018).

In this study, the gender of respondents was almost evenly spread at 54% males and 44% females. Such gender spread was desirable for representativity of both genders and pertinent to hypotheses H4a$_1$ and H4b$_1$. The sample also had a fair representation of all population groups as per the Stats SA (2019) report. Age groups 18-30 and 31-40 years were the most represented groups, with 32% for 18-30 years and 35% for 31-40 years. Age has been widely viewed as an influential factor in consumer behaviour. It is also believed that part of the behavioural differences are a result of age-related cognitive processes and accumulated life experiences (Sharma, Chen and Luk, 2012). The information processing theory posits that, compared to younger people, older people are assumed to have a narrow set of considerations and do generally not seek more information (Sugianto, 2017; Fang *et al.*, 2016).

Airline services have for some time been thought of as a preserve of the elite due to the issue of affordability of ticket prices. The descriptive analysis showed that more of the respondents were employed (77%), followed by the self-employed (14%). Often, most

people who travel for business purposes have their airline tickets paid for by the employer or business, thus complicating the choice decision. To get clarity on the ability to make a decision, further analysis revealed that effectively 60% could make or influence airline choice decisions.

Contrary to the belief that air transport is for the elite social group members, the income level composition of the sample revealed that the lower to the middle (<R200000 to <R60000 per annum) income groups were the most represented with a cumulative 74%. On the education front, the results show that the respondents were fairly educated, 10% with doctoral qualifications, 17% with Masters, 22% with Honours degrees, 17% Bachelors and 17% with diploma qualifications. Those with school leaving certificates and post-school certificates accounted for less than 10% each.

Income and education levels were hypothesised as moderators in the conceptual model presented in chapter 4. Numerous studies have investigated the effect of these two demographic factors on consumer behaviour, for example, Sugianto (2017). From a consumer research point of view, consumer income distribution is indicative of disposable income which in this case could be translated into demand for airline services estimates. Education level is thought to indicate an individual's ability to process information and make rational decisions based on the information.

7.4.2 Airline Service Attributes (SRO 1)

As indicated in section 6.2 in the previous chapter, a series of exploratory and confirmatory factor analyses (EFA and CFA) were run to determine factor structure, reliability and validity of the observed measures. From the EFA, six latent constructs (overall airline reliability, booking and check-in, airline reputation, onboard services, loyalty programs and ticket price, and cabin features and experiences) were extracted as airline service attributes, two latent constructs (marketing messages and marketing communications mix) as marketing communications effort. The last latent construct extracted was labelled post-purchase outcomes and behaviour. A series of CFA was used to confirm the factor structure of personal values.

From the factor analyses, mean and standard deviation values for the latent constructs were calculated (see Table 6.5). The mean and standard deviation values of airline service attribute constructs were used to answer research question two (RQ2); hence achieve Secondary Research Objective 1 (*To identify the most important airline service attributes used by customers to evaluate and choose airlines within the South African domestic passenger market*). Overall airline reliability (*M=47.79, SD=7.59*) was identified as the most important attribute. This attribute was a coalescence of factors (safety, reliability, luggage handling and staff competence/courtesy/responsiveness) which have been found as very important in other studies. For example, safety, punctual/reliable flights and staff competence have been perceived as important airline selection attributes (Campbell and Vigar-Ellis, 2012; Stone, 2016).

On the other end, airline reputation (*M=13.17, SD=4.25*) was found to be the least important attribute considered by travellers when choosing an airline. This result is almost similar to that in Campbell and Vigar-Ellis (2012), where airline reputation was one of the three least important factors for selecting an airline. However, throughout this thesis, the reliance on the proximal attributes to explain airline choice behaviour has been criticised (Xiao, Guo and D'Ambra, 2014; Philips (2014). Critics state that such an approach fails to link behaviour to the deep-seated motives that underpin human behaviour. The lack of lucidity in using airline service attributes to explain customer behaviour is evidenced by the multiplicity and differences in the airline service attributes adopted/identified by different studies exploring or investigating airline service quality evaluation and airline choice behaviour.

That said, the latent constructs from both exploratory and confirmatory factor analyses, together with the descriptive variables, were used as inputs to test the six hypotheses formulated in Chapter 4. The results of hypotheses testing are discussed below.

7.4.3 Influence of Personal Values on Airline Service Attributes (*Primary Research Objective*)

To achieve the primary objective of this study indicated in Section 7.2 above, $H1_1$ was formulated and tested. To do so, it was essential to test the influence (statistical

significance) of each of the Schwartz *et al.* (2012) nineteen values on airline choice. A backward multiple regression analysis was conducted, and the results indicated that only five of the nineteen values were found significant. These were self-direction thought, stimulation, achievement, universalism tolerance and benevolence care values.

Then, the six airline service attributes were regressed on each of the identified values, and the results are summarised in Table 7.1 below.

Table 7.1: Hypothesis (H1$_1$) Testing Results Summary

Hypothesis	Statistical technique	Results
H1$_1$: *Personal values influence airline service attributes used to choose an airline within the South African domestic passenger market.*	A backward regression analysis was used to test the prediction power of personal values on the evaluation and prioritisation of each of the airline service attributes. The unstandardised regression coefficients were used to denote the change in the valuation and prioritisation of each of the airline service attributes with a shift in the importance of personal value to an individual.	Self-direction thought, stimulation and universalism tolerance values were found to undergird the evaluation and prioritisation of the overall airline reliability when choosing an airline. The resultant equation for overall airline reliability = 2.33 + .12SdT + .14Stim + .08UnT + e.
		Only benevolence care value was found to predict the evaluation and prioritisation of the booking and check-in when choosing an airline. The unstandardised coefficient for BeC was b = .16.
		It was established that none of the identified personal values predicts the evaluation and prioritisation of the airline reputation when choosing an airline.
		Self-direction thought, stimulation, achievement and benevolence care values were found to significantly predict the evaluation and prioritisation of the onboard services when choosing an airline. The equation for onboard services = 2.66 + .11SdT + .10Stim + .11Ach - .14BeC + e.
		Stimulation and universalism tolerance were found to significantly underpin the evaluation and prioritisation of the loyalty programs and ticket price when choosing an airline. The equation was LOYPROGTP = 2.953 + .22 Stim - .12UnT + e
		It was also established that none of the identified personal values predicts the evaluation and prioritisation of the cabin features and experiences when choosing an airline.

Primary Source

The findings in the table above are derived from hypothesis one (H1$_1$) testing. H1$_1$ is *Personal values influence the evaluation and prioritisation of airline service attributes used to choose an airline within the South African domestic passenger market.* This hypothesis is the primary attempt to bridge the research gap articulated in Chapter 1, which stems from the paucity of studies using personal values to explain airline choice

behaviour. According to classical human values theorists, for example, Zeithaml (1988), Gutman (1982) and Rokeach (1973), airline service attributes are just a means to an end.

They lament that it is not correct to treat airline service attributes as ultimate determinants of airline choice behaviour. Instead, human values theorists argue for the application of personal values as the ultimate determinants of airline choice behaviour. In simple terms, the human/personal values theorisation of airline service quality entails that airline service attributes are prioritised (or not) depending on the extent they enable travellers to achieve their life goals.

An extensive review of literature in the previous chapters, Chapters 1 and 3 in particular, reveal paucity of studies employing personal values to explain airline choice behaviour, particularly the evaluation and prioritisation of airline service attributes. Notwithstanding this paucity, Hau and Thuy (2012) tested the impact of service personal values across three service industries - airlines service, banking service and healthcare. In general, their findings confirmed that personal values do influence perceived service value, satisfaction and loyalty. In another study, Wittmer and Oberlin (2015) employed the attribute-consequence-value chain theory to find values that underpinned airline ticket-buying behaviour. Their findings indicated "values such as living a secure and safe life and caring for others" as the values the most prioritised by passengers (p.144).

The effect of the lack of studies employing personal values to explain airline choice leaves an empirical gap, which makes it difficult to refer to and compare this study's findings. In the following sections (7.4.3.1 – 6), findings on $H1_1$ are discussed.

7.4.3.1 Personal Values Influence on Overall Airline Reliability

The results in Table 7.1 show that self-direction thought, stimulation and universalism tolerance values have a positive influence on the prioritisation of the airline's overall airline reliability when choosing an airline. What this means is that individuals who value the freedom to cultivate their ideas and abilities are more likely to prioritise overall airline reliability when choosing an airline. In the same fashion, individuals motivated by changes in life, novelty and excitement and those who are tolerant of people different from them will prioritise overall airline reliability as a criterion of choosing an airline.

The equation shows that as the importance of these three values increases in an individual, the airline's overall airline reliability also becomes an essential attribute for airline choice. These findings are consistent with the central assumption of the theory of basic human values, which are arrayed as a circular continuum of motivations (Schwartz, 1992, 2012; Schwartz and Butenko, 2014). However, it is unclear how diversity could be related to airline reliability, perhaps presenting an opportunity for further research to delve deeper into answering the 'why' questions about the prioritisation of overall airline reliability.

7.4.3.2 Personal Values Influence on Booking and Check-in

The analysis established that among the Schwartz *et al.* (2012) nineteen values, only benevolence care value was found to significantly influence the prioritisation of booking and check-in services. That is, people devoted to the welfare of their ingroup members prioritise booking and check-in services. A probable explanation for such a finding could be the shift from face-to-face service encounters to self-service (Lin and Filieri, 2015; Lu, Chou and Ling, 2009), which has brought an emphasis of convenience.

Since the majority of the respondents were relatively young people, who by nature are digital natives (Prensky, 2001), are emotionally and closely connected to family and friends (Azionya, 2015; Oksiutycz and Kunene, 2017), and are often the working class, service convenience is probably of utmost importance to them (Kelly, Lawlor and Mulvey, 2017). As such, it is not surprising that they prioritise booking and check-in services which have been enhanced through digital technologies as it helps them to serve their ingroup with ease and conveniently. For example, one can book and check-in for themselves and their loved ones at the convenience of their homes or offices.

7.4.3.3 Personal Values Influence on Airline Reputation

Airline reputation can be accumulated from various factors such as service quality, publicity and can also be shaped through marketing communication (Buaphian, 2015; Graham and Bansal, 2007). In Section 3.6.9 in Chapter 3 of this study, service quality was primarily described as the extent of airline services in enabling individuals to achieve their personal values (Beldona, Kher and Bernard, 2020). Also, literature across the

services marketing associate strong or improved brand reputation to higher the service quality and vice versa (Wirtz and Lovelock, 2018). As such, brand reputation is seen as a key determinant of consumer behaviours (Sengupta, Balaji and Krishnan, 2015; Liu and Lee, 2016).

From a human values theory, brand reputation is a means to an end. Thus, airline passengers would prioritise it if it is instrumental to the achievement of their personal values. However, the results of this study revealed no significant relationship between the identified personal values and airline reputation. This did not come as a surprise. In a study by Kim and Park (2017), airline reputation was found to be the least important attribute when choosing an airline and in Truong, Pan and Buaphiban (2020), airline reputation was found to be an insignificant predictor of behaviour intention. Moreover, as evidenced by the negative publicity for South African Airways (SAA) and its subsidiaries, the airline still held a relatively substantial market share (Orlek, 2010; Free Market Foundation, 2013). The descriptive results of the study also confirm this, for instance, SAA was preferred by 34% of the respondents. Its subsidiaries: Mango Airlines and South African Express were respectively preferred by 13% and 19% of the respondents (see Figure 6.10 and 6.11).

7.4.3.4 Personal Values Influence on Onboard Services

As can be seen from the summary table (Table 7.1), onboard services are influenced by four of the most parsimonious consumer (passenger) personal values. Using the unstandardised regression coefficients, three values (self-direction thought, stimulation and achievement values) are shown to have a positive effect. In contrast, benevolence care value has a negative effect on the prioritisation of onboard services when choosing an airline.

Drawing from extant literature on the Schwartz's basic theory on human values (Schwartz *et al.*, 2012; Schwartz and Butenko, 2014; Li, 2016), the conclusion for the positive influence results, referred to in the preceding paragraph, could include people who find independence of thought and pursuing their interests as important, and are ready for change or novelty. Such people will pay more attention to onboard services. As the

importance of these life goals increase, so is the importance they attach to on onboard services when choosing an airline. On the other hand, the inverse relationship between the concern for the welfare and interests of others (benevolence care value) and onboard services indicate that as the importance of valuing concern for the welfare and interests of others (ingroup) increase, the prioritisation of onboard services when choosing an airline diminishes.

7.4.3.5 Personal Values Influence on Loyalty Programs and Ticket Price

Airline ticket price is a very important airline choice attribute while loyalty programs have received low importance scores (Baikgaki and Daw, 2013; Campbell and Vigar-Ellis, 2012; De Jager and Bin Dahari, 2012). In this study, the exploratory factor analyses aggregated the two attributes suggesting that airline customers evaluate them as a single attribute, which is not that important. From the regression analysis, stimulation and universalism tolerance values were found to underlie the evaluation and prioritisation of loyalty programs and ticket price when choosing an airline.

The conclusion that can be drawn from these results is, people driven by readiness to change (i.e., stimulation value) will pay attention to loyalty programs and ticket prices. A likely explanation for this could be the adoption of novel and dynamic air ticket pricing approaches and loyalty programs (Grooves and Gini, 2015; Williams, 2018). It can also be concluded that as concern for the welfare and interests of others becomes a stronger drive for individuals (universal tolerance value), the importance placed on loyalty programs and ticket price is reduced. This is consistent with the Mantey and Naidoo (2017) findings that loyalty programs do not necessarily indicate customer loyalty to an airline. As such, loyalty programs can just be regarded as one of the customer lock-in strategies.

7.4.3.6 Personal Values Influence on Cabin Features and Experiences

Like with airline reputation, none of the identified most parsimonious values had a significant effect on the evaluation and prioritisation of cabin features and experiences when choosing an airline. Although there has been no study exploring the relationship between personal values and cabin features known to the researcher, there are however

several studies (Lambert and Luiz, 2011; De Jager and van Zyl, 2012; Campbell and Vigar-Ellis, 2012; Vink *et al.*, 2012; Ahmadpour *et al.*, 2014) where cabin features and experiences are mentioned as a service quality dimension.

According to Aksoy, Atilgan and Akinci (2003), cabin features are a critical element of an airline's physical environment which passengers interact with. Cabin features and experiences relate to aircraft type and design-related dimensions such as legroom, seat comfort, cleanliness, temperature and air quality. Contrary to Aksoy, Atilgan and Akinci (2003) assertion, the literature on service quality evaluation within the South African domestic airline market suggests otherwise. For example, in Campbell and Vigar-Ellis (2012), space onboard and legroom (an aspect of cabin feature and experiences) was rated as the second least important attribute.

One thing that is apparent about the findings discussed above and in relation to $H1_1$ is, despite determining the relationship between retained personal values and the airline service attributes, they do not provide the reasons of the relationships. This opens up an opportunity for future research, which is addressed in Section 7.7. The following subsection discusses the findings in relation to $H2_1$.

7.4.4 Impact of Airline Service Attributes on Post-purchase Outcomes (SRO 2)

To achieve the secondary research objective 2 (see Section 7.2), hypothesis two ($H2_1$) was formulated and tested. The results (see Table 6.13) indicate that there was no significant relationship between five of the airline service attributes and post-purchase outcomes and behaviour. Only onboard services attribute ($b = .29$) had a significant relationship, implying that an improvement of onboard services would result in positive or improved post-purchase outcomes and behaviour among the respondents.

The results correspond with those of Namukasa (2013), who found inflight factors as significant and positive influencers of customer satisfaction. However, these findings are also surprising in that one would have expected overall airline reliability (a most important attribute) and booking and check-in services (a second most important attribute) to have a considerable effect on post-purchase outcomes and behaviour. Possibly, such findings

are due to what Santos and Boote (2003) refer to as the state of indifference and can be better explained using Herzberg's dual-factor theory.

Though more synonymous with job motivation, Herzberg's dual-factor theory has also been used to explain the formation of brand loyalty (Zhang and Liu, 2017), patient satisfaction (Bohm, 2012; Mitrabasu, 2013) and users' intention to switch to cloud services (Park and Ryoo, 2012). According to the Herzberg dual-factor theory (Herzberg, 1974), overall airline reliability and booking and check-in services can be regarded as the hygiene factors to passengers, implying that low performance might lead to dissatisfaction and complaints. Mere performance improvements of these service attributes do not necessarily result in satisfaction. However, airlines are expected not to falter on these service attributes.

The results of this study are also inconsistent with those of Namukasa (2013), Ganiyu (2016), and Mantey and Naidoo (2017) generally suggesting that service quality has a positive influence on post-purchase outcomes such as customer satisfaction, repeat purchase, loyalty and advocacy. However, these differences should be taken with caution since service quality is multifaceted, ephemeral, fuzzy, 'elusive' and 'indistinct' concept that is problematic to operationalise and measure (Ganiyu, 2016; Parasuraman, Zeithaml and Berry, 1988). In the following section, findings on whether airline customers distinguish between the two model types (low-cost carriers and full-service carriers) are discussed.

7.4.5 Differential Effect of Airline model Type (SRO 3a and SRO 3b)

In pursuit of secondary research, objective 3, two hypotheses ($H3a_1$ and $H3b_1$) were formulated to test both pre-purchase and post-purchase airline service evaluation. On the pre-purchase ($H3a_1$), this study intended to assess if customers of low-cost carriers (LCC) and full-service carriers (FSC) were motivated by similar personal values. To test this hypothesis, a three-step analytical process was conducted. In the first step, the aim was to determine, at the proximal level, if customers differentiated the airline types on service quality attributes. The results indicated that LCC and FSC customers did not distinguish between the two airline model types (see Table 6.14).

This could possibly be understood as a result of intense competition that has led to airline model hybridisation/convergence (Loh *et al.*, 2020; Jean and Lohmann, 2016; Pearson and Merkert, 2014; Lohmann and Koo, 2013; Daft and Albers 2013; Fageda, Suau-Sanchez and Mason, 2015; Lange, Sieling and Parra, 2019; Azadian and Vasigh, 2019). Furthermore, there is evidence that LCCs are introducing extras to lure customers and seek growth opportunities (Pearson, Pitfield and Ryley, 2015; Pearson and Merkert, 2014). As such, this convergence tends to constrict the difference between the two models to airline customers. In support, Henrickson and Wilson (2016) state that the cost base differences between the two airline model types have drastically narrowed, allowing this airline model convergence.

The second step sought to assess if LCC and FSC customers are motivated by similar personal values when choosing an airline (through evaluation and prioritising airline service attributes). The results were mixed. On the one hand, three values (self-direction thought, achievement and benevolence care) were not distinct to any of the two groups, implying they motivated both LCC and FSC customers when choosing an airline. On the other hand, two values (stimulation and universalism tolerance) were found as the distinct motivation during the evaluation and prioritisation of airline service attributes among the customers of the two airline types.

Further analysis indicated that stimulation value positively influenced low-cost carrier customers and negatively influenced full-service carrier customers. This could be attributed to the fact that people who seek exciting life, challenges, novelty and are ready for new changes in life (stimulation value) are more likely to try new things (Kitsawad and Guinard, 2014). In this case, the relatively new airlines are low-cost airlines in the South African domestic market. Similarly, universalism tolerance value was found to positively influence the airline choice behaviour of older customers compared to young customers. The possible explanation for this can only be speculative at this moment. That is, people who are concerned about the welfare and interests of others tend to prioritise preserving old treasured brands believed to carry the interests of many people.

Then in H3b$_1$, the aim was to test if post-purchase outcomes and behaviour for low-cost carrier customers differed from those of full-service carriers' customers within the South

African domestic passenger market. Several studies have investigated such a hypothesis, providing mixed results (Koklic, Kukar-Kinney and Vegelj, 2017). While Leong et al. (2015) and Loureiro and Fialho (2016) found no significant difference between LCCs and FSCs service delivery and post-purchase outcomes, Rajaguru (2016), Lohmann and Koo (2013) and Suhartanto and Noor (2012) found that are differences in the level of satisfaction and loyalty among the LCC and FSC customers.

The results of this study (see Table 6.16 in the previous chapter) correspond with the findings in many other studies that found no satisfaction and loyalty differences among low-cost and full-service airlines' customers. For example, Loureiro and Fialho (2016) used the three service quality dimensions (inflight ambience, space/function and crew). They found no difference in satisfaction between LCC and FSC customers when it came to inflight ambience and space/function dimensions. Also, Maulisa and Hati (2018) found no difference between LCC and FSC customers in a study where they, among other things, tested the impact of customer satisfaction (post-purchase outcome) on behavioural intention (post-purchase behaviour).

These results also confirm the findings in H3a$_1$ that South African airline consumers do not distinguish between low-cost and full-service airlines as espoused in the literature. Such differences are detailed in Section 2.8 of Chapter 2. Possibly to customers, these differences are insignificant, hence not considered in the post-purchase evaluation of airline service performance. Having discussed the results about the differential effect of airline model type in this section, the next section discusses the moderating effect of two demographic variables (income and education).

7.4.6 Moderating Effect of Income and Education (SRO 4a and SRO 4b)

Like in hypothesis three, hypothesis four was also split into two hypotheses (H4a$_1$ and H4b$_1$) to achieve secondary research objectives 4a and 4b. In H4a$_1$. The focus was to test if the effect of personal values on the evaluation and prioritisation of airline service attributes depends on income and education levels. The results indicate that income moderates the effect of stimulation value on the evaluation and prioritisation of booking and check-in services when choosing an airline. However, with a negative coefficient of

the interaction term (see Table 6.17 in the previous chapter), it implies that the effect of stimulation value on booking and check-in services decreases as income increases and vice versa.

These results can be explained in two ways. Firstly, by drawing from the findings of a study by Schwartz and Huismans (1995). The authors found that stimulation value was one of the values that were important to people with lower income; hence, an underlying motive of their behaviour. The second explanation could be drawn from definition of stimulation value, which entails readiness for change, the pursuit of exciting life and novelty (Cieciuch and Schwartz, 2018; Torres *et al.*, 2015; Schwartz and Butenko, 2014). As such, the drastic digitisation of airline booking and check-in services (Budd and Vorley, 2013; Lin and Filieri, 2015) can be assumed to enable the achievement of novel and exciting life as end-states of existence.

Also, income was found to moderate the relationship between self-direction thought value and onboard services. As in the case above, the coefficient of the interaction term was negative, implying that for people with lower income, the influence of self-direction thought value and onboard services is strong, but as they move up the income ladder, the influence decreases. This can be explained speculatively. Unlike in other countries where domestic flights over three hours, South African flights take on average around one and a half hours. As such, we can speculate that for such short-haul flights, people do not pay so much attention to onboard services.

Turning to the moderation effect of education on the relationships between personal values and airline service attributes, the analysis showed that education only moderated the relationship between stimulation value and onboard services. Again, with a negative unstandardised coefficient, the results imply that an improvement in education reduces the influence of stimulation value have on the evaluation and prioritisation of onboard services when choosing an airline. This inverse conditional relationship between stimulation value and education level is inconsistent with some previous findings that individuals with postgraduate and higher qualifications tended to prioritise the pursuit of exciting life and novelties (Demir, 2016).

In H4b$_1$, the focus was shifted to the moderation effect of income and education on the influence of the perceived performance of airline service attributes on post-purchase outcomes and behaviour. Income was found not to moderate the effect any of the six airline service attributes have on post-purchase outcomes and behaviour. Such results correspond with the findings of Seiders *et al.* (2005) while also disagreeing with those of Jiang and Zhang (2016), Dölarslan (2014) and Dong *et al.* (2011). They found that income has a negative moderating effect on post-purchase outcomes and behaviour.

The results of this study show that education has a positive influence on the effect of airline reputation on post-purchase outcomes and behaviour. Naturally, education is assumed to enhance one's ability to search and handle complex consideration sets of information (Dong *et al.*, 2011), particularly the subtle brand reputational information. This view of education can be a possible explanation for the findings of this study. Airline customers with moderate to higher levels of education can integrate and discern the positive reputational aspects of an airline.

Having discussed the moderation effects of income and education, a discussion of the moderation effect of marketing communication effort ensues in the next section.

7.4.7 Moderating Effect of Marketing Communications Effort (SRO 5a and SRO 5b)

Marketing communications is one of the significant elements of an organisation's marketing mix (Clow and Baack, 2018; Shimp and Andrews, 2013). It plays an integrative role for all the organisation's functional areas, packages, and positions all the organisation's assets (e.g., products, people, history, milestones/achievements, plans) as customer value. To add value, marketing communications must be applied throughout the customer decision-making process, that is, pre- and post-purchase phases.

In this study, the pre-purchase application of marketing communications was hypothesised (H5a$_1$) as moderating the influence of personal values on the evaluation and prioritisation of airlines service attributes when choosing an airline. The post-purchase hypothesis (H5b$_1$) focused on the moderating effect of marketing

communications on the relationship between airline service attributes (perceived performance) and post-purchase outcomes and behaviour.

The results for H5a$_1$ are summarised and presented in Table 7.2 below and discussed after that.

Table 7.2: Summary of Hypothesis (H5a$_1$)

Model	Interaction terms outcomes
Self-direction thought value on overall airline reliability.	SdT x MarkMess $b = .23$, $p = .008$ and $R^2 = .03$.
Self-direction thought value on onboard services.	SdT x MarkMess $b = .19$, $p = .029$ and $R^2 = .02$.
Self-direction thought value on loyalty programs and ticket price.	SdT x MarkMix $b = -.17$, $p = .048$ and $R^2 = .02$.
Stimulation value on overall airline reliability.	Stim x MarkMix $b = -.19$, $p = .003$ and $R^2 = .04$.
Stimulation value on onboard services.	Stim x MarkMix $b = -.13$, $p = .021$ and $R^2 = .01$.
Universalism tolerance value on overall airline reliability.	UnT x MarkMess $b = .14$, $p = .033$ and $R^2 = .01$.

SdT x MarkMess = Interaction term for self-direction thought value and marketing messages; **SdT x MarkMix** = Interaction term for self-direction thought value and marketing communications mix; **Stim x MarkMix** = Interaction term for stimulation value and marketing communications mix; **UnT x MarkMess** = Interaction term for self-direction thought value and marketing messages.

As can be seen from the table, the marketing communications effort was split into marketing messages and marketing communications mix. The results therein show that the marketing communications construct moderate six linear models. In the first model, marketing messages are found to positively moderate the effect of self-direction thought value on overall airline reliability, and self-direction thought value on onboard services and universalism tolerance value on overall airline reliability. Unlike marketing messages, the results for the marketing communications mix indicated that this construct had a negative moderating effect on three linear models. These were; self-direction thought value on loyalty programs and ticket price, stimulation value on overall airline reliability and stimulation value on onboard services.

Though there are no studies known to the researcher that have hypothesised as in this study, the effect of marketing communications on consumer behaviour has been investigated in several studies. For example, Angowski, Domańska and Komor (2017) found that promotional measures, particularly measures of a financial nature (price discounts, special offers), significantly influenced consumer behaviour. Also, Abdelhady,

Fayed and Fawzy (2019) found that airline promotion significantly affects airline passengers' purchasing decision-making.

For hypothesis H5b$_1$, the moderation analyses revealed that the two constructs of marketing communications effort do not moderate the relationships between airline service attributes (perceived service performance) and post-purchase outcomes and behaviour. Instead, marketing communications mix constructs were found to have a direct effect on post-purchase outcomes and behaviour in line with the findings of Sihite, Harun and Nugroho (2014). In their study, these authors found that an increase in the promotion (marketing communication effort) will positively improve customer loyalty.

Two conclusions can be drawn from the results of this study. The first one is that marketing communications effort needs to be integrated to avoid a silo approach to marketing communications (Cao, 2014), prioritise marketing communications mix elements and optimise customer path-to-purchase (Payne, Peltier and Barger, 2017). Also, the integration of marketing communications enables the achievement of message consistency (Moriarty and Schultz, 2012), a critical aspect of brand building. Drawing from the work of Luxton, Reid and Mavondo (2015), an integrated marketing communications approach will be vital to building positive airline reputation and improve market share and financial performance.

The second conclusion, which is specific to hypothesis H5a$_1$ is based on the Means-End Conceptualisation of Components for Advertising Strategy (MECCAS) model as detailed in Section 3.8.1 in Chapter 3. The MECCAS model can enable airlines to employ personal values to formulate positioning strategies and marketing messages (Shimp and Andrews, 2013). What this means is, instead of obsessing with communicating about the airline service attributes, airlines should share how these service attributes will enable customers to achieve their end-states of existence (personal values).

The next section discusses the findings of the last hypothesis for this study. The hypothesis focused on the direct relationship between personal values and post-purchase outcomes and behaviour.

7.4.8 Influence of Personal Values on Post-Purchase Outcomes (SRO6)

The results of this hypothesis (H6$_1$) testing indicate that only the stimulation value has a significant direct influence on post-purchase outcomes and behaviour. The benevolence care value, which had a negative influence was not significant. This means that the other personal values' effect on post-purchase outcomes and behaviour might be conditional on (moderated or mediated by) other variables. This finding could be considered for future research.

This finding partially corresponds with the findings of previous studies, albeit in different industries. These studies tested the effect of personal values on post-purchase outcomes. For example, Thuy and Hau (2010) and Henrique and de Matos (2014) focused on customer loyalty in the financial services sector while Arambewela and Hall (2011) and Mustaffa *et al.* (2017) concentrated on the satisfaction in higher education. Also, Hau and Thuy (2012) tested the effects of personal values across three service industries, and all these studies affirm that different values positively impact on post-purchase outcomes and behaviours. Such differences are to be expected as asserted in Rokeach's (1973) classical definition that human values are transsituational, implying that they differ in importance from one situation to the other.

With the discussion of the results from Sections 7.4.3 to 7.4.8, it can be concluded that the objectives of the study were met, especially concerning the primary research objective. The results in respect of the primary research objective were achieved, adding on the findings of Hau and Thuy (2012) whose study supported that personal values do influence perceived service quality. Having discussed the findings of this study, an inference must be made on the implications thereof. In the following section, the contributions and implications of this study are outlined.

7.5 IMPLICATIONS AND RECOMMENDATIONS

The problem statement of this research (see Section 1.3 in Chapter 1) is the yardstick for the contribution and implications of the findings of this study. An extensive analysis of the literature in Chapters 1 and 3, in particular, reveal the shortcomings of over-reliance on the proximal airline service attributes to explain airline service quality evaluation and

choice behaviour. The criticism that has been advanced against such a practice is that product attributes are just, but a means to an end (Gutman, 1982; Zeithaml, 1988). Insomuch as they are very crucial to customers (Kelley, Hyde and Bruwer, 2015), they do not explain the motivations of the customer.

Further, Xiao, Guo and D'Ambra (2014) and Philips (2014) indicate that people do not buy products for what they are, but for what they can do for them. Drawing from the application of personal values to explain consumer behaviour in other fields (Kitsawad and Guinard, 2014; Manan, 2016; Zinas and Jusan, 2017; Borgi, Bardi and Schwartz, 2017), this study contributes to existing knowledge by providing a detailed explanation of the underlying motivations for airline customers to prioritise specific service attributes over others.

In the following two sections, the implications and recommendations of the study are split into pre-purchase and post-purchase.

7.5.1 Implications and Recommendations based on the Primary Research Objective Findings

The findings for hypothesis $H1_1$ will have an implication on the segmentation of the South African domestic passenger market. Such an approach to segmenting the market will enable airlines to target and position themselves and their services. Even though the five values appear to be of low to moderate effect on the evaluation and prioritisation of airline service attributes, airlines must know that personal values do not have a direct relationship with product/service attributes. Instead, their relationship is mediated by the consequences (behaviours which generate the desired benefits and/or minimize the undesirable effects – Zinas, 2013) that emanate from the attributes (Wang and Yu, 2016; Xiao, Guo and D'Ambra, 2014; Kahle, 1980; Gutman, 1982; Zeithaml, 1988).

As such, this recommends that airlines consider developing airline services that enable people motivated by the five values discussed in sections 7.4.3.1 to 7.4.3.6. This will allow airlines to effectively segment the airline market, target and position their marketing effort through product/service design and marketing communications.

7.5.2 Implications and Recommendations based on SRO 1 Findings

In Section 7.4.2, the importance of airline service attributes is discussed. However, as suggested by Xiao, Guo and D'Ambra (2014) and Philips (2014), passengers are not driven by the airline service attributes when choosing or evaluating an airline, but by the extent to which the attributes enable them to achieve their personal values. Henceforth, on the backdrop of the recommendation in Section 7.5.1, airlines must develop or enhance and promote (position) airline service attributes in line with the identified set of the most parsimonious values.

7.5.3 Implications and Recommendations based on SRO 2 Findings

The results from hypothesis ($H2_1$) testing show that only onboard services significantly influenced post-purchase outcomes and behaviours. Notwithstanding the likely explanation for the results proffered in Section 7.4.4, this study recommends that airlines' marketing and product teams have to investigate the lack of positive impact of airline service attributes on post-purchase outcomes and behaviour. Several studies (see Section 3.7 in Chapter 3) have found a positive relationship between perceived airline service quality (a result of the evaluation of airline service attributes against customer expectation).

Also, airlines can position these service attributes using the identified set of personal values, which can be grouped into four higher-order values (self-enhancement values, self-transcendence values, openness to change values and conversation values as suggested by Schwartz (1992, 2012). The positioning could be augmented and reinforced by post-purchase promotional efforts.

7.5.4 Implications and Recommendations based on SRO 3a and 3b Findings

The findings on hypothesis $H3a_1$ show that there is no difference in personal values influencing the evaluation and prioritisation of airline service attributes among both low-cost carrier customers and full-service carrier customers. Furthermore, the findings indicate that LCC and FSC customers do not differentiate between the two airline model types. Also, findings from hypothesis $H3b_1$ show no difference in post-purchase outcomes

and behaviour between LCC and FSC customers. This could be a result of hybridisation by airlines as a way of surviving competition (Loh *et al.*, 2020; Jean and Lohmann, 2016).

These findings imply that airlines might be wasting marketing effort and resources concentrating on differentiating, based on the model type, which is of no significance to the customers. As such, this study recommends that airlines must instead expend their marketing efforts and resources on developing new services packages or improving existing ones to enable passengers to achieve their values.

7.5.5 Implications and Recommendations based on SRO 4a and 4b Findings

The findings on $H4a_1$ and $H4b_1$ are crucial for positioning airline service and enhancing the perceived airline service performance. Henceforth, an airline has to incorporate customer income and education levels to improve chances of being the most preferred airline. That is, for customers motivated by self-direction thought and stimulation values and with higher income levels, airlines have to avoid positioning their services based on booking, check-in and onboard services. In section 7.4.6, it is indicated that as a customer's income increases, the effect of self-direction thought and stimulation values on booking and check-in and onboard services would decrease. Instead, it will be advisable to position the overall airline reliability, which was found to be directly influenced by income.

Furthermore, for customers motivated by stimulation value and with higher education levels, airline services must be positioned based on airline reputation instead of onboard services. Again, the findings show that as education level increases, the effect of stimulation value on onboard services wanes off. In contrast, airline reputation was found to have a direct influence on onboard services. While customer income is not of importance post-purchase, education level was found to positively moderate the effect of airline reputation on post-purchase outcomes and behaviour.

In explaining the effect of education, Jiang and Zhang (2016) assert that people with higher levels of education might hold higher expectations of airline service quality. Dong *et al.* (2011) concur and posit that education enables individuals to process abstract

information like equity (brand power) to discern an airline's reputation. Based on this, it is recommended that different post-purchase promotional efforts be developed and targeted based on education levels. For example, complex information such as financials used in promotional campaigns should target the highly educated.

7.5.6 Implications and Recommendations based on SRO 5a and 5b Findings

Hypothesis (H5a$_1$) testing results show that marketing communications constructs do moderate the effect of personal values on the evaluation and prioritisation of airline service attributes when choosing an airline. However, looking at the directions of the impact as denoted by either positive or negative signs of the regression coefficients, the study recommends the adoption of the integrated marketing communications (IMC).

According to Payne, Peltier and Barger (2017), IMC is vital in cross-channel synchronisation and emphasises on integrating multiple consumer touchpoints, media and messages. For example, this study recommends the integration of, among other things marketing messages and marketing mix elements to enhance the positioning of airline services. Marketing messages must link airline service attributes to the identified personal values while marketing mix elements must be integrated as and when deemed to enable the effective and efficient achievement of marketing communication objectives.

The findings in respect of H5b$_1$ show that marketing communications effort is not a significant moderator of the effect of airline service attributes (perceived service performance) on post-purchase outcomes and behaviour. However, the fact that the results show a significant direct influence of marketing communications constructs on post-purchase outcomes and behaviour further bolsters the need for an integrated marketing communications approach, with marketing messages modelled around the identified personal values as in H5a$_1$. As part of the IMC approach recommended in H5a$_1$, particularly the development and targeting of marketing messages, the study also suggests the application of the Means-End Conceptualisation of Components for Advertising Strategy MECCAS model when developing marketing messages (Shimp and

Andrews, 2013; Reynolds and Gutman, 1984). The application of the MECCAS model by an airline is exemplified in Table 3.6 under Section 3.8.1 of Chapter 3.

7.5.7 Implications and Recommendations based on SRO 6 Findings

As for hypothesis (H6_1), the findings indicate that passengers to whom new, exciting and novel changes (stimulation value) is important, will likely exhibit positive post-purchase outcomes and behaviour. This suggests that airlines are performing well in enabling such passengers to achieve their stimulation values. It is, therefore, recommended that airlines need to pay attention to other personal values that are identified as underlying motives for passenger choice behaviour and as criteria for post-purchase service performance evaluation. The next section discusses the study's contribution to the body of knowledge.

7.6 CONTRIBUTION TO KNOWLEDGE

The main aim of this study was to explain airline choice behaviour using the concept of personal values. The results of the study, particularly for hypothesis (H1_1), makes a significant contribution to the body of knowledge on airline choice behaviour in South Africa and beyond. Firstly, the study confirms that personal values do influence airline choice; hence can be used to understand airline choice behaviour. The study identified self-direction thought, stimulation, achievement, universalism tolerance and benevolence care values as the most parsimonious set of values that influence airline choice within the South African domestic passenger market.

Secondly, the knowledge of consumer personal values underlying airline choice is critical for market segmentation and positioning of airlines and/or their services. The findings of this study will contribute immensely to the planning and development of airline services and marketing communications planning.

However, since values are transsituational (Schwartz, 2006, 2012), it is essential to note that the set of values influencing airline choice will differ from one situation to the other, for example, between domestic markets and long-haul (regional and international) markets. Hypothesis (H2_1), though not novel, adds on the empirical evidence on the impact of airline service quality (performance of airline service attributes) of post-

purchase outcomes and behaviour such as customer satisfaction, loyalty and repeat purchase intention within the South African market and elsewhere (De Jager and Van Zyl, 2012; Namukasa, 2013; Mantey and Naidoo, 2017; Jiang and Zhang, 2016).

The study also contributes to the existing literature through the moderation hypotheses findings. Hypothesis $H3a_1$, $H4a_1$ and $H5a_1$ are novel findings since no study has so far attempted to investigate the influence of personal values on the evaluation and prioritisation of airline service attributes when choosing an airline. The findings on the moderation role of demographic variables (income and education) further ignite the debate whether these variables have direct influence or a conditional impact on airline choice. The study indicates that the integration of marketing communications is critical for the effectiveness of adoption of personal values into airline marketing programs.

On the theoretical front, this study contributes to the conceptualisation of airline choice behaviour within the South African domestic passenger market. All along, the airline choice phenomenon has been explained using the attribute models, for example, Campbell and Vigar-Ellis (2012), De Jager and van Zyl (2012), Luke (2015). These studies and many others theorised airline choice as a function of various factors such as ticket prices, reliability, safety, staff courtesy, etc. This study argues against such a simplistic approach and indicate that airline customers attach some level of importance to the airline factors depending on their extent of being instrumental to the achievement of their personal values. Thus, it is the personal values that explains airline choice, with airline service attributes just means to ends. The next section propounds on the limitations of the study and recommendations for future research.

7.7 LIMITATIONS AND FUTURE RESEARCH

There were a couple of limitations identified in this study, that is, research design-related limitations, sample representativity and theoretical framework-related limitations. This study employed a quantitative research design, exalted by many previous studies for objectivity and deduction (Cohen, Manion and Morrison, 2007; Johnson, 2014; Queirós, Faria and Almeida, 2017), which is deemed to be central and leads to progress in science (Krueger, 2001; Hunter, 2002).

However, there are critics of the quantitative designs, the null hypothesis significance testing in particular (Kirk, 1996; Gliner, Leech and Morgan, 2002; Trafimow, 2006, 2014; Garcia and Mayorga, 2018). Such criticism may mean that the results of quantitative studies have to be applied pragmatically whenever they are adopted. In critiquing the null hypothesis significance testing, particularly in the social sciences, Edwards (1972) and Szucs and Ioannidis (2017) refer to it as dangerous nonsense (dressed up as the "scientific method"). Trafimow (2014) problematises the $p \leq 0.05$ threshold of rejecting the null hypothesis. The author argues that a p-value of ≤ 0.05 merely indicates insufficient evidence supporting the null hypothesis or a low probability of obtaining the suggested outcome, no practical significance.

As such, it would be plausible that in future, a mixed methods research study is employed to investigate the influence of personal values on airline choice. Teddlie and Tashakkori (2012) assert that mixed methods research is characterised by methodological eclecticism, abductive reasoning and ideological pluralism. Mixed methods research rejects the incompatibility thesis, methodological monism/provincialism, the false dichotomy between quantitative and qualitative research (Onwuegbuzie and Leech, 2005; Bryman and Bell, 2015; Makrakis and Kostoulas-Makrakis, 2016; Minayo, 2017). As such, Creswell and Plano-Clark (2011) and Shannon-Baker (2015) endorse mixed methods research as capable of providing a more complex and richer understanding of a phenomenon which would otherwise be impossible to explain from a single research approach (qualitative or quantitative).

The second limitation was that of the sample's practical representativeness. Notwithstanding that this study's sample size conformed to the rules of thumb to statistical analysis requirements for exploratory factor analysis, confirmatory factor analysis and regression analysis (see Section 5.7.1), it remains essential that the results of the study be reconciled with the actual population size. For instance, in its report, ACSA (2019) estimated domestic passenger traffic to be slightly above 2 million passengers per month from 2015 to 2019, translating to approximately 24 million domestic passengers per year. Indeed, regardless of the statistically acceptable sample size, the data collected from 294 respondents cannot be said to be representative of the views of 24 million domestic

passengers, therefore, a need to exercise caution when tempted to generalise the findings.

Since it is resource-intensive to increase the sample, hence near impossible to draw data from all population subjects (Saunders, Lewis and Thornhill, 2016), adopting a mixed methods research in future research will enhance the breadth and depth of understanding of the relationship between personal values and airline passenger behaviour in general. The last limitation stems from the theoretical framework. Human/personal values are a highly abstract concept (Schwartz, 1992; Schwartz and Butenko, 2014; Schwartz *et al.*, 2017) and challenging to measure. However, the use of the portrait value questionnaire (PVQ) makes it easy as it allows respondents to reflect and compare themselves with the other person described on the portrait. This reduces bias/social desirability as the portraits are arranged in random.

Furthermore, the lack of studies using personal values to investigate and explain airline choice behaviour meant that there was no empirical evidence to compare to the findings of this study. As such, the researcher relied on the empirical evidence on the influence of personal values on consumer behaviour in other fields, for example, banking industry (Henrique and de Matos, 2014), shopping mall choice (Cai and Shannon, 2012; Li and Cai, 2012; Pike; 2012), food choice (Kitsawad and Guinard, 2014; Manan, 2016; Tey *et al.*, 2018), tourism (Pike, 2012; Guiry and Venquist, 2015), housing and accommodation (Hu, Geertman and Hooimeijer, 2016; Zinas and Jusan, 2017) and higher education (Fatoki, 2014; Mustaffa *et al.*, 2016; Mustaffa *et al.*, 2017).

As such, the comparison of the empirical aspects of the study may have been out of context since personal values are transsituational (Schwartz, 1992, 2012). In future, a baseline cross-cultural study on the personal values of South Africans, in general, could be of importance for empirical evidence backing. Furthermore, the theoretical framework did not capture that the relationship between personal values and airlines service attributes is mediated by consequences as espoused in the attributes-consequences-values (ACV) chain theory (Gutman and Reynolds, 1988). Such an assumption was mainly due to the difficulty of measuring consequences quantitatively; hence it is recommended that the mixed methods future research assume a means-end approach.

7.8 CONCLUDING REMARKS

Drawing from the empirical findings of this study obtained in Section 6.3 of Chapter 6 and discussed in detail in subsections 7.4.3 to 7.4.8 of this chapter, it can be concluded that all the objectives of this study were achieved. Like several previous studies (De Meyer and Mostert, 2011; Campbell and Vigar-Ellis, 2012; Milioti, Karlaftis and Akkogiounoglou, 2015), this study identified the most important airline service attributes used by customers to evaluate and choose airlines. However, as problematised in Section 1.3 of Chapter 1, the study focused on examining the influence of personal values (using Schwartz's Refined values) on airline choice.

The main objective of this study was achieved. Five values were identified as parsimoniously influencing the evaluation and prioritisation of airline service attributes when choosing an airline. In light of the findings on the stated objectives, the study proffered recommendations to improve airline services for the benefit of the airlines and travellers. The objectives were pulled off despite the limitations identified in Section 7.7. This study also suggested a more nuanced methodological approach to address some of the limitations and further contribute to the body of knowledge.

7.9 SUMMARY

This chapter is essential in two ways. Firstly, it is a conclusion chapter which tied together all the preceding chapters of the study. In doing so, the chapter summarized the findings from literature which underpinned the entire study. It went on to discuss the empirical findings from Chapter 6 in line with the research objectives. After that, the chapter provided and discussed the implications, recommendations, contributions and limitations of the study.

The chapter also set the agenda for future research to further contribute to the body of knowledge on consumer behaviour in general, and airline choice in particular. Secondly, the chapter offered a reflective space for the researcher on the journey from the time the idea to pursue doctoral studies was conceived to date. It has been a journey fraught with mixed emotions, albeit so enriching.

REFERENCES

1. Ab Hamid, M.R., Sami, W. and Mohmad Sideki, M.H. (2017). Discriminant Validity Assessment – Use of the Fornell & Larcker Criterion versus HTMT Criterion. *Journal of Physics, Conference Series 890, 012163*, 1-5.

2. Abate, M. (2016). Economic effects of air transport market liberalization in Africa. *Transportation Research Part A, 92*, 326 – 337.

3. Abate, M.A. (2013). Economic effects of air transport liberalization in Africa. In: Paper presented at the African Economic Conference, Johannesburg South Africa, October 28–30, 2013. <http://www.afdb.org/>

4. Abdelhady, M.R.R., Fayed, H.A.K. and Fawzy, N.M. (2019). The Influence of Airlines' Marketing Mix Elements on Passengers' Purchasing Decision-Making: The Case of FSCs and LCCs. *International Journal of Hospitality & Tourism System, 12*(2), 1-17.

5. Abeyratne, R. (2016). *Competition and Investment in Air Transport: Legal and Economic issues*. Quebec: Springer International Publishing AG.

6. Acar, A.Z. and Karabulak, S. (2015). Competition between Full Service Network Carriers and Low Cost Carriers in Turkish Airline Market. *Procedia - Social and Behavioral Sciences, 207*, 642 – 651.

7. ACSA (2019). Airport Company South Africa Total Consolidated Passenger Traffic. [Online] Available at: http://www.airports.co.za/Documents/ACSA_Consolidated_Passenger_traffic_Apr%2019.pdf (Accessed on 29 May 2019).

8. African Airlines Association (AFRAA). (2016). Annual report, AFRAA. [Online] Available at: http/www.afraa.org (Accessed 2 July 2019).

9. African Civil Aviation (n.d.) The Single African Air Transport Market - An Agenda 2063 Flagship Project. [Online] Available at: https://au.int/sites/default/files/newsevents/workingdocuments/33100-wd-6a-brochure_on_single_african_air_transport_market_english.pdf (Accessed 2 July 2019).

10. Ahad, N.A., Yin, T.S., Othman, A.R. and Yaacob, C.R. (2011). Sensitivity of Normality Tests to Non-normal Data. *Sains Malaysiana, 40*(6), 637 – 641.

11. Ahmadpour, N., Lindgaard, G., Robert, J-M. and Pownall, B. (2014). The thematic structure of passenger comfort experience and its relationship to the context features in the aircraft cabin, *Ergonomics, 57*(6), 801-815.

12. Air Transport Action Group. (2014). Aviation Benefits Beyond Borders: Powering global economic growth, employment, trade links, tourism and support for sustainable development through air transport. [Online] Available at: http://aviationbenefits.org/media/26786/ATAG__AviationBenefits2014_FULL_LowRes.pdf (Accessed on 31 March 2017).

13. Airbus (2011). Delivering the future: global market forecast 2010-2030.

14. Airfleets.net (2017). Details of Fly Blue Crane Fleet*.* [Online] Available at: http://www.airfleets.net/flottecie/Fly%20Blue%20Crane.htm (Accessed 12 June 2017).

15. Airlink (n.d.). Airlink profile. [Online] Available at: https://flyairlink.com/about/about-airlink (Accessed on: 21 May 2017).

16. Akamavi, R.K., Mohamed, E., Pellmann, K., and Xu. (2015). Key determinants of passenger loyalty in the low-cost airline business. *Tourism Management, (6),* 528 – 545.

17. Alamdari, F. and Fagan, S. (2005). Impact of Adherence to the original low-cost model on the profitability of low-cost airlines. *Transport Reviews 25*(3), 377-390.

18. Alerge, J., and Cladera, M. (2009). Analysing the effect of satisfaction and previous visits on tourist intentions to return. *European Journal of Marketing, 43(5),* 670 – 685.

19. Ali, Z. and Bhaskar, S.B. (2016). Basic statistical tools in research and data analysis. *Indian journal of anaesthesia, 60*(9), 662–669. https://doi.org/10.4103/0019-5049.190623

20. Allaman, T.L., Mittelstaedt, R.D., Martin, B. and Goldenberg, M. (2009). Exploring the Motivations of BASE Jumpers: Extreme Sports Enthusiasts. *Journal of Sport & Tourism, 14(4),* 229 – 247.

21. Allport, G.W. (1961). *Pattern and growth in personality*. New York: Holt, Rinehart & Winston.

22. Allport, G.W., Vernon, P.E. and Lindzey, G. (1960). *Study of values*. Houghton Mifflin.

23. Alwin, D.F. and Beattie, B.A. (2016). The KISS Principle in Survey Design: Question Length and Data Quality. *Sociological Methodology, 46*(1):121-152.

24. American Psychological Association. (2010). *Publication manual of the American Psychological Association.* 6th edition. Washington, DC: Author.

25. Amin, M., Rezaei, S. and Tavana, F.S. (2015). Gender differences and consumer's repurchase intention: the impact of trust propensity, usefulness and ease of use for implication of innovative online retail. *Int. J. Innovation and Learning, 17*(2), 217-233.

26. Andrews, D., Nonnecke, B., Preece, J. (2003). Electronic survey methodology: A case study in reaching hard to involve Internet Users. *International Journal of Human-Computer Interaction, 16*(2), 185-210.

27. Angowski, M., Domańska, K. and Komor, A. (2017). The impact of promotional measures on the buying behaviour of young consumers on the food market. *Annales Universitatis Mariae Curie-Skłodowska, Sectio H–Oeconomia, 51*(2), 9–18.

28. Anil, N.K. and Icli, G.E. (2014). The HEDQUAL scale: a new measurement scale of service quality for MBA programs in higher education. *South African Journal of Business Management, 45*(3), 31 - 43.

29. Antwi, S.K. and Hamza, K. (2015). Qualitative and Quantitative Research Paradigms in Business Research: A Philosophical Reflection. *European Journal of Business and Management, 7*(3), 217-226.

30. Anuwichanont, J. (2011). The Impact Of Price Perception On Customer Loyalty In The Airline Context. *Journal of Business & Economics Research (JBER), 9*(9), 37-50.

31. Appelbaum, P.S., Lidz, C.W. and Klitzman, R. (2009). Voluntariness OF CONSENT TO RESEARCH: A Conceptual Model. *The Hastings Centre Report, 39*(1), 30-39.

32. Arambewela, R. and Hall, J. (2011). The role of personal values in enhancing student experience and satisfaction among International postgraduate students: an exploratory study. *Procedia - Social and Behavioral Sciences, 29*, 1807 – 1815.

33. Arbore, A. and Estes, Z. (2013). Loyalty program structure and consumers' perceptions of status: feeling special in a grocery store? *J Retail Consumer Serv 20*(5), 439 – 444.

34. Arbuckle, J.L. (2016). *IBM SPSS Amos 24 User's Guide*. Armonk, NY: IBM.

35. Archana, R. and Subha, M.V. (2012). A study on service quality and passenger satisfaction on Indian airlines. *International Journal of Multidisciplinary Research, 2*(2), 51-63.

36. Argan, M. and Argan, M.T. (2017). Relationships Between Service Personal Values, Service Value, Satisfaction, and Loyalty: A Study Regarding Services of Private and State Hospitals in Turkey. *International Journal of Medical Research & Health Sciences, 6*(6), 89-99.

37. Arsil, P. (2013). Consumer's Purchasing Motives of Local Foods In Indonesia: A Means-End Chain Approach. [Unpublished Thesis] Doctor of Philosophy, School of Agriculture, Food and Wine, Faculty of Sciences, The University of Adelaide.

38. Arsil, P., Li, E. and Bruwar, J. (2016). Using Means-end Chain Analysis to Reveal Consumers' Motivation for Buying Local Foods: An Exploratory Study. *Gadjah Mada International Journal of Business, 18*(3), 285-300.

39. Asah, F., Fatoki, O.O. and Rungani, E. (2015). "The impact of motivations, personal values and management skills on the performance of SMEs in South Africa", *African Journal of Economic and Management Studies, 6*(3), 308-322. [Online] Available at: https://doi.org/10.1108/AJEMS-01-2013-0009 (Accessed on 20 June 2019).

40. Asiamah, N., Mensah, H. K. and Oteng-Abayie, E. (2017). General, Target, and Accessible Population: Demystifying the Concepts for Effective Sampling. *The Qualitative Report, 22*(6), 1607-1621. [Online] Available at: https://nsuworks.nova.edu/tqr/vol22/iss6/9 (Accessed on 25 July 2019).

41. Assessment of Fit When RMSEA and CFI Disagree, *Multivariate Behavioral Research, 51*(2-3), 220-239, DOI: 10.1080/00273171.2015.1134306

42. Atulkar, S. and Kesari, B. (2017). Satisfaction, loyalty and repatronage intentions: Role of hedonic shopping values. *Journal of Retailing and Consumer Services, 39*, 23-34.

43. Audrain-Pontevia, A-F. and Vanhuele, M. (2016). "Where do customer loyalties really lie, and why? Gender differences in store loyalty". *International Journal of Retail & Distribution Management, 44*(8), 799-813.

44. Azadian, F. and Vasigh, B. (2019). The blurring lines between full-service network carriers and low-cost carriers: A financial perspective on business model convergence. *Transport Policy, 75*, 19-26.

45. Azionya, C.M. (2015). *University of Johannesburg millenials' communication of brand perception on Facebook: implications for reputation management.* Unpublished Doctoral dissertation, University of Johannesburg.

46. Babić, R.S., Tatalović, T. and Bajić, J. (2017). AIR TRANSPORT COMPETITION CHALLENGES. *International Journal for Traffic and Transport Engineering, 7*(2): 144 - 163.

47. Babin, B.J. and Harris, E. (2012). *Consumer Behaviour,* Sixth Edition. Louisiana: Cengage.

48. Baglin, J. (2014). "Improving Your Exploratory Factor Analysis for Ordinal Data: A Demonstration Using FACTOR," *Practical Assessment, Research, and Evaluation, 19*(5), 1 - 16. DOI: https://doi.org/10.7275/dsep-4220

49. Baikgaki, O.A. and Daw, O.D. (2013). The Determinants of Domestic Air Passenger Demand in the Republic of South Africa. *Mediterranean Journal of Social Sciences, 4*(13), 389-396.

50. Baines, P., Fill, C., and Page, K. (2013). *Essentials of marketing.* Oxford: Oxford University Press.

51. Baldus, B.J., Voorhees, C. and Calantone, R. (2015). Online brand community engagement: Scale development and validation. *Journal of Business Research 68*, 978 – 985.

52. Bari, S., Bavik, A., Ekiz, H.E., Hussain, K. and Toner, S. (2001). "AIRQUAL: A Multiple-Item Scale for Measuring Service Quality, Customer Satisfaction, and Repurchase Intention", HOS-414 Graduation Project (Thesis), Gazimagusa:

Eastern Mediterranean University, School of Tourism and Hospitality Management.

53. Barnes, J. (2017). Measuring Service Quality in the Low--Cost Airline Industry. [Unpublished PhD Thesis]: University of Stirling. Retrieved from https://dspace.stir.ac.uk/bitstream/1893/24938/1/Final%20Submission.pdf (Accessed on 22 October 2018).

54. Baroux J.L. (2013). *The Airlines: The Failure of an Industry.* New York: LID Publishing.

55. Bartels, D.M. and Johnson, E.J. (2015). Connecting cognition and consumer choice. *Cognition, 135*, 47 - 51.

56. Becker, G. (2000). How important is transient error in estimating reliability? Going beyond simulation studies. *Psychological Methods, 5*(3), 370–379. https://doi.org/10.1037/1082-989X.5.3.370

57. Becker, H. (1941). "Supreme Values and the Sociologist," *American Sociological Review, 6*, 155-172.

58. Becker, J., Engelbrecht, A., Boonzaaier, M., Finch, J.D., Meiring, D. and Louw, G. (2017). The measurement of values: A psychometric evaluation of the Schwartz Value Survey in the South African context. *Management Dynamics Volume 26*(2), 21 - 41.

59. Beckmann, J. (2017). University Research Ethics clearances: Safety Nets, or a False Sense of Legal Immunity? *South African Journal of Higher Education, 31*(3), 6 - 23.

60. Belch, G.E. and Belch, M.A. (2018). *Advertising and Promotion: An Integrated Marketing Communications Perspective*. Eleventh Edition. New York: McGraw-Hill Education.

61. Beldona, S., Kher, H.V. and Bernard, S. (2020). Do personal values affect perceptions of the hospitality performance? *International Journal of Hospitality Management, 87*(102384), 1-10.

62. Bell, E., Bryman, A. and Harley, B. (2019). *Business Research Methods*, Fifth Edition. Oxford: Oxford University Press.

63. Bell, J. and Waters, S. (2014). *Doing Your Research Project: A Guide to first time researchers.* 6th ed., Berkshire: Open University Press.

64. Belobaba, P., Odoni, A. and Barnhart, C. (2016). *The Global Airline Industry.* Second Edition. West Sussex: John Wiley & Sons Ltd.

65. Bentler, P.M. (1990). Comparative fit indexes in structural models. *Psychological Bulletin, 107*, 238–246. doi: 10.1037/0033-2909.107.2.238

66. Bentler, P.M. and Chou, C.P. (1987). Practical Issues in Structural Modeling. *Sociological Methods & Research, 16*, 78-117. https://doi.org/10.1177/0049124187016001004

67. Berg, J.W., Appelbaum, P.S., Lidz, C.W. and Parker, L. (2001). *Informed Consent: Legal Theory and Clinical Practice*, 2nd ed. New York: Oxford University Press.

68. Berlianto, M.P. (2019). Identifying Antecedents and Consequences of Customer Satisfaction in the Full-Service Airline Industry. Jurnal Manajemen, XXIII(03), 497-511. DOI: http://dx.doi.org/10.24912/jm.v23i3.586

69. Bhasin, H. (2016). What is a product? [Online] Available at: https://www.marketing91.com/what-is-a-product/ (Accessed on 26 October 2017).

70. Bieger, T. and Wittmer, A. (2006). Air transport and tourism—Perspectives and challenges for destinations, airlines and governments. *Journal of Air Transport Management, 12*(1), 40-46.

71. Bilotkach, V., Gaggero, A.A. and Piga, C.A. (2015). Airline pricing under different market conditions: Evidence from European Low-Cost Carriers. *Tourism Management, 47*, 152-163.

72. Bitzan, J. and Peoples, J. (2016). A comparative analysis of cost change for low-cost, full-service, and other carriers in the US airline industry. *Research in Transportation Economics, 56*, 25-41.

73. Blankenship, K.L., Wegener, D.T. and Murray, R.A. (2015). Values, inter-attitudinal structure, and attitude change: Value accessibility can increase a related attitude's resistance to change. *Personality and Social Psychology Bulletin, 41*(12), 1739–1750.

74. Bloomberg, (2017). Skywise Airline. [Online] Available at: https://www.bloomberg.com/research/stocks/private/snapshot.asp?privcapid=34013012 (Accessed 11 June 2017).

75. Boateng, S.L. and Boateng, R. (2014). Philosophical Debates in Marketing and the Application of Critical Realism to Online Relationship Marketing. In Boateng, S.L. (Eds.) Chapter 2 (in print) Essays from my PhD, Pearl Richards Foundation. [Online] Available at: http://dx.doi.org/10.2139/ssrn.2393044 (Accessed on 03 March 2018).

76. Boeije, H., Slagt, M. and van Wessel, F. (2013). The Contribution of Mixed Methods Research to the Field of Childhood Trauma: A Narrative Review Focused on Data Integration. *Journal of Mixed Methods Research, XX*(X) 1–24.

77. Boeing Commercial Aeroplanes (2014) Current Market Outlook 2013 –2032. [Online] Available at: https://speednews.com/documentaccess/103536_cmo2013.pdf (Accessed on 13 June 2019).

78. Boer, D. and Fischer, R. (2013). How and when do personal values guide our attitudes and sociality? Explaining cross-cultural variability in attitude–value linkages. *Psychological Bulletin, 139*(5), 1113–1147.

79. Boetsch, T., Bieger, T. and Wittmer, A. (2011). A customer-value framework for analyzing airline services. *Transportation Journal, 50*(3), 251–270. https://doi.org/10.5325/transportationj.50.3.0251.

80. Bofinger, H.C. (2017). Air transport in Africa: A portrait of capacity and competition in various market segments. *WIDER Working Paper 2017/36*, United Nations University World Institute for Development Economics Research.

81. Bohm, J. (2012). Two-factor theory – at the intersection of healthcare management and patient satisfaction. *ClinicoEconomics and Outcomes Research, 4*, 277–285.

82. Booms, B.H. and Bitner, M.J. (1981). Marketing strategies and organization structures for service firms. In Akroush, M.N. (2011). The 7Ps classification of the services marketing mix revisited: an empirical assessment of their generalisability,

applicability and effect on performance - evidence from Jordan's services organisations. *Jordan Journal of Business Administration, 7*(1), 116-147.

83. Borenstein, S. and Rose, N.L. (2014). How Airline Markets Work…or Do They? Regulatory Reform in the Airline Industry in Rose, N.L. (Ed) **Economic Regulation and Its Reform: What Have We Learned?** University of Chicago Press.

84. Borg, I., Bardi, A. and Schwartz, S.H. (2017). Does the Value Circle Exist Within Persons or Only Across Persons? *Journal of Personality, 85*(2). 151 – 162.

85. Boschma, G., Yonge, O. and Mychajlunow, L. (2003). Consent in Oral History Interviews: Unique Challenges. *Qualitative Health Research, 13*(1), 129-135.

86. Bouman, T., Steg, L. and Kiers, H.A.L. (2018). Measuring Values in Environmental Research: A Test of an Environmental Portrait Value Questionnaire. *Front. Psychol. 9*, 564. doi: 10.3389/fpsyg.2018.00564

87. Boyd, R.L., Wilson, S.R., Pennebaker, J.W., Kosinski, M., Stillwell, D.J. and Mihalcea, R. (2015). Values in Words: Using Language to Evaluate and Understand Personal Values. Proceedings of the Ninth International AAAI Conference on Web and Social Media, 31 – 40.

88. Brace, I. (2018). *Questionnaire Design: How to Plan, Structure and Write Survey Material for Effective Market Research*. Fourth Edition. London: Kogan Page Ltd.

89. Bracken, S. (2010). Discussing the importance of ontology and epistemology awareness in practitioner research. *Worcester Journal of Learning and Teaching, 4*, 1 - 9.

90. Bradley, M.T. and Brand, A. (2013). Alpha Values as a Function of Sample Size, Effect Size, and Power: Accuracy over Inference. *Psychological Reports, 112*(3), 835-844.

91. Braga, M., Paccagnella, M. and Pellizzari, M. (2014). Evaluating students' evaluations of professors. *Econ Educ Rev, 41*. 71 – 88.

92. Braithwaite, V.A. and Law, H.G. (1985). Structure of human values: Testing the adequacy of the Rokeach Value Survey. *Journal of Personality and Social Psychology, 49*(1), 250–263. https://doi.org/10.1037/0022-3514.49.1.250

93. Brashear-Alejandro, T., Kang, J. and Groza, M.D. (2016). Leveraging loyalty programs to build customer–company identification. *Journal of Business Research, 69*, 1190–1198.

94. Bridges, E. and Florsheim, R. (2008). Hedonic and utilitarian shopping goals: The online experience. *Journal of Business Research, 61*(4), 309-314.

95. Brits, A. (2010). A Liberalised South African Airline Industry: Measuring Airline Total-Factor Productivity. *Journal of Transport and Supply Chain Management*, 22 - 38.

96. Brooks, D. (2012). *The Social Animal*. New York: Random House Trade Paperbacks.

97. Brown, T.A. (2015). *Confirmatory Factor Analysis for Applied Research.* 2nd ed. New York: The Guilford Press.

98. Brown, V. (2017). "The Road to Yamoussoukro," *Journal of Comparative Urban Law and Policy, 1*(1), Article 17. [Online] Available at: https://readingroom.law.gsu.edu/jculp/vol1/iss1/17

99. Browne, M.W. and Cudek, R. (1993). Alternative ways of assessing model fit. In K. A. Bollen, and J. S. Long (Eds.), Testing structural equation models, 136–162. Newbury Park, CA: Sage.

100. Brunsø, K., Scholderer, J., and Grunert, K. G. (2004). Closing the gap between values and behaviour – a means-end theory of lifestyle. *Journal of Business Research, 57,* 665 – 670.

101. Bryman, A. and Bell, E. (2015). *Business Research Methods.* International Fourth Edition. Cape Town: Oxford University Press.

102. Buaphiban, T. (2015). "Determination of Factors That Influence Passengers' Airline Selection: A Study of Low-Cost Carriers in Thailand". *Dissertations and Theses*. Paper 157.

103. Budd, L. and Ison, S. (2017). *Air Transport Management: An International Perspective*. London: Routledge.

104. Budd, L. and Vorley, T. (2013). Airlines, apps, and business travel: a critical examination. *Research in Transportation Business & Management, 9*, 41-49.

105.   Buhalis, D. (2004). eAirlines: strategic and tactical use of ICTS in the airline industry. *Information & Management, 41(7)*, 805 – 825.

106.   Buhalis, D. and Law, R. (2008). Progress in information technology and tourism management: 20 years after the internet – the state of e-tourism research. *Tourism Management, 29(4),* 609 – 623.

107.   Bukhari, S.M.F., Ghoneim, A. and Dennis, C. (2012). Understanding the Factors that Attract Travellers to Buy Airline Tickets Online in Saudi Arabia. *European, Mediterranean & Middle Eastern Conference on Information Systems*, June 7-8, Munich, Germany.

108.   Bukhari, S.M.F., Ghoneim, A., Dennis, C. and Jamjoom, B. (2013). The antecedents of travellers' e-satisfaction and intention to buy airline tickets online. *Journal of Enterprise Information Management, 26*(6), 624-641.

109.   Burger, R., Steenekamp, C.L., van der Berg, S. and Zoch, A. (2017). The middle class in contemporary South Africa: Comparing rival approaches. *Stellenbosch Economic Working Papers*: 11/14.

110.   Burgess, S.M., Schwartz, S. and Blackwell, R.D. (1994). Do Values Share Universal Content and Structure? A South African Test. *South African Journal of Psychology*, *24*(1), 1–12.

111.   Burns, G. N., Morris, M. B., Periard, D. A., LaHuis, D., Flannery, N. M., Carretta, T. R., and Roebke, M. (2017). Criterion-Related Validity of a Big Five General Factor of Personality from the TIPI to the IPIP. *International Journal of Selection and Assessment, 25*, 213–222.

112.   Burrell, G. and Morgan, G. (1979). *Sociological Paradigms and Organizational Analysis*. London.

113.   Burton, L.J. and Mazerolle, S.M. (2011). Survey instrument validity part I: Principles of survey instrument development and validation in athletic training education research. *Athletic Training Education Journal, 6*(1), 27-35.

114.   BusinessDay. (2017). Grounded budget airline pins hopes on rescue plan. [Online] Available at: https://www.businesslive.co.za/bd/companies/transport-and-

tourism/2017-03-31-groundmed-budget-airline-pins-hopes-on-rescue-plan/
(Accessed on 1 October 2017).

115.   BusinessTech. (2015). Another low-cost airline grounded in SA. [Online] Available at: https://businesstech.co.za/news/general/105953/another-low-cost-airline-grounded-in-sa/ (Accessed on 1 October 2017).

116.   BusinessTech. (2017). Government approves another R3 billion SAA bailout. [Online] Available at: https://businesstech.co.za/news/government/201836/government-approves-another-r3-billion-saa-bailout/ (Accessed on 13 October 2017).

117.   Button, K. (2008). The Impacts of Globalisation on International Air Transport Activity, past trends and future perspectives: a contribution to the OECD/ITF *Global Forum on Transport and Environment in a Globalising World* held on 10-12 November 2008 in Guadalajara, Mexico.

118.   Button, K., Brugnoli, A., Martini, G. and Scotti, D. (2015). Connecting African urban areas: airline networks and intra-Sub-Saharan trade. *Journal of Transport Geography, 42*, 84 – 89.

119.   Cai, Y. and Shannon, R. (2012). "Personal values and mall shopping behaviour", *International Journal of retail & Distribution Management, 40(4),* 290 – 318.

120.   Camilleri, M.A. (2017). The Tourism Industry: An Overview. Travel Marketing. *Tourism Economics and the Airline Product*, 3–27.

121.   Camilleri, M.A. (2018). Travel Marketing, Tourism Economics and the Airline Product. *Tourism, Hospitality & Event Management.* doi:10.1007/978-3-319-49849-2

122.   Campbell, B. and Vigar-Ellis, D. (2012). The importance of choice attributes and the positions of the airlines within the South African domestic passenger airline industry as perceived by passengers at Durban International Airport. *Southern African Business Review, 16*(2), 97 – 119.

123.   Campbell, K. (2014). African Airlines face cost and political changes and need international partnerships. [Online] Available at: http://www.engineeringnews.co.za/article/african-airlines-face-cost-and-political-

challenges-and-need-international-partnerships-2011-04-29. (Accessed on 9 April 2017).

124.   Campbell, K. (2016). South Africa a leader in aviation security. [Online] Available at: http://www.engineeringnews.co.za/topic/airline-industry (Accessed on 9 April 2017).

125.   Cao, L. (2014). "Business model transformation in moving to a cross-channel retail strategy: a case study", *International Journal of Electronic Commerce, 18*(4), 69-96.

126.   CAPA Center for Aviation, (2017). SA Express profile. [Online] Available at: https://centreforaviation.com/data/profiles/airlines/sa-express-xz (Accessed 27 May 2017).

127.   CAPA Centre for Aviation. (2013). South Africa's Mango – the often forgotten budget airline subsidiary starts to pursue faster growth. [Online] Available at: https://centreforaviation.com/insights/analysis/south-africas-mango-the-often-forgotten-budget-airline-subsidiary-starts-to-pursue-faster-growth-117288 (Accessed 4 June 2017).

128.   Capazorio, B. (2016). State entities debts push SA to the edge. *The Times.* [Online] Available at: http://www.timeslive.co.za/thetimes/2016/12/07/State-entities-debts-push-SA-to-the-edge1 [Accessed on 20 May 2017].

129.   Cemair (2019). About Us. [Online] Available at: http://www.cemair.co.za/about_us.html (Accessed 24 September 2019).

130.   CH-aviation (2012). 1time finally suspends all operations and files for liquidation. [Online] Available at: http://www.ch-aviation.com/portal/news/14302-1time-finally-suspends-all-operations-and-files-for-liquidation (Accessed on 9 April 2017).

131.   Chaabane, A.M. and Pez, V. (2017). "Make me feel special": Are hierarchical loyalty programs a panacea for all brands? The role of brand concept. *Journal of Retailing and Consumer Services, 38*, 108-117.

132.   Chabra, S. and Misra, M. (2012). A study of the effect of learning music on the personal values of adolescent students. *MIER Journal of Educational Studies, Trends & Practices, 2*(2), 158-167.

133. Chalmers, R.P. (2018). On Misconceptions and the Limited Usefulness of Ordinal Alpha. *Educational and Psychological Measurement, 78*(6), 1056–1071.

134. Chamhuri, N. and Batt, P.J. (2013). Exploring the Factors Influencing Consumers' Choice of Retail Store When Purchasing Fresh Meat in Malaysia. *International Food and Agribusiness Management Review, 16*(3), 99 – 122.

135. Chan, J.K.L. (2014). Understanding the meaning of low airfare and satisfaction to leisure air travelers using Malaysian low-cost airlines. *Journal of Vocational Marketing. 20*(3), 211–223.

136. Chang, Y-H. and Cheng, C-H. (2011). Exploring the effects of consumer ethnocentrism on preference of choosing foreign airlines: A perspective of Chinese tourists. *African Journal of Business Management, 5*(34), 12966-12971.

137. Chang, Y.S., Son, M.G. and Oh, C.H. (2011). Design and implementation of RFID based air-cargo monitoring system, *Advanced Engineering Informatics 25*, 41 – 52.

138. Chavan, P. and Kulkarni, R.V. (2017). Role of Non-parametric Test in Management & Social Science Research. *Quest International Multidisciplinary Research Journal, VI*(IX), 38-52.

139. Chen, C-F. and Wang, J-P. (2016). Customer participation, value co-creation and customer loyalty – A case of airline online check-in system. *Computers in Human Behavior, 62*, 346-352.

140. Chen, F.Y., and Chang, Y.H. (2005). Examining airline service quality from a process perspective. *Journal of Air Transport Management, 11,* 79 – 87.

141. Chen, G. (2016). Developing a Model of Analytic Rating Scales to Assess College Students' L2 Chinese Oral Performance. *International Journal of Language Testing, 6*(2), 50-71.

142. Chen, H-T. and Chao, C-C. (2015). Airline choice by passengers from Taiwan and China: A case study of outgoing passengers from Kaohsiung International Airport. *Journal of Air Transport Management, 49*, 53-63.

143. Cherubino, P., Martinez-Levy, A.C., Caratu`, M., Cartocci, G., Di Flumer, G., Modica, E., Rossi, D., Mancini, M. and Trettel, A. (2019). "Consumer Behaviour

through the Eyes of Neurophysiological Measures: State-of-the-Art and Future Trends." *Computational Intelligence and Neuroscience*, 1 - 41.

144.   Cheung, C., Xiao, B. and Liu, I. (2014). "Do Actions Speak Louder Than Voices? The Signaling Role of Social Information Cues in Influencing Consumer Purchase Decisions," *Decision Support Systems, 65*, 50 - 58.

145.   Chiam, M., Soutar, G. and Yeo, A. (2009). Online and Off-line Travel Packages Preferences: A Conjoint Analysis. *International Journal of Tourism Research, 11*. 31 - 40.

146.   Child, D. (2006). *The Essentials of Factor Analysis.* 3rd Edition. London: Continuum International Publishing Group.

147.   Chilisa, B. (2011). Indigenous Research Methodologies. Thousand Oaks: Sage.

148.   Chilisa, B. and Kawulich, B. (2012). Selecting a research approach: Paradigm, methodology and methods. In C. Wagner, B. Kawulich, and M. Garner (Eds.), *Doing social research: A global context.* Berkshire: McGraw Hill Education.

149.   Chiou, Y-U. and Chen, Y-H. (2012). Service quality effects on air passenger intentions: a service chain perspective. *Transportmetrica, 8*(6), 406-426.

150.   Chiu, C-M., Wang, E.T.G., Fang, Y-H. and Huang, H-Y. (2014). Understanding customers' repeat purchase intentions in B2C e-commerce: the roles of utilitarian value, hedonic value and perceived risk. *Info Systems J, 24*, 85–114.

151.   Chow, C.K.W. (2014). Customer satisfaction and service quality in the Chinese airline industry. *Journal of Air Transport Management, 35*, 102-107.

152.   Chun and Ovchinnikov, 2018). Strategic Consumers, Revenue Management, and the Design of Loyalty Programs. *Management Science, 65*(9), 3949-4450.

153.   Chung, Y-S., Wu, C-L., and Chiang, W-E. (2013). Air passengers' shopping motivation and information seeking behavior. *Journal of Air Transport Management, 27,* 25 – 28.

154. Cieciuch, J. and Davidov, E. (2012). A comparison of the invariance properties of the PVQ-40 and the PVQ-21 to measure human values across German and Polish Samples. *Survey Research Methods, 6*(1), 37 - 48.

155. Cieciuch, J. and Schwartz, S.H. (2012). Assessing the number of distinct basic values and their structure in Poland. *Journal of Personality Assessment, 94*, 321–328.

156. Cieciuch, J. and Schwartz, S.H. (2018). Values and the human being. In Dovidio, J.F and van Zomeren, M. *The Oxford Handbook of the Human Essence*. New York: Oxford University Press.

157. Cieciuch, J., Davidov, E., Algesheimer, R. and Schmidt, P. (2018). Testing for Approximate Measurement Invariance of Human Values in the European Social Survey. *Sociological Methods & Research, 47*(4), 665-686.

158. Cieciuch, J., Davidov, E., Vecchione, M., Beierlein, C. and Schwartz, S.H. (2014). The Cross-National Invariance Properties of a New Scale to Measure 19 Basic Human Values: A Test Across Eight Countries. *Journal of Cross-Cultural Psychology, 45*(5), 764–776.

159. Cieciuch, J., Schwartz, S.H., Davidov, E. (2015). Values, Social Psychology of. In: Wright, J.D. (editor-in-chief), *International Encyclopedia of the Social &*

160. Citeman. (2007). Implications of Unique features of services. [Online] Available at: https://www.citeman.com/2519-implications-of-unique-features-of-services.html (Accessed on 12 November 2017).

161. Clawson, C.J. and Vinson, D.E. (1978). "Human Values: a Historical and Interdisciplinary Analysis". In Kent Hunt and Ann Abor (eds.) *MI - Advances in Consumer Research, 05: Association for Consumer Research*, 396-402. [Online] Available at: http://acrwebsite.org/volumes/9454/volumes/v05/NA-05 (Accessed on 10 October 2019).

162. Clow, K.E. and Baack, D. (2018). *Integrated Advertising, Promotion, and Marketing Communications*. Eighth Edition. Global Edition. London: Pearson Education.

163. Cohen, J. (1988). *Statistical power analysis for the behavioral sciences* (2nd ed.). Hillsdale, NJ: Lawrence Erlbaum.

164.   Cohen, J. (1990). Things I Have Learned (so far). *American Psychologist, 45*, 1304-1312. https://doi.org/10.1037/0003-066X.45.12.1304

165.   Cohen, J. (1992). A power primer. *Psychological Bulletin, 112*(1), 155 - 159.

166.   Cohen, J.B., and Warlop, L. (2001). A motivational perspective on means-end chains. In: Reynolds, T.J. and Olson, J.C. (Eds.), *Understanding consumer decision making: a means-end approach to advertising and marketing strategy,* 389 – 412. Mahwah, NJ: Lawrence Erlbaum Associates.

167.   Cohen, L., Manion, L. and Morrison, K. (2007). *Research methods in education* (6th ed.). New York: Routledge.

168.   Cohen, S.A., Prayag, G., and Moital, M. (2014). Consumer Behaviour in Tourism: Concepts, Influences and Opportunities. *Current Issues in Tourism, 17(10),* 872 – 909.

169.   Cole, C., Laurent, G., Drolet, A. and Ebert, J. (2008). "Decision Making and Brand Choice by Older Consumers," *Marketing Letters Vol. 19*(3/4), 355-365.

170.   Cole, D. (2010). Predicting Digital Content Success with the Means-End Chain. [Online] Available at: http://www.advertisingaphasia.com/predicting-digital-content-success-with-the-means-end-chain/ (Accessed on 10 February 2020).

171.   Comair (2013). Fleet. [Online] Available at: http://www.comair.co.za/about-us/fleet. (Accessed on 13 March 2015).

172.   Comair (2018). Integrated Annual Report 2018. [Online] Available at: http://www.comair.co.za/Media/Comair/files/2018/comair-annual-report-2018-final.pdf (Accessed on 23 September 2019).

173.   Comair (n.d.). The Comair Story. [Online] Available at: http://www.comair.co.za/about-us/the-comair-story (Accessed on 21 May 2017).

174.   Comte, A . (1856). *A general view of positivism*. London: Smith Elder & Co.

175.   Cooksey, R.W. and McDonald, G. (2011). *Writing Up Your Research: Surviving and Thriving in Postgraduate Research*. Tilde: University Press.

176.   Coolen, H. and Hoekstra, J. (2001). "Values as determinants of preferences for housing attributes". In Zinus, Z.B. and Jusan, M.J. (2011). Motivational Factors Influencing Housing Interior Finish Choice and Preference. *ASEAN Conference on*

Environment-Behaviour Studies, Savoy Homann Bidakara Bandung Hotel, Bandung, Indonesia, 15-17 June.

177.   Cooper, B. (2014). Online Marketing. [Online] Available at: https://blog.bufferapp.com/people-dont-buy-products-they-buy-better-versions-of-themselves (Accessed 29 July 2017).

178.   Cooper, D.R. and Schindler, P.S. (2013). *Business Research Methods.* 12th Edition. New York: McGraw-Hill Irwin.

179.   Costello, A.B. and Osborne, J.W. (2005). Best practices in exploratory factor analysis: four recommendations for getting the most from your analysis. *Practical Assessment, Research & Evaluation, 10*(7), 1 - 9.

180.   Coyle, D. (2019). Homo Economicus, AIs, humans and rats: decision-making and economic welfare, *Journal of Economic Methodology, 26*(1), 2 - 12.

181.   Crawfurd, L. (2013). On African Airlines. African Development Bank Group Blog. [Online] Available at: https://www.afdb.org/en/blogs/integrating-africa/post/on-african-airlines-12723/ (Accessed on 05 April 12, 2017).

182.   Creswell, J.W. (2014). *Research Design: Qualitative, Quantitative and Mixed Method Approaches.* Fourth Edition. Thousand Oaks, California: SAGE Publications Limited.

183.   Creswell, J.W. and Plano Clark, V.L. (2011). *Designing and Conducting Mixed Methods Research.* 2nd Edition. Thousand Oaks, CA: Sage.

184.   Creswell, J.W., Klassen, A.C., Plano Clark, V.L., and Smith, K.C. (2011). Best Practices for Mixed Methods Research in the Health Sciences. *Office of Behavioural and Social Sciences Research,* National Institute of Health.

185.   Crossman, A. (2017). Deductive vs Inductive Reasoning - What's the Difference? An Overview of Two Different Approaches to Scientific Research. [Online] Available at: https://www.thoughtco.com/deductive-vs-inductive-reasoning-3026549 (Accessed on 28 March 2018).

186.   Crotty, M. (1998). The foundations of social research: Meaning and perspectives in the research process. In Strang, K.D. (2015). *The Palgrave Handbook of Research Design in Business and Management.* New York: Palgrave Macmillan.

187. Cunningham, C.T., Quan, H., Hemmelgarn, B., Noseworthy, T., Beck, C.A., Dixon, E., Samuel, S., Ghali, W.A., Sykes, L.L. and Jetté, N. (2015). Exploring physician specialist response rates to web-based surveys. *BMC Medical Research Methodology, 15*(32), 1 - 8.

188. Curras-Perez, R. and Sanchez-Garcia, I. (2016). Antecedents and Consequences of Consumer Commitment in Traditional and Low-Cost Airlines. *Journal of Travel & Tourism Marketing, 33*(6), 899-911.

189. Dabholkar, P. A., Shepherd, C. D., and Thorpe, D. I. (2000). A comprehensive framework for service quality: an investigation of critical conceptual and measurement issues through a longitudinal study. *Journal of Retailing, 76(2),* 139 – 173.

190. Daft, J. and Albers, S. (2013). A conceptual framework for measuring airline business model convergence. *Journal of Air Transport Management, 28*, 47-54.

191. Daft, J. and Albers, S. (2015). An empirical analysis of airline business model convergence. *Journal of Air Transport Management, 46*, 3-11.

192. Dalati S. (2018). Measurement and Measurement Scales. In: Marx Gómez J., Mouselli S. (eds) *Modernizing the Academic Teaching and Research Environment. Progress in IS*. Springer, Cham. https://doi.org/10.1007/978-3-319-74173-4_5

193. Das, G. (2014). "Linkages of Retailer Personality, Perceived Quality and Purchase Intention with Retailer Loyalty: A Study of Indian Non-food Retailing." *Journal of Retailing and Consumer Services, 21*(3), 407– 414.

194. Datamonitor (2011) Industry Profile: Global Airlines. [Online] Available at: www.datamonitor.com (Accessed on 26 March 2015).

195. Datler, D., Jagodzinski, W. and Schmidt, P. (2012). Two theories on the test bench: Internal and external validity of the theories of Ronald Inglehart and Shalom Schwartz. *Social Science Research, 42*(3), 906-925.

196. David, M. and Sutton, C. (2004). *Social research: the basics*, Thousand Oaks, CA: Sage.

197.   Davidov, E., Schmidt, P. and Schwartz, S.H. (2008). Bringing values back in: The adequacy of the European social survey to measure values in 20 countries. *Public Opinion Quarterly, 72*, 420–445.

198.   De Jager, J.W. (2012). Domestic Airline service expectations in South Africa and Italy. *International Journal of Business Policy and Economics, 5*(1), 185 - 198.

199.   De Jager, J.W. and Bin Dahari, Z. (2012). Selected Pre-Flight Expectations in the Air Transportation Industry-A Comparison Between South Africa and Malaysia. *World Applied Sciences Journal, 20*(8), 1123 - 1132.

200.   De Jager, J.W. and van Zyl, D. (2012). Airline Service Quality in South Africa and Malaysia- An International Customer Expectations Approach. *Journal of Economics and Behavioral Studies, 5*(11), 752 – 761.

201.   De Jager, J.W., van Zyl, D. and Toriola, A.L. (2012). Airline service quality in South Africa and Italy. *Journal of Air Transport Management, 25*, 19 - 21.

202.   De Lisle, J. (2011). The Benefits and Challenges of Mixing Methods and Methodologies: Lessons Learnt from Implementing Qualitative Led Mixed Methods Research Designs in Trinidad and Tobago. *Caribbean Curriculum, 18,* 87 – 120.

203.   De Meyer, C.F. and Mostert, P.G. (2011). The influence of passenger satisfaction on relationship formation in the South African domestic airline industry. *South African Journal of Business Management, 42*(4), 79 – 87.

204.   de Oliveira Santini, F., Sampaio, C.H., Perin, M.G., Espartel, L.B. and Ladeira, W.J. (2015). Moderating Effects of Sales Promotion Types. *Brazilian Administration Review, Rio de Janeiro, 12, 2*(3), 169-189.

205.   de Wit, J.G. (2014). Unlevel playing field? Ah yes, you mean protectionism. *Journal of Air Transport Management, 41*(0), 22-29. doi:http://dx.doi.org/10.1016/j.jairtraman.2013.11.012

206.   Debats, D.L.H.M. (1996). Meaning in life: psychometric, clinical and phenomenological aspects. Groningen: s.n. [Online] Available at: https://www.rug.nl/research/portal/files/10223324/c5.pdf (Accessed on 20 February 2019).

207.   Delcourt, C., Gremler, D.D., De Zanet, F. and van Riel, A.C.R. (2017). "An analysis of the interaction effect between employee technical and emotional

competencies in emotionally charged service encounters", Journal of Service Management, 28(1), 85-106, https://doi.org/10.1108/JOSM-12-2015-0407

208.   Demir, K. (2016). The Values Individuals from Various Education Level Believe in. *The Turkisk Online Journal of Educational Technology, Special Issue for INTE 2016*, 1175 - 1184.

209.   Department of Transport (1990). *The Domestic Air Transport Policy.* Pretoria: Government Printers.

210.   Department of Transport (2013). Address at the Inaugural Aviation Industry Transformation Letsema by Mrs. Chikunga: Deputy Minister of Transport, Birchwood Hotel, Gauteng.

211.   Department of Transport (2015). National Airports Development Plan. [Online]   Available   at: https://www.transport.gov.za/documents/11623/19945/ANNEXUREA_NationalAirportsDevelomentPlanAugust+2015.pdf/3a3876ae-b78e-4568-9379-36ab7af324de (Accessed on 13 March 2018).

212.   Deshwal, P. (2016). "Customer experience quality and demographic variables (age, gender, education level, and family income) in retail stores". *International Journal of Retail & Distribution Management, 44*(9), 940-955.

213.   DeVellis, R.F. (2017). *Scale Development: Theory and Applications*. 4th Edition. Thousand Oaks, CA: Sage.

214.   Dewey, J. (2008). Reconstruction in Philosophy. In J. Boydston (Ed.), *The middle works of John Dewey, 1899-1924, 11*, 105 - 353. Carbondale: Southern Illinois University Press. (Original work published 1910).

215.   Dibley, A. and Baker, S. (2001). "Uncovering the links between brand choice and personal values among young British and Spanish girls", *Journal of Consumer Behaviour. 1(1),* 77 – 93.

216.   Diggines, C. (2010). Passenger perceptions and understanding of the low-cost and full-service airline models in South Africa and the implications for service strategy: A case study involving South African Airways, British Airways (Comair), Kulula.com, Mango and 1time. *International Research Symposium in Service Management*, held on 24-27 August 2010 at Le Meridien Hotel, Mauritius.

217.   Diliman, D.A., Smyth, J.D. and Christian, L.M. (2014). Internet, Phone, Mail, and Mixed-Mode Surveys: The Tailored Design Method. 4th Edition. Hoboken, NJ: Wiley & Sons Inc.

218.   Ding, M-C., Ho, C-W. and Lii, Y. (2015). Is corporate reputation a double-edged sword? Relative effects of perceived justice in airline service recovery. *International Journal of Economics and Business Research. 10*(1), 1-18.

219.   Divine, R.L., and Lepisto, L. (1998). A Means-End Analysis of Linkages between Bank Attributes and Consumer Values: A Correlational Approach. *The Journal of Marketing Management, (Spring/Summer),* 72 – 79.

220.   Dobruszkes, F. and Graham, A. (2016). Air transport liberalisation and airline network dynamics: Investigating the complex relationships. *Journal of Transport Geography, 50,* 1-3. doi: http://dx.doi.org/10.1016/j.jtrangeo.2015.08.004

221.   Dobruszkes, F. and Mwanza, H. (2007). Marginalisation et dépendance aérienne de l'Afrique subsaharienne. (Marginalization and air dependence of sub-Saharan Africa). *Belgeo 2*, 203-226.

222.   Dölarslan, E.S. (2014). Assessing the effects of satisfaction and value on customer loyalty behaviors in service environments: High-speed railway in Turkey as a case study. *Management Research Review, 37*(8), 706-727.

223.   Dolnicar, S., Grabler, K., Grun, B, and Kulnig, A. (2011). Key drivers of airline loyalty. *Tourism Management, 32(5)*, 1020 – 1026.

224.   Domestic Flights South Africa, (2017). Fly Blue Crane. [Online] Available at: https://www.domesticflights-southafrica.co.za/author/johanna/ (Accessed 4 June 2017).

225.   Dong, S., Ding, M., Grewal, R. and Zhao, P. (2011). Functional forms of the satisfaction–loyalty relationship. *Intern. J. of Research in Marketing, 28*, 38-50.

226.   Doody, O. and Bailey, M.E. (2016). Setting Research Question, Aim and Objective. *Nurse Researcher, 23*(3), 19-23.

227.   Durvasula, S., Lysonski, S., and Madhavi, A. D. (2011). "Beyond service attributes: do personal values matter?" *Journal of Services Marketing, 25(1),* 33–46.

228. Easterly, W. (2001). The middle-class consensus and economic development. *Journal of Economic Growth, 6*(4), 317-335.

229. Eavani, F. and Nazari, K. (2012). Marketing mix: a critical review of the concept. Elixir Marketing Mgmt. 49, 9914 - 9920.

230. Edwards, A.W.F. (1972). *Likelihood: An Account of the Statistical Concept of Likelihood and Its Application to Scientific Inference*. Cambridge: Cambridge University Press.

231. Efremova, M., Panyusheva, T., Schmidt, P. and Zercher, F. (2017). Mixed Methods in Value Research: An Analysis of the Validity of the Russian Version of the Schwartz Value Survey (SVS) Using Cognitive Interviews, Multidimensional Scaling (MDS), and Confirmatory Factor Analysis (CFA). *ASK. Research & Methods 26,* 3 - 30. [Online] Available at: https://www.ceeol.com/search/viewpdf?id=632701 (Accessed on 26 February 2019).

232. Eggert, A., Steinhoff, L. and Garnefeld, I. (2015). Managing the bright and dark sides of status endowment in hierarchical loyalty programs. *J. Serv. Res. 18*(2), 210 – 228.

233. Eisingerich, A.B., Auh, S. and Merlo, O. (2014). Acta Non Verba? The Role of Customer Participation and Word of Mouth in the Relationship Between Service Firms' Customer Satisfaction and Sales Performance. *Journal of Service Research, 17*(1), 40-53.

234. Ekiz, H.E., Hussain, K. and Bavik, A. (2006). Perceptions of service quality in North Cyprus national airline", tourism and hospitality industry 2006-new trends in tourism and hospitality management. In: *18th Biennial International Conference*. Faculty of Tourism and Hospitality Management, Opatija. 778 –790.

235. El-deen, R.M.B., Hasan, S.B. and Fouzy, N.M. (2016). The effect of airport and in-flight service quality on customer satisfaction. *Journal of Faculty of Tourism and Hotels, Fayoum University, 10*(1/2), 1-19.

236. Ellen, R.F. (1984). Ethnographic research: A guide to general conduct. In Rehman, A.A. and Alharthi, K. (2016). An Introduction to Research Paradigms. *International Journal of Educational Investigations, 3*(8), 51-59.

237.   Elliot, A.J. and McGregor, H.A. (2001). A 2 × 2 achievement goal framework. *Journal of Personality and Social Psychology, 80*(3), 501-519.

238.   Engel, J.F., Kollat, D.J., and Blackwell, R.D. (1968). *Consumer Behaviour.* New York: Holt, Reinhart and Winston.

239.   Erasmus, A.C., Boshoff, E. and Rousseau, G.G., (2001). "Consumer decision-making models within the discipline of consumer science: a critical approach". *Journal of Family Ecology and Consumer Sciences, 29*, 82 - 90.

240.   Erdem, T. and Swait, J. (2004). Brand credibility, brand consideration, and choice. *J. Consum. Res. 31*(1), 191-198.

241.   Etikan, I., Musa, S.A. and Alkassim, R.S. (2016). Comparison of Convenience Sampling and Purposive Sampling. *American Journal of Theoretical and Applied Statistics, 5*(1), 1-4.

242.   Evans, J.R. and Mathur, A. (2005). The value of online surveys. *Internet Research, 15*(2), 195-219.

243.   Fabrigar, L.R., and Wegener, D.T. (2012). *Exploratory Factor Analysis: Understanding Statistics*. New York: Oxford University Press.

244.   Fageda, X., Suau-Sanchez, P. and Mason, K.J. (2015). The evolving low-cost business model: Network implications of fare bundling and connecting flights in Europe. *Journal of Air Transport Management, 42*, 289-296.

245.   Faku, D. (2019). Comair about-turn on Boeing 737 MAX. BusinessReport. [Online] Available at: https://www.iol.co.za/business-report/companies/comair-about-turn-on-boeing-737-max-19822463 (Accessed on 25 September 2019).

246.   Falk, R.F. and Miller, N.B. (1992). *A primer for soft modeling*. University of Akron Press.

247.   Fang, J., Wen, C., George, B. and Prybutok, V.R. (2016). Consumer Heterogeneity, Perceived Value, and Repurchase Decision-Making in Online Shopping: The Role of Gender, Age and Shopping Motives. *Journal of Electronic Commerce Research, 17*(2), 116-131.

248.   Farooq, M.S., Salamb, M., Fayollec, A., Jaafard, N. and 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.

249. Farrugia, P., Petrisor, B.A., Farrokhyar, F. and Bhandari, M. (2010). Practical tips for surgical research: Research questions, hypotheses and objectives. Canadian journal of surgery. *Journal canadien de chirurgie, 53*(4), 278–281.

250. Fatoki, O. (2014). The Personal Values of University Students in South Africa. *Mediterranean Journal of Social Sciences, 5*(23), 758 - 763.

251. Fatoki, O. (2015). An investigation into the personal values of small business owners in South Africa. *Corporate Ownership & Control, 12*(2), 610-614.

252. Fatoki, O. (2016). Gender, Religiosity and the Personal Values of University Students in South Africa. *Gender & Behaviour, 14*(1), 7117 - 7125.

253. Feather, N.T. (1975). *Value in Education and Society.* New York: The Free Press.

254. Federico, G. (2013). 'SAA II: Abuse of Dominance in the South African Skies'. *Journal of Competition Law & Economics, 9*(3), 709 - 737.

255. Ferreira, E., (2017). SAA to receive further bailout. *Business Report.* [Online] Available at: http://www.iol.co.za/business-report/budget/budget2017-saa-to-receive-further-bailout-7879109 [Accessed on 15 May 2017].

256. Ferrer-Rosell, B. and Coenders, G. (2017). Airline type and tourist expenditure: Are full service and low-cost carriers converging or diverging? *Journal of Air Transport Management, 63*, 119-125.

257. Ferrer-Rosell, B., Martínez-Garcia, E. and Coenders, G. (2014). Package and no-frills air carriers as moderators of length of stay. *Tourism Management, 42*, 114-122.

258. Field, A. (2013). *"Discovering Coefficients Using SPSS"* (4th ed.), Los Angeles: Sage.

259. Finn, A., Leibbrandt, M. and Woolard, I. (2013). *The Middle Class and Inequality in South Africa.* Southern Africa Labour and Development Research Unit, unpublished paper for the Programme to Support Pro-Poor Policy Development. Cape Town: SALDRU, University of Cape Town.

260. Fischer, R. and Boer, D. (2016). Values: the dynamic nexus between biology, ecology and culture. *Curr Opin Psychol 8*, 155 – 160.

261.   Flannelly, L.R., Flannelly, K.J. and Jankowski, K.R.B. (2014). Fundamentals of measurement in healthcare research. *Journal of Health Care Chaplaincy*, *20*(2), 75–82.

262.   Fleischer, A., Tchetchik, A. and Toledo, T. (2015). Does it pay to reveal safety information? The effect of safety information on flight choice. *Transportation Research Part C 56*, 210 – 220.

263.   Flightsite, (2012). 'Fly Mango Airlines', [Online] Available at: http://www.flightsite.co.za/flights/airlines/mango-airlines/ (Accessed on 11 April, 2017).

264.   Flightsite, (2013). 'Kulula Airlines', [Online] Available at: http://www.flightsite.co.za/flights/airlines/kulula-airlines/ (Accessed on 11 April 2017).

265.   Flightsite, (2017). Airlink. [Online] Available at: http://www.flightsite.co.za/flights/airlines/airlink/ (Accessed on 8 May 2017).

266.   Flightsite. (2013a) In Luke, R. and Walters, J. (2013). Overview of the developments in the domestic airline industry in South Africa since market deregulation. *Journal of Transport and Supply Chain Management, 7(1),* 1 – 11. http://dx.doi.org/10.4102/jtscm.v7i1.117 (Accessed on 15 June, 2015).

267.   Fly Go Air, (2015). About us. [Online] Available at: http://www.flygoair.co.za/index.php/about-us/our-profile (Accessed 4 June 2015).

268.   FlySafair, (2017). FlySafair: About us. [Online] Available at: https://www.flysafair.co.za/about-us (Accessed 8 June 2017).

269.   Forgas, S., Moliner, M.A., Sanchez, J., and Palau, R. (2010). Antecedents of airline passenger loyalty: low-cost versus traditional airlines. *Journal of Air Transport Management, 19,* 229 – 233.

270.   Fornell, C. (1992). A national customer satisfaction barometer: the Swedish experience. In Lee, W-I., Chang, C-Y., and Liu, Y-L. (2010). Exploring customers' store loyalty using the means-end chain approach. *Journal of Retailing and Consumer Services, 17,* 395 – 405.

271.   Fornell, C. and Larcker, D.F. (1981). Evaluating Structural Equation Models with Unobservable Variables and Measurement Error. *Journal of Marketing Research, 18*(1), 39–50.

272.   Foster, R. (2017). Airlink Anniversary: Best foot forward. *Skyways Magazine, June*, 24 - 25.

273.   Fotiadis, A.K. and Vassiliadis, C.A. (2016). Service Quality at Theme Parks. *Journal of Quality Assurance in Hospitality & Tourism, 17*(2), 178-190.

274.   Fouka, G. and Mantzorou, M. (2011). What are the Major Ethical Issues in Conducting Research? Is there a Conflict between the Research Ethics and the Nature of Nursing? *Health Science Journal, 5*(1), 3-14.

275.   Fourie, C., and Lubbe, B. (2006). Determinants of selection of full-service and low-cost carriers – A note on business travellers in South Africa. *Journal of Air Transport Management, 12,* 98–102.

276.   Fox, J., Murray, C. and Warm, A. (2003). Conducting research using web-based questionnaires: Practical, methodological, and ethical considerations. *International Journal of Social Research Methodology, 6*(2), 167-180.

277.   Foxall, G.R. (2015). *Consumer Behaviour: A Practical Guide*. London: Routledge Taylor and Francis.

278.   Foxall, G.R., Oliveira-Castro, J.M., James, V.K. and Schrezenmaier, T.C. (2011). '*Consumer behaviour analysis and the behavioural perspective model*.', Management Online Review (MORE).

279.   Francis, G., Humphreys, I., Ison, S. and Aicken, M. (2006). Where next for low-cost airlines? A spatial and temporal comparative study. *Journal of Transport Geography, 14*(2), 83-94.

280.   Franks, M.R. (2006). Airline Liability for Loss, Damage or Delay of Passenger Baggage. [Online] Available at: http://dx.doi.org/10.2139/ssrn.937936 (Accessed on 23 September 2016).

281.   Frankson, L. (2017). Government approves R3 billion bailout for SAA [Online] Available at: http://www.infrastructurene.ws/2017/10/02/government-approves-r3-billion-bailout-for-saa/# (Accessed on 13 October 2017).

282.   Free Market Foundation, (2013). Freedom in the skies. [Online] Available at: http://www.freemarketfoundation.com/article-view/freedom-in-the-skies-air-transport-in-south-africa (Accessed on 10May 2017).

283.   Frost, J. (2020). How to Interpret Regression Models that have Significant Variables but a Low R-squared. [Online] Available at: https://statisticsbyjim.com/regression/low-r-squared-regression/ (Accessed on 01 June 2020).

284.   Fu, Oum and Zhang (2010). Air Transport Liberalization and Its Impacts on Airline Competition and Air Passenger Traffic. *Transportation Journal, 49*(4), 24-41.

285.   Fulgoni, G.M. (2016). "In the digital world, not everything that can be measured matters", *Journal of Advertising Research, 56*(10), 9-13.

286.   Fullerton, R.A. (2013). "The birth of consumer behavior: motivation research in the 1940s and 1950s", *Journal of Historical Research in Marketing*, *5*(2), 212 – 222.

287.   Furr, R.M. and Bacharach, V.R. (2013), *"Psychometrics. An Introduction"* (2nd Ed.). Los Angeles: Sage.

288.   Gadrich, T., Bashkansky, E. and Zitikis, R. (2014). Assessing variation: a unifying approach for all scales of measurement. *Qual Quant, 49*, 1145–1167.

289.   Ganesan-Lim, C., Russell-Bennett, R. and Dagger, T. (2008). "The Impact of Service Contact Type and Demographic Characteristics on Service Quality Perceptions," *Journal of Services Marketing, 22*(7), 550-561.

290.   Ganiyu, R.A. (2016). Perceived Service Quality and Customer Loyalty: The Mediating Effect of Passenger Satisfaction in the Nigerian Airline Industry. *International Journal of Management and Economics, 52*, 94 – 117.

291.   Garcia, N.M. and Mayorga, O.J. (2018). The threat of unexamined secondary data: A critical race transformative convergent mixed method. *Race Ethnicity and Education, 21*(2), 231-252.

292.   Garg, R., Rahman, Z. and Qureshi, M.N. (2014). "Measuring customer experience in banks: scale development and validation". J*ournal of Modelling in Management, Vol. 9*(1), 87-117. https://doi.org/10.1108/JM2-07-2012-0023

293.   Gaskin, C.J. and Happell, B, (2014). On exploratory factor analysis: A review of recent evidence, an assessment of current practice, and recommendations for future use. *International Journal of Nursing Studies, 51*(3), 511-521.

294.   Gasson, S. (2003). *The Impact of E-Commerce Technology on the Air travel Industry.* Unpublished Idea Group Inc. research report.

295.   Gavin, K. (2013). Operator preparedness is key to successful Africa flights. *Aviation International News, 42*(1), 8 - 9.

296.   George, D. and Mallery, P. (2010). *SPSS for Windows step by step. A simple study guide and reference* (10. Baskı). GEN, Boston, MA: Pearson Education, Inc.

297.   George, D. and Mallery, P. (2016). *Frequencies. In IBM SPSS Statistics 23 Step by Step*. New York: Routledge.

298.   German Aerospace Center DLR, (2008). Topical Report: Airline Business Models. [Online] Available at: http://ec.europa.eu/transport/modes/air/doc/abm_report_2008.pdf. (Accessed on 02 February 2020).

299.   Gernetzky, K. (2017). Fly Blue Crane stops flights to reach deal with business partners. Business Day [Online] Available at: https://www.businesslive.co.za/bd/companies/transport-and-tourism/2017-02-03-fly-blue-crane-stops-flights-to-reach-deal-with-business-partners/ (Accessed on 21 September 2019).

300.   Ghazieh, L. and Soltani, B. (2016). "Effects of Managers' Individual Values on Company's Performance: The Case of France." *ACRN Oxford Journal of Finance and Risk Perspectives 5*(1), 71-92.

301.   Ghosh, I. (2014). VALS ™ Psychographic: A New Way of Market Segmentation in India. *The International Journal of Business & Management, 2*(4), 25 - 30.

302.   Gibbins, K. and Walker, I. (1993). Multiple Interpretations of the Rokeach Value Survey. *The Journal of Social Psychology, 133*(6), 797-805.

303.   Gibbs, L., Slevitch, L. and Washburn, I. (2017). Competency-Based Training in Aviation: The Impact on Flight Attendant Performance and Passenger Satisfaction. *Journal of Aviation/Aerospace Education & Research, 26*(2). https://doi.org/10.15394/jaaer.2017.1716

304.   Gignac, G.E. and Szodorai, E.T. (2016). Effect size guidelines for individual differences researchers. *Personality and Individual Differences, 102*,74–78.

305.   Gil, I., Berenguer, G., and Cervera, A. (2008). The roles of service encounters, service value, and job satisfaction in achieving customer satisfaction in business relationships. *Industrial Marketing Management, 37(8),* 921 – 939.

306.   Ginindza, B. (2019). SA Express to replace local flight routes with destinations on the African continent. Business Report. [Online] Available at: https://www.iol.co.za/business-report/companies/sa-express-to-replace-local-flight-routes-with-destinations-on-the-african-continent-32252323 (Accessed on 23 September 2019).

307.   Glaser, B.G. (2008). Quantitative and Qualitative Research, [Online] *Grounded Theory Review: An International Journal, 7(2),* 1 – 11. Available: http://groundedtheoryreview.com/2008/06/30/1052/ (Accessed on 19/10/15).

308.   Gliner, J.A., Leech, N.L. and Morgan, G.A. (2002). Problems With Null Hypothesis Significance Testing (NHST): What Do the Textbooks Say? *The Journal of Experimental Education, 71*(1), 83–92.

309.   Godlewska-Dzioboń, Klimczyk and Witoń, 2018). Determinatives of employment changes in the polish service sector between 2005 AND 2017. In A. Nalepka and A. Ujwary-Gil (Eds.) *Business and Non-profit Organizations Facing Increased Competition and Growing Customers' Demands, 17*, 519 - 534. Proceedings of the 17th Conference of Scientists and Business People Tomaszowice, Poland, 18-19 June 2018. Available at: https://konferencja.jemi.edu.pl/files/monografia_vol17.pdf#page=627 (Accessed on 28 May 2020).

310.   Goel, A.A. (2017). DESIGN AND ANALYSIS OF LOYALTY REWARD PROGRAMS. [Published PhD Thesis]: Stanford University. Retrieved from http://purl.stanford.edu/jv609vj6030 (Accessed on 11 January 2019).

311.   Goldstein, A. (2001). Service liberalisation and regulatory reform in sub-Saharan Africa: the case of air transport. *World Economy, 24*(3), 221–248.

312.   Goodhope, O.O. (2013). Major Classic Consumer Buying Behaviour Models: Implications for Marketing Decision-Making. *Journal of Economics and Sustainable Development, 4*(4), 164 - 172.

313.   Gordon, G. (2015). Africa's limited skies. *Mail & Guardian*. [Online] Available at: https://mg.co.za/article/2015-07-17-africas-limited-skies (Accessed on 4 May 2017).

314.   Goretzko, D., Pham, T.T.H. and Bühner, M. (2019). Exploratory factor analysis: Current use, methodological developments and recommendations for good practice. *Current Psychology,* 1-12 https://doi.org/10.1007/s12144-019-00300-2

315.   Graham, M. and Bansal, P. (2007). Consumers' Willingness to Pay for Corporate Reputation: The Context of Airline Companies. *Corp Reputation Rev 10*, 189–200.

316.   Grebitus, C., Steiner, B. and Veeman, M. (2015). The roles of human values and generalized trust on stated preferences when food is labeled with environmental footprints: Insights from Germany. *Food Policy, 52*, 84–91

317.   Greenwood, J.D. (2016). All the way up or all the way down? Some historical reflections on theories of psychological continuity. *Journal of Comparative Psychology, 130*(3), 205-214. Available at: http://dx.doi.org/10.1037/a0039916 (Accessed on 4 January 2018).

318.   Grobler, R. (2019). Authors retract Stellenbosch University study on coloured women's 'low thinking function'. News24 [Online] Available at: https://www.news24.com/SouthAfrica/News/authors-retract-stellenbosch-university-study-on-coloured-womens-low-thinking-ability-20190503 (Accessed on 5 July 2019).

319.   Grönroos, C. (1984). "A service quality model and its marketing implications", *European Journal of Marketing, 18*(4), 36-44.

320.   Grönroos, C. (2001). "The perceived service quality concept – a mistake", Managing Service Quality: *An International Journal*, *11*(3), 150-152.

321. Grönroos, C. (2015). *Service Management and Marketing: Managing the Service Profit Logic*, 4th edition. John Wiley & Co, Chichester.

322. Grove, S.K., Burns, N. and Gray, J.R. (2013). *The Practice of Nursing Research: Appraisal, Synthesis, and Generation of Evidence*. Seventh edition. St Louis MO: Elsevier Saunders.

323. Groves, W. and Gini, M. (2015). On Optimising Airline Ticket Purchase Timing. *ACM Transactions on Intelligent Systems Technology, 7*(1), 1-28.

324. Guiry, M. and Vequist IV, D.G. (2015). South Korea's Medical Tourism Destination Brand Personality and the Influence of Personal Values, Asia Pacific. *Journal of Tourism Research, 20*(5), 563 - 584.

325. Gutman, J. (1982). A means-end chain model based on consumer categorization processes. *Journal of Marketing, 46,* 60 – 72.

326. Gutman, J. (1991). Exploring the nature of linkages between consequences and values. *Journal of Business Research, 22(2),* 143 – 148.

327. Ha, J. and Jang, S. (2013). Attributes, consequences, and consumer values: A means-end chain approach across restaurant segments. *International Journal of Contemporary Hospitality Management, 25*(3): 383-409.

328. Haarhoff, R. (2017). Investigating long haul inbound airline price competitiveness: a study of South African Airways. *African Journal of Hospitality, Tourism and Leisure, 6*(1), 1 - 17.

329. Hair, J., Hult, G.T.M., Ringle, C and Sarstedt, M. (2014). *A Primer on Partial Least Squares Structural Equation Modeling (PLS-SEM)*. Los Angeles: SAGE Publications, Incorporated.

330. Hair, J.F., Black, W.C., Babin, B.J. and Anderson, R.E. (2019). *Multivariate Data Analysis*. Eighteenth Edition. Hampshire: Cengage Learning.

331. Hair, J.F., Jr, Black, W.C., Babin, B.J., Anderson, R.E. and Tatham, R.L. (2010). *SEM: an introduction. Multivariate data analysis. A global perspective* 7th Ed. Upper Saddle River: Pearson Education.

332. Hanf, J. and Winter, P. (2017). "David versus Goliath," in *The Wine Value Chain in China*, Elsevier, 133–144. [Online] Available at:

https://www.sciencedirect.com/science/article/pii/B978008100754900009X

(Accessed on 28 August 2019).

333.   Hansen, R. and Sia, S.K. (2015). "Hummel's digital transformation toward omnichannel retailing: key lessons learned", *MIS Quarterly Executive, 14*(2), 51-66.

334.   Harrington, D. (2008). *Confirmatory factor analysis*. New York: Oxford University Press.

335.   Hartman, J.B., Shim, S., Barber, B. and O'Brien, M. (2006). "Adolescents' utilitarian and hedonic web-consumption behaviour: hierarchical influence of personal values and innovativeness", *Psychology & Marketing, 23(10)*, 813 – 839.

336.   Hau, L.N. and Thuy, P.N. (2012). Impact of service personal values on service value and customer loyalty: a cross-service industry study. *Serv Bus, 6*, 137–155.

337.   Hayes, A.F. (2018). *Introduction to Moderation, Mediation and Conditional Process Analysis: A Regression-Based Approach*. Second Edition. London: The Guilford Press.

338.   Hayes, A.F. and Montoya, A.K. (2017). A Tutorial on Testing, Visualizing, and Probing an Interaction Involving a Multicategorical Variable in Linear Regression Analysis. *Communication Methods and Measures, 11*(1), 1-30.

339.   Hazledine, T. (2011). Legacy carriers fight back: Pricing and product differentiation in modern airline marketing. *Journal of Air Transport Management, Volume 17*(2), 130-135.

340.   Heale, R. and Twycross, A. (2016). Validity and reliability in quantitative studies. *Evid Based Nurs, 18*(3), 66-67.

341.   Heinz, S. and O'Connell, J.F. (2013). Air transport in Africa: toward sustainable business models for African airlines. *Journal of Transport Geography, 31*, 72 – 83.

342.   Hemphill, J.F. (2003). Interpreting the magnitudes of correlation coefficients. *American Psychologist, 58*(1), 78–80.

343.   Henama, U.S. (2014). The demise of 1Time and the reaction of interest groups. *African Journal of Hospitality Tourism and Leisure, 3*(2), 1 - 11.

344.   Henama, U.S. (2015). The demise of Skywise. Fin24 [Online] Available at: https://www.fin24.com/Opinion/the-demise-of-skywise-20151207 (Accessed on 21 September 2019).

345.   Henama, U.S., Acha-Anyi, P.N. and Sifolo, P.P.S. (2016). The Low Cost Carrier Bandwagon: Lessons for Skywise Airline. African Journal of Hospitality, Tourism and Leisure, 5 (2), 1 - 23.

346.   Henderson, C.M., Beck, J.T. and Palmatier, R.W. (2011). Review of the theoretical underpinnings of loyalty programs. *Journal of Consumer Psychology, 21*(3), 256–276.

347.   Henderson, R.W. (2005). Informed consent in the development of case studies. *International Journal of Case Method Research and Application, XVII* (3): 1–9.

348.   Henrickson, K.E. and Wilson, W.W. (2016). "The Convergence of Low-Cost and Legacy Airline Operations", *Airline Efficiency, Advances in Airline Economics, 5*, 355-375.

349.   Henrique, J.L. and de Matos, C.A. (2014). The influence of personal values and demographic variables on customer loyalty in the banking industry. *International Journal of Bank Marketing, 33*(4), 571-587.

350.   Herzberg, F. (1974). Motivation-hygiene profiles. *Organizational Dynamics, 3*(2), 18-29.

351.   Heyns, G. and Carstens, S. (2011). Passenger Choice Decisions at a Regional Airport in South Africa. *Journal of Transport and Supply Chain Management, 5*(1), 186 - 201.

352.   Ho, C-I., Lin, P-Y. and Huang, S-C. (2014). Exploring Taiwanese's working holiday-makers' motivations: an analysis of means-end hierarchies. *Journal of Hospitality & Tourism Research, 38*(4), 463 – 486.

353.   Ho, C.I., and Lee, Y.L. (2007). The development of e-travel service quality scale. *Tourism Management, 28(6),* 1434 – 1449.

354.   Hoerger, M. (2010). Participant Dropout as a Function of Survey Length in Internet-Mediated University Studies: Implications for Study Design and Voluntary Participation in Psychological Research. *Cyberpsychology, Behavior, and Social Networking, 13*(6), 697-700.

355.   Hofstede, G. and G.J. Hofstede. (2005). Culture and Organizations: Software of the Mind. In Li, M. and Cai, L.A. (2012). The Effects of Personal Values on Travel Motivation and Behavioral Intention. *Journal of Travel Research, 51*(4). 473 – 487.

356.   Homer, P. and Kahle, L. (1988). "A structural equation analysis of the value-attitude-behavioral hierarchy". *Journal of Personality and Social Psychology, 54*, 638-46.

357.   Hoogland, J.J. and Boomsma, A. (1998). Robustness Studies in Covariance Structure Modeling: An Overview and a Meta-Analysis. *Sociological Methods & Research, 26*, 329-367. https://doi.org/10.1177/0049124198026003003

358.   Hope, S. (2016). Bursting paradigms: a colour wheel of practice-research, *Cultural Trends, 25*(2), 74-86.

359.   Horn, J.L. and McArdle, J.J. (1992). "A Practical and Theoretical Guide to Measurement Invariance in Aging Research." *Experimental Aging Research 18*, 117 - 44.

360.   Horner, J. (2003). Morality, ethics, and law: Introductory concepts. *Seminars in Speech and Language 24*(4): 263–274.

361.   Hossain, M.Z., Kibria, H. and Farhana, S. (2017). Do Customer Loyalty Programs Really Work in Airlines Business? — A Study on Air Berlin. *Journal of Service Science and Management, 10*, 360-375.

362.   Howard, M.C. (2016). A Review of Exploratory Factor Analysis Decisions and Overview of Current Practices: What We Are Doing and How Can We Improve? *International Journal of Human-Computer Interaction, 32*(1), 51-62. DOI: 10.1080/10447318.2015.1087664

363. Hsiao, Yen, and Li, (2012). Exploring consumer value of multi-channel shopping: A perspective of means-end theory. *Internet Research, 22*(3), 318 – 339.

364. Hu, H., Geertman, S. and Hooimeijer, P. (2016). Personal values that drive the choice for green apartments in Nanjing China: the limited role of environmental values. *J Hous and the Built Environ, 31*, 659 – 675.

365. Hu, L. and Bentler, P.M. (1999). Cut-off criteria for fit indexes in covariance structure analysis: Conventional criteria versus new alternatives. *Structural Equation Modeling, 6*, 1 – 55. doi: 10.1080/10705519909540118

366. Huff, K. (2017). People Don't Buy Products or Services—They Buy Promises. Zimmer Marketing [Online] Available at: https://info.zimmermarketing.com/blog/people-dont-buy-products-or-services-they-buy-promises (Accessed on 15 April 2020).

367. Human-Vogel, S. and Coetzee, S. (2011). Challenges associated with ethics review of educational research at a South African university. *Acta Academica 43*(2), 165 – 192.

368. Hundenborn, J., Leibbrandt, M. and Woolard, I. (2016). *Drivers of Inequality in South Africa*. SALDRU Working Paper Number 194/NIDS Discussion Paper 2016/16. Cape Town: SALDRU, University of Cape Town

369. Huschelrath, K. and Muller, K. (2012). "Low-Cost Carriers and the Evolution of the Domestic U.S. Airline Industry," *Competition and Regulation in Network Industries, 13*(2), 133-159.

370. Hussain, R., Nasser, A. A., and Hussain, Y. K. (2015). Service Quality and Customer Satisfaction of a UAE-based airline: An Empirical Investigation. *Journal of Air Transport Management, 42,* 167 – 175.

371. Hussein, M. E., Hirst, S., Salyers, V. and Osuji, J. (2014). Using Grounded Theory as a Method of Inquiry: Advantages and Disadvantages. *The Qualitative Report, 19*(27), 1-15. [Online] Available at: https://nsuworks.nova.edu/tqr/vol19/iss27/3 (Accesses on 24 July 2019).

372.   Hutchinson, K., Donnell, L.V., Gilmore, A. and Reid, A. (2015). Loyalty card adoption in SME retailers: the impact upon marketing management. *European Journal of Marketing, 49*(3/4), 467–490.

373.   IATA (2014). *Annual Review*. Available from: http://www.iata.org/about/Documents/annual-review-2014.pdf. (Accessed 29 March 2015).

374.   IATA (2015). IATA Annual Review. [Online] Available at: https://www.iata.org/about/Documents/iata-annual-review-2015.pdf (Accessed on 11 April 2017).

375.   IATA (2016). Another Strong Year for Airline Profits in 2017. [Online] Available at: http://www.iata.org/pressroom/pr/Pages/2016-12-08-01.aspx (Accessed on 11 April 2017).

376.   IATA (2017). Africa Open Skies. [Online] Available at: http://www.iata.org/policy/promoting-aviation/liberalization/Pages/intra-africa-liberalization-report.aspx (Accessed on 14 April 2017).

377.   ICAO Secretariat, (2008). 'Domestic market deregulation in South Africa' [Online] Available: http://icao.int/sustainability/CaseStudies/StatesReplies/SouthAfrica_En.pdf (Accessed on 16 October 2015).

378.   In'nami, Y. and Koizumi, R. (2013). Review of Sample Size for Structural Equation Models in Second Language Testing and Learning Research: A Monte Carlo Approach. *International Journal of Testing, 13*(4), 329-353.

379.   InterVistas, (2014). Transforming Intra-African Air Connectivity: The Economic Benefits of Implementing the Yamoussoukro Decision. InterVistas consulting Ltd. July 2014. https://www.iata.org/whatwedo/Documents/economics/InterVISTAS_AfricaLiberalisation_FinalReport_July2014.pdf (Accessed on 11 April 2017).

380.   Iofrida, N., De Luca, A.I., Strano, A. and Gulisano, G. (2018). Can social research paradigms justify the diversity of approaches to social life cycle assessment? *Int J Life Cycle Assess, 23*, 464–480.

381.   Ismaila, D.A., Warnock-Smith, D. and Hubbard, N. (2014). The impact of Air Service Agreement liberalisation: The case of Nigeria. *Journal of Air Transport Management, 37*, 69-75.

382.   Israel, G.D. (2003). Determining sample size. *Tech. Rep. No. PEOD-6*, 1-6.

383.   Iversen, N.M., Hem, L.E. and Mehmetoglu, M. (2016). Lifestyle segmentation of tourists seeking nature-based experiences: the role of cultural values and travel motives. J*ournal of Travel & Tourism Marketing, 33*(1), 38 - 66. DOI: 10.1080/10548408.2014.998359

384.   Jamaludin, N.L., Sam, D.L., Sandal, G.M. and Adam, A.A. (2016). Personal values, subjective well-being and destination-loyalty intention of international students. *SpringerPlus 5*(720), 1-11. https://doi.org/10.1186/s40064-016-2439-3

385.   Jankowski, K.R.B. and Flannelly, K.J. (2015). Measures of Central Tendency in Chaplaincy, Health Care, and Related Research. *Journal of Health Care Chaplaincy, 21*(1), 39-49.

386.   Jarach, D., Zerbini, F. and Miniero, G. (2009). When legacy carriers converge with low-cost carriers: Exploring the fusion of European airline business models through a case-based analysis. *Journal of Air Transport Management, 15*, 287–293.

387.   Jean, D.A. and Lohmann, G. (2016). Revisiting the airline business model spectrum: The influence of post global financial crisis and airline mergers in the US (2011−2013). *Research in Transportation Business & Management, 21*, 76-83.

388.   Jeffery, M., Egli, L., Gieraltowski, A., Lambert, J., Miller, J., Neely, L. and Sharma, R. (2017). "Air France Internet Marketing: Optimizing Google, Yahoo!, MSN, and Kayak Sponsored Search", *Kellogg School of Management Cases*. https://doi.org/10.1108/case.kellogg.2016.000012

389.   Jeng, M-Y. and Yeh, T-M. (2016). The effect of consumer values on the brand position of green restaurants by means-end chain and laddering interviews. *Serv. Bus 10,* 223 – 238.

390.   Jeng, S-P. (2016). The influences of airline brand credibility on consumer purchase intentions. *Journal of Air Transport Management, 55*, 1-8.

391.   Jessor, R. (1958). The problem of reductionism in psychology. *Psychological Review, 65*(3), 170–178.

392.   Jiang, H. and Zhang, Y. (2016). An investigation of service quality, customer satisfaction and loyalty in China's airline market. *Journal of Air Transport Management, 57*, 80 - 88.

393.   Jisana, T.K. (2014). CONSUMER BEHAVIOUR MODELS: AN OVERVIEW. *Sai Om Journal of Commerce & Management, 1*(5), 34 - 43.

394.   Johnson, D.E. (2014). Descriptive Statistics. In Podesva, R.J. and Sharma, D. (Eds.) *Research Methods in Linguistics.* New York: Cambridge University Press.

395.   Johnson, P. and Duberley, J. (2015). Inductive praxis and management research: Towards a reflexive framework. *British Journal of Management*, *26*(4), 760-776.

396.   Johnson, R.B., Onwuegbuzie, A.J. and Turner, L.A. (2007). Toward a Definition of Mixed Methods Research. *Journal of Mixed Methods Research, 1*(2):112-133.

397.   Johnston, H. and Klandermans, B. (2003). The Cultural Analysis of Social Movements. In Johnston, H. and Klandermans, B. (Eds). *Social Movements and Culture: Protest and Contention.* London: Routledge Taylor & Francis Group.

398.   Joinson, A. (1999). Social desirability, anonymity, and Internet-based questionnaires. *Behavior Research Methods, Instruments, & Computers, 31*(3), 433-438.

399.   Jonkheid, K. (1999). Applying a Psychodynamic Approach to Means-end Chain: Implications for Advertising Theory and Practice. Doctor of Commerce. [Unpublished]: University of Johannesburg. Retrieved from: https://ujdigispace.uj.ac.za (Accessed on 15 March 2015).

400.   Kachroo, P. and Kachen, S. (2018). Item placement for questionnaire design for optimal reliability. *J Market Anal, 6*, 120–126.

401.   Kaciak, E. (2011). Market Segmentation Based on Consumers' Cognitive Motivational Structures. *Konsumpcja i Rozwój*, 77-92.

402.   Kaciak, E. and Cullen, C.W. (2006). "Analysis of means-end chain data in marketing research," *Journal of Targeting, Measurement and Analysis for Marketing, 15,* 12 – 20.

403.   Kahle, L.R. (1980). Stimulus condition self-selection by males in the interaction of locus of control and skill-chance situations. *J Pers Soc Psychol, 38*, 50 - 56.

404.   Kahle, L.R. ed. (1983). *Social Values and Social Change: Adaptation to Life in America*. New York: Praeger.

405.   Kahle, L.R., Beatty, S.E. and Homer, P. (1986). Alternative measurement approaches to consumer values: the list of values (LOV) and values and lifestyle (VALS). *Journal of Consumer Research, 13*(3), 405–409.

406.   Kaiser, H. (1974). An index of factorial simplicity. *Psychometrika, 39*, 31-6.

407.   Kamakura, W. A. and Novak, T. P. (1992). "Value segmentation: exploring the meaning of LOV", *Journal of Consumer Research, 19*, 119-132.

408.   Karadag, E., Kılıçoğlu, G., and Yılmaz-Kılıçoğlu, D. (2018). Cultural validity trouble in measuring value concept: A study on validity of Schwartz Value Survey in Turkish culture. *Cogent Psychology, 5*(1), 1523517. https://doi.org/10.1080/23311908.2018.1523517

409.   Kaushik, M. and Mathur, B. (2014). Data Analysis of Students Marks with Descriptive Statistics. International Journal on Recent and Innovation Trends in Computing and Communication, 2(5), 1188– 1191.

410.   Kellar, S.P. and Kelvin, E.A. (2012). *Exploratory factor analysis. Munro's statistical methods for health care research* (6th ed.). Philadelphia, PA: Wolters Kluwer.

411.   Kelley, K., Hyde, J. and Bruwer, J. (2015). "US wine consumer preferences for bottle characteristics, back label extrinsic cues and wine composition", *Asia Pacific Journal of Marketing and Logistics, 27*(4), 516-534.

412.   Kelly, M., Dowling M, and Miller M. (2018). The Search for Understanding: The Role of Paradigmatic Worldviews. *Nurse Researcher, 25*(4), 9 - 13.

413.   Kelly, P., Lawlor, J. and Mulvey, M. (2017). Customer Roles in Self-Service Technology Encounters in a Tourism Context, *Journal of Travel & Tourism Marketing, 34*(2), 222 - 238.

414.   Kelly, T.A. and Strupp, H.H. (1992). Patient and therapist values in psychotherapy: Perceived changes, assimilation, similarity, and outcome. *Journal of Consulting and Clinical Psychology, 60*(1), 34–40. https://doi.org/10.1037/0022-006X.60.1.34

415.   Kern, S.E. (2014). Inferential statistics, power estimates, and study design formalities continue to suppress biomedical innovation.

416.   Kesari, B. and Atulkar, S. (2016). Satisfaction of mall shoppers: A study on perceived utilitarian and hedonic shopping values. *Journal of Retailing and Consumer Services. 31*, 22-31.

417.   Khalaf, G. and Iguernane, M. (2016). "Multicollinearity and A Ridge Parameter Estimation Approach," *Journal of Modern Applied Statistical Methods, 15*(2/25), 400-410.

418.   Khan, M.T. (2014). The Concept of 'Marketing Mix' and its Elements (A Conceptual Review Paper. International Journal of Information, Business and Management, 6(2), 95 - 107.

419.   Khanh, G.H.N. (2017). Customer Satisfaction of Vietnam Airline Domestic Service Quality. *International Journal of Quality Innovation, 3*(10), 1-11.

420.   Khumalo, S. (2019). SA Express says it's on the right track despite suspensions. fin24. [Online] Available at: https://www.fin24.com/Companies/Industrial/sa-express-says-its-on-the-right-track-despite-suspensions-20190905 (Accessed on 24 September 2019).

421.   Kiatkawsin, K. and Han, H. (2017). An alternative interpretation of attitude and extension of the value–attitude–behavior hierarchy: the destination attributes of Chiang Mai, Thailand. *Asia Pacific Journal of Tourism Research, 22*(5), 481-500.

422.   Kilgo, C.A. (2016). "An epistemological revolution: using quantitative data to critically interrogate high-impact educational practices." [Unpublished PhD

Thesis]: University of Iowa. Retrieved from https://doi.org/10.17077/etd.2xvjjjpt (Accessed on 7 February 2017).

423.   Kim, B., Kim, S.S. and King, B. (2016). The sacred and the profane: Identifying pilgrim traveler value orientations using means-end theory. *Tourism Management, 56*, 142–155.

424.   Kim, S-B. and Park, J-W. (2017). A study on the importance of airline selection attributes by airline type: An emphasis on the difference of opinion in between Korean and overseas aviation experts. *Journal of Air Transport Management, 60*, 76-83.

425.   Kimberlin, C.L. and Winterstein, A.G. (2008). Validity and reliability of measurement instruments used in research. *Am J Health-Syst Pharm, 65*, 2276-2284.

426.   King Shaka Airport, (2017). Mango airlines: a juicy success story. [Online] Available at: http://kingshakainternational.co.za/mango-airlines-a-juicy-success-profile/ [Accessed 4 June 2017].

427.   Kirk, R.E. (1996). Practical significance: A concept whose time has come. *Educational and Psychological Measurement, 56*, 746–759.

428.   Kitsawad, K. and Guinard, JX. (2014). Combining means-end chain analysis and the Portrait Value Questionnaire to research the influence of personal values on food choice. *Food Quality and Preference, 35,* 48 – 58.

429.   Kivunja, C. and Kuyini, A.B. (2017). Understanding and Applying Research Paradigms in Educational Contexts. *International Journal of Higher Education, 6*(5), 26 - 41. https://doi.org/10.5430/ijhe.v6n5p26

430.   Kılınç, H. and Firat, M. (2015). Opinions of expert academicians on online data collection and voluntary participation in social sciences research. *Educational Sciences: Theory & Practice, 17*, 1461–1486.

431.   Kline, R.B. (2014). *An Easy Guide to Factor Analysis*. New York: Routledge.

432.   Kline, R.B. (2016). *Principles and Practice of Structural Equation Modeling*. 4th Edition. London: Guilford Press.

433.   Kloda, L.A. and Bartlett, J.C. (2013). Formulating answerable questions: question negotiation in evidence-based practice. *Journal of the Canadian Health Libraries Association, 34*(20), 55 - 60.

434.   Klophaus, R., Conrady, R. and Fichert, F. (2012). Low cost carriers going hybrid: Evidence from Europe. *Journal of Air Transport Management, 23*, 54–58.

435.   Kluckhohn, C. (1951). "Values and Value Orientations in the Theory of Action: An Explanation in Definition and Classification," in Parsons, T. and Shills, E. (eds.), *Toward A General Theory of Action*, Cambridge: Harvard University Press.

436.   Knafo, A., Roccas, S. and Sagiv, L. (2011). The Value of Values in Cross-Cultural Research: A Special Issue in Honor of Shalom Schwartz. *Journal of Cross-Cultural Psychology, 42*(2), 178 – 184.

437.   Ko, S., Norum, P., and Hawley, J. M. (2010). "Consumer value structures reflected in clothing advertisements." *Journal of Fashion Marketing and Management, 14(3),* 451 – 468.

438.   Kocyigit, E. (2018). Marketing, Its Scope, Philosophical Foundations and Needed Reforms. [Blog] Available at: http://erenkocyigit.com/marketing-scope-philosophical-foundations-needed-reforms/ (Accessed on 02 July 2018).

439.   Koklic, M.K., Kukar-Kinney, M. and Vegelj, S. (2017). An investigation of customer satisfaction with low-cost and full-service airline companies. *Journal of Business Research, 80*, 188–196.

440.   Koo, T.T.R., Caponecchia, C. and Williamson, A. (2018). How important is safety in making flight choices? Evidence from simple choice experiments. *Transportation 45*, 159 – 175.

441.   Kopalle, P.K., Sun, Y., Neslin, S.A., Sun, B. and Swaminathan, V. (2012). The joint sales impact of frequency reward and customer tier components of loyalty programs. *Marketing Science 31*(2) 216-235.

442.   Kothari, C.R. (2010). *Research Methodology.* Mumbai: New Age International Publishers.

443.   Kotler, P. and Armstrong, G. (2018). *Principles of Marketing*. 17th ed. Global Edition. New York: Pearson

444.   Kotler, P. and Keller, K.L. (2016). *Marketing Management,* Global Edition. Cape Town: Prentice-Hall.

445.   Kotrlik, J.W., Williams, H.A. and Jabor, M.K. (2011). Reporting and Interpreting Effect Size in Quantitative Agricultural Education Research. Journal of Agricultural Education, 52(1), 132 – 142.

446.   Kreis, H. and Mafael, A. (2014). The influence of customer loyalty program design on the relationship between customer motives and value perception. *Journal of Retailing and Consumer Services Volume 21*(4), 590-600.

447.   Kreuter, F., Presser, S. and Tourangeau, R. (2008). Social desirability bias in CATI, IVR, and Web surveys. *Public Opin. Q., 72*(5), 847–865.

448.   Krosnick, J.A. and Presser, S. (2010). 'Question and Questionnaire Design'. In Marsden, P.V. and Wright, J.D. (Eds.). *Handbook of Survey Research*. 2nd Edn. Bingley: Emerald, 263-313.

449.   Krueger, J. (2001). Null hypothesis significance testing: On the survival of a flawed method. *American Psychologist, 56*, 16 - 26.

450.   Krystallis, A., Vassallo, M. and Chryssohoidis, G. (2012). The usefulness of Schwartz's 'Values Theory' in understanding consumer behaviour towards differentiated products, *Journal of Marketing Management, 28*(11-12), 1438-1463. DOI:10.1080/0267257X.2012.715091

451.   Kuhn, T. (1962). *The Structure of Scientific Revolutions*, Chicago: University of Chicago Press (1970, 2nd edition, with postscript).

452.   Kulula (2017). Kulula brand timeline. [Online] Available at: http://www.kulula.com/brand/timeline [Accessed 27 May 2017].

453.   Kulula (2019). Routes. [Online] Available at: https://www.kulula.com/flights/routes-and-schedules/routes (Accessed on 25 September 2019).

454.   Kurtulmuşoğlu, F.B., Can, G.F. and Tolon, M. (2016). A voice in the skies: Listening to airline passenger preferences. *Journal of Air Transport Management, 57*, 130-137. https://doi.org/10.1016/j.jairtraman.2016.07.017.

455. Kyriazos, T.A. (2019). Applied Psychometrics: Sample Size and Sample Power Considerations in Factor Analysis (EFA, CFA) and SEM in General. *Psychology, 9*, 2207 - 2230.

456. Ladhari, R. and Tchetgna, N.M. (2015). The influence of personal values on Fair Trade consumption. *Journal of Cleaner Production, 87*, 469-477.

457. Lagerkvist, C.J., Ngigi, M., Okello, J.J. and Karanja, N. (2012). Means-End Chain approach to understanding farmers' motivations for pesticide use in leafy vegetables: The case of kale in peri-urban Nairobi, Kenya, Crop Protection, 39, 72-80.

458. Lages, L.F. and Fernandes, J.C. (2005). "The SERPVAL scale: a multi-item instrument for measuring service personal values", *Journal of Business Research, 58*(11), 1562 – 1572.

459. Lai, K. and Green, S.B. (2016). The Problem with Having Two Watches: Assessment of Fit When RMSEA and CFI Disagree, *Multivariate Behavioral Research, 51*(2-3), 220-239. DOI: 10.1080/00273171.2015.1134306

460. Lambert, A, and Luiz, J. (2011). Passenger service expectations as perceived by long haul airline managers in South Africa. *Africa Journal of Business Management, 5*(29), 11662 – 11675.

461. Lamont, M. and Swidler, S. (2014). Methodological pluralism and the possibilities and limits of interviewing. *Qualitative Sociology, 31*(2), 153 - 171.

462. Lange, A., Sieling, J. and Parra, G.G. (2019). Convergence in airline operations- The case of ground times. *Journal of Air Transport Management, 77*, 39-45.

463. Law, C. (2017). The study of customer relationship management in Thai airline industry: A case of Thai travellers in Thailand. *Journal of Airline and Airport Management, 7*(1), 13-42.

464. Lazaris, C. and Vrechopoulos, A. (2014). 'From Multichannel to "Omnichannel" Retailing: Review of the Literature and Calls for Research', in *2nd International Conference on Contemporary Marketing Issues,(ICCMI)*, 1–7.

465. Le Roux, C. (2015). Oral history research ethics: should anonymity and confidentially issues be dealt with on their own merit? *Africa Education Review,*

12(4), 552–566. [Online] Available at: https://www.tandfonline.com/doi/pdf/10.1080/18146627.2015.1112132?needAccess=true (Accessed on 13 July 2019).

466. Leatherbee, M. and Katila, R. (2019). The Lean Startup Method: Team Composition, Hypothesis Testing, and Early-stage Business Models. working paper (August 15, 2019). [Online] Available at: SSRN: https://doi.org/10.2139/ssrn.2902689

467. Leckie, C., Nyadzayo, M.W. and Johnson, L.W. (2016). Antecedents of consumer brand engagement and brand loyalty. *Journal of Marketing Management, 32*(5-6), 558-578

468. Lee, H-J. and Lyu, J, (2016). Personal values as determinants of intentions to use self-service technology in retailing. *Computers in Human Behavior, 60*, 322-332.

469. Lee, J., Ok, C., Lee, S-H. and Lee, C-K. (2018). Relationship between Emotional Labor and Customer Orientation among Airline Service Employees: Mediating Role of Depersonalization. Journal of Travel Research, 57(3), 324–341.

470. Lee, J.A., Soutar, N., Daly, T.M. and Louriere, J. (2011). Schwartz values clusters in the United States and China. *Journal of Cross-Cultural Psychology, 42*, 234 - 252.

471. Lee, P.Y., Lusk, K., Mirosa, M. and Oey, I. (2014). The role of personal values in Chinese consumers' food consumption decisions. A case study of healthy drinks. *Appetite, 73*, 95 – 104.

472. Lee, W-I., and Lin, C-H. (2010). Consumer hierarchical value map modelling in the healthcare service industry. *African Journal of Business Management, 53*(3), 722 – 736.

473. Lee, W-I., Chang, C-Y., and Liu, Y-L. (2010). Exploring customers' store loyalty using the means-end chain approach. *Journal of Retailing and Consumer Services, 17,* 395 – 405.

474. Leick, R. and Wensveen, J. (2014). The airline business. In D. Prokop (Ed.), *The business of transportation,* 65 - 99. Santa Barbara, California: Praeger Publishing.

475.	Leong, L-Y., Hew, T-S., Lee, V-H. and Ooi, K-B. (2015). An SEM–artificial-neural-network analysis of the relationships between SERVPERF, customer satisfaction and loyalty among low-cost and full-service airline. *Expert Systems with Applications, 42*(19), 6620-6634.

476.	Leung, A., Yen, B.T.H. and Lohmann, G. (2017). Why passengers' geo-demographic characteristics matter to airport marketing, J*ournal of Travel & Tourism Marketing, 34*(6), 833-850. DOI: 10.1080/10548408.2016.1250698

477.	Levy, B., Hirsch, A. and Woolard, I. (2014). *South Africa's evolving political settlement in comparative perspective*, Southern Africa Labour and Development Research Unit Working Paper Number 138. Cape Town: SALDRU, University of Cape Town.

478.	Li, J. (2016). Assessing Schwartz's Refined Value Theory in the Chinese Context. *China Media Research, 12*(1), 95 - 107.

479.	Li, M. and Cai, L.A. (2012). The Effects of Personal Values on Travel Motivation and Behavioral Intention. *Journal of Travel Research, 51*(4). 473 – 487.

480.	Li, X., Ma, B. and Zhou, C. (2017). Effects of customer loyalty on customer entitlement and voiced complaints, *The Service Industries Journal, 37*(13-14), 858-874.

481.	Lilleoja, L., Dobewall, H., Aavik, T., Strack, M. and Verkasalo, M. (2016). Measurement equivalence of Schwartz's refined value structure across countries and modes of data collection: New evidence from Estonia, Finland, and Ethiopia. *Personality and Individual Differences, 102*, 204–210.

482.	Lim, S.S. and Tkaczynski, A. (2017). Origin and money matter: The airline service quality expectations of international students. *Journal of Hospitality and Tourism Management, 31*, 244 - 252.

483.	Lim, Y.J., Osmanb, A., Salahuddin, S.N., Romled, A.R. and Abdullah, S. (2016). Factors Influencing Online Shopping Behavior: The Mediating Role of Purchase Intention. *Procedia Economics and Finance, 35*, 401 – 410.

484.	Lin, C. (2002). "Attribute-consequence-value linkages: a new technique for understanding customer's product knowledge", *Journal of targeting, Measurement and analysis for Marketing, 10,* 339 – 352.

485.   Lin, H-H. and Chang, J. (2012). A construction of consumer cognitive structures and their implications in furniture shopping decisions: A means-end chain approach. *Serv Bus, 6*, 197 – 218.

486.   Lin, L-Z. and Yeh, H-R. (2013). A means-end chain of fuzzy conceptualization to elicit consumer perception in-store image. *International Journal of Hospitality Management, 33*, 376 – 388

487.   Lin, Y. and Ryan, C. (2016). From mission statement to airline branding. *Journal of Air Transport Management, 53*, 150-160.

488.   Lin, Z. and Filieri, R. (2015). Airline passengers' continuance intention towards online check in services: The role of personal innovativeness and subjective knowledge. *Transportation Research Part E: Logistics and Transportation Review, 81*, 158 - 168.

489.   Liou,J.J.H., Tsai, C-Y., Lin, R-H. and Tzeng, G-H. (2011). A modified VIKOR multiple-criteria decision method for improving domestic airlines service quality. J*ournal of Air Transport Management, 17*(2), 57-61.

490.   Liu, C.H.S. and Lee, T. (2016). Service quality and price perception of service: influence of word-of-mouth and revisit intention. *Journal of Air Transport Management, 52*, 42–54.

491.   Liu, F., Li, J., Mizerski, D. and Soh, H. (2012). Self-congruity, brand attitude, and brand loyalty: A study on luxury brands. *European Journal of Marketing, 46*(7/8), 922–937.

492.   Liu, W., Zhao, T., Zhou, W., Tang, J. (2018). Safety risk factors of metro tunnel construction in China: An integrated study with EFA and SEM. *Safety Science, 105*, 98-113.

493.   Llach*, J., Marimon, F., del Mar Alonso-Almeida, M., and Bernardo, M. (2013). Determinants of online booking loyalties for the purchasing of airline tickets. *Tourism Management, 35,* 23 – 31.

494.   Lo, A.S., Wu, C. and Tsai, H. (2015). 'The impact of service quality on positive consumption emotions in resort and hotel spa experiences', *Journal of*

Hospitality   Marketing   &   Management   24   (2),   155   –   179. https://doi.org/10.1080/19368623.2014.885872

495.   Locke, G. (2009). Consumer behaviour trends and their impacts on airline product distribution. *Journal of Revenue and Pricing Management, 8(2/3),* 267 – 278.

496.   Löfgren. K. (2013). Normality Tests using SPSS: How to check whether data   are   normally   distributed.   [Online]   Available   at: https://www.youtube.com/watch?v=IiedOyglLn0 (Accessed on 20 April 2020).

497.   Loh, S.H., Yuen, K.F., Wang, X., Surucu-Balci, E., Balci, G. and Zhou, Q. (2020). Airport selection criteria of low-cost carriers: A fuzzy analytical hierarchy process. Journal of Air Transport Management, 83, 101759.

498.   Lohmann, G. and Duval, D.T. (2014). Destination morphology: A new framework to understand tourism–transport issues? *Journal of Destination Marketing & Management, 3*(3), 133–136.

499.   Lohmann, G. and Duval, D.T. (2015). Tourism and transport. In Cooper, C. (Ed.), *Contemporary Tourism Reviews, 1*, 129 – 182. Oxford: Goodfellow.

500.   Lohmann, G. and Koo, T.R. (2013). The airline business model spectrum. *Journal of Air Transport Management, 31*, 7–9.

501.   Lohmann, G. and Vianna, C. (2016). Air route suspension: The role of stakeholder engagement and aviation and non-aviation factors. *Journal of Air Transport Management, 53*, 199–210. doi:10.1016/j.jairtraman.2016.03.007

502.   Long, J., Velikova, N., Dodd, T. and Scott-Halsell, S. (2018). "Craft Beer Consumers' Lifestyles and Perceptions of Locality," *International Journal of Hospitality   Beverage   Management,   2*(1).   [Online]   Available   at: https://scholars.unh.edu/ijhbm/vol2/iss1/1 (Accessed on 14 August 2018).

503.   Long, J.S. and L.H. Ervin (2000). "Using Heteroskedasticity Consistent Standard Errors in the Linear Regression Model," *The American Statistician 54*(3), 217-224.

504.   López- Mosquera, N. and Sánchez, M. (2011). The influence of personal values in the economic-use valuation of peri-urban green spaces: An application of the means-end chain theory. *Tourism Management, 32,* 875 – 889.

505. Lordan, O. (2013). Study of the Full-Service and Low-Cost Carriers Network Configuration. Journal of Industrial Engineering and Management, 7(5), 1112 - 1123.

506. Lordan, O. (2014). Study of the full-service and low-cost carriers network configuration. *Journal of Industrial Engineering and Management (JIEM), OmniaScience, Barcelona, 7*(5), 1112-1123.

507. Loureiro, S.M.C., and Fialho, A.F. (2016). The role of intrinsic in-flight cues in relationship quality and behavioural intentions: Segmentation in less mindful and mindful passengers. *Journal of Travel & Tourism Marketing*, 1–15.

508. Lu, A.C.C., Gursoy, D. and Lu, C.Y. (2015). Authenticity perceptions, brand equity and brand choice intention: The case of ethnic restaurants. *International Journal of Hospitality Management, 50*, 36-45.

509. Lu, J-H., Chou, H-Y. and Ling, P-C. (2009). Investigating passengers' intentions to use technology-based self check-in services. *Transportation Research Part E: Logistics and Transportation Review, 45*(2), 345-356.

510. Lu, J-L., Chou, H-Y. and Ling, P-C. (2009). Investigating passengers' intentions to use technology-based self-check-in services. *Transportation Research Part E: Logistics and Transportation Review, 45*(2), 345-356.

511. Lubbe, B., Douglas, A. and Mclachlan, P. (2016). Airline loyalty of frequent flyers: a survey of members and non-members of loyalty programmes. *African Journal of Hospitality, Tourism and Leisure, 5*(1), 1 - 14.

512. Luiz, H.J. and de Matos, C.A. (2015). "The influence of personal values and demographic variables on customer loyalty in the banking industry." *International Journal of Bank Marketing 33*(4), 571 - 587.

513. Luke, R.J. and Walters, J. (2013). Overview of the developments in the domestic airline industry in South Africa since market deregulation. *Journal of Transport and Supply Chain Management, 7*(1), 1 – 11. http://dx.doi.org/10.4102/jtscm.v7i1.117 (Accessed on 7 October 2015).

514. Luke, R.J. (2015). *Determinants of passenger choice in the domestic airline in South Africa* [Unpublished PhD Thesis]: University of Johannesburg. Retrieved from https://ujdigispace.uj.ac.za (Accessed on 7 October 2015).

515. Lunenburg, F.C. (2012). Organizational Structure: Mintzberg's Framework. International Journal of Scholarly, Academic, Intellectual Diversity, 14(1), 1-8.

516. Luxton, S., Reid, M. and Mavondo, F. (2015). "Integrated marketing communication capability and brand performance", *Journal of Advertising, Vol. 44*(1), 37-46.

517. Lyu, J., Hahn, K. and Sadachar, A. (2018). Understanding millennial consumer's adoption of 3D printed fashion products by exploring personal values and innovativeness. *Fash Text, 5*(11), 1-24. https://doi.org/10.1186/s40691-017-0119-8

518. Ma, Y.J. and Lee, H.H. (2012). Understanding consumption behaviours for fair trade nonfood products: focusing on self-transcendence and openness to change values. *Int. J. Consum. Stud. 36*(6), 622 - 634.

519. Madhavan, M. and Chandrasekar, K. (2015). Consumer Buying Behavior - An Overview of Theory and Models. *St. Theresa Journal of Humanities and Social Sciences, 1*(1), 74 - 112.

520. Madi, A. (2016). "Using values to segment virtual consumers on social networking sites", *Marketing Intelligence & Planning, 34*(5), 623 - 645.

521. Magun, V., Rudnev, M. and Schmidt, P. (2016). Within- and Between-Country Value Diversity in Europe: A Typological Approach. *European Sociological Review, 32*(2), 189–202.

522. Mahutolis Magazine (2017). FlySafair. [Online] Available at: http://durban-airport.co.za/ [Accessed 11 June 2017].

523. Mai, H.T.X. and Olsen, S.O. (2015). Consumer participation in virtual communities: The role of personal values and personality. Journal of Marketing Communications, 21(2), 144–164. http://dx.doi.org/10.1080/13527266.2012.736086

524. Makrakis, V. and Kostoulas-Makrakis, N. (2016). Bridging the qualitative–quantitative divide: Experiences from conducting a mixed methods evaluation in the RUCAS programme. *Evaluation and Program Planning, 54*, 144 – 151.

525.   Malaval, P., Bénaroya, C. and Aflalo, J. (2014). "Aerospace Marketing Management," *Management for Professionals, Springer, edition 127*, number 978-3-319-01354-1.

526.   Malcom-Piqueux, L. (2015). "Application of Person-Centered Approaches to Critical Quantitative Research: Exploring Inequities in College Financing Strategies: Person-Centered Approaches to Critical Quantitative Research," *New Dir. Institutional Res., 163*, 59-73.

527.   Malhotra, N.K. (2015). *Essentials of Marketing Research: A Hands-On Orientation.* Global edition. Cape Town: Pearson.

528.   Mamotte, N. and Wassenaar, D. (2015). Measuring Voluntariness of Consent to Research: An Instrument Review. *Journal of Empirical Research on Human Research Ethics, 10*(2), 121-131.

529.   Manan, H.A. (2016). The Hierarchical Influence of Personal Values on Attitudes toward Food and Food Choices. *Procedia Economics and Finance, 37*, 439 – 446.

530.   Mango (2017). Mango. [Online] Available at: https://www.flymango.com/en/about-us/about-mango/getting-to-know-us (Accessed 4 June 2017).

531.   Mansori, S., Sambasivan, M. and Md-Sidin, S. (2014). Acceptance of novel products: the role of religiosity, ethnicity and values. *Marketing Intelligence & Planning, 33*(10), 39-66.

532.   Mantey, N.O. and Naidoo, V. (2017). 'Interplay between air passengers' service quality, satisfaction, loyalty and loyalty programmes in South African owned airlines', *Acta Commercii 17*(1), a448. https://doi.org/10.4102/ac.v17i1.448

533.   Maqutu, A. (2015). Airline to fly to cities neglected by majors: Fly Blue Crane start with short hops, looks to Southern Africa. Sunday Times, Business Times, August 23:5.

534.   Marcella, K., Maura, D. and Michelle, M. (2018). The search for understanding: the role of paradigms. *Nurse Researcher, 25*(4), 9-13.

535.   Margo, C.S. (1984). Report of the Commission of Inquiry into Civil Aviation in South Africa, Book 1, Pretoria: Government Printers, South Africa.

536.   Maslow, H. (1954). *Motivation and Personality*. New York: Harper & Row.

537.   Mason, M. (2010). Sample Size and Saturation in PhD Studies Using Qualitative Interviews. *Forum: Qualitative Social Research,* 11(3), 1 - 19.

538.   Matsunaga, M. (2008). Item Parceling in Structural Equation Modeling: A Primer. *Communication Methods and Measures, 2*(4), 260-293.

539.   Mathers, N., Fox, N. and Hunn, A. (2007) *Surveys and Questionnaires. The NIHR RDS for the East Midlands*. Yorkshire & the Humber.

540.   Maulisa, A.R. and Hati, S.R.H. (2018). the anomaly of airline passenger behavioural intention: a comparison between low-cost and full-service airlines. *ASEAN Marketing Journal, X*(2), 75-90.

541.   McIntosh, A. and Thyne, M. (2005). Understanding tourist behaviour using means-end theory. *Ann. Tour. Res. 32(1),* 259 – 262.

542.   McKelly, D.H., Rogerson, C.M., van Huysteen, E., Maritz, J. and Ngidi, M. (2017). Spatial trends in tourism within South Africa: The expected and the surprising. *South African Journal of Geomatics, 6*(2), 219 - 231.

543.   McLaren, L. (2017). A space for critical quantitative public health research? *Critical Public Health, 27*(4), 391-393.

544.   Meiring, T., Kannemeyer, C. and Potgieter, E. (2018). *The gap between rich and poor: South African society's biggest divide depends on where you think you fit in*. Cape Town: SALDRU, UCT. (SALDRU Working Paper Number 220).

545.   Mertens, D. M. (2012). What comes first? The paradigm or the approach? *Journal of Mixed Methods Research, 6*(4), 255 – 257.

546.   Meyer, M. (2016). Is Homo Economicus a Universal Paradigm in Economic Theory? *ANNALS OF ECONOMICS AND FINANCE 17*(2), 433 - 443.

547.   Mhlanga, O. (2017). Impacts of deregulation on the airline industry in South Africa: A review of the literature. *African Journal of Hospitality, Tourism and Leisure, 6*(3), 1 - 14.

548.   Mhlanga, O. and Steyn, J.N. (2016). The aviation industry in South Africa: A historical overview. *African Journal of Hospitality, Tourism and Leisure, 5*(4), 1-13.

549.   Mhlanga, O. and Steyn, J.N. (2017). Impacts of the macro environment on airline operations in southern Africa. *African Journal of Hospitality, Tourism and Leisure, 6*(1), 1-15.

550.   Mhlanga, O., Steyn, J.N. and Spencer, J.P. (2017). Impacts of the microenvironment on airline operations in southern Africa: A literature review study. *African Journal of Hospitality, Tourism and Leisure, Volume 6*(1), 1 - 13.

551.   Mihart, C. (2012). Impact of Integrated Marketing Communication on Consumer Behaviour: Effects on Consumer Decision-Making Process. *International Journal of marketing Studies, 4(2),* 121 – 129.

552.   Milioti, C.P., Karlaftis, M.G. and Akkogiounoglou, E. (2015). Traveler perceptions and airline choice: A multivariate probit approach. *Journal of Air Transport Management 49*, 46 - 52.

553.   Miller, C.R., Smith, A.R., Kliewer, C., Rosenthal, J.A. and Wedel, K.R. (2016). An Online Survey of Social Workers' Family Values. *Journal of Social Work Values and Ethics, 13*(1), 59 - 72.

554.   Milner, T. and Rosenstreich, D.A. (2013). Review of Consumer Decision-making Models and Development of a New Model for Financial Services. *J Financ Serv Mark 18*, 106–120. https://doi.org/10.1057/fsm.2013.7

555.   Minayo, M.C.S. (2017). Origin of the scientific arguments that support qualitative research. *Collective Health, 13*(4), 561-575.

556.   Mishra, P., Pandey, C.M., Singh, U. and Gupta, A. (2018). Scales of measurement and presentation of statistical data. *Ann Card Anaesth, 21*, 419-422.

557.   Mitchell, A. (1983). *The nine American lifestyles.* New York, NY: Warner.

558.   Mitrabasu, N.C. (2013). Integrating Kano Model and Herzberg Two Factor Theory to Unveil the Third Quality Factor of Patient Satisfaction in a Multispecialty Outdoor Medical Centre. *International Journal of Emerging Science and Engineering (IJESE), 1*(7), 1-5.

559.   Mncube, L. (2014). Competition and regulatory issues in the civil aviation sector. *Aviation Industry Growth and Safety Conference.*

560.   Mohajan, H.K. (2017). Two Criteria for Good Measurements in Research: Validity and Reliability. *Annals of Spiru Haret University, 17*(3): 58-82.

561.   Mohammadi, A.M. and Mohammed, B. (2011). Applying Consumer Behaviour Theory and Grand Models to Attendees Behaviour in Conference Industry. Book of Proceedings Vol. i – International Conference on Tourism & Management Studies – Algarve 2011.

562.   Mohammed, A.F. (2010). Practices in Sample Size Determination and Variance Estimation – Implications on Data Analysis. *Proceedings of the Regional Conference on Statistical Sciences 2010 (RCSS'10)*, 147-162

563.   Molina-Azorin, J.F. (2016). Mixed methods research: An opportunity to improve our studies and our research skills. *European Journal of Management and Business Economics, 25*, 37 – 38.

564.   Moliner-tena, M.A., Monferrer-tirado, D., and Estrada-guillén, M. (2019). Customer Engagement, Non-Transactional Behaviors And Experience In Services A Study In The Bank Sector. *International Journal of Bank Marketing, 37*(3), 730–754. https://doi.org/10.1108/IJBM-04-2018-0107.

565.   Moneyweb (2015). Skywise looks at SAA's domestic turf. [Online] Available: http://www.moneyweb.co.za/news/companies-and-deals/skywise-looks-at-saas-domestic-turf/ (Accessed on 17/10/15).

566.   Moreira, M.E., O'Connelly, J. and Williams, G. (2011). An Empirical Study of the Socio-economic Effects of Supporting Flag Carriers: The Case of the Caribbean Community (CARICOM). Journal of Air Transport Studies, 2(1), 1-101.

567.   Moriarty, S. and Schultz, D. (2012). Four theories of how IMC works. In Shelly, R. and Esther, T. (Eds.). *Advertising Theory*. New York: Taylor Francis.

568.   Moshagen, M. (2012). The Model Size Effect in SEM: Inflated Goodness of Fit Statistics Are Due to the Size of the Covariance Matrix, Structural Equation Modeling. *A Multidisciplinary Journal, 19*(1), 86-98.

569.   Mostert, P.G. and De Meyer, C.F. (2010). Building Customer Relationships as retention Strategy in the South African Domestic Passenger Airline Industry*. Acta Commercii, 10*, 27 - 42.

570.   Mouton, J. (2001). *How to succeed in your masters and doctoral studies: A South African guide and resource book*. Pretoria: Van Schaik.

571.   Mtutu, P. and Thondhlana, G. (2016). Encouraging pro-environmental behaviour: Energy use and recycling at Rhodes University, South Africa. *Habitat International, 53*, 142 - 150.

572.   Mughal, A., Mehmood, A., Mohi-ud-deen, A. and Ahmad, B. (2014). The Impact of Promotional Tools on Consumer Buying Behavior: A Study from Pakistan. *Journal of Public Administration and Governance, 4*(3), 402-414.

573.   Mukaka, M.M. (2012). A guide to appropriate use of Correlation coefficient in medical research. *Malawi Med Journal, 24*(3), 69 – 71.

574.   Murugan, N. (2017). Influence of Socio-Demographic Factors in The Choice of Airline Between Air Asia & Malaysia Airlines. *ASEAN Tourism Research Association Conference (ATRC) 2017*, 187-194.

575.   Mustaffa, W.S.W., Bing, K.W., Rahmana, R.A. and Ab Wahida, H. (2016). Examining the Effect of Service Personal Values on Emotional Satisfaction with Service Experience among International Students in Malaysian Public Universities. *Procedia Economics and Finance, 35*, 713 – 721.

576.   Mustaffa, W.S.W., Rahmana, R.A., Ahmad, N.L. and Ab Wahida, H.A (2016). The Customer's Cognitive Evaluation of Service Experience: An Empirical Comparison between Service Personal Values and Service Value. *International Journal of Academic Research in Business and Social Sciences, 7*(10), 704 – 712.

577.   Muthén, L.K. and Muthén, B.O. (2002). How to Use a Monte Carlo Study to Decide on Sample Size and Determine Power. *Structural Equation Modeling, 9*, 599-620. https://doi.org/10.1207/S15328007SEM0904_8

578.   Myburgh, A., Sheik, F., Fiandiero, F., and Hodge, J. (2006). *Clear Skies over Southern Africa: The importance of air transport liberalisation for shared economic growth.* Genesis Analytics. Woodmead: ComMark Trust.

579.   Myungsook, A. and Yonghwi, N. (2009). Airline customer satisfaction and loyalty: impact of in-flight service quality. *Serv Bus, 3,* 293–307.

580.   Naami, A., Ashouri, F. and Soleimani, Y. (2017). Determination of the Impact of Consumer Lifestyle based on VALS Approach Mental Attitude toward Decision on Purchase Intention Mobile Phones. *Jilid, 8*(2), 112-129.

581.   Naik, K. and Savant, R. (2016). CUSTOMER DELIGHT: KEY WORD IN AIRLINE INDUSTRY. *NCRD's Business Review : e-Journal, 2*(2), 1 - 10.

582.   Namukasa, J. (2013). 2013),"The influence of airline service quality on passenger satisfaction and loyalty ", *The TQM Journal, Vol. 25* (5), 520 – 532.

583.   Narangajavana, Y., Garrigos-Simon, F.J., García, J.S. and Forgas-Coll, S. (2014). Prices, prices and prices: A study in the airline sector. *Tourism Management, 41*, 28 - 42.

584.   Nassaji, H. (2019). Good research questions. *Language Teaching Research, 23*(3), 283 – 286. [Online] Available at: https://journals.sagepub.com/doi/pdf/10.1177/1362168819845322 (Accessed on 13 August 2019).

585.   Ndhlovu, R. and Ricover, A. (2009). *Assessment of potential impact of implementation of the Yamoussoukro Decision on open skies policy in the SADC region.* (GS 10F-0277P). Gaborone: USAID Southern Africa.

586.   Ndlovu, R. (2001). The views of African carriers on the major challenges facing air transport globally. In: World Tourism Organisation, *Proceedings of the AFCAC WTO International Conference on Tourism and Transport in Africa.* Windhoek, Namibia, 86 - 98.

587.   Neuman, L.W. (2007). The Meanings of Methodology. In L. W. Neuman (Ed.), *Social Research Methods: Qualitative and Quantitative Approaches* (3rd ed.). Boston: Allyn and Bacon.

588.   News24 (2013a). News24.com. [Online] Available at: http://www.news24.com/Travel/Flights/kulula-Airline-Info-20130301 [Accessed 27 May 2017].

589.   News24 (2013b). SAA becomes most awarded airline in Africa. fin24. Available at: https://www.news24.com/Travel/Flights/SAA-becomes-most-awarded-airline-in-Africa-20130619 (Accessed on 23 September 2019).

590.   News24 (2016). Aviation authority intensifies SA Express oversight - minister. fin24. [Online] Available at: http://www.fin24.com/Companies/Industrial/aviation-authority-intensifies-sa-express-oversight-minister-20160614 (Accessed 27 May 2017).

591. Ngulube, P. (2005). Research Procedures used by Master of Information Studies Students at the University of Natal in the Period 1982 – 2002 With Special Reference to Their Sampling Techniques and Survey Response Rates: A Methodological Discourse. *The International Information and Library Review, 37*(2), 127-143.

592. Ngulube, P. (2015). Trends in research methodological procedures used in knowledge management studies African Journal of Library. *Archives and Information Science, 25*(2), 125-143.

593. Nikbin, D., Marimuthu, M., Hyun, S.S. and Ismail, I. (2015). 'Relationships of perceived justice to service recovery, service failure attributions, recovery satisfaction, and loyalty in the context of airline travelers', *Asia Pacific Journal of Tourism Research, 20* (3), 239 – 262. https://doi.org/10.1080/10941665.2014.889028

594. Njoya, E.T. (2016). Africa's single aviation market: the progress so far. *J. Transp. Geogr. 50*, 4–11.

595. Nor, K.A. and Wan, N.M. (2013), Perceptions of service quality and behavioural intentions: A mediation effect of patient satisfaction in private healthcare in Malaysia. *International Journal of Marketing Studies, 5* (4), 15–29.

596. Novikov, A.M. and Novikov, D.A. (2013:14). *Research Methodology: From Philosophy of Science to Research Design*. New York: CRC Press.

597. Nugroho A. and Sihite J. (2017). Tweeting and Retweeting Tourism and Airline Service Attributes. In Saufi A., Andilolo I., Othman N., Lew A. (eds) *Balancing Development and Sustainability in Tourism Destinations*. Springer, Singapore.

598. Nunkoo, R. and Ramkissoon, H. (2009). Applying the means-end chain theory and the laddering technique to the study of host attitudes to tourism. *Journal of Sustainable Tourism, 17*(3), 337-355

599. Nunnally, J.C. (1967). *Psychometric Theory*. New York: McGraw-Hill.

600. Nunnally, J.C. and Bernstein, I.H. (1967). *Psychometric Theory* (Vol. 226). New York, NY: McGraw-Hill.

601. Nwanko, S., Hamelin, N. and Khaled, M. (2014). Consumer values, motivation and purchase intention for luxury goods. *Journal of Retailing and Consumer Services, 21,* 735 – 744.

602. O'Connor, B.P. (2000). SPSS and SAS programs for determining the number of components using parallel analysis and Velicer's MAP test. *Behavior Research Methods, Instrumentation, and Computers, 32,* 396-402.

603. O'Leary, Z. (2014). *The Essential Guide to Doing Your Research Project.* Second edition. London: SAGE Publications Limited.

604. Ødegaard, F. and Wilson, J.G. (2016). Dynamic pricing of primary products and ancillary services. *European Journal of Operational Research, 251*, 586–599.

605. OECD (2010). Trade, Policy and the Economic Crisis. [Online] Available at: http://www.oecd.org/trade/45293999.pdf (Accessed on 13 October 2017).

606. Ogunnaike, O.O. and Kehinde, O.J. (2011). "Assessing Relationship Between Personal Value and Customer Satisfaction: Evidence From Nigerian Banking Industry," The Annals of the "Stefan cel Mare" University of Suceava. Fascicle of The Faculty of Economics and Public Administration, "*Stefan cel Mare*" University of Suceava, Romania, *Faculty of Economics and Public Administration, 11*(13), 167-175.

607. Oksiutycz, A. and Kunene, S. (2017). Contribution of Online Corporate Communication to Brand Reputation among Millennials in the Vaal Region, *Communicatio, 43*(3-4), 74 - 94. https://doi.org/10.1080/02500167.2017.1340318

608. Oliver R.L. (1980). A Cognitive Model of the Antecedents and Consequences of Satisfaction Decisions. *Journal of Marketing Research, 17*(4), 460 - 469.

609. Oliver, R.L. (1981). Measurement and evaluation of satisfaction processes in retail settings. *J Retail, 57*(3), 25 – 48.

610. Oliver, R.L. (2014). *Satisfaction: A Behavioural Perspective on the Consumer.* Second Edition. New York: Routledge, Taylor Francis Group.

611. Olson, J. C., and Reynolds, T. J. (1983). "Understanding consumers' cognitive structures: implications for advertising strategy". In Percy, L., and

Woodside, A. (Eds.), *Advertising and Consumer Psychology,* Lexington Books, Lexington, MA. 77 – 90.

612.   Omair A. (2014). Sample size estimation and sampling techniques for selecting a representative sample. *J Health Spec* [Online] Available at: http://www.thejhs.org/text.asp?2014/2/4/142/142783 (Accessed on 26 March 2019).

613.   Onwuegbuzie, A.J. and Leech, N.L. (2005). Taking the "Q" out of research: Teaching research methodology courses without the divide between quantitative and qualitative paradigms: Quality & Quantity. *International Journal of Methodology, 39*, 267-296.

614.   Onwuegbuzie, A.J. and Leech, N.L. (2006). Linking research questions to mixed methods data analysis procedures. *Qualitative Report. 11*(3), 474 - 498.

615.   Onwuegbuzie, A.J. and Collins, K.M.T. (2007). A Typology of Mixed Methods Sampling Designs in Social Science Research. *The Qualitative Report, 12(2),* 281 – 316. Available at: http://nsuworks.nova.edu/tqr/vol12/iss2/9 (Accessed on 5 January 2017).

616.   Onwuegbuzie, A.J. and Leech, N.L. (2007). Sampling Designs in Qualitative Research: Making the Sampling Process More Public. *The Qualitative Report, 12(2),* 238 – 254. Available at: http://nsuworks.nova.edu/tqr/vol12/iss2/7 (Accessed on 5 January 2017).

617.   Onwuegbuzie, A.J., Johnson, R.B. and Collins, K.M.T. (2009). Call for mixed analysis: A philosophical framework for combining qualitative and quantitative approaches. *International Journal of Multiple Research Approaches, 3*, 114 – 139.

618.   Orçan, F. (2018). Exploratory and Confirmatory Factor Analysis: Which One to Use First? *Journal of Measurement and Evaluation in Education and Psychology, 9*(4), 414-421.

619.   Orlek, J. (2010). SAA speaks out on withdrawal from Durban CT route. [Online] Available at: https://www.freightnews.co.za/WebsectionNews.aspx (Accessed 17 July 2016).

620.   Orsingher, C., Marzorcchi, G. L., and Valentini, S. (2011). Consumer (Goal) Satisfaction: A Means-End Chain Approach. *Psychology & Marketing, 28(7),* 730 – 748.

621.   Orthofer, A. (2016). *Wealth Inequality in South Africa: Insights from Survey and Tax Data.* REDI3x3 Working Paper 15.

622.   Oxford Business Group (2014). Growing number of carriers joining South Africa's aviation market. [Online] Available at: https://oxfordbusinessgroup.com/analysis/race-skies-more-carriers-are-joining-market-cater-growing-number-air-passengers (Accessed on 24 April 2016).

623.   Oxford Economics (2011). Economic Benefits from Air Transport in South Africa. [Online] Available at: https://www.iata.org/policy/Documents/Benefits-of-Aviation-South-Africa-2011.pdf (Accessed on 14 April 2017).

624.   Paelo, A. (2015). Muted battle for the region's skies: Competition in the airline industry. [Online] Available at: http://www.competition.org.za/review/2015/5/25/muted-battle-for-the-regions-skies-competition-in-the-airline-industry (Accessed on 12 March 2017).

625.   Paelo, A. (2016). Barriers to entry in the low cost airlines sector. [Online] Available at: http://www.thedti.gov.za/ERPC/docs/ACPaelo.pdf.   (Accessed 12 December 2016).

626.   Paelo, A. and Vilakazi, T. (2016). Barriers to Entry for Low Cost Carriers in the South African Airline Industry: Competitive Dynamics and the Entry, Expansion and Exit of 1time Airline. *CCRED Working Paper No. 2016/8.* [Online] Available at: http://dx.doi.org/10.2139/ssrn.2926806 (Accessed on 17 August 2017).

627.   Pai, P. and Arnott, D.C. (2013). "User Adoption of Social Networking Sites: Eliciting Uses and Gratifications through a Means-End Approach," *Computers in Human Behavior, 29*(3), 1039 - 1053.

628.   Pallant, J. (2013). *SPSS Survival Manual. A step by step guide to data analysis using SPSS.* 4th edition. Allen & Unwin. [Online] Available at: www.allenandunwin.com/spss. (Accessed on 24 March 2020).

629.   Parahoo, K. (2014). *Nursing Research, Principles, Process and Issues.* Third edition. Hampshire: Palgrave Macmillan.

630.   Parasuraman, A., Zeithaml, V. A., and Malhotra, A. (2005). A multiple-item scale for assessing electronic service quality. *Journal of Service Research, 7(3),* 213 – 233.

631.   Parasuraman, A., Zeithaml, V.A. and Berry, L. (1988). SERVQUAL - a multiple item scale for measuring consumer perceptions of service quality. *J. Retail 64*, 12–40.

632.   Park, R. (2019). Practical Teaching Strategies for Hypothesis Testing. *The American Statistician, 73*(3), 282-287.

633.   Park, S.C. and Ryoo, S.Y. (2012). An empirical investigation of end-users' switching toward cloud computing: A two factor theory perspective. *Computers in Human Behavior, 29*(10, 160-170.

634.   Patton, M. Q. (2002). *Qualitative research and evaluation methods*. 3rd Edition. Thousand Oaks: Sage.

635.   Paul, M., Hennig-Thurau, T., Gremler, D.D., Gwinner, K.P. and Wiertz, C. (2009). Toward a theory of repeat purchase drivers for consumer services. *Journal of the Academy of Marketing Science, 37*(2), 215-237.

636.   Payne, E.M., Peltier, J.W. and Barger, V.A. (2017). Omni-channel marketing, integrated marketing communications and consumer engagement A research agenda. *Journal of Research in Interactive Marketing, 11*(2), 185-197.

637.   Payne, S.L. (1951). *The Art of Asking Questions*. Princeton, NJ: Princeton University Press.

638.   Pearson, J. and Merkert, R. (2014). Airlines-within-airlines: A business model moving East. *Journal of Air Transport Management, 38*, 21-26.

639.   Pearson, J., Pitfield, D. and Ryley, T. (2015). Intangible resources of competitive advantage: Analysis of 49 Asian airlines across three business models. *Journal of Air Transport Management, 47*, 179-189.

640.   PEKTAŞ, F. (2018). THE effect of lifestyle on the demand for alternative tourism. *Int. Journal of Management Economics and Business, 14*(1), 187-198.

641.   Peterson, R. (2018). Impacts of Airline Deregulation. TR NEWS 315 MAY– JUNE.   [Online]   Available   at:

http://onlinepubs.trb.org/onlinepubs/trnews/trnews315airlinedereg.pdf (Accessed on 11 September 2019).

642.   Philips, T. (2014). 5 Beats by Dr. Dre marketing strategies for entrepreneurs. [Online] Available at: https://www.naijapreneur.com/beats-by-dr-dre-marketing-strategies/ (Accessed on 22 February 2020).

643.   Pike, S. (2012). Destination positioning opportunities using personal values: Elicited through the Repertory Test with Laddering Analysis. *Tourism Management, 33*, 100 – 107.

644.   Pirie, G. (2006). 'Africanisation' of South Africa's international air links, 1994–2003. *Journal of Transport Geography, 14*(1), 3-14.

645.   Pitchayadejanant, K. and Nakpathom, P. (2016). The Effect of Demographic Information as Moderator toward Relationship between Service Quality, Customer Satisfaction, and Customer Loyalty in Thai Low-Cost Carriers' Passengers. *Journal of Marketing Management, 4*(1), 172-182.

646.   Planespotters (2019a). Airlink Fleet Details and History. [Online] Available at: https://www.planespotters.net/airline/Airlink-South-Africa (Accessed on 25 September 2019).

647.   Planespotters (2019b). Kulula.com Fleet Details and History. [Online] Available at: https://www.planespotters.net/airline/Airlink-South-Africa (Accessed on 23 September 2019).

648.   Planespotters, (2013). '1time', [Online} Available at: http://www.planespotters.net/search.php?q=1time (Accessed on 04 April 2017).

649.   Plano-Clark, V.L. and Creswell, J.W. (2010). *Understanding research: a consumer's guide*. Upper Saddle River, N.J.: Merrill/Pearson Educational.

650.   Plano-Clark, V.L. and Creswell, J.W. (2014). *Understanding research: A consumer's guide*. London: Pearson Higher Ed.

651.   Polit, D., Beck, C.T. and Hungler, B.P. (2013). *Essentials of Nursing Research: Methods, Appraisals and Utilization*. Eighth edition. Philadelphia: Lippincott.

652.   Prensky, M. (2001). "Digital Natives, Digital Immigrants Part 1", *On the Horizon, 9*(5), 1 - 6.

653.   Qamar, B.K. (2018). RESEARCH ETHICS. *Pakistan Armed Forces Medical Journal, 68*(6), 1503-1504.

654.   Queirós, A., Faria, D. and Almeida, F. (2017). Strengths and Limitations of Qualitative and Quantitative Research Methods. *European Journal of Education Studies*, 0. doi:http://dx.doi.org/10.46827/ejes.v0i0.1017

655.   Radder, L. and Grunert, K. (2009). 'Consumers' perceptions of Africa wildlife meat: A laddering study', *Journal of Food Products Marketing, 15*, 164 – 174.

656.   Rahi, S. (2017). Research Design and Methods: A Systematic Review of Research Paradigms, Sampling Issues and Instruments Development. *International Journal of Economics & Management Sciences, 6*(2), 1 - 5.

657.   Rahim, A.G. (2015), *Customer satisfaction and loyalty towards perceived service quality of domestic airlines in Nigeria*. Unpublished Doctoral Thesis, University of Lagos, Lagos.

658.   Rajaguru, R. (2016). Role of value for money and service quality on behavioural intention: A study of full service and low-cost airlines. *Journal of Air Transport Management, 53*, 114 - 122.

659.   Ralston, A.R., Russell, C.J. and Egri, C.P. (2018). Business values dimensions: A cross-culturally developed measure of workforce values. *International Business Review, 27*, 1189–1199.

660.   Ravitch, S.M. and Carl, N.M. (2016). *Qualitative Research: Bridging the Conceptual, Theoretical and Methodological*. Los Angeles: SAGE Publications, Inc.

661.   Raynes, C. and Tsui, K.W.H. (2019). Review of Airline-within-Airline strategy: Case studies of the Singapore Airlines Group and Qantas Group. *Case Studies on Transport Policy 7*, 150–165.

662.   Rea, L.M. and Parker, R.A. (1992). *Designing and conducting survey research*. San Francisco, CA: Jossey– Bass.

663.   Rehman, A. and Alharthi, K. (2016). An Introduction to Research Paradigms. *International Journal of Educational Investigations, 3*(8), 51 - 59.

664. Reynolds, T.J. and Gutman, J. (1984). *Laddering: Extending the Repertory Grid Methodology to Construct Attribute Consequences-Value Hierarchies*. In: Pitts, R.E. and Woodside, A.G. (Eds.). Personal Values and Consumer Psychology. Lexington: Lexington Books.

665. Reynolds, T.J. and Olson, J.C. (2001). *Understanding Consumer Decision Making: The Means-end Approach to Marketing and Advertising Strategy.* London: Lawrence Elbaum Associates Publishers.

666. Reynolds, T.J. and Gutman, J. (1988). Laddering theory, method, analysis, and interpretation. *Journal of Advertising Research, 28(1),* 11 – 31.

667. Reynolds, T.J. and Whitlark, D.B. (1995). "Applying Laddering Data to Communications Strategy and Advertising Strategy". *Journal of Advertising Research, 35,* 9 – 17.

668. Richman, A. and Lyle, C. (2005). The economic benefits of liberalising regional air transport – a review of global experience. Unpublished ComMark research report. [Online] Available: http://commark.org. (Accessed 15 March 2015).

669. Riesman, D. (1950). *The lonely crowd: A study of the changing American character*. NY: Yale University.

670. Robbins, L.C. (1932). *An Essay on the Nature and Significance of Economic Science.* London: Macmillan.

671. Rokeach, M. (1968). The role of values in public opinion research. *Public Opin Q, 32 (4)*, 547 – 559.

672. Rokeach, M. (1973). *The Nature of Human Values.* New York: The Free Press.

673. Rokeach, M. (1979). From individual to institutional values: With special reference to the values of science. *Understanding Human Values, 47.* 70

674. Rosenberg, M. (1956). "Cognitive Structure and Attitudinal Affect", *Journal of Abnormal Psychology, 53.* 367 – 372.

675. Roszkowski, M.J., Kinzler, R.J. and Kane, J. (2014). Profile of a Residential Learning Community on Schwartz's Typology of Values. *Journal of Service-Learning in Higher Education, 3*, 5 - 29.

676.   Rouby, I. (2018). A New Business Model: Low-Cost Carriers (The Case of EasyJet). *Global Review of Research in Tourism, Hospitality and Leisure Management, An Online International Research Journal, 4*(1), 608 - 631.

677.   Ryynänen, T. (2010). A SEARCH FOR INTERPRETATION AND UNDERSTANDING: Consumer Studies in Design Research. *Discussion Papers 49*, University of Helsinki, Department of Economics and Management.

678.   SA Express, (2015). 'About Us' [Online] Available: http://www.flyexpress.aero/about-ud/ (Accessed on 25 October 2015).

679.   SAA (2017). Brief History [Online] Available at: https://www.flysaa.com/about-us/leading-carrier/about-saa/brief-history (Accessed on 05 March 2017).

680.   SAA (2019). Our Aircraft Fleet. [Online] Available at: https://www.flysaa.com/plan-book/travel-information/fleet (Accessed on 27 November 2019).

681.   SAA Museum Society (n.d.). South African Airways: A Brief History [Online] Available at: http://www.saamuseum.co.za/saa-history.html (Accessed on 5 March 2017).

682.   Salmons, J. (2012). Cases in online interview research. Sage Publications. [Online] Available at: www.sagepub.com/booksProdDesc.nav?prodId=Book235442 (Accessed on 04 November 2017).

683.   Samuels, P. (2017). Advice on Exploratory Factor Analysis. *Technical Report*. Centre for Academic Success, Birmingham City University.

684.   Sandada, M. and 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

685.   Santos, J. and Boote, J. (2003). A theoretical exploration and model of consumer expectations, post-purchase affective states and affective behaviour. *Journal of Consumer Behaviour, 3*(2), 142–156.

686.   Santosa, M. and Guinard, J-X. (2011). Means-end chains analysis of extra virgin olive oil purchase and consumption behavior. *Food Quality and Preference, 22*, 304–316.

687.   Sarantakos, S. (2013). *Social Research.* 4th edition. Hampshire: Palgrave Macmillan.

688.   Saris, W.E., Knoppen, D. and Schwartz, S.H. (2013). Operationalizing the Theory of Human Values: Balancing Homogeneity of Reflective Items and Theoretical Coverage. *Survey Research Methods, 7*(1), 29-44.

689.   Saris, W.E., Knoppen, D. and Schwartz, S.H. (2013). Operationalizing the Theory of Human Values: Balancing Homogeneity of Reflective Items and Theoretical Coverage. *Survey Research Methods, 7*(1), 29-44.

690.   Sarmento, R. and Costa, V. (2017). *Comparative Analysis to Using R and Python for Statistical Data Analysis.* Oakland: IGI Global.

691.   Sashi, C.M., Brynildsen, G. and Bilgihan, A. (2019). Social Media, Customer Engagement and Advocacy: An Empirical Investigation Using Twitter Data for Quick Service Restaurants. *International Journal of Contemporary Hospitality Management, 31*(3), 1247–1272. https://doi.org/10.1108/IJCHM-02-2018-0108.

692.   Saunders, M.N.K., Lewis, P. and Thornhill, A. (2012). *Research methods for business students.* 6th Edition. Harlow: Pearson Education.

693.   Saunders, M.N.K., Lewis, P. and Thornhill, A. (2016). *Research methods for business students.* 7th Edition. Harlow: Pearson Education.

694.   Savage (2011). Competition on the basis of safety? Adv. *Airline Econ., 3*, 297-323.

695.   Savides, M. (2018). We'll be flying again soon following 'paperwork discrepancy', says CemAir. TimesLive. [Online] Available at: https://www.timeslive.co.za/news/south-africa/2018-02-02-well-be-flying-again-soon-following-paperwork-discrepancy-says-cemair/ (Accessed on 26 September 2019).

696.   Schaefers, T. (2013). Exploring carsharing usage motives: A hierarchical means-end chain analysis. *Transportation Research Part A 47.* 69 – 77.

697. Schafer, J.L. (1997). Analysis of Incomplete Multivariate Data. London: CRC Press.

698. Schiffman, L.G., Kanuk, L.L. and Wisenblit, J. (2010). *Consumer Behaviour.* Tenth Edition. Global Edition. Cape Town: Pearson.

699. Schlumberger, C.E. (2010). Open Skies for Africa. World Bank. Washington DC. [Online] Available at: http://ac.els-cdn.com/S0966692314002439/1-s2.0-S0966692314002439-main.pdf?_tid=b76a80f4-1628-11e7-a3ec-00000aacb361&acdnat=1490975159_84c2b6ae51ad166c1792b8771e11877f (Accessed on 31 March 2017).

700. Schlumberger, C.E. and Weisskopf, N. (2014). *Ready for Takeoff? The Potential for Low-Cost Carriers in Developing Countries.* Directions in Development. Washington, DC: World Bank.

701. Schmidt, F. and Hunter, J. (2002). Are there benefits from NHST. *American Psychologist, 57*(1), 65 - 71.

702. Schumacker, R.E. and Lomax, R.G. (2016). *A Beginner's Guide to Structural Equation Modeling.* 4th ed. New York: Routledge.

703. Schwartz S.H. (2016). Basic Human Values: Theory, Measurement, and Applications. *SK- Academic Publishing, 4*(1), 61-70.

704. Schwartz S.H. (2017). The Refined Theory of Basic Values. In Roccas S. and Sagiv L. (eds) *Values and Behavior.* Springer, Cham.

705. Schwartz S.H., Cieciuch, J., Vecchione, M., Torres, C., Dirilen-Gumus, O. and Butenko, T. (2017). Value tradeoffs propel and inhibit behavior: Validating the 19 refined values in four countries. *European Journal of Social Psychology, 47*(3), 241-258.

706. Schwartz, S.H. (1992). Universals in the content and structure of values: Theoretical advances and empirical tests in 20 countries. Advances in Experimental Social Psychology, 25. 1 – 62.

707. Schwartz, S.H. (1994), "Are there universal aspects in the structure and content of human values?", *Journal of Social Issues, 50*(4), 19 - 45.

708. Schwartz, S.H. (2003). A proposal for measuring value orientations across nations *Questionnaire package of the European social survey, 259*(290), 261.

709.   Schwartz, S.H. (2006). Theory measurement, and applications]. *Revue Francaise de Sociologie,* 47, 249 – 288.

710.   Schwartz, S.H. (2012). An Overview of the Schwartz Theory of Basic Values. *Online Readings in Psychology and Culture,* 2(1). http://dx.doi.org/10.9707/2307-0919.1116 (Accessed on 6June 2015).

711.   Schwartz, S.H. (2017b). Individual values across cultures. In A.T. Church (Ed.), *The Praeger handbook of personality across cultures: Culture and characteristic adaptations*, 121–152. Praeger/ABC-CLIO.

712.   Schwartz, S.H. and Bilsky, W. (1987). Toward a universal psychological structure of human values. In Weijters, B., and Muylle, S. (2008). A Means-End-Chain analysis of pub visits Belgium. Gent: Vlerick Leuven Gent Management School.

713.   Schwartz, S.H. and Boehnke, K. (2004). Evaluating the structure of human values with confirmatory factor analysis. *Journal of Research in Personality, 38*, 230-255. http://dx.doi.org/10.1016/S0092-6566(03)00069-2.

714.   Schwartz, S.H. and Butenko, T. (2014). Values and behavior: Validating the refined value theory in Russia. *European Journal of Social Psychology, 44*, 799–813.

715.   Schwartz, S.H. and Huismans, S. (1995). Value priorities and religiosity in four Western religions. *Social Psychology Quterly*, 88-107.

716.   Schwartz, S.H., Cieciuch, J., Vecchione, M., Davidov, E., Fischer, R., Beierlein, C., Ramos, A., Demiriktu, K., Dirilen-Gumus, O., Verkasalo, M., Lönnqvist, J-E. and Konty, M. (2012). Refining the Theory of Basic Individual Values. *Journal of Personality and Social Psychology, 103*(4). 663 – 688.

717.   Schwartz, S.H., Melech, G., Lehman, A., Burgess, S., Harris, M. and Owens, V. (2001). "Extending the cross-cultural validity of the theory of basic human values with a different method of measurement", *Journal of Cross-cultural Psychology, 32*, 519-42.

718.   Scotland, J. (2012). Exploring the Philosophical Underpinnings of Research: Relating Ontology and Epistemology to the Methodology and Methods

of the Scientific, Interpretive, and Critical Research Paradigms. *English Language Teaching, 5*(9), 9 – 16. Available at: http://dx.doi.org/10.5539/elt.v5n9p9 (Accessed on 24 March 2018).

719.   Seiders, K., Voss, G.B., Grewal, D. and Godfrey, A.L. (2005). Do satisfied customers buy more? Examining moderating influences in a retailing context. *Journal of Marketing, 69*(4), 26−43.

720.   Sekaran, U. (2003). *Research Methods for Business: A skill Building Approach.* 4th Edition. New York: John Wiley.

721.   Sekaran, U. and Bougie, R. (2016). *Research Methods for Business: A Skill-Building Approach.* Seventh Edition. West Sussex: John Wiley & Sons Ltd.

722.   Sengupta, A.S., Balaji, M.S. and Krishnan, B.C. (2015). How consumers cope with service failure: A study of brand reputation and customer satisfaction. *J. Bus. Res. 68*(3), 665–674.

723.   Shannon-Baker, P. (2015). Making Paradigms Meaningful in Mixed Methods Research. *Journal of Mixed Methods Research, 10*(4), 319–334.

724.   Sharma, P., Chen, I. and Luk, S. (2012). "Gender and Age as Moderators in the Service Evaluation Process," *Journal of Services Marketing, 26*(2), 102-114.

725.   Shaw-Smith, P. (2012). South Africa's low-cost carriers face a bumpy ride. [Online] Available from: https://www.ainonline.com/aviation-news/air-transport/south-africas-low-cost%20carriers-face-bumpy-ride (Accessed 25 November 2016).

726.   Sheeran, P., Gollwitzer, P.M. and Bargh, J.A. (2013). Nonconscious processes and health. *Health Psychology, 32*(5), 460–473.

727.   Shek, D.T.L. and Wu, F.K.Y. (2018). The Social Indicators Movement: Progress, Paradigms, Puzzles, Promise and Potential Research Directions. *Soc Indic Res, 135*, 975–990.

728.   Shepherd, C. and Challenger, R. (2013). "Revisiting Paradigm(s) in Management Research: A Rhetorical Analysis of the Paradigm Wars: Revisiting

Paradigm(s) in Management Research." *International Journal of Management Reviews, 15*(2), 225-244.

729.   Shim, S. and Maggs, J. (2005). "A cognitive and behavioural hierarchical decision-making model of college students' alcohol consumption", *Psychology & Marketing, 22(8),* 649 – 668.

730.   Shimp, T.A. and Andrews, J.C. (2013). *Advertising Promotion and Other Aspects of Integrated Marketing Communications*. 9th Edition. London: South Western, Cengage Learning.

731.   Shukla, P. (2008). "Conspicuous consumption among middle age consumers: psychological and brand antecedents". *Journal of Product & Brand Management*, *17*(1), 25-36.

732.   Sihite, J., Harun, T.W. and Nugroho, A. (2014). The Low-Cost Airline Consumer Price Sensitivity. An Investigation on The Mediating Role of Promotion and Trust in Brand. *International Research Journal of Business Studies, 7*(3), 199 -211.

733.   Simón, J., Pérez-Testor, C., Alomar, E., Danioni, F., Iriarte, L., Cormenzana, S. and Martínez, A. (2017). The Portrait Values Questionnaire: A bibliographic and bibliometric review of the instrument. *Aloma, 35*(1), 39-50.

734.   Şimşek, G.G. and Noyan, F. (2013). McDonald's ωt , Cronbach's α, and Generalized θ for Composite Reliability of Common Factors Structures. *Communications in Statistics - Simulation and Computation, 42*(9), 2008-2025. Available at: https://doi.org/10.1080/03610918.2012.689062 (Accessed on 31 May 2020).

735.   Singh, A. and Masuku, M. (2014). "Sampling techniques and determination of sample size in applied statistics research: an overview. *IjecmCoUk, II*(11), 1-22.

736.   Sithole, M. (2012). Marketing to the rapidly growing south african black middle class. In Wilson, Sithole and Snyder (2012), The Mid-Continent Review. [Online]   Available   at: http://www.midcontinent.edu/sites/default/files/pdfs/MidContinentReview.pdf#page=12 (Accessed on 24 January 2020).

737.   Skade, T. (2016). Rise and rise of Fly Blue Crane. *Destiny Connect.com*. [Online] Available at: http://www.destinyconnect.com/2016/06/30/rise-rise-fly-blue-crane/ [Accessed 12 June 2017].

738.   SKYTRAX (2015). A-Z of Award Winners. [Online] Available at: http://www.airlinequality.com/awards/world-airline-awards/ (Accessed on 21 May 2019).

739.   Slabbert, A. (2015). Skywise operations back to normal. *Moneyweb*. [Online] Available at: https://www.moneyweb.co.za/uncategorized/skywise-operations-back-to-normal-executive/ (Accessed 12 June 2017).

740.   Slabbert, A. (2016). No Government Guarantee for SAA now. *Moneyweb*. [Online] Available at: https://www.moneyweb.co.za/in-depth/budget/no-government-guarantee-saa-now/ (Accessed 21 May 2017).

741.   Smit, C., Roberts-Lombard, M. and Mpinganjira, M. (2018). 'Technology readiness and mobile self-service technology adoption in the airline industry: An emerging market perspective', *Acta Commercii, 18*(1), [Online] Available at: https://actacommercii.co.za/index.php/acta/article/view/580/995 (Accessed on 3 July 2019).

742.   Smith, A. (1776). *An inquiry into the nature and causes of the wealth of nations*. New York: Modern Library.

743.   Smith, C. (2015). Big benefits from 'open skies' in Africa - report, Fin24. [Online] Available: http://www.fin24.com/Economy/Big-benefits-from-open-skies-in-Africa-report-20150709 (Accessed on 12 April 2017).

744.   Smith, C. (2017). Air transport adds R154.8bn to SA's GDP - report. [Online] Available at: https://www.fin24.com/Economy/air-transport-adds-r1548bn-to-sas-gdp-report-20170624-2 (Accessed on 20 September 2019).

745.   Smith, N. (2013). Four new low-cost carriers portent a busy year for SA aviation.   [Online]   Available; http://www.bdlive.co.za/business/transport/2013/12/29/four-new-low-cost-carriers-portend-a-busy-year-for-sa-aviation (Accessed on 29 December 2013).

746.   Sniehotta, F.F., Presseau, J. and Araújo-Soares, V. (2014). Time to retire the theory of planned behaviour. *Health Psychology Review, 8*(1), 1-7.

747.   Sohaimi, N.S., Abdullah, A., Shuid, S. and Sarkawi, A.A. (2017). Young professionals' housing affordability through housing preferences in kuala lumpur and a review on the means-end chain model. *Journal of the Malaysian Institute of Planners, 15*(1), 369 - 376.

748.   Solomon, M.R., Bamossy, G.J., Askegaard, S. and Hogg, M.K. (2016). *Consumer Behaviour: A European Perspective*. Sixth Edition. London: Pearson Education Limited.

749.   Somekh, B. and Lewin, C. (2011). *Theory and Methods in Social Research*. London: SAGE.

750.   South Africa Travel Online (2012). Velvet Sky Airline. [Online] Available at: http://www.southafrica.to/transport/Airlines/Velvet-Sky/Velvet-Sky.php [Accessed on 9 April 2017].

751.   South Africa Travel Online (2017a). Fly Go Air. [Online] Available at: http://www.southafrica.to/transport/Airlines/FlyGoAir/FlyGoAir.php (Accessed 4 June 2017).

752.   South Africa Travel Online (2017b). Fly Blue Crane. [Online] Available at: https://www.southafrica.to/transport/Airlines/Fly-Blue-Crane/Fly-Blue-Crane.php (Accessed 12 June 2017).

753.   South African Government News Agency, (2015). SAA to receive government guarantee. [Online] Available at: https://www.sanews.gov.za/south-africa/saa-receive-government-guarantee (Accessed on 15 June 2017).

754.   Spasojevic, B., Lohmann, G. and Scott, N. (2018). Air transport and tourism – a systematic literature review (2000–2014), *Current Issues in Tourism, 21*(9), 975-997, DOI:10.1080/13683500.2017.1334762

755.   Speckman, A. (2015). Comair 'could bail out of SA'. Sunday Times, Business Times, 10 May: 1

756.   Srédl, K., Soukup, A. and Severová, L. (2013). Models of Consumer's Choice. *Ekonomie*, 4-9. [Online] Available at: https://otik.uk.zcu.cz/handle/11025/17493 (Accessed on 11 March 2018).

757. Srinidhi, S., and Manrai, A. K. (2013). "A conceptual model for demand forecasting and service positioning in the airline industry", *Journal of Modelling in Management, 8(1),* 123 – 139.

758. Ssamula, B. (2008). Strategies to design a cost-effective hub network for sparse air travel demand in Africa. Unpublished doctoral thesis. University of Pretoria. [Online] Available from: UPeTD: http://upetd.up.ac.za/thesis/available/etd-07242008-093606/unrestricted/01chapters1.2.pdf. (Accessed 9 January 2016).

759. Ssamula, B. (2014). Sustainable Business Models for the state owned African airlines. *Transportation Journal, 51*(2), 19 - 34.

760. Stage, F.K. (2007). "Answering critical questions using quantitative data," *New Dir. Institutional Res., 133*, 5-16.

761. Stage, F.K. and Wells, R.S. (2014). "Critical Quantitative Inquiry in Context: Critical Quantitative Inquiry in Context," New Directions for Institutional Research, 158, 1 - 7.

762. Stander, B. (n.d.). History of aviation in South Africa. [Online] Available at: http://planespotter.iteg.co.za/history_of_aviation_in_south_africa (Accessed on 05 March 2017).

763. Statista (2019). Mobile phone internet user penetration in South Africa from 2017 to 2023. [Online] Available at: https://www.statista.com/statistics/972866/south-africa-mobile-phone-internet-penetration/ (Accessed on 4 July 2019).

764. Stats SA. (2017). General Household Survey Report, STATISTICAL RELEASE P0318. [Online] Available at: http://www.statssa.gov.za/publications/P0318/P03182017.pdf (Accessed on 01 July 2019).

765. Stats SA. (2019). Mid-year population estimates, STATISTICAL RELEASE P0302. [Online] Available at: http://www.statssa.gov.za/publications/P0302/P03022019.pdf (Accessed on 13 March 2020).

766. Steinhoff, L. and Palmatier, R.W. (2016). Understanding loyalty program effectiveness: managing target and bystander effects. *J. of the Acad. Mark. Sci. 44*, 88–107.

767. Stevens, S.S. (1946). On the Theory of Scales of Measurement. *Science, New Series, 103*(2684), 677-680.

768. Steyn, J.N. and Mhlanga, O. (2016). The impact of International Air Transport Agreements on Airline Operations in southern Africa. *African Journal of Hospitality, Tourism and Leisure Volume, 5*(2):1-16.

769. Stocki, R. (2015). How lifestyle induces management: A research model for the study of co-operative isomorphism. Paper to be delivered at the *9th International Conference in Critical Management Studies* University of Leicester, UK, 8-10 July, Halifax.

770. Stone, M.J. (2016). Reliability as a factor in small community air passenger choice. *Journal of Air Transport Management, 53*, 161-164.

771. Strang, K.D. (2015). *The Palgrave Handbook of Research Design in Business and Management*. New York: Palgrave Macmillan.

772. Styan, J-B. (2013). Airline industry grows SA's GDP by R74bn. [Online] Available at: https://www.fin24.com/Companies/TravelAndLeisure/Airline-industry-grows-SAs-GDP-by-R74bn-20130418 (Accessed on 20 September 2019).

773. Sudbury, L. and Simcock, P. (2009). Understanding older consumers through cognitive and the list of values: A U.K. based perspective. *Psychology and Marketing, 26(1),* 22 – 38.

774. Sugianto, D.K. (2017). The Moderating Effect of Age, Income, Gender, Expertise, Loyalty Program, and Critical Incident on the Influence of Customer Satisfaction Towards Customer Loyalty in Airline Industry: A case of PT.X. *iBuss Management, 5*(1), 70-83.

775. Suhartanto, D. and Noor, A.A. (2012). Customer Satisfaction in the Airline Industry: The Role of Service Quality and Price. *Asia Tourism Forum Conference, p.6.*

776.   Suki, N.M. (2014). Passenger satisfaction with airline service quality in Malaysia: A structural equation modeling approach. *Research in Transportation Business & Management, 10*, 26–32.

777.   Surovitskikh, S. (2012). The relationship between South African aviation policy in Africa and air passenger traffic flows. Unpublished PhD Thesis for the Doctor of Commerce Degree in Tourism Management at the University of Pretoria, Pretoria, South Africa.

778.   Surovitskikh, S. and Lubbe, B. (2008). Positioning of selected Middle Eastern airlines in the South African business and leisure travel environment. *Journal of Air Transport Management, 14*(2), 75-81.

779.   Surovitskikh, S. and Lubbe, B. (2015). The Air Liberalisation Index as a tool in measuring the impact of South Africa's aviation policy in Africa on air passenger traffic flows. *Journal of Air Transport Management, 42*, 159-166, 10.1016/j.jairtraman.2014.09.010

780.   Surovitskikh, S., Lubbe, B. and Louw, L. (2012). The relationship between South African aviation policy in Africa and air passenger traffic flows. *Proceedings of the 1st International Aviation Management Conference, IAMC, Dubai, UAE, 18 – 20.*

781.   Swait, J., Argo, J. and Li, L. (2018). Modeling Simultaneous Multiple Goal Pursuit and Adaptation in Consumer Choice. *Journal of Marketing Research, 55*(3), 352-367.

782.   Szolnoki, G. and Hoffman, D. (2013). Online, face-to-face and telephone surveys—Comparing different sampling methods in wine consumer research. *Wine Economics and Policy, 2*, 57–66.

783.   Szucs, D. and Ioannidis, J.P.A. (2017). When Null Hypothesis Significance Testing Is Unsuitable for Research: A Reassessment. *Front. Hum. Neurosci. 11*(390), 1-21.

784.   Tabachnick, B.G. and Fidell, L.S. (2007). *Using multivariate statistics* (5th ed.). New York: Allyn & Bacon/Pearson Education.

785.	Tabachnick, B.G. and Fidell, L.S. (2014). *Using Multivariate Statistics.* Sixth Edition. Essex: Pearson Education Limited.

786.	Tabachnick, B.G. and Fidell, L.S. (Eds.). (2001). *Using multivariate statistics.* 4th Ed. New York: HarperCollins Publishers.

787.	Taherdoost, H. (2018). How to Design and Create an Effective Survey/Questionnaire: A Step-by-Step Guide. *International Journal of Academic Research in Management (IJARM), 5*(4), 37-41.

788.	Tai, S.H.C. (2008). "Relationship between personal values and shopping orientation of Chinese consumers", *Asia Pacific Journal of Marketing Logistics, 20(4),* 381 – 395.

789.	Tanlaka E.F., Ewashen, C. and King-Shier, K. (2019). Postpositivist critical multiplism: Its value for nursing research. *Nursing Open, 6*, 740–744.

790.	Tashakkori, A. and Teddlie, C. (Eds.). (2003). *Handbook of mixed methods in social and behavioural research.* Thousand Oaks, CA: Sage.

791.	Teddlie C, and Tashakkori A. (2012). Common "Core" Characteristics of Mixed Methods Research: A Review of Critical Issues and Call for Greater Convergence. *American Behavioral Scientist, 56*(6), 774-788.

792.	Teece, D.J. (2010). Business Models, Business Strategy and Innovation. *Long Range Planning, 43*, 172 - 194.

793.	Teng, Y-M., Wu, K-S. and Huang, D-M. (2014). The Influence of Green Restaurant Decision Formation Using the VAB Model: The Effect of Environmental Concerns upon Intent to Visit. *Sustainability, 6*, 8736-8755.

794.	Terblanche, N.S. (2015). 'Customers' perceived benefits of a frequent flyer program'. *Journal of Travel & Tourism Marketing 32*(3), 199–210.

795.	Tey, Y.S., Arsil, P., Brindal, M., Liew, S.Y., Teoh, c.t. and Terano, R. (2018). Personal values underlying ethnic food choice: Means-end evidence for Japanese food. *Journal of Ethnic Foods, 5*, 33 - 39.

796.	Thatcher, R. (2010). Validity and Reliability of Quantitative Electroencephalography. *Journal of Neurotherapy, 14*, 122-152.

797.	Thienhirun, S. and Chung, S. (2017). Influence of List of Values on Customer Needs, Satisfaction, and Return Intention in Ethnic Restaurants, *Journal*

of Hospitality Marketing & Management, 26(8), 868 - 888. DOI: [10.1080/19368623.2017.1331779](10.1080/19368623.2017.1331779)

798.   Thomas, W.I. and Znaniecki, F. (1927). *The Polish Peasant in Europe and America.* New York: Alfred A. Knopf.

799.   Thompson, A. (2009). Interpreting Kahle's List of Values: Being Respected, Security, and Self-Fulfillment in Context. *UW-L Journal of Undergraduate Research XII,* 1-9.

800.   Thompson, C.G., Kim, R.S., Aloe, A.M. and Becker, B.J. (2017). Extracting the Variance Inflation Factor and Other Multicollinearity Diagnostics from Typical Regression Results. *Basic and Applied Social Psychology, 39*(2), 81-90.

801.   Thompson, F.M. and 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.

802.   Thulo, L. (2017). Siza Mzimela Blue Crane Women Entrepreneur. *SME South Africa.* [Online] Available at: http://www.smesouthafrica.co.za/17192/Siza-Mzimela-Blue-Crane-Women-Entrepreneur/index.php?fb_comment_id=1436362116429767_1436854883047157#fea5e8333960c8 (Accessed 12 June 2017).

803.   Thuy, P.N. and Hau, L.N. (2010). Service personal values and customer loyalty: a study of banking services in a transitional economy. *International journal of Bank Marketing, 28*(6), 465 – 478.

804.   Thyne, M. (2001). The importance of values research for nonprofit organizations: The motivation-based values of museum visitors. *International Journal of Nonprofit and Voluntary Sector Marketing, 6*(2), 116–130.

805.   Tilley, L. and Woodthorpe, K. (2011). Is it the end for anonymity as we know it? A critical examination of the ethical principle of anonymity in the context of 21st century demands on the qualitative researcher. *Qualitative Research, 11*(2), 197-212.

806.   Ting, H., Yacobb, Y., Liewc, L. and Lauc, W.M. (2016). Intention to Use Mobile Payment System: A Case of Developing Market by Ethnicity. *Procedia - Social and Behavioral Sciences, 224*, 368 – 375

807.   Tinsley, H.E. and Tinsley, D.J. (1987). Uses of Factor Analysis in Counseling Psychology Research. *Journal of Counseling Psychology, 34*, 414-424. https://doi.org/10.1037/0022-0167.34.4.414

808.   Tolman, E. C. (1932). *Purposive Behaviour in Animals and Men*. New York: Appleton-Century-Crofts.

809.   Tomová, A. and Materna, M. (2017). The directions of on-going air carriers´ hybridization: Towards peerless business models? *Procedia Engineering 192*, 569 – 573.

810.   Tonnies, F. (1957). *Community and Society, Gemeinsschaft and Gesellschaft.* East Lansing, Michigan: Michigan State University Press.

811.   Torres, C.V., Porto, J.B., Vargas, L.M. and Fischer, R. (2015). A Meta-analysis of Basic Human Values in Brazil: Observed differences within the country. *Revista Psicologia: Organizações e Trabalho, 15*(1), 89-102.

812.   Torres, C.V., Schwartz, S.H. and Nascimento, T.G. (2016). The Refined Theory of Values: associations with behavior and evidences of discriminative and predictive validity. *Psicologia USP, 27*(2), 341-356.

813.   Trafimow, D. (2006). Using Epistemic Ratios to Evaluate Hypotheses: An Imprecision Penalty for Imprecise Hypotheses. *Genetic, Social, and General Psychology Monographs, 132*(4), 431-462.

814.   Trafimow, D. (2014). Considering Quantitative and Qualitative Issues Together. *Qualitative Research in Psychology, 11*(1), 15-24.

815.   Traveller24 (2015). Everything you need to know about SA's latest low cost airline. [Online] Available at: http://www.traveller24.com/News/Flights/Everything-you-need-to-know-about-SAs-latest-low-cost-airline-20150203 (Accessed 11 June 2017).

816.   TravelStart, (2015a). Low cost carrier flood pushes airline ticket prices down. [Online] Available: http://traveller24.news24.com/News/Flights/Low-cost-carrier-flood-pushes-airline-ticket-prices-down-201503318. (Accessed on 25 October 2015).

817.   TravelStart, (2015b). SA's low-cost market is healthy, but for how long? [Online] Available: http://traveller24.news24.com/ (Accessed on 25/10/15).

818.   TravelStart, (2015c). Passengers warned air ticket price won't last much longer. [Online] Available: http://traveller24.news24.com/news/flights/passengers-warned-air-ticket-prices-won't-last-much-longer-20150819.   (Accessed   on   25/10/15).

819.   TravelStart, (2015d). Over-saturated budget airline market will crash – Mango CEO. [Online] Available: http://traveller24.news24.com/news/flights/over-saturated-budget-airline-market-will-crash-mango-ceo-20150923 (Accessed on 25/10/15).

820.   Treiblmaier, H. and Filzmoser, P. (2010). Exploratory factor analysis revisited: How robust methods support the detection of hidden multivariate data structures in IS research. *Information & Management, 47*, 197 – 207.

821.   Trip Advisor (2017). Review of cheap flights. [Online] Available at: https://www.tripadvisor.com/Airline_Review-d8728964-Reviews-Cheap-Flights-CemAir (Accessed 4 June 2017).

822.   Truong, D., Pan, J.Y. and Buaphiban, T. (2020). Low cost carriers in Southeast Asia: How does ticket price change the way passengers make their airline selection? *Journal of Air Transport Management, 86*(101836), 1-12.

823.   Tsang, N.K.F., Lee, L.Y.S., Wong, A. and Chong, R. (2012). THEMEQUAL—adapting the SERVQUAL scale to theme park services: A case of Hong Kong Disneyland. *Journal of Travel & Tourism Marketing, 29*(5), 416–429.

824.   Tuulik, K., Õunapuu, T., Kuimet, K. and Titov, E. (2016). Rokeach's instrumental and terminal values as descriptors of modern organisation values. *International Journal of Organizational Leadership, 5*, 151–161.

825.   Udjo, O., Lubbe, B. and Douglas, A. (2013). The search for and purchasing of an airline ticket.

826.   UK Essays. (2013). Critical Analysis Is Made on The Servqual Model Marketing   Essay.   [Online].   Available: https://www.ukessays.com/essays/marketing/critical-analysis-is-made-on-the-servqual-model-marketing-essay.php?cref=1 (Accessed on 25 February 2018).

827.   University of Southern California Libraries (2016). Organizing Your Social Sciences Research Paper: Types of Research Designs. [Online] Available at:

http://libguides.usc.edu/content.php?pid=83009&sid=818072 (accessed on 21 May 2019).

828.   UNWTO, (2015). UNWTO Annual Report 2015. [Online] Available at: https://www.e-unwto.org/doi/pdf/10.18111/9789284418039 (Accessed on 24 October 2018).

829.   Uziel, L. (2010). Rethinking Social Desirability Scales: From Impression Management to Interpersonally Oriented Self-Control. *Perspectives on Psychological Science, 5*(3), 243 - 262.

830.   VALS^TM (2015). VALS™ Lens: Applying VALS™ to current events. [Online] Available   at: http://www.strategicbusinessinsights.com/vals/free/lens/VALSlens2015-06.shtml (Accessed on 23 February 2019).

831.   Van Acker, V., Goodwin, P. and Witlox, F. (2016). Key research themes on travel behavior, lifestyle, and sustainable urban mobility. *International Journal of Sustainable Transportation, 10*(1), 25-32.

832.   Van De Schoot, R., Schmidt, P., De Beuckelaer, A., Lek, K. and Zondervan-Zwijnenburg, M. (2015). Editorial: Measurement Invariance. *Front. Psychol. 6*, 1064.doi: 10.3389/fpsyg.2015.01064

833.   Van den Broeck, J., Cunningham, S.A., Eeckels, R. and Herbst, K. (2005). Data cleaning: Detecting, diagnosing, and editing data abnormalities. *PLoS Med, 2*(10): 0966-0970.

834.   Van Vuuren, C. and Slabbert, E. (2011). Travel behaviour of tourists to a South African holiday resort. African Journal for Physical, Health Education, Recreation and Dance (AJPHERD), 17(4), 694-707.

835.   Van Wyngaardt, M. (2015). Implementation of Yamoussoukro Decision vital to the aviation industry. Engineering News. [Online] Available at: http://www.engineeringnews.co.za/article/implementation-of-yamoussoukro-decision-vital-to-aviation-industry-2015-01-21/rep_id:4136 (Accessed on 31 March 2017).

836.   Vanlalhriati, C. and Singh, E.N. (2015). Descriptive Statistics in Business Research. *International Journal of Advanced Research, 3*(6), 1409-1415.

837.   Varaki, B.S., Floden, R.E. and Kalatehjafarabadi, T.J. (2015). Para-quantitative Methodology: Reclaiming experimentalism in educational research. *Open Review of Educational Research, 2*(1), 26 - 41.

838.   Velleman, P.F. and Wilkinson, L. (1993). Nominal, Ordinal, Interval, and Ratio Typologies Are Misleading. *The American Statistician, 47*(1), 65-72.

839.   Veludo-de-Oliveira, T.M., and Ikeda, A.A. (2004). "Student value in marketing education", *Proceeding of Summer Marketing Educator's Conference,* American Marketing Association, Boston, MA.

840.   Verhoef, P.C., Kannan, P.K. and Inman, J.J. (2015). "From multi-channel retailing to Omni-channel retailing: Introduction to the special issue on multi-channel retailing", *Journal of Retailing, 91*(2). 174-181.

841.   Vernon, P.E. and Allport, G.W. (1931). A test for personal values. *The Journal of Abnormal and Social Psychology, 26*(3), 231–248.

842.   Veroff, J., Douvan, E. and Kulka, R.A. (1981). *The Inner American: A Self-Portrait from 1957 to 1976*. New York: Basic Books.

843.   Viksne, K., Salkovska, J., Gaitniece, E. and Puke, I. (2016). COMPARATIVE ANALYSIS OF CUSTOMER BEHAVIOUR MODELS. *Proceedings of the 2016 International Conference "ECONOMIC SCIENCE FOR RURAL DEVELOPMENT" No 43*, 231-231, held in Jelgava, LLU ESAF on 21-22 April 2016.

844.   Vilkaite-Vaitone, N. and Papsiene, P. (2016). Influence of Customer Loyalty Program on Organizational Performance: A Case of Airline Industry. *Inzinerine Ekonomika-Engineering Economics, 27*(1), 109–116.

845.   Vimiso, P., Muchenje, V., Marume, U., and Chiruka, R. (2012). Preliminary study on consumers' and meat traders' perceptions of beef quality and how the beef quality is affected by animal welfare practices. *Scientific Research and Essays, 7*(22), 2037 - 2048.

846.   Vink, P., Bazley, C., Kamp, I. and Blok. M. (2012). "Possibilities to Improve the Aircraft Interior Comfort Experience." *Applied Ergonomics, 43*(2), 354–359.

847.   Vinson, D.E., Scott, J.E. and Lamont, L.M. (1977). The Role of Personal Values in Marketing and Consumer Behavior. *Journal of Marketing*, 44 - 50.

848.   Visagie, J, (2013). Who are the middle class in South Africa? Does it matter for policy? [Online] Available at: http://www.econ3x3.org/sites/default/files/articles/Visagie%202013%20Middle%20class%20FINAL_0.pdf (Accessed on 01 August 2018).

849.   Vivek, S.D., Beatty, S.E. and Morgan, R.M. (2012). Customer engagement: Exploring customer relationships beyond purchase. *The Journal of Marketing Theory and Practice, 20*(2), 122–146.

850.   Von Possel, S. (2010). Integrating the Means-End Approach into the Product Positioning Process Using the Example of the HEAD Snowboarding Travel Boardbag in Germany, Munich, GRIN Verlag. [Online] Available at: http://www.grin.com/en/e-book/177725/integrating-the-means-end-approach-into-the-product-positioning-process (Accessed 12 November 2017).

851.   Walliman, N. (2011). *Research Methods: The Basics.* Abingdon: Routledge.

852.   Walls, J.L. (2018). Identifying Human Values Reflected in "Digitoral" Marketing Campaigns. [Published PhD Thesis]: Fielding Graduate University. Published by ProQuest LLC. ProQuest 10829147. Retrieved from https://media.proquest.com/media/pq/classic/doc/4326464983/fmt/ai/rep/NPDF?_s=TR64XA1bEjHneJ1qgMxA49gd8ek%3D (Accessed on 7 October 2015).

853.   Wang, E.S-E. and Yu, J-R. (2016). "Means-end chain approach for exploring the motivation of ready-to-drink tea consumers", *Asia Pacific Journal of Marketing and Logistics, 28*(3), 384 - 395. https://doi.org/10.1108/APJML-08-2015-0121

854.   Wang, E.S-T., Chen, L.S-L. and Chen, F. (2015). The antecedents and influences of airline loyalty programs: the moderating role of involvement. *Serv Bus, 9*, 257–280.

855.   Wang, J. and Wang, X. (2012). *Structural Equation Modeling: Applications Using Mplus.* Hoboken, NJ: Wiley, Higher Education Press. https://doi.org/10.1002/9781118356258

856.   Wang, X., Su, Y., Cheung, S., Wong, E. and Kwong, T. (2013). An exploration of Biggs' constructive alignment in course design and its impact on

students' learning approaches. Assessment & Evaluation in Higher Education, 38(4), 477–491.

857.   Wang, Y., So, K.K.F. and Sparks, B.A. (2017). Technology Readiness and Customer Satisfaction with Travel Technologies: A Cross-Country Investigation. *Journal of Travel Research, 56*(5), 563–577.

858.   Wang, Z., Rao, C.P. and D'Auria, A. (1994). "A Comparison of the Rokeach Value Survey (Rvs) in China and the United States", In Cote, J.A. and Leong, S.M., (Eds). *AP - Asia Pacific Advances in Consumer Research Volume 1*. Provo, UT: Association for Consumer Research, 185-190.

859.   Warrens, M.J. (2015). Some Relationships Between Cronbach's Alpha and the Spearman-Brown Formula. *Journal of Classification, 32*, 127-137.

860.   Wassenberg, C. L., Goldenberg, M. A., and Soule, K. E. (2015). Benefits of botanical garden visitation: A means-end study. *Urban Forestry and Urban Greening, 14,* 148 – 155.

861.   Wasswa, H.W. (2017). SELLING NATIONALISM: INFLUENCE OF PATRIOTIC ADVERTISING ON CONSUMER ETHNOCENTRISM IN KENYA. European Journal of Social Sciences Studies, 2(8), 94 - 105.

862.   Wasunna, C., Tegli, J. and Ndebele, P. (2014). Informed Consent in an African Context. In Kruger, M., Ndebele, P. and Horn, L. *Research Ethics in Africa: A Resource for Research Ethics Committees*. Stellenbosch: Sun Press.

863.   Watkins, L. and Gnoth, J. (2005). "Methodological issues in using Kahle's list of values scales for Japanese tourism behaviour", *Journal of Vacation Marketing, Vol. 113*, 225-33.

864.   Wawrzyniak, A. and Furaji, F. (2013). The concept of simulation model to study consumer behavior. *STUDIA INFORMATICA NR 32*, 121 - 136.

865.   Weavind, T. (2015). Skywise: Sinister plot to destroy our airline. [Online] Available at: http://city-press.news24.com/Business/Skywise-Sinister-plot-to-destroy-our-airline-20151018 (Accessed on 9 April 2017).

866.   Webb, D.J., Murphy, J.H. and Brown, C.O. (2017). A Comparison of Three Psychometric Values Measures for Modeling Ecologically Conscious Consumption Behavior. *Theoretical Economics Letters*, *7*(7), 2008-2018.

867.   Weber, J. (1993). Exploring the Relationship Between Personal Values and Moral Reasoning. *Human Relations, 46*(4), 435–463. https://doi.org/10.1177/001872679304600402

868.   Weber, J. (2017). Discovering the Millennials' Personal Values Orientation: A Comparison to Two Managerial Populations. *Journal of Business Ethics, 143*, 517–529.

869.   WEF (2016). Africa's potential is sky high – and the airline industry is key. [Online] Available at: https://www.weforum.org/agenda/2016/05/africa-s-potential-is-sky-high-and-the-airline-industry-is-key/ (Accessed on 13 October 2017).

870.   WEF (2017). Digital Transformation Initiative Aviation, Travel and Tourism Industry. White Paper, In Collaboration with Accenture. [Online] Available at: http://reports.weforum.org/digital-transformation/wp-content/blogs.dir/94/mp/files/pages/files/wef-dti-aviation-travel-and-tourism-white-paper.pdf (Accessed on 04 July 2019).

871.   Wehner, C., López-Bonilla, J.M., López-Bonilla, L.M. and Santos, J.A.C. (2018). State of the art of pricing policy in air transportation: network carriers vs. low-cost airlines. *Tourism & Management Studies, 14*(3), 32-40.

872.   Weijters, B., and Muylle, S. (2008). A Means-End-Chain analysis of pub visits Belgium. Gent: Vlericks Leuven Gent Management School.

873.   Wells, R.S. and Stage, F.K. (2015). "Past, Present, and Future of Critical Quantitative Research in Higher Education: Past, Present, and Future of Critical Quantitative Research," *New Dir. Institutional Res., 163*, 103-112.

874.   Wen, C. and Yeh, W. (2010). 'Positioning of international air passenger carriers using multidimensional scaling and correspondence analysis'. *Transportation Journal, 49*(1), 7–23.

875.   West, S., Schmitt, P. and Kujawski, D. (2016). Service pricing strategies in maintenance services. *23rd EurOMA Conference*, Trondheim, Norway. [Online] Available at: https://www.researchgate.net/profile/Shaun_West2/publication/304272134_EUROMA_2016_Pricing/links/576b681d08aef2a864d2124f/EUROMA-2016-Pricing.pdf (Accessed on 17 August 2018).

876. Wetzel, H.A., Maik, H. and Alex, R.Z. (2014). Gratitude versus entitlement: A dual process model of the profitability implications of customer prioritization. *Journal of Marketing, 78*(2), 1–19.

877. Whyte, R. and Lohmann, G. (2017). Airline Business Models. In Budd, L. and Ison, S. (Eds). *Air Transport Management: An International Perspective*. New York: Routledge Taylor and Francis Group.

878. Wieseke, J., Alavi, S. and Habel, J. (2014). Willing to pay more, eager to pay less: The role of customer loyalty in price negotiations. Journal of Marketing, 78(6), 17–37.

879. Wiles, R., Crow, G., Heath, S. and Charles, V. (2008). The Management of Confidentiality and Anonymity in Social Research. *International Journal of Social Research Methodology, 11*(5), 417-428

880. Wilkinson, L., and Task Force on Statistical Inference. (1999). Statistical methods in psychology journals: Guidelines and explanations. *American Psychologist, 54*, 594–604.

881. Williams (2018). Dynamic airline pricing and seat availability. [Online] Available at: https://ssrn.com/abstract=3026383 (Accessed on 24 May 2018).

882. Williams, R. (2019). Ordinal Independent Variables. University of Notre Dame. [Online] Available at: https://www3.nd.edu/~rwilliam/ (Accessed 5 June 2019).

883. Wilson, B. (2017). Fly Blue Crane CEO on breaking the aviation glass ceiling. *Runway Girl Network*. [Online] Available at: https://runwaygirlnetwork.com/2016/01/02/fly-blue-crane-ceo-on-breaking-the-aviation-glass-ceiling/ (Accessed 12 June 2017).

884. Wirtz, J. and Lovelock, C. (2018). *Essentials of Services Marketing*. 3rd Edition. London: Pearson.

885. Wittmer, A. and Oberlin, N. (2015). ANCILLARY REVENUE PRICING. *Journal of Air Transport Studies, 6*(2), 43 - 62. [Online] Available at: https://www.alexandria.unisg.ch/243853/1/14Wittmer.pdf (Accessed on 27 April, 2020).

886.   Wittmer, A. and Riegler, B. (2014). Purchasing a general ticket for public transport – A means end approach. *Travel Behaviour and Society 1*, 106 – 112.

887.   Wolf, E.J., Harrington, K.M., Clark, S.L. and Miller, M.W. (2013). Sample Size Requirements for Structural Equation Models: An Evaluation of Power, Bias, and Solution Propriety. *Educational and Psychological Measurement, 73*, 913-934. https://doi.org/10.1177/0013164413495237

888.   Wood, A. (2016). What is the state of South Africa's airline industry? [Online] Available from: http://www.moneybags.co.za/what-is-the-state-of-south-africas-airline-industry. (Accessed 03 March 2016).

889.   World Bank, (2005). East Africa Air Transport Survey. World Bank, Washington, DC.

890.   World Trade Organisation (WTO) (2006). Second review of the air transport annex, Developments in the air transport sector (part two), Quantitative Air Services Agreements review (QUASAR), vols. I and II, Document S/C/W/270/Add.1.

891.   WTO (2005). Thematic Essays International Trade in Air Transport: Recent Developments and Policy Issues. [Online] Available at: https://www.wto.org/english/res_e/booksp_e/anrep_e/wtr05-3b_e.pdf (Accessed on 31 March 2017).

892.   Wu, H-C. and Cheng, C-C. (2013). A hierarchical model of service quality in the airline industry. *Journal of Hospitality and Tourism Management, 20*, 13-22.

893.   Xiao, L., Guo, Z., D'Ambra, J. and Fu, B. (2014). "UNDERSTANDING ONLINE GROUP PURCHASE DECISION MAKING: A MEANS-END CHAIN APPROACH" (2014). *PACIS 2014 Proceedings. 290.* [Online] Available at: http://aisel.aisnet.org/pacis2014/290 (Accessed on 15 May 2019).

894.   Xue, J., Zhou, Z., Zhang, L. and Majeed, S. (2020). Do Brand Competence and Warmth Always Influence Purchase Intention? The Moderating Role of Gender. *Front. Psychol. 11*(248). doi: 10.3389/fpsyg.2020.00248

895.   Yan, J. (2018). The Research on Consumer Decision of WeChat Marketing Perspective. *Management & Engineering 32*, 1838 - 5745.

896. Yanchar, S.C. (2006). On the possibility of contextual–quantitative inquiry, *New Ideas in Psychology, 24*(3), 212-228.

897. Yang, Y. and Green, S.B. (2011). Coefficient Alpha: A Reliability Coefficient for the 21st Century? *Journal of Psychoeducational Assessment, 29*(4) 377–392.

898. Yankelovich, D. (1981). *New Rules: Searching for Self-Fulfillment in a World Turned Upside Down.* New York: Random House.

899. Yasir Arafat, S.M. (2016). Cross Cultural Adaptation & Psychometric Validation of Instruments: Stepwise Description. *International Journal of Psychiatry, 1*(1), 1-4.

900. Yaylali, M., Çelik, A.K. and Dilek, Ö. (2016). Analyzing key socio-economic and socio-demographic drivers of domestic passengers' airline choice behavior in Turkey using multinomial and mixed logit models. *The International Journal of Transportation Research, 8*(3), 121 - 130.

901. Yilmaz, K.G., Gungordu, A. and Yumusak, T. (2016). The Relationship between the List of Values and Consumer Decision Making Styles in the Context of Clothing Products. *Business Management Dynamics, 5*(9), 01-14.

902. Yong, A.G. and Pearce, S. (2013). A Beginner's Guide to Factor Analysis: Focusing on Exploratory Factor Analysis. *Tutorials in Quantitative Methods for Psychology, 9*(2), 79-94.

903. Zeithaml, V. (1988). Consumer perception of price, quality, and value: A means-end model of synthesis of evidence. *J. Mark. 52*, 2 - 22.

904. Zeithaml, V.A., Bitner, M.J. and Gremler, D.D. (2010). Services Marketing Strategy: Part 1. Marketing Strategy. Wiley International Encyclopedia of Marketing. [Online] Available at: https://doi.org/10.1002/9781444316568.wiem01055 (Accessed on 26 November 2019).

905. Zeithaml, V.A., Gremler; D.D. and Bitner, M.J. (2018). *Services Marketing: Integrating Customer Focus Across the Firm: Integrating Customer Focus Across the Firm.* 7th Edition. McGraw-Hill Education.

906.   Zepeda, L. and Nie, C. (2012). What are the odds of being an organic or local food shopper? Multivariate analysis of U.S. food shopper lifestyle segments. *Agriculture and Human Values, 29*(4), 467–480.

907.   Zhang, C., Lin. Y.H. and Newman, D.G. (2016). Investigating the Effectiveness of Repositioning Strategies: The Customers' Perspective, *Journal of Travel & Tourism Marketing, 33*(9), 1235-1250, DOI: 10.1080/10548408.2015.1107018.

908.   Zhang, Y. and Liu, F. (2017). The Formation of Brand Loyalty: A Partial Dual-Factor Explanation, *Journal of International Consumer Marketing, 29*(4), 239-249.

909.   Zhou, Y., Thøgersen, J., Ruan, Y. and Huang, G. (2013). "The moderating role of human values in planned behavior: the case of Chinese consumers' intention to buy organic food", *Journal of Consumer Marketing, Vol. 30*(4), 335-344.

910.   Zinas, B.Z. and Jusan, M.M. (2012). Housing Choice and Preference: Theory and Measurement. *Procedia - Social and Behavioral Sciences 49*, 282–292.

911.   Zinas, B.Z. and Jusan, M.M. (2017). Choice Behaviour of Housing Attributes: Theory and measurement. *Asian Journal of Environmen-Behaviour Studies, ajE-Bs, 2*(2), 23 - 37.

912.   Zinas, Z.B. (2013). Laddering as a Research Technique for Measuring Housing Choice and Preference. *J. of Environmental Sciences and Resource Management, 5*(2), 1-11.

913.   Žnideršić, R.K., Grubor, A. and Marić, D. (2014). Impulsive Consumer Behavior. International *Journal of Multidisciplinarity in Business and Science, 2*(2), 81 - 89.

914.   Zweigenthal, C. (2013). Lack of liberalisation hurting Africa airline industry, Chief Executive, Airline Association of Southern Africa (AASA) In interview with CNBCAfrica: Lack of liberalisation hurting Africa airline industry. [Online] Available at: http://www.cnbcafrica.com/news/special-report/2013/07/04/lack-of-liberalisation-hurting-africa-airline-industry/ (Accessed on 10 April 2017).

APPENDICES

APPENDIX A: UNISA Ethical Clearance Certificate

UNISA | university of south africa

UNISA DEPARTMENT OF MARKETING AND RETAIL MANAGEMENT RESEARCH ETHICS REVIEW COMMITTEE

8 June 2017

Dear Nkululeko Fuyane

Decision: Ethics Approval from 2017 - 2020

NHREC Registration # : (if applicable) n/a
ERC Reference # : MRM_2016_007
Name : Nkululeko Fuyane
Student #: 55775497
Staff #: n/a

Researcher(s): Name   Nkululeko Fuyane, deebogroup@gmail.com, 0782979535

Supervisor (s): Name   Prof ML van Scheers, vscheml@unisa.ac.za, 0823231365

Working title of research:

Consumer personal values on airline choice in the South African domestic market: a means-end analysis.

Qualification: postgraduate student research

Thank you for the application for research ethics clearance by the Unisa, the Department of Marketing and Retail Management Ethics Review Committee for the above mentioned research. Ethics approval is granted for 3 years.

The **low risk application** was **reviewed** by the Department of Marketing and Retail Management Ethics Review Committee on 2 June 2017 in compliance with the Unisa Policy on Research Ethics and the Standard Operating Procedure on Research Ethics Risk Assessment.

The proposed research may now commence with the provisions that:
1. The researcher(s) will ensure that the research project adheres to the values and principles expressed in the UNISA Policy on Research Ethics.

University of South Africa
Preller Street, Muckleneuk Ridge, City of Tshwane
PO Box 392 UNISA 0003 South Africa
Telephone. +27 12 429 3111 Facsimile: +27 12 429 4150
www.unisa.ac.za

Open Rubric

2. Any adverse circumstance arising in the undertaking of the research project that is relevant to the ethicality of the study should be communicated in writing to the Department of Marketing and Retail Management Research Ethics Committee.

3. The researcher(s) will conduct the study according to the methods and procedures set out in the approved application.

4. Any changes that can affect the study-related risks for the research participants, particularly in terms of assurances made with regards to the protection of participants' privacy and the confidentiality of the data, should be reported to the Committee in writing, accompanied by a progress report.

5. The researcher will ensure that the research project adheres to any applicable national legislation, professional codes of conduct, institutional guidelines and scientific standards relevant to the specific field of study. Adherence to the following South African legislation is important, if applicable: Protection of Personal Information Act, no 4 of 2013; Children's act no 38 of 2005 and the National Health Act, no 61 of 2003.

6. Only de-identified research data may be used for secondary research purposes in future on condition that the research objectives are similar to those of the original research. Secondary use of identifiable human research data require additional ethics clearance.

7. No field work activities may continue after the expiry date (6 June 2020). Submission of a completed research ethics progress report will constitute an application for renewal of Ethics Research Committee approval.

8. Minor changes suggested by the ethics committee be amended on the Form 1.

9. Permission obtained from authorities of OR Tambo and/or King Shaka airport in order to approach participants.

Note:

The reference number **2016_MRM_007** should be clearly indicated on all forms of communication with the intended research participants, as well as with the Committee.

Yours sincerely,

Signature
Chair of Department of
Marketing and Retail Management ERC
E-mail: jwiid@unisa.ac.za
Tel: (012) 429-2381

Signature
Executive Dean: College of Economic and
Management Sciences
E-mail: mogalmt@unisa.ac.za
Tel: (012) 429-4805

URERC 25.04.17 - Decision template (V2) - Approve

APPENDIX B: Permission Letter from Airport Company of South Africa (ACSA)

KING SHAKA
INTERNATIONAL AIRPORT
AIRPORTS COMPANY SOUTH AFRICA

05th December 2017

Mr Nkululeko Fuyane
Student: 55775497
Unisa Department of Marketing and Retail Management Research
Ethics Review Committee

Dear Sir

PERMISSION TO CONDUCT SURVEY AT KING SHAKA INTERNATIONAL AIRPORT

This is to confirm that we have granted you permission to conduct a survey at King Shaka International Airport over a period of two days (dates and times still to be determined and agreed to) during December 2017

This is for the subject: THE INFLUENCE ON CONSUMER PERSONAL VALUES ON AIRLINE CHOICE IN THE SOUTH AFRICAN DOMESTIC AIRLINE MARKET: A MEANS -END ANALYSIS.

We have engaged our airline partners on this matter and they have looked at the questionnaire and have agreed that we can allow this survey to take place at our airport.

Yours Faithfully,

Colin Naidoo
Senior Manager: Corporate Affairs
Email: Colin.naidoo@airports.co.za

APPENDIX C: Information and Consent Form

PERSONAL VALUES AND AIRLINE CHOICE WITHIN THE SOUTH AFRICAN DOMESTIC MARKET.

Informed consent for participation in an academic research study

Department of Marketing and Retail Management

Dear Respondent

I am Nkululeko Fuyane, a doctoral candidate (Doctor of Commerce in Business Management Degree) at the University of South Africa, Department of Marketing and Retail. You are at this moment invited to consider participating in this study as titled above. The main aim of this research is to determine the critical consumer personal values underlying airline choice within the South African domestic market. The outcome of the study will assist airlines in developing products that are consistent with traveller needs. The questionnaire has 25 questions which might take about twenty (20) minutes to complete.

There are no foreseeable risks and discomforts for participating in this study. As pointed out earlier on, this study will benefit you (as the traveller) through improved airline service quality as they will directly speak to your values (lifetime goals). The University of South Africa has approved this study, Department of Marketing and Retail Research Ethics Review Committee under Ref, number MRM_2016_007. In the event of any concerns or queries about the survey, you are free to contact me (the researcher) on deebobgroup@gmail.com or the research supervisors on vscheml@unisa.ac.za and makhikm@unisa.ac.za or ultimately the Ethics Review Committee on marketing@unisa.ac.za.

Please note that participation in this study is voluntary, and may withdraw your participation at any point without retribution. If you do not want to continue participating,

please click on "I do not want to participate" under the next section. The information obtained from this study will be primarily for academic purposes, and strict confidentiality will be applied to all the responses received in this study. The questionnaire does not ask for identifiable personal details to protect respondents from being associated or matched with the data collected. The outcome of this research will be shared with all concerned parties (i.e., Airlines, UNISA research repository and academia in general) through peer-reviewed publications and conference proceedings.

Consent to participate in this study:

I am well-informed about this study, and I understand the purpose and procedures of the study. I, therefore, declare that my participation in this study is voluntary and I understand that I may withdraw my participation without retribution. Should I have any questions/concerns about the research or my rights as a participant, I have been informed to contact; the researcher on deebobgroup@gmail.com or the research supervisor on vscheml@unisa.ac.za or ultimately the Ethics Review Committee on marketing@unisa.ac.za. I am aware that the data collected through this questionnaire will be analysed and stored safely, and that no personal information will be raised to protect the respondents from identification.

Please mark the form to indicate that:

- You have read and understand the information provided above.
- You give your consent to participate in the study on a voluntary basis.

Please sign or mark **X** if you agree

APPENDIX D: Questionnaire (Hardcopy)

For the online version of the questionnaire, click **HERE**

Section A: Travel Information:

Q1 How frequent do you fly within South Africa per year?

		Mark (X)
V^1	Never, but intend to fly in the near future	1
V^2	Rarely (say, once in a blue moon)	2
V^3	Sometimes (say, once in a number of months)	3
V^4	Often (say, twice in a month)	4
V^5	Always (say, more than twice in a month)	5

Q2 Which of these domestic routes have you flown in the last twelve months?

		Mark (X)
V_6	Johannesburg – Cape Town or vice versa	1
V_7	Durban - Johannesburg or vice versa	2
V_8	Cape Town – Durban or vice versa	3
V_9	Other…………………………………………………………………………… ……… ………………………………………………………………………………………… ……… ………………………………………………………………………………………… ……… …………………………………………………………………………………………	4

Q3 Purpose of flights

		Mark (X)

V₁₀	Business	1
V₁₁	Private	2
V₁₂	Both	3

Q4 If the purpose of flying is business, are you able to make choice decisions or is handled by a specialist buying department or outsourced to an agency?

		Mark (X)
V₁₃	Yes, I can make a decision	1
V₁₄	Travel arrangements handled by the buying department or an agency and I can make a decision on airline choice	2
V₁₅	Travel arrangements handled by the buying department or an agency and I cannot make a decision on airline choice	3
V₁₆	No, I cannot make a decision at all	4

Q5 Which of the following airlines do you prefer the most to fly in when travelling within South Africa?

		Mark (X)
V₁₇	South African Airways (SAA)	1
V₁₈	SA Express	2
V₁₉	British Airways operated by Comair	3
V₂₀	Kulula	4
V₂₁	SA Airlink	5
V₂₂	Mango Airlines	6
V₂₃	Safair	7
V₂₄	Cemair	8
V₂₅	Other……………………………………………..	9

Section B: Airline Service Attributes

Service attributes are defined as either tangible and intangible factors, characteristics or features assembled by an airline in response to passenger's needs. It is the experience we get from these attributes and the meaning they have for us that makes them critical to us when deciding which airline to fly on when evaluating an airline's service quality and to decide whether to continue operating a particular airline or switch to others.

Q6 When choosing an airline, the following are the service attributes we usually consider. Below are statements that are related to these attributes; please indicate HOW IMPORTANT they are to you concerning your airline choice decision-making. Mark the appropriate block with a X.

Variable no	Statements	Not important at all	Of little importance	Of Average importance	Very important	Absolutely essential
		1	2	3	4	5
	TICKET PRICE					
V$_{26}$	Low ticket prices	1	2	3	4	5

Variable no	Statements	Not important at all	Of little importance	Of Average importance	Very important	Absolutely essential
V$_{27}$	Avoiding booking flights during peak times (e.g. holidays) as prices are usually high	1	2	3	4	5
V$_{28}$	Quality of services	1	2	3	4	5
V$_{29}$	Sales promotions, e.g. redeemable coupons	1	2	3	4	5
V$_{30}$	Booking my flights at the earliest possible time to avoid steeper last minute booking prices	1	2	3	4	5
V$_{31}$	Ticket prices to include ancillary charges, e.g. luggage allowance, seat upgrades/selection, flexibility fees in case of cancellation, etc.	1	2	3	4	5
	RELIABILITY					

V$_{32}$	Airline's adherence to flight scheduled times (punctuality)	1	2	3	4	5
V$_{33}$	Airline's queries, complaints and luggage handling	1	2	3	4	5
V$_{34}$	Frequency of flights by an airline in smaller airports	1	2	3	4	5
V$_{35}$	Airline's rate of flight cancellations	1	2	3	4	5
V$_{36}$	Communication in respect of schedule time changes or any other changes	1	2	3	4	5
	SAFETY					
V$_{37}$	Checking on an airline's safety record before I choose it	1	2	3	4	5
V$_{38}$	Type and size of aircraft	1	2	3	4	5
V$_{39}$	Perceptions of safety and risk	1	2	3	4	5
V$_{40}$	Record of aircraft maintenance and repairs	1	2	3	4	5
V$_{41}$	Aircraft's safety features	1	2	3	4	5
V$_{42}$	Aviation safety and security protocols	1	2	3	4	5
	AIRLINE'S STAFF COMPETENCY/KNOWLEDGE, COURTESY AND RESPONSIVENESS					
V$_{43}$	Staff courteousness and friendliness	1	2	3	4	5
V$_{44}$	Staff knowledge/competence	1	2	3	4	5
V$_{45}$	Physical look (grooming) of airline staff	1	2	3	4	5
V$_{46}$	Staff empathy and customer care	1	2	3	4	5

V_{47}	Staff responsiveness	1	2	3	4	5
	LUGGAGE HANDLING					
V_{48}	Luggage labelling or marking	1	2	3	4	5
V_{49}	Free luggage allowance	1	2	3	4	5
V_{50}	Luggage security	1	2	3	4	5
V_{51}	Luggage tracking and notification technology	1	2	3	4	5
V_{52}	Self-service bag (luggage) counters	1	2	3	4	5
	AIRLINE REPUTATION					
V_{53}	History and origin of an airline	1	2	3	4	5
V_{54}	Owners or directors of an airline	1	2	3	4	5
V_{55}	Airline's brand image, identity and equity	1	2	3	4	5
V_{56}	Airline's number of years of operation	1	2	3	4	5
V_{57}	Airline's market positioning and associations	1	2	3	4	5
	LOYALTY PROGRAMS					
V_{58}	Loyalty programs financial benefits¨ e.g. discounted or free flights¨ car rentals or accommodation	1	2	3	4	5
V_{59}	Preferential treatment or exclusive services¨ e.g. using waiting lounges¨ priority boarding¨ etc.	1	2	3	4	5
V_{60}	How FFP points accrual is calculated	1	2	3	4	5
V_{61}	The breadth and height of partner network¨ i.e. the number of domestic airline partners¨ other related other related travel service providers such as hotels and taxi, shuttle services and other service providers outside the sector such as retail shops.	1	2	3	4	5
V_{62}	Flexibility of FFPs¨ i.e. can one customize redemption or spending of loyalty points	1	2	3	4	5
	ONBOARD (INFLIGHT) SERVICES					
V_{63}	Onboard entertainment¨ i.e. variety¨ audience specification and availability of accessories such as earphones¨ touch screens¨ etc.	1	2	3	4	5

V_{64}	Availability and quantity of onboard meals	1	2	3	4	5
V_{65}	Quality (taste, freshness, appearance and variety) onboard meals.	1	2	3	4	5
V_{66}	Availability of other onboard retailing services, i.e. sales of snacks and drinks.	1	2	3	4	5
V_{67}	Pricing of inflight meals, snacks and drinks	1	2	3	4	5
V_{68}	Availability of WiFi connectivity	1	2	3	4	5
	CABIN FEATURES AND EXPERIENCES					
V_{69}	Cabin room space (width and height)	1	2	3	4	5
V_{70}	Cabin and toilet cleanliness	1	2	3	4	5
V_{71}	Seat comfort	1	2	3	4	5
V_{72}	Legroom	1	2	3	4	5
V_{73}	Controlled temperature	1	2	3	4	5
	BOOKING AND CHECK-IN					
V_{74}	Easiness and efficiency of booking	1	2	3	4	5
V_{75}	Web layout and ease of navigation for online booking	1	2	3	4	5
V_{76}	Availability of mobile booking and check-in applications	1	2	3	4	5
V_{77}	Easy and secure payment processes for online booking	1	2	3	4	5
V_{78}	Ability to change details after booking, to include flight cancellation and rescheduling processes.	1	2	3	4	5
V_{79}	Ability to check-in at self-service kiosks	1	2	3	4	5
V_{80}	Check-in facilities for people living with disabilities	1	2	3	4	5

Section C: Personal Values Underlying Airline Choice

In different choice situations, it is argued that the decisions we make and actions we take are, but a means to an end. That said, our evaluation of airline service attributes when choosing an airline is the 'means' to achieve our values which are an 'end'. Personal values are defined as the guiding principles for one's life and behaviour. Under this section, your responses to the questions will help determine personal values guiding airline choice behaviour.

Q7 Here we briefly describe a different person whom you have to compare yourself to. Please read each description and think about how much that person is or is not like you. For each portrait, tick on the circle that shows how much the person described is like you or is not like you. Mark the appropriate block with a X.

Variable no	Statements	Not like me at all	Not like me	A little like me	Moderately like me	Like me	Very much like me
		1	2	3	4	5	6
V81	It is important to this person to form their views independently.	1	2	3	4	5	6
V82	It is important to this person that his/her country is secure and stable.	1	2	3	4	5	6
V83	It is important to this person to have a good time.	1	2	3	4	5	6
V84	It is important to this person to avoid upsetting other people.	1	2	3	4	5	6
V85	It is important to this person that the weak and vulnerable in society be protected.	1	2	3	4	5	6
V86	It is important to this person that people do what he/she says they should.	1	2	3	4	5	6
V87	It is important to this person never to think he/she deserves more than other people.	1	2	3	4	5	6
V88	It is important to this person to care for nature.	1	2	3	4	5	6
V89	It is important to this person that no one should ever shame him/her.	1	2	3	4	5	6
V90	It is important to this person always to look for different things to do.	1	2	3	4	5	6

407

V_{91}	It is important to this person to take care of people he/she is close to.	1	2	3	4	5	6
V_{92}	It is important to him/her to have the power that money can bring.	1	2	3	4	5	6
V_{93}	It is very important to this person to avoid disease and protect his/her health.	1	2	3	4	5	6
V_{94}	It is important to this person to be tolerant toward all kinds of people and groups.	1	2	3	4	5	6
V_{95}	It is important to this person never to violate rules or regulations.	1	2	3	4	5	6
V_{96}	It is important to this person to make his/her own decisions about his/her life.	1	2	3	4	5	6
V_{97}	It is important to this person to have ambitions in life.	1	2	3	4	5	6
V_{98}	It is important to this person to maintain traditional values and ways of thinking.	1	2	3	4	5	6
V_{99}	It is important to this person that people he/she knows have full confidence in him/her.	1	2	3	4	5	6
V_{100}	It is important to this person to be wealthy.	1	2	3	4	5	6
V_{101}	It is important to this person to take part in activities to defend nature.	1	2	3	4	5	6
V_{102}	It is important to this person never to annoy anyone.	1	2	3	4	5	6

V_{103}	It is important to this person to develop his/her own opinions.	1	2	3	4	5	6
V_{104}	It is important to this person to protect his/her public image.	1	2	3	4	5	6
V_{105}	It is very important to this person to help the people dear to him/her.	1	2	3	4	5	6
V_{106}	It is important to this person to be personally safe and secure.	1	2	3	4	5	6
V_{107}	It is important to this person to be a dependable and trustworthy friend.	1	2	3	4	5	6
V_{108}	It is important to this person to take risks that make life exciting.	1	2	3	4	5	6
V_{109}	It is important to this person to have the power to make people do what he/she wants.	1	2	3	4	5	6

V_{110}	It is important to this person to plan his/her activities independently.	1	2	3	4	5	6
V_{111}	It is important to this person to follow rules even when no-one is watching.	1	2	3	4	5	6
V_{112}	It is important to this person to be very successful.	1	2	3	4	5	6
V_{113}	It is important to this person to follow his/her family's customs or the customs of a religion.	1	2	3	4	5	6
V_{114}	It is important to this person to listen to and understand people who are different from him/her.	1	2	3	4	5	6
V_{115}	It is important to this person to have a strong state that can defend its citizens.	1	2	3	4	5	6
V_{116}	It is important to this person to enjoy life's pleasures.	1	2	3	4	5	6
V_{117}	It is important to this person that every person in the world have equal opportunities in life.	1	2	3	4	5	6
V_{118}	It is important to this person to be humble.	1	2	3	4	5	6
V_{119}	It is important to this person to figure things out him/herself.	1	2	3	4	5	6
V_{120}	It is important to this person to honour the traditional practices of his/her culture.	1	2	3	4	5	6
V_{121}	It is important to this person to be the one who tells others what to do.	1	2	3	4	5	6
V_{122}	It is important to this person to obey all the laws.	1	2	3	4	5	6
V_{123}	It is important to this person to have all sorts of new experiences.	1	2	3	4	5	6
V_{124}	It is important to this person to own expensive things that show his/her wealth.	1	2	3	4	5	6
V_{125}	It is important to this person to protect the natural environment from destruction or pollution.	1	2	3	4	5	6
V_{126}	It is important to this person to take advantage of every opportunity to have fun.	1	2	3	4	5	6
V_{127}	It is important to this person to concern him/herself with every need of his/her dear ones.	1	2	3	4	5	6

		1	2	3	4	5	6
V$_{128}$	It is important to this person that people recognise what he/she achieves.	1	2	3	4	5	6
V$_{129}$	It is important to this person never to be humiliated.	1	2	3	4	5	6
V$_{130}$	It is important to this person that his/her country protect itself against all threats.	1	2	3	4	5	6
V$_{131}$	It is important to this person never to make other people angry.	1	2	3	4	5	6
V$_{132}$	It is important to this person that everyone be treated justly, even people he/she doesn't know.	1	2	3	4	5	6
V$_{133}$	It is important to this person to avoid anything dangerous.	1	2	3	4	5	6
V$_{134}$	It is important to this person to be satisfied with what he/she has and not ask for more.	1	2	3	4	5	6
V$_{135}$	It is important to this person that all his/her friends and family can rely on him/her completely.	1	2	3	4	5	6
V$_{136}$	It is important to this person to be free to choose what he/she does by him/herself.	1	2	3	4	5	6
V$_{137}$	It is important to this person to accept people even when he/she disagrees with them.	1	2	3	4	5	6

Q8 In section B (Q6) you rated the importance of various airline service attributes. Which of them is the most important to you? Mark the appropriate block with a X.

	Service Attribute	Mark (X)
V$_{138}$	Low ticket prices	1
V$_{139}$	Airline's reliability track record	2
V$_{140}$	Airline's safety record	3
V$_{141}$	Airline's staff competency/knowledge, courtesy and responsiveness	4
V$_{142}$	Airline's luggage handling record	5
V$_{143}$	Airline's reputation	6

V144	Loyalty program(s)		7
V145	On-board (inflight) services		8
V146	Aircraft's cabin features and resultant experiences		9
V147	Booking and check-in services		10

Section D: Effect of Airline Promotional Effort:

Airlines carry out marketing communication (promotion) campaigns to inform, remind/reinforce and persuade travellers to favour them ahead of the competition. This section seeks to extrapolate how airline promotional effort affects your perceptions and attitude insofar their brand image, services attributes and delivery performance are concerned.

Q9 The following statements describe how airlines' marketing campaigns impacts on your evaluation of various airline SERVICE ATTRIBUTES to arrive at your airline choice. Indicate your agreement/disagreement with the statements using the scale provided below. Mark the appropriate block with a X.

Variable no	Statements	Strongly disagree	Disagree	Neither agree or disagree	Agree	Strongly agree
		1	2	3	4	5
V148	Airlines' marketing messages helps me know about the services attributes offered by different airlines	1	2	3	4	5
V149	Airlines' marketing messages helps me identify service attributes that are important to me	1	2	3	4	5
V150	Airlines' marketing messages moderates my evaluation of airlines service attributes	1	2	3	4	5
V160	Airlines' marketing messages substantially influence my airline choice	1	2	3	4	5

Q10 The following statements describe how airlines' marketing campaigns impacts on your decision whether to continue patronising (REPEAT PURCHASE INTENTION) an airline and, or your level LOYALTY to an airline. Mark the appropriate block with a X.

Variable no	Statements	Strongly disagree	Disagree	Neither agree or disagree	Agree	Strongly agree
		1	2	3	4	5
V₁₆₁	Airlines' marketing messages substantially influence how I evaluate the performance an airline's service delivery against my underlying life goals (personal values).	1	2	3	4	5
V₁₆₂	Airlines' marketing messages moderate my post flight experiences.	1	2	3	4	5
V₁₆₃	An airline's marketing messages are instrumental to my decision whether to continue patronising its services.	1	2	3	4	5
V₁₆₄	I am likely to be loyal to an airline whose marketing messages amplify how its service attributes resonate with my personal values.	1	2	3	4	5
V₁₆₅	I am more likely to buy (and repeat buying) airline services which are on special offer than those that are not.	1	2	3	4	5

Q11 Listed hereunder is a mix of marketing communication channels which can be used by airlines or its marketing campaigns. Indicate how likely marketing messages on these channels may catch your attention. Mark the appropriate block with a X.

Variable no	Statements	Extremely unlikely	Unlikely	Neutral	Likely	Extremely likely

		1	2	3	4	5
V$_{166}$	Marketing messages on print media (e.g. newspapers and magazines).	1	2	3	4	5
V$_{167}$	Messages broadcast through TV and radio.	1	2	3	4	5
V$_{168}$	Outdoor marketing messages (e.g. on billboards, vehicle (buses, trains or company cars) livery, bus/train stations ads, aircraft branding, etc.).	1	2	3	4	5
V$_{169}$	I am likely to be loyal to an airline whose marketing messages amplify how its service attributes resonate with my personal values.	1	2	3	4	5
V$_{170}$	Marketing messages on digital channels, e.g. on social media platforms, websites and through mobile devices.	1	2	3	4	5
V$_{171}$	Word of mouth	1	2	3	4	5

Q12 Airlines convey their promotional (marketing) messages through a mix of marketing communication tools. Indicate how impactful on your overall evaluation of an airline's services and your choice decision are marketing messages conveyed through the means listed below. Mark the appropriate block with a X.

Variable no	Statements	Not impactful at all	Slightly impactful	Somehow impactful	Very impactful	Extremely impactful
		1	2	3	4	5
V$_{172}$	Advertisements (to include those on print, outdoor and broadcast).	1	2	3	4	5
V$_{173}$	Sales promotions (both financial, e.g. ticket price discount and nonfinancial, e.g. free meals).	1	2	3	4	5

413

V₁₇₄	Public relations campaigns (press and features articles, sponsorships/corporate social responsibility initiatives and other newsworthy stories).	1	2	3	4	5
V₁₇₅	Direct marketing campaigns (where airlines use your information from databases to promote its service directly to you).	1	2	3	4	5
V₁₇₆	Digital marketing campaigns, e.g. online display ads, social media engagements, mobile marketing messages/notifications, etc.	1	2	3	4	5
V₁₇₇	Sales messages by sales agents (airline's own or travel agents').	1	2	3	4	5

Section E: Satisfaction

In Section a (Q5), you indicated your most preferred airline? The statements below centre on satisfaction with regard to your most preferred airline's performance.

Q13   You are requested to indicate how much your most preferred airline meets your service expectations through its service attributes listed below. Mark the appropriate block with a X.

Variable no	Statements	Verydissatisfactory	Dissatisfactory	Averagely	Satisfactory	VerySatisfactory
		1	2	3	4	5
V₁₇₈	My most preferred airline's ticket prices are.......	1	2	3	4	5

414

V179	When it comes to reliability, my most preferred airline's performance is.......	1	2	3	4	5
V180	My most preferred airline's safety record is........	1	2	3	4	5
V181	My most preferred airline's safety record is........	1	2	3	4	5
V182	My most preferred airline's ground staff service delivery is...........	1	2	3	4	5
V183	My most preferred airline's cabin crews (on-board staff) service delivery is...........	1	2	3	4	5
V184	When it comes to luggage handling and management, my most preferred airline's performance is......	1	2	3	4	5
V185	Frequent flyer programs rewards offered by my most preferred airline are.....	1	2	3	4	5
V186	On-board entertainment offered by most preferred airline is......	1	2	3	4	5
V187	The availability, quality, prices and variety of on-board meals and drinks offered by my most preferred airline are.....	1	2	3	4	5
V188	The cabin features of my most preferred airline's aircrafts are.....	1	2	3	4	5
V190	The booking and check-in processes of my most preferred airline are.....	1	2	3	4	5

Q14 Indicate your possible action in response to the following statements. Mark the appropriate block with a X.

Variable no	Statements	Extremely unlikely	Unlikely	Neutral	Likely	Extremely likely
		1	2	3	4	5
V_{191}	I will continue patronising my most preferred airline?	1	2	3	4	5
V_{192}	I can recommend my most preferred airline to another person?	1	2	3	4	5
V_{193}	I am highly likely to switch to another airline.	1	2	3	4	5
V_{194}	I am prepared to pay more for the services offered by my most preferred airline.	1	2	3	4	5

Q15 Any other comment about your most preferred airline.

If you do not have any comment, please write 'No further comment'

………
………
………
………
………
………

Section F: Demographic Information

This information is for profiling you as a respondent only.

Q16   Your gender

	Option	Mark (X)
V_{195}	Male	1

V₁₉₆	Female	2
V₁₉₇	Prefer not to say	3

Q17 Which population group do you belong to?

	Option	Mark (X)
V₁₉₈	Black	1
V₁₉₉	Coloured	2
V₂₀₀	White	3
V₂₀₁	Indian	4
V₂₀₂	Other	5

Q18   How old are you?

	Option	Mark (X)
V₂₀₃	18 - 30 years	1
V₂₀₄	31 - 40 years	2
V₂₀₅	41 - 50 years	3
V₂₀₆	51 - 60 years	4
V₂₀₇	60 years and above	5

Q19 Indicate your occupation by choosing from options below.

	Option	Mark (X)
V₂₀₈	Employed	1
V₂₀₉	Self-employed	2
V₂₁₀	Retired	3
V₂₁₁	Other…………………………	4

Q20 Which income bracket (personal income per annum in South African Rands) do you fall under?

	Option	Mark (X)
V_{212}	0 to 200 000 Rands	1
V_{213}	201 000 to R400 000 Rands	2
V_{214}	401 000 to 600 000 Rands	3
V_{215}	601 000 to 800 000 Rands	4
V_{216}	801 000 to 1 000 000 Rands	5
V_{217}	Above 1 000 000 Rands	6

Q21 What is your highest qualification?

	Option	Mark (X)
V_{218}	School leaving certificate, e.g. NSC.	1
V_{219}	Certificate	2
V_{220}	Diploma	3
V_{221}	Bachelors Degree/Advanced Diploma	4
V_{222}	Bachelors Honours Degree/Postgraduate Diploma	5
V_{223}	Masters Degree	6
V_{224}	Doctoral Degree	7
V_{225}	Other:……………………………………………………	8

THE END OF THE QUESTIONNAIRE, THANK YOU.

APPENDIX E: Schwartz PVQ-RR Data Analysis Instructions Pack

Shalom H. Schwartz

Scoring and Analysis Instructions

For a presentation of the theory underlying the PVQ-RR and validating data, see Schwartz, et al. (2012), Schwartz & Butenko (2014), Schwartz et al. (2016) in references. For instructions for different types of statistical analysis, see below 'correcting for scale use bias'.

Scoring Key for 19 Values in the PVQ-RR Value Scale

Self-direction Thought	1,23,39	Tradition	18,33,40
Self-direction Action	16,30,56	Conformity-Rules	15,31,42
Stimulation	10,28,43	Conformity-Interpersonal	4,22,51
Hedonism	3,36,46	Humility	7,38,54
Achievement	17,32,48	Universalism-Nature	8,21,45
Power Dominance	6,29,41	Universalism-Concern	5,37,52
Power Resources	12,20,44	Universalism-Tolerance	14,34,57
Face	9,24,49	Benevolence –Care	11,25,47
Security Personal	13,26,53	Benevolence-Dependability	19,27,55
Security Societal	2,35,50		

Scoring Key for 10 Original Values with the PVQ-RR Value Scale

Self-Direction	1,23,39,16,30,56	Security	13,26,53,2,35,50
Stimulation	10,28,43	Conformity	15,31,42,4,22,51
Hedonism	3,36,46	Tradition	18,33,40,7,38,54
Achievement	17,32,48	Benevolence	11,25,47,19,27,55
Power	6,29,41,12,20,44	Universalism	8,21,45,5,37,52,14,34,57

Scoring Key for Higher Order Values in the PVQ-RR Value Scale

Self-Transcendence — Combine means for universalism-nature, universalism-concern, universalism-tolerance, benevolence-care, and benevolence-dependability

Self-Enhancement — Combine means for achievement, power dominance and power resources

Openness to change — Combine means for self-direction thought, self-direction action, stimulation and hedonism

Conservation — Combine means for security-personal, security-societal, tradition, conformity-rules, conformity-interpersonal

Humility and Face are best treated as separate values because they are on the borders between self-transcendence and conservation (humility) and of self-enhancement and conservation (face). Structural analyses (MDS) can reveal whether these two values could be added to the higher order values to increase reliability in your samples. Analyses in about

100 samples so far indicate that humility is best combined with self-transcendence in about 70% and with conservation in about 30% of samples. Face is best combined with self-enhancement in 75% and with conservation in 25% of samples.

Correcting for scale use biases

The score for each value is the mean of the raw ratings given to the items listed above for that value. For most purposes, it is necessary to make a correction for individual differences in use of the response scale before performing analyses. Below are instructions for making the correction that is appropriate to various types of analyses. **Failure to make the necessary scale use correction typically leads to mistaken conclusions!**

Individuals and cultural groups differ in their use of the response scale.[1] Scale use differences often distort findings and lead to incorrect conclusions.[2] To correct for scale use:

(A) Compute scores for the 19 values by taking the means of the items that index it (above). If you wish to check internal reliabilities, do so for these value scores before the next steps.

(B) Compute each individual's mean score across <u>all</u> 57 value items. This is the individual's Mean RATing of all values. Call this MRAT.[3]

(C) Subtract MRAT from each of the 19 value scores. This centers the scores of each of the the individual's 19 values (computed in A) around that individual's Mean Rating.

1. <u>For correlation analyses</u>: Use the centered value scores (C).

2. <u>For group mean comparisons, analysis of variance or of covariance (t- tests, ANOVA, MANOVA, ANCOVA, MANCOVA)</u>: Use the centered value scores as the dependent variables.

3. <u>For regression</u>:

   a. If the value is your **dependent** variable, use the centered value score.

   b. If the values are **predictor** variables:
      1. Enter <u>un</u>centered values as predictors in the regression.
         a' If all 19 values are included, the single regression coefficients for the values are not clearly meaningful and interpretable because the values are interdependent. This is so even if the multicolinearity statistics do not look problematic.
         b' Choose the values to exclude as predictors *a priori* on theoretical grounds because they are irrelevant to the topic.
      2. If you are interested <u>only</u> in the total variance accounted for by values and not in the regression coefficients, you may include all 19 <u>un</u>centered values as predictors. The R^2 is meaningful but, because the 19 values are exactly linearly dependent, the coefficients for each value are not precisely interpretable.
      3. If you use only one value as a predictor, use the centered value because this is equivalent to correlation.

   c. In publications, it is advisable to provide a table with the correlations between the centered values and the dependent variables in addition to any regression. These correlations will aid in understanding results and reduce confusion due either to multicolinearity or to intercorrelations among the values.

4. <u>For multidimensional scaling,</u> both centered and uncentered item responses work equally well.

5. <u>For canonical, discriminant, or confirmatory factor analyses</u>:
Use **raw** (uncentered) value scores for the items or 19 value means.[4] However, if only some of the 57 items are included, centered scores can be used

6. <u>Exploratory factor analysis</u> is not suitable for discovering the theorized set of relations among values because they form a quasi-circumplex, which EFA does not reveal. Factors obtained in an EFA with rotation will only partly overlap with the 19 values, combining them to form larger factors, and will exploit chance associations. The first *unrotated* factor represents the way respondents use the response scale. It may represent an acquiescence bias, social desirability, the overall importance of values to the person, or some combination of these and other influences . It does not represent specific value preferences. A crude representation of the circular structure of values can be obtained using EFA by plotting the value items in a two-dimensional space according to their loadings on factors 2 and 3 of the *unrotated* solution.

Footnotes

1. For a discussion of the general issue, see Saris (1988). Schwartz, et al. (1997) examine meanings of such scale use as an individual difference variable. Smith (2004) discusses correlates of scale use differences at the level of cultures.

2. Two critical assumptions underlie these corrections.
   (1) The motivational circle captured by the set of 19 individual level values is reasonably comprehensive of the full motivational space of values recognized across individuals and cultural groups. Empirical evidence supports this assumption (Schwartz, 1992, 2004).
   (2) Studies of value priorities are concerned with the importance of particular values as part of the value system of a person or group. This is because the way values affect cognition, emotion, and behavior is through a trade-off or balancing among multiple values that are simultaneously relevant to a decision or action. The relevant values often have opposing implications for the decision or action. The absolute importance of a single value across individuals or across groups ignores the fact that values function as a system (Schwartz, 1996, 2006). The scale use correction converts absolute value scores into scores that indicate the relative importance of each value in the value system, i.e., the individual's value priorities.

3. We center within person rather than standardizing (i.e., we do not divide by individuals' standard deviation across the 57 items). This is because individual differences in variances of value ratings are usually meaningful. Even if, on average, individuals attribute the same mean importance to the set of values, some individuals discriminate more sharply among their values and others discriminate less sharply. Standardizing that makes everyone's variance the same (i.e., 1) would eliminate these real differences in the extent to which individuals discriminate among their values.

4. Centering creates a small degree of linear dependence among the items. This may be problematic in these analyses The scale use problem is avoided or eliminated by other aspects of these analyses without centering. See Closs (1996) and Cornwell & Dunlop (1994).

References [starred are available as electronic files]

Closs, S. J. (1996). On the factoring and interpretation of ipsative data. *Journal of Occupational and Organizational Psychology, 69,* 41-47.

Cornwell, J. M., & Dunlop, W. P. (1994). On the questionable soundness of factoring ipsative data: A response to Saville and Willson (1991). *Journal of Occupational and Organizational Psychology, 67,* 89-100.

Saris, W. E. (Ed) (1988). *Variation in response functions, A source of measurement error in attitude research.* Amsterdam: Sociometric Research Foundation.

*Schwartz, S. H. (1992). Universals in the content and structure of values: Theory and empirical tests in 20 countries. In M. Zanna (Ed.), *Advances in experimental social psychology (Vol. 25)* (pp. 1-65). New York: Academic Press.

*Schwartz, S.H. (1996). Value priorities and behavior: Applying a theory of integrated value systems. In C. Seligman, J.M. Olson, & M.P. Zanna (Eds.), *The Psychology of Values: The Ontario Symposium, Vol. 8* (pp.1-24). Hillsdale, NJ: Erlbaum.

*Schwartz, S.H., Verkasalo, M., Antonovsky, A., & Sagiv, L. (1997). Value priorities and social desirability: Much substance, some style. *British Journal of Social Psychology, 36,* 3-18.

*Schwartz, S. H. (2003). A Proposal for Measuring Value Orientations across Nations. Chapter 7 in the Questionnaire Development Package of the European Social Survey. Website: www.Europeansocialsurvey.org.

*Schwartz, S. H. (2006). Les valeurs de base de la personne: Théorie, mesures et applications [Basic human values: Theory, measurement, and applications]. *Revue Française de Sociologie, 47,* 249-288.

*Schwartz, S. H., & Butenko, T. (2014). Values and behavior: Validating the refined value theory in Russia. *European Journal of Social Psychology,44,* 719-813.) DOI: 10.1002/ejsp.2053

*Schwartz, S. H., Cieciuch, J., Vecchione, M., Torres, C., Dirilem-Gumus, O., & Butenko, T. (in press, 2016). Value tradeoffs and behavior in four countries: Validating 19 refined values. *European Journal of Social Psychology*

*Schwartz, S. H. (2017). The refined theory of basic values. In S. Roccas & L. Sagiv (Eds.), *Values and behavior: Taking a cross-cultural perspective,* Springer.

*Schwartz, S.H., Cieciuch, J., Vecchione, M., Davidov, E., Fischer, R., Beierlein, C., Ramos, A., Verkasalo, M., Lönnqvist, J.-E., Demirutku, K., Dirilen-Gumus, O., & Konty, M. (2012). Refining the theory of basic individual values. *Journal of Personality and Social Psychology, 103,* 663-688.

APPENDIX F: Turnitin Report

424

DCOM FINAL DRAFT
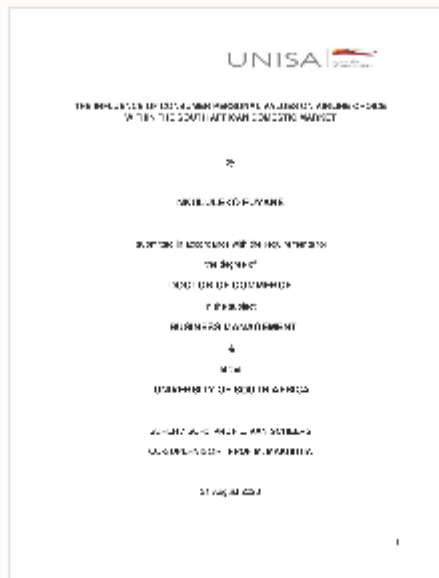
425