THE IMPACT OF ADVERTISING CONTROLLABLE ELEMENTS ON CONSUMERS' ATTITUDE TOWARDS THE ADVERTISEMENT, BRAND AND PURCHASE INTENTION

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Thesis submitted in fulfilment of the requirements for the degree

of **Master of Commerce in Marketing** at the University of Cape Town

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DECLARATION

1. This dissertation has been submitted to Turnitin (or equivalent similarity and originality checking software) and I confirm that my supervisor has seen my report and any concerns revealed by such have been resolved with my supervisor.

2. I certify that I have received Ethics approval (if applicable) from the Commerce Ethics Committee.

3. This work has not been previously submitted in whole, or in part, for the award of any degree in this or any other university. It is my own work. Each significant contribution to, and quotation in, this dissertation from the work, or works of other people has been attributed, and has been cited and referenced.

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To whom it may concern

This is to confirm that I, the undersigned, have language edited the article of **Suhaila Arshad** entitled:

The Impact of Advertising Controllable Elements On Consumers' Attitude Towards the Advertisement, Brand and Purchase Intention

The responsibility of implementing the recommended language changes rests with the author(s) of the article.

Yours truly,

Caroline Bull

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DEDICATION

I dedicate this thesis
to my late father and
my children; Haziq, Alyssa and Arianna.

ABSTRACT

Downstream fuel retailing among the major players in South Africa is highly competitive, and further compounded by the emergence of new players and changing customer orientation under the current price regulation environment. Marketing of fuel by way of expanding geographical coverage and the distribution network is no longer sustainable. Advertising benefits fuel companies by communicating their value proposition for brand differentiation, swaying consumer perception of fuel as a low involvement commodity with no difference in quality, and ultimately influencing their attitudes and behaviour. Fuel companies can take advantage of the advertising elements that have direct bearing – and are within their control – to make impactful advertisements to attract customers. Thus, this study investigates the influence of advertising controllable elements – namely, source and message – on attitude towards the advertisement, as well as attitude towards the brand and subsequently on purchase intention. A sample of 201 respondents was selected using convenience sampling method. The data was collected using an online self-administered questionnaire. Data analysis was performed using the Statistical Package for Social Sciences (SPSS) version 26.0. The relationship between the independent and the dependent variables was then examined using Structural Equation Modelling (SEM) with Analysis of Moment Structures (AMOS) version 26.0. The study findings established that attitude towards the advertisement is positively and significantly influenced by source credibility, source likeability and emotional message. Rational message has a positive impact on attitude towards the advertisement, albeit insignificant. Meanwhile, only source credibility and rational message have positive significant effects on attitude towards the brand. The impact of source likeability on brand attitude although positive, is not significant. Contrariwise, emotional message has neither influence nor significant effect on attitude towards the brand. Moreover, the study findings showed that while attitude towards the advertisement positively influences brand attitude, it does not influence purchase intention. The purchase intention for fuel is nonetheless influenced by attitude towards the brand. This study offers useful insights that can be used to create an impactful fuel advertisement, leveraging on source attributes and message appeals to influence consumers' attitudinal as well as behavioural intention.

Keywords: fuel advertising, advertising controllable elements, attitude towards advertisement, attitude towards brand, purchase intention

TABLE OF CONTENTS

LIST OF TABLES

LIST OF FIGURES

CHAPTER ONE
INTRODUCTION AND BACKGROUND TO THE STUDY

1.1 INTRODUCTION

In the modern competitive business environment, advertisements have become one of the most significant commercial activities. Companies, brands, and organisations spend a large part of their budget to create and run advertisements to promote their business and goods (Lin, 2011). Adverts are useful for the representation of a corporate identity, a commodity's image, product positioning and promotion to attract consumers and influence their purchase intention (Belch & Belch, 2017). A major concern for marketing scholars in recent decades has been understanding and determining the impact of advertisements on consumers' attitude towards the advertised product or brand (Raluca & Ioan, 2010). The idea behind this is that the positive or negative evaluation of the advertisement is linked to the brand being advertised. Therefore, there is a possibility of a causal relationship between the attitude towards an advertisement and behaviour towards the product, service or brand promoted in the advertisement.

All the components or elements of advertising are crucial in ensuring a successful advert that can affect consumers' attitude towards the advertisement and the advertised brand (Rodgers & Thorson, 2019). Advert attitude and brand attitude reflect persuasive psychological influences, and act as important indices for measuring advertising effects (Lin, 2011). Consequently, attitude towards the advertisement and attitude towards the brand create a certain influential power on purchase intention (Lee, Lee & Yang, 2017; Sallam & Algammash, 2016). Despite all advertising components being important, companies can only focus on the controllable elements, namely source, and advertising appeals (Belch & Belch, 2017). Therefore, a company must choose the right spokesperson or source to deliver a compelling message through appropriate media or channels to ensure an effective advertising and promotional campaign (Belch & Belch, 2017).

Advertisers are constantly seeking strategies aimed at drawing attention to their products and services and distinguishing their brand from competing brands (Singh & Banerjee, 2018). According to Spry, Pappu and Cornwell (2011), advertisement recall and acknowledgement, attitude towards the advertisement, and brand assessments may depend on certain factors (such

as source credibility). Source credibility is a term widely used to indicate the particular qualities of a communicator that influence the recipient's assent to a message (Singh & Banerjee, 2018). In addition, advertising credibility is considered to be the consumers' overall perception towards the reliability, truthfulness, dependability, trustworthiness and legitimacy (Sebastian & Pandowo, 2016). Source credibility is a prognosticator of attitude towards the advertisement, attitude towards the brand, and purchase intention (Amos, Holmes & Strutton, 2008). Apart from credibility, likeability is another source characteristic that has a considerable effect on the way the message is processed by consumers. Yilmaz, Telci, Bodur and Iscioglu (2011) posit that a likeable source generates increased attention to the ad and positive feelings towards the brand, which then translates into purchase likelihood. Source likeability is normally associated with physical appearance, behaviour and other personal traits that exude attractiveness, similarity and familiarity (Amos et al., 2008; Bhatt, Jayswal & Patel, 2013; Lin, 2011; Nguyen & Nguyen, 2017; Yilmaz et al., 2011).

Over many decades, the success of advertisements has become a matter of endless debate (MacKenzie, Lutz & Belch, 1986). While advertisers are continually pursing greater effectiveness in marketing communication, more care needs to be taken in selecting the type of advertising appeals (Akbari, 2015). Lin (2011) indicates that advertising appeals have an influence on consumer attitude and behaviour. To get the consumers to receive a message, brands and companies need to bring some driving force into the message. Advertising appeal reflects an attraction that awakens the desires of the consumers (Lin, 2011). Kotler (2003) divides advertising appeal into rational and emotional appeals. "Advertisers use rational appeals in the advertisements to persuade viewers who chose to follow central route, that is, those who are cognitive processors; and emotional appeals for those viewers who are more dependent on peripheral cues to form an attitude about the product or service advertised in the advertisement" (Keshari & Jain, 2016:70). The emotional and rational appeals are expected to trigger different responses from consumers and significantly affect their purchase intention. The success of these appeals depends on how consumers interpret information contained in the advertisement (Keshari & Jain, 2016). Nevertheless, marketers are very interested to know how customers process the information found in the advertisement and how they perceive it, since it directly influences consumers' responses.

Numerous studies have appraised the influence of advertising source on consumers' attitude towards the advertisement (Bhatt et al., 2013; Fleck, Korchia & Le Roy, 2012; Lin, 2011;

Sallam, 2011; Singh & Banerjee, 2018; Yilmaz et al., 2011) and attitude towards the brand (Bhatt et al., 2013; Nguyen & Nguyen, 2017; Sallam, 2011; Singh & Banerjee, 2018; Vien, Yun & Fai, 2017; Wu & Wang, 2010; Yilmaz et al., 2011). Nevertheless, the comparison between source credibility and source likeability to ascertain which one is more influential in creating favourable attitude towards the advertisement and advertised brand is inadequately researched. Despite source credibility and source likeability being commonly considered by advertisers, they have yet to establish which one is more prominent (Bhatt et al., 2013; Singh & Banerjee, 2018; Yilmaz et al., 2011). Similarly, the majority of previous studies have focused on the impact of advertising appeals on consumers' attitude towards the advertisement (Hornik & Miniero, 2010; Keshari & Jain, 2016; Lui, Cheng & Li, 2009) and brand attitude (Feiz, Fakharyan, Jalilvand & Hashemi, 2013; Keshari & Jain, 2016). However, limited studies have compared the rational and emotional appeal, and determined which one is more effective in influencing advert attitude and brand attitude. Although both the rational and emotional appeals have been regularly utilized by advertisers, marketers however have not established which one is more effective (Keshari & Jain, 2016; Pashna, Esfidani & Jafari, 2019).

This study attempts to examine the impact of source credibility alongside source likeability on attitude towards the advertisement and attitude towards the brand. Moreover, the study endeavours to investigate the effect of rational – as well as emotional – appeals on advert attitude and brand attitude. In addition, this study attempts to empirically test the influence of the ensued advert and brand attitude on consumer purchase intention. Furthermore, it is interesting that few studies have examined the interactive relationship between different source characteristics, various types of advertising appeals, attitude towards the advertisement and attitude towards the brand within an integrated model (Feiz et al., 2013). The findings of this study are expected to provide brands and marketing practitioners with insights into the preference of consumers when it comes to source attributes, and whether they rely on emotional or rational (or both) systems to process information in the advertisement. Although previous studies have established relationships between the three variables (attitude towards the advertisement, attitude towards the brand, and purchase intention), such relationships have been considered to be casual in nature (Sallam & Algammash, 2016). Furthermore, previous studies have been conducted in matured countries, and not developing economies such as South Africa (Akbari, 2015; Keshari & Jain, 2016; Lin, 2011; Okazaki, Mueller & Taylor, 2010).

The new way of advertising is very challenging, especially in the fuel retailing industry, where products are treated as a basic commodity, the quality of products is perceived to be the same and the price is regulated (Dugar, 2013). The intricacy of advertising in this industry makes it an interesting topic for research as fuel companies need to differentiate their products as well as services to attract customers and influence purchase intention (Sartorius, Eitzen & Hart, 2007). This research provides useful insights pertaining to the effect of advertising controllable elements on attitudinal responses, and purchase likelihood for fuel products and services within a single study. Marketers and advertisers need to know the impact of these controllable elements on consumer attitudes and purchase intention, so as not to focus solely on a particular element – at the expense of another.

1.2 RESEARCH AIM, QUESTIONS AND OBJECTIVES

The following research aim, questions and objectives have been formulated for this study to address the problem at hand:

1.2.1 Research aim

The aim of this study is to investigate the impact of controllable elements in advertising on attitude towards the advertisement, attitude towards the brand and, subsequently, purchase intention.

1.2.2 Research questions

The ensuing research questions were framed to address the research aim for this study:

- What is the impact of source credibility and likeability on attitude towards the advertisement and attitude towards the brand?
- What is the impact of rational and emotional appeals in message on attitude towards the advertisement and advertised brand?
- What is the impact of attitude towards the advertisement and attitude towards the brand on purchase intention?

1.2.3 Research objectives

The following objectives were formed to address the research questions for the study:

- to investigate and compare the impact of source credibility alongside likeability on attitude towards the advertisement and attitude towards the brand
- to examine and compare the impact of rational and emotional appeals in message on attitude towards the advertisement and advertised brand
- to assess the effect of attitude towards the advertisement on attitude towards the brand
- to study and compare the influence of attitude towards the advertisement and attitude towards the brand on purchase intention

1.3 LITERATURE REVIEW AND HYPOTHESES DEVELOPMENT

To achieve the aim of this study, it is of great importance to have established a comprehensive literature review on which to base this study. This section provides a literature review on marketing communication underpinning the concept of advertising, the controllable elements in advertising, attitude towards the advertisement, attitude towards the brand, purchase intention and fuel retailing sector in South Africa.

1.3.1 The concept of advertising

Advertising is the most popular form of marketing communication, due to the fact that it is the most utilised marketing communication tool (Belch & Belch, 2017; Clow & Baack, 2016; Keshari & Jain, 2016; Kotler & Armstrong, 2014). Advertising is considered to be an important communication tool, particularly for organisations, companies and brands targeting mass markets (Keshari & Jain, 2016). Juska (2017) defines advertising as a form of persuasive communication created for a specific purpose, targeted at a particular audience and requiring payment for messages delivered through a proprietary medium. According to Belch and Belch (2017), advertising can create unique, favourable images and associations, especially for products or services that are difficult to differentiate on the basis of functional attributes. Advertisements can create awareness, increase intention to buy, and transform passive buyers into customers (Akkaya, Akyol & Simsek, 2017). Studies have shown that advertising can affect consumers' attitudes and purchase intention by way of perception and acceptance

(Chaoying, Jian & Ille, 2011; Kashif & Rashid, 2016). Advertisements is described as having controllable and non-controllable elements in relation to the communication model (Belch & Belch, 2017). This study will focus on controllable elements in advertising, which are discussed in the following section.

1.3.2 Advertising elements

Rodgers and Thorson (2019) suggest that advertising elements consist of advertising message appeals and sources of the advertisement. McGuire's persuasion matrix model describes how each independent and dependent variable of these communication components interact to successfully influence a consumer into a purchase (Belch & Belch, 2017; Fennis & Stroebe, 2015). The source and message elements of advertising that are controllable by advertisers formed the constructs of this study, as elaborated on below.

1.3.2.1 Source

Belch and Belch (2017) define source as the individual or organisation involved in delivering a marketing message, either indirectly or directly to a group of people. According to Yilmaz, Telci, Bodur and Iscioglu (2011), advertiser source can be classified into two categories: namely, source credibility and source likeability. Source credibility and likeability have a significant effect on the manner the advertised messages are processed by consumers (Yilmaz et al., 2011). There is considerable evidence that source credibility and likeability exert positive effects on purchase intention through enhancing both attitude towards the advertisement and attitude towards the brand (Bhatt et al., 2013; Sallam, 2011; Singh & Banerjee, 2018; Visentin, Pizzi & Pichierri, 2019). Against this background, the following hypotheses were formulated:

H1: Source credibility has a significant positive effect on attitude towards the advertisement.
H2: Source credibility has a significant positive effect on attitude towards the brand.
H3: Source likeability has a significant positive effect on attitude towards the advertisement.
H4: Source likeability has a significant positive effect on attitude towards the brand.

1.3.2.2 Message

Ruchi (2012) describes message as the integral part of an advertisement that attempts to convey the intent of the advertiser to the target audience through visuals and/or verbals. Advertisements need to elicit rational and emotional appeals in their messaging approach to attract consumers' attention and influence their behaviour (Jovanovic, Vlastelica & Kostic, 2016). Rational appeals are informative or logical and focus on the attributes of a product or service that benefit consumers (Lin, 2011). On the other hand, emotional appeals target the psychological, social and symbolic needs of consumers to trigger positive or negative feelings that encourage certain behaviour (Lin, 2011). Numerous scholars have concluded that both rational and emotional appeals have a significant positive influence on consumers' attitude towards the advertisement and brand (Lee & Hong, 2016; Ness, Johnson, Ault, Taylor, Griffith, Connelly, Dunbar & Jensen, 2017; Sadeghi, Fakharyan, Dadkhah, Kodadadian, Vosta & Jafari, 2015; Zhang, Sun, Liu & Knight, 2014). Along with what the previous literature found, the following hypotheses were formulated:

H5: Rational appeal has a positive and significant relationship with attitude towards the advertisement.

H6: Rational appeal has a positive and significant relationship with attitude towards the brand.

H7: Emotional appeal has a positive and significant relationship with attitude towards the advertisement.

H8: Emotional appeal has a positive and significant relationship with attitude towards the brand.

1.3.3 Attitude

Attitude is described as a mental position taken toward a person, topic, or an event that influences the holder's perceptions, feelings, learning processes and subsequent behaviour (Clow & Baack, 2016). The three components that form attitude are cognitive, affective and conative (or behavioural) (Clow & Baack, 2016; Zikmund, Carr & Griffin, 2013). The consumers' attitudes reflect their personal values or beliefs about an object, thus influencing their behaviour (Sallam & Algammash, 2016). Marketing practitioners and advertisers view attitude as a vital indicator of consumers' positive or negative evaluation of an object or brand,

which may subsequently affect their purchase intention (Belch & Belch, 2017). Advertising is one of the promotional mixes used to create favourable attitudes towards the advertisement as well as the advertised brand, by leveraging on the controllable elements.

1.3.3.1 Attitude towards the advertisement

Attitude towards the advertisement (or referred to as advert attitude) is defined as consumers' favourable or unfavourable responses to a particular advertisement based on various advertisement factors – it is the emotional change after viewing the advertisement (Lee, Lee & Yang, 2017). Numerous researchers have investigated advert attitude, highlighting the impact of attitude towards the advertisement on attitude towards the brand and purchase intention (Sallam & Algammash, 2016; Singh & Banerjee, 2018; Yan, Hyllegard & Blaesi, 2012). Furthermore, advert attitude has been discussed to simultaneously influence attitude towards the brand and purchase intention (Lee et al., 2017). Against this background, the following hypotheses were formulated:

H9: The attitude towards the advertisement has a positive and significant impact on attitude towards the brand.

H10: The attitude towards the advertisement has a positive and significant impact on purchase intention.

1.3.3.2 Attitude towards the brand

Brand attitude is defined as consumers' favourable or unfavourable responses to a particular brand, which is affected by aroused beliefs and associations that form reputation towards the brand (Foroudi, 2019). Consumer brand attitude is a process of perception and acceptance, influenced by the advertising appeal and how a person handles information (Chaoying, Jian & Ille, 2011). Numerous studies have examined brand attitude, underlining the impact of consumers' attitude towards the brand on their purchase intention (Lee et al., 2017; Sallam & Algammash, 2016; Singh & Banerjee, 2018; Yan et al., 2012). Premised on this reasoning, the researcher proposes the next hypothesis:

H11: The attitude towards the brand has a positive and significant influence on purchase intention.

1.3.4 Purchase intention

Purchase intention is described as the likelihood that consumers will buy a particular brand versus competing products (Akbari, 2015). Prevailing studies that examined the relationship among attitude towards the advertisement, attitude towards the brand and purchase intention reported positive linkages, which are crucial insights for marketing practitioners (Abdul Wahid & Ahmed, 2011; Ganesan, Sridhar & Priyadharsani, 2017; Kaushal & Rakesh, 2016; Lee et al., 2017; Sallam & Algammash, 2016).

1.3.5 Overview of South Africa oil industry

The oil industry in South Africa consists of upstream, midstream and downstream activities. While South Africa imports most of its crude oil requirements from Africa and Middle East, the country is also a significant exporter of petroleum products to its neighbouring African countries (SAPIA, 2016; SAPIA, 2019). The oil industry is one of the major contributors to the economy and employment in this country (SAPIA, 2019). Petrol and diesel are the two major petroleum products sold in South Africa – apart from fuel oil, jet fuel, bitumen, illuminating paraffin and liquefied petroleum gas (LPG). Among all these petroleum products, the petrol price is regulated by the South Africa government based on import parity price formula (SAPIA, 2019). However, this may change with the impending liberalisation.

1.3.5.1 Fuel retailing in South Africa

The major players in the South African oil industry are Engen Petroleum, Shell South Africa, Chevron South Africa, BP Southern Africa, Total South Africa, Sasol Oil and Petro SA (SAPIA, 2020). These companies are also integrated members of the South African Petroleum Industry Association (SAPIA). The oil companies in South Africa sell about 50% of petrol, diesel and other liquid fuels to the retail market through petrol stations on their own direct distribution network, branded-marketers/integrated wholesalers or independent wholesalers (SAPIA, 2016). There are approximately 4 600 petrol stations with over 6 000 licences issued in South Africa (SAPIA, 2016). Engen Petroleum is the industry leader with more than 25% market share and the largest service station footprint of over 1 000 sites in South Africa ("Engen remains SA's…", 2017; Phembani, 2019).

1.3.5.2 Paradigm shift in fuel marketing

Fuel price deregulation is one of the many initiatives proposed by National Treasury to stimulate economic growth (de Villiers, 2019; National Treasury, 2019). This may spur the competition among wholesalers and retailers, and create a price war (Sartorius, Eitzen & Hart, 2007). Although the matter is still being debated, the dynamics of the fuel industry in South Africa continues to evolve with the emergence of new players to an existing crowded market, as well as changing consumer behaviour (Boyle, 2019; "Four trends shaping…", 2016; WhoOwnsWhom, 2019). This has led to fuel companies and retailers turning their forecourts into convenient transitory stops by also providing a variety of non-fuel products and services.

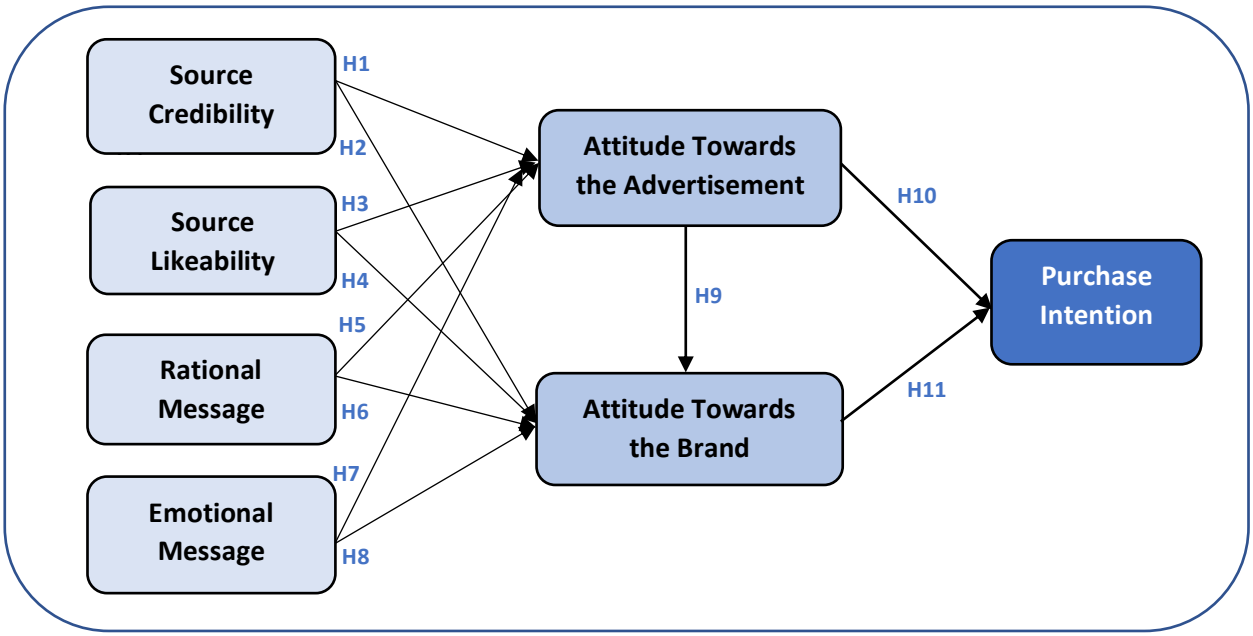
1.3.5.3 Advertising in the fuel industry

The notion of marketing in the fuel industry by way of expanding geographical coverage and the distribution network is no longer sustainable. The intensifying competition among the many fuel retailers, changing consumers' orientation and rapid challenges ahead (in the event of price deregulation) compel fuel companies to turn to other non-fuel products and offerings as points of differentiation. Advertising can benefit the fuel companies by way of brand building and marketing, promoting their value proposition to influence consumer perception of fuel from a low involvement commodity to high involvement brand, emphasising customer experience, as well as a value-addition to attract consumers to frequent their forecourts and encourage brand loyalty (Attri & Pahwa, 2012; Dugar, 2007; Dugar, 2013).

1.3.6 Conceptual Framework

Founded on the preliminary literature provided, the following conceptual framework was proposed for the study:

Figure 1.1 Conceptual framework



Sources: Adapted from (Ganesan, Sridhar & Priyadharsani, 2017; Lin, 2011; Yilmaz, Iscioglu & Bodur, 2011)

1.4 RESEARCH DESIGN AND METHODOLOGY

This section provides a brief explanation of the research methodology undertaken in the study. The research methodology particularly covers research design, paradigm and approach employed, sampling design followed, measurement and scales implemented, the data collection method used, as well as the data analysis procedures applied.

1.4.1 Research design

Research design is described as a framework of the research project, which guides the data collection and analysis (Bryman, Bell, Hirschsohn, Dos Santos, Du Toit, Masenge, Vann Aardt & Wagner, 2017; Creswell, 2014). According to Sreejesh, Mohapatra and Anusree (2014) as well as Malhotra (2010), research design can be classed into three broad categories, namely: exploratory, descriptive and causal. Exploratory research is flexible in nature – intended to gain insights of a situation – and the findings are tentative, which may require further research (Sekaran & Bougie, 2016). On the contrary, both descriptive and causal are structured and conclusive in nature, where specific hypotheses are tested to examine relationships (Sekaran

& Bougie, 2016). Descriptive research describes what is happening in the market, while causal research determines the cause and effect relationship between variables (Sekaran & Bougie, 2016). The current study adopted descriptive research design, which allowed for collection of rich data in large amounts to test the hypotheses.

1.4.2 Research paradigm

Research paradigm represents a set of fundamental beliefs and assumptions as to how the world is perceived, which then serve as guidelines to conduct study and resolve research problems (Jonker & Pennink, 2010; Makombe, 2017). Research paradigms are classified into four categories, namely, positivism, constructivism/interpretivism, transformative and pragmatism (Creswell, 2014). This study employed the positivist approach, where the findings were compared to the stated hypotheses.

1.4.3 Research approach

Research approach can be classified into three different tactics, namely, qualitative, quantitative, and mixed method (Bryman et al., 2017; Creswell, 2014; Gay, Airasian & Mills, 2012; Wilson, 2018). The qualitative approach uses non-numerical data – like narrative and visuals – to gain insights into a particular phenomenon of interest (Gay et al., 2012). On the contrary, quantitative approach relies on numerical data to describe, explain, predict or control phenomena of interest (Gay et al., 2012). Mixed method or mixed-mode integrates the qualitative and quantitative approaches in a single study (Mitchell, 2018; Wilson, 2018). This study adopted a quantitative approach, which entailed the collection of numerical data and exhibited deductive relationship between theory and research (Bryman et al., 2017; Mitchell, 2018).

1.4.4 Sampling design

The sampling design is a framework used in establishing the participants that should be selected for the study (Sreejesh et al., 2014). This section provides a synopsis of the study's target population, sample size and methods.

1.4.5 Target population

Target population is the population of interest, from where information will be obtained for the study (Wilson, 2018). The target population for this study are motorists in South Africa who have valid driving licenses, drive cars or other forms of road vehicles, and previously bought fuel for their vehicles. Based on data from National Traffic Information System (eNaTIS), there are 12 729 325 live vehicle population in South Africa as at 31 January 2020 which require fuel purchases (eNaTIS, 2020). The motorists also must have been exposed to any fuel advertisement in the last six months.

1.4.6 Sample size

In accordance with the historical evidence approach, a sample size of 201 motorists is considered comparable to other similar studies of this nature (Akbari, 2015; Balakrishan, Dahnil & Yi, 2014; Sallam, 2011; Visentin et al., 2019; Zhang et al., 2014), and sufficiently large for multivariate statistics analysis (Anderson & Gerbing, 1988; Gorsuch, 1983; Hoogland, 2001; Hoogland & Boomsma, 1998; Kline, 2011; Muthen & Muthen, 2002; Tabachnick & Fidell, 2001; Tinsley & Tinsley, 1987).

1.4.7 Sampling method

Sampling is the process of selecting a segment of the population for investigation (Sreejesh et al., 2014). The sampling method can be clustered into two categories, namely probability and non-probability sampling (Wilson, 2018). Probability sampling uses a random selection where every member of the target population has an equal chance of being chosen (Bryman et al., 2017; Wilson, 2018). On the other hand, non-probability sampling is not random, and some members of the population are more likely to be selected than others (Bryman et al., 2017; Wilson, 2018). For this study, the non-probability sampling method, specifically convenience sampling, was applied due to its practicalities and accessibility to the researcher.

1.4.8 Data collection method

Data collection methods are procedures utilised to gather data from participants (Sreejesh et al., 2014; Wahyuni, 2012). This study employed a self-administered survey method, developed

using Qualtrics. The web-based electronic structured questionnaires were pre-tested with 26 respondents to test their understanding using a debriefing approach, and their feedback was incorporated to improve the survey. Next, the survey was piloted on a convenience sample of 50 South African motorists to ascertain its reliability. All the constructs reported mean values above 3.500, which indicated a level of agreement with regards to the influence of the controllable elements on attitudes and purchase intention. The scale is also considered reliable, with an overall Cronbach alpha coefficient value of 0.819. Thereafter, the survey was finally launched and the link was published on social media portals, where the researcher expected the majority of qualifying participants to be present. This approach for data collection offers a host of benefits in terms of time and cost effectiveness, easily personalisation, as well as wider reach (Wilson, 2018). The researcher also shared the link at strategic locations in Cape Town with high concentrations of motorists (e.g. mall and forecourts).

1.4.9 The measurement instrument

The measurement instrument is a tool used to measure the variables in study for indicators (Gay et. al, 2012). The survey instrument allowed participants to express different degrees of agreement or disagreement in response to statements about the variables stated in the hypotheses. All variables were assessed using a five-point Likert Scale ranging from 'Strongly disagree' (1) to 'Strongly agree' (5). The questionnaires were developed in reference to previous related studies as stated in Table 3.3 under Chapter 3 (Abdul Wahid & Ahmed, 2011; Akbari, 2015; Bhatt & Patel, 2013; Ganesan et al., 2017; Lin, 2011; Jovanovic et al., 2016; Kamran & Siddiqui, 2019; Nguyen & Nguyen, 2017; Sadeghi et al., 2015; Sallam & Algammash, 2016; Singh & Banerjee, 2018; Spears & Singh, 2004; Visentin, Pizzi & Pichierri, 2019; Yilmaz, Iscioglu & Bodur, 2011; Zhang, Sun, Liu & Knight, 2014) where modifications were made to the scales and wording of the items to fit the context and purpose of this study.

1.4.10 Reliability and validity of measurement instrument

Reliability refers to the consistency of the survey questionnaires measuring a particular concept (Bryman, 2012). The measuring instrument was deemed reliable based on three different methods, which returned values higher than the recommended indicator for adequate internal consistency – namely 0.6 for Cronbach alpha coefficients (Ebrahimzadeh, Moradi, Vahedi, Kachooei & Birjandinejad, 2015; Hume, Ball & Salmon, 2006; Malhotra, 2010; McMinn, van

Sluijs & Harvey, 2009; Sim & Wright, 2000), 0.7 for composite reliability (Chin, 1988; Nunnally, 1978) and 0.4 for average variance extracted (Fraering & Minor, 2006). Validity relates to whether or not an indicator (or set of indicators) that is devised to gauge a concept really measures that concept (Bryman, 2012). This was established by way of content validity, convergent validity and discriminant validity for the study (Aldalaigan & Buttle, 2002; Brown & Cudeck, 1993; Fraering & Minor, 2006; Nunnally & Bernstein, 1994; Neuman, 2006)

1.4.11 Data analysis

Data analysis involves management, analysis and interpretation of the data collected for the study (Bryman, 2012). The management of data involved cleaning, editing, coding and tabulation prior to analysis. The cleaned data was analysed using Statistical Package for Social Sciences (SPSS) and Analysis of Moment Structures (AMOS) versions 26.0. The study is multivariate in nature, where the following statistical methods were applied on the empirical data sets, and inferences made thereafter based on the results;

- Frequency analysis
- Descriptive statistical analysis
- Reliability and validity analysis
- Structural equation modelling
- Hypotheses testing

1.5 CONTRIBUTION OF RESEARCH

The findings of this study offer valuable insights to both marketing executives and scholars on the intricacies of advertising in the fuel industry. Marketers of fuel companies will benefit by taking cognisance of the advertising elements that directly impact the attitude towards the advert and brand, and subsequently exert positive influence on motorists' purchase intentions. They will also be able to ascertain whether the adverts implemented have positively impacted the company. These insights can be used to develop effectual adverts that build meaningful and lasting relationships. This will be of utmost importance in the event of price deregulation, as competition will be more intense. For academia, the study helps to fill the gap and complement previous similar research in the advertising field, particularly in the context of the

fuel retail industry. In addition, it provides insights on the effectiveness of fuel advertising in developing economies like South Africa.

1.6 LIMITATIONS OF THE STUDY

The quantitative approach, which is scientific in nature, may not be able to answer all questions or capture the full richness of the participants and the environments under study (Gay et al., 2012). The measurement instrument also will always have some degree of error as the variables in study are often proxies for the real behaviour with no adequate picture of how the participants truly act (Gay et al, 2012). While convenience sampling may provide ease of access to participants, its limitations in terms of generalisation and representation of the population need to be acknowledged (Bryman, 2012). This study was conducted in the specific context of advertisements by fuel retailers in the South Africa market. Thus, it is undependable to generalise the findings of this study to cover a broader context or a different industry. Furthermore, this research did not take into consideration whether the motorists are obliged to fuel at certain garage due to their employer/company fuel card or loyalty programme partnership.

1.7 ETHICAL CONSIDERATION

Ethical consideration is important in safeguarding the respondents' rights, obtaining their informed consent and compliance to the institutional assessment procedure for ethical authorisation before conducting fieldwork. The current study was governed by the University of Cape Town provision that studies concerning human participation require the ethics committee's approval before a study can be carried out. The study was approved by the University of Cape Town Commerce Research Ethics Committee and ethics permission was obtained with clearance number REF: REC 2019/012/004 (Annexure A). The partakers were informed that their participation is voluntary and that they may choose to withdraw at any stage without any consequences. They were also informed that their responses are confidential and no identifiable information was requested.

1.8 STRUCTURE OF THE THESIS

This thesis comprises five chapters, each with several sections and sub-headings. The contents of each chapter are outlined next.

Chapter 1 consists of *Introduction and Background to the study*. The chapter commences with an overview of the study, as well as the problem statement. This is followed by the research aim, questions, and objectives that guided the investigation. The theoretical aspects of the study, including formulation of hypotheses and proposed conceptual framework, were reflected. The research design and methodology considerations were briefly explained, together with contribution as well as the limitations of this study. The ethical consideration and structure of the entire thesis are also stipulated in this chapter.

Chapter 2 provides a *Literature Review* on the concepts of marketing communication underpinning advertising, the controllable elements in advertising, attitudes specifically towards the advert as well as brand, and purchase intention. An overview of South Africa oil industry and fuel retail sector are provided, so as to understand the landscape within which the fuel companies operate.

Chapter 3 explains the *Research Methodology* considerations regarding the underlying philosophy and procedural paradigm for this study. The chapter commences with a brief description of marketing research, before proceeding to present a detailed overview of the research design, paradigm and approach, including the chosen methodologies for the study. This chapter unfolds the empirical fieldwork covering the sampling design, pre- as well as pilot testing of the questionnaire instrument, survey research implementation, and overall data gathering. The chapter also addresses reliability and validity assessment of the measuring instrument. The data analysis, which includes statistical procedures and Structural Equation Modelling used in this study, are also described.

Chapter 4 reports on the *Results and Discussions* of the findings derived from the statistical analysis procedures. The findings of the research are tabulated, statistically analysed, interpreted and presented in this chapter. The research hypotheses formulated are corroborated, and the proposed conceptual model tested by employing structural equation modelling.

Chapter 5 reviews the entire study and presents the *Conclusions and Recommendations* drawn to support the empirical objectives formulated at the inception of this research. The chapter ends with a discussion of the limitations of this study, guidelines for further research and final concluding remarks.

1.9 CHAPTER SUMMARY

The fuel retailing sector in South Africa is highly competitive despite regulated pricing, fuel being treated as a commodity, quality perceived to be the same, and the prospect of deregulation. Thus, it has become important for fuel companies to differentiate and promote their products and services, through effective advertising, to attract customers and influence their purchase intention. This can be done by understanding the influence of advertising controllable elements – specifically source and message – on consumers' attitude towards the advertisement, brand and purchase intention, in order to produce an impactful advert.

This chapter serves as an introduction to the study documented in this thesis. It sets the scene for the full thesis by providing a background to the study, framing the problem, and describing the objectives and methodology undertaken to carry out the research, while not neglecting the ethical considerations. Moreover, the study alludes to the contribution and limitations of this study for future research reference. The next chapter provides a literature review on the concept of marketing communication, advertising, the controllable elements of advertising (namely source, message, channel), attitudes towards the advertisement, attitude towards the brand, purchase intention and the fuel retailing sector in South Africa.

CHAPTER 2
LITERATURE REVIEW

2.1 INTRODUCTION

Marketing of fuel has transformed from merely focusing on strengthening distribution networks by way of opening and adding more outlets, to the era of branding, positioning and differentiation (Dugar, 2007). The fuel retail sector in South Africa is facing a competitiveness threat caused by an overtraded market with too many fuel stations, and a changing environment and customer orientation (Sartorius et al., 2007). The industry is also facing the possibility of liberalisation or price deregulation in future. Moreover, fuel is perceived as an undifferentiated low-involvement commodity (Dugar, 2007). The importance of advertising under these settings is paramount, as the marketing activities undertaken by oil companies gain more traction and focus through differentiation, constant value addition, customer relation management, segmentation, targeting and positioning (Dugar, 2007). Advertising is the new mantra in fuel marketing, leveraging on the use of all possible communication elements and techniques to influence consumers' attitudes as well as purchase behaviour (Dugar, 2007).

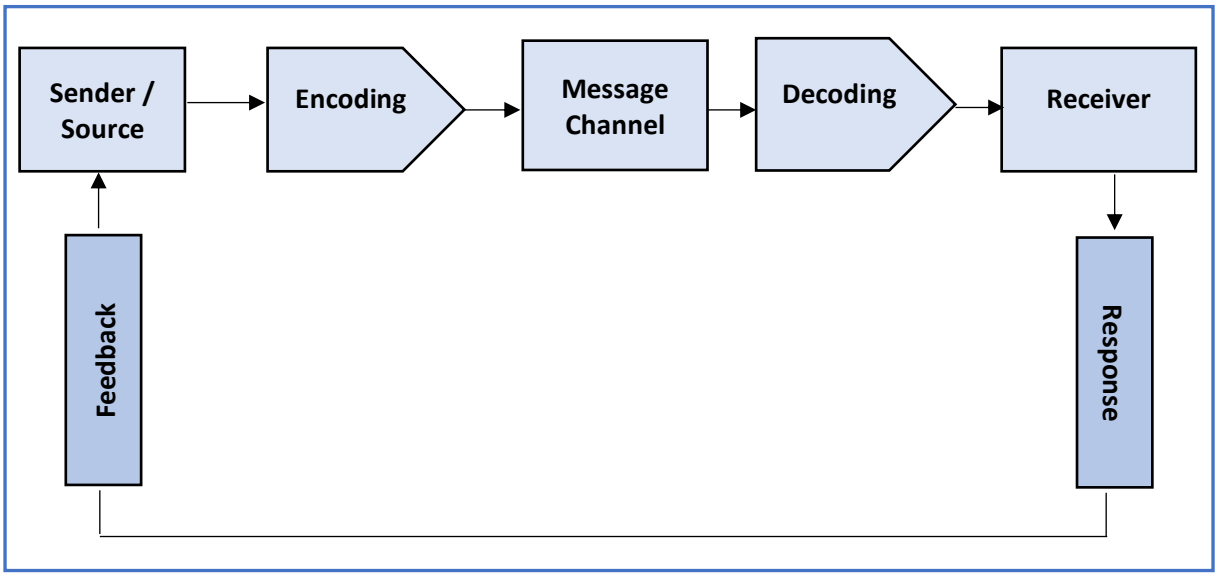
This chapter presents a discussion on the influence of advertising through its controllable elements on South African consumers' attitudes and purchase intention for fuel brands. The chapter begins with marketing communication as the backbone of advertising. Next, the theoretical background of advertising and its controllable elements respectively are discussed, followed by the deliberation on attitude, specifically attitude towards the advertisement (advert attitude) and attitude towards the brand (brand attitude), as well as purchase intention that form the variables under study. An overview of the South African oil industry is presented thereafter, focusing on the fuel retail sector, the changing environment causing a paradigm shift in fuel marketing, and the importance of advertising under these circumstances, before the final section brings the chapter to a close and hints at the next chapter.

2.2 MARKETING COMMUNICATION

Communication has been numerously defined as the passing of information, the exchange of ideas or a two-way process of establishing a commonness of thought between two parties

(Belch & Belch, 2017). The components that form the communication process include participants (sender/source, receiver), transmission devices or tools (message, channel), functions and processes (encoding, decoding, response, feedback) as well as noise (any extraneous factors that distorts the process and prevent effective communication) (Belch & Belch, 2017; Clow & Baack, 2016; Yeshin, 2012). These components are illustrated in the communication process model in Figure 2.1 below. Communication is a vital component of marketing. Thus, having an understanding of the basic process of communication is fundamental to appreciate and employ its functionality in a marketing line of work (Yeshin, 2012).

Figure 2.1 The communication process



Sources: (Adapted from Belch & Belch, 2017; Clow & Baack, 2016; Yeshin, 2012)

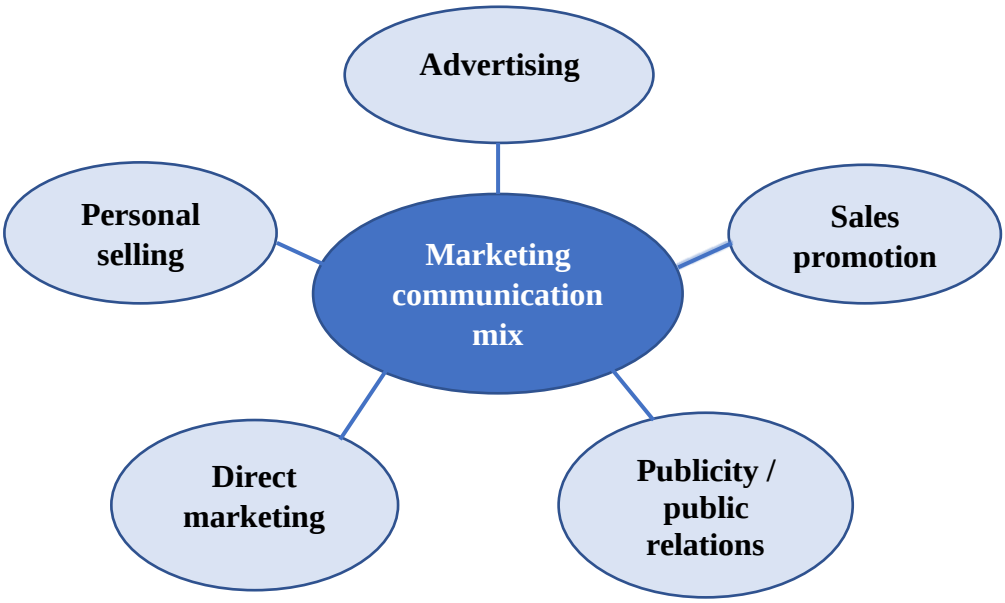
Kotler and Keller (2015) define marketing communication as the means by which firms attempt to inform, persuade and remind their customers directly or indirectly of products and brands they sell. Marketing communication is the promotion element of the marketing mix, which includes product, price and place (Belch & Belch, 2017; Clow & Baack, 2016). Belch and Belch (2017) define promotion as the coordination of all seller-initiated efforts to set up channels of information and persuasion in order to sell goods and services or promote an idea. It is a form of propaganda with economic objectives to influence the target audience to respond favorably to a company and their products or brand (Todorova, 2015). Over the years, marketing has transitioned from being merely transactional to building and sustaining long-term relationships with individual customers (Yeshin, 2012). This has also led every facet of

marketing communication to evolve, influenced by wider environmental factors such as media development, budgetary demands and consumer attitude (Egan, 2007).

The idea of integration by Schultz, Tannenbaum and Lauterborn in the early 1990s led to the development of the integrated marketing communications (IMC) concept (Schultz & Schultz, 2004; Yeshin, 2012). This was also proliferated by the emerging trends in marketing communications, such as integration of media platforms, explosion of the digital arena, the shift in channel power, the increase in global competition and brand parity, as well as the emphasis on customer engagement, accountability and measurable results (Clow & Baack, 2016). Belch and Belch (2017) echo Schultz's definition of IMC as a strategic business process used to plan, develop, execute and evaluate co-ordinated, measurable, persuasive brand communication programmes over time with consumers, customers, prospects, and other targeted, relevant external and internal audiences. The underlying principle of IMC is to deliver a clear, concise, unified and consistent message within every piece of communication across different media (Juska, 2017).

IMC underlines the importance of co-ordinating a varied promotional or marketing communication mix in Figure 2.2; advertising, direct marketing, personal selling, sales promotion and public relations in a unified way so that a synergistic communication effect is created (Kotler & Armstrong, 2014). Yeshin (2012) accentuates it is imperative that each and every communication tactic serves to reinforce the work of the other parts of the communication programme to achieve maximum impact. Successful marketing communication relies on deciding the right promotion mix, taking into consideration the advantages and disadvantages of the different tools to determine which to use, how to combine, as well as the budget allocation among them (Todorova, 2015).

Figure 2.2 Elements of the promotional or marketing communication mix



Source: (Kotler & Armstrong, 2014)

Advertising has become the most efficient way for companies to broadcast product information to consumers (Wang, Chen & Chu, 2012). It is still considered dominant among the marketing communication mix due to its pervasiveness (Blech & Belch, 2017). Advertising underpins the area of interest for this study and is elaborated on in the following section.

2.3 ADVERTISING DEFINED

Juska (2017) defines advertising as a form of persuasive communication created for a specific purpose, targeted at a particular audience and requiring payment for messages delivered through a proprietary medium. O'Guinn, Allen, Semenik and Scheinbaum (2014) emphasise that three essential criteria must be met for a communication to be classified as advertising; it must be paid for, delivered to audience via mass media and the communication must be attempting persuasion. Belch and Belch (2017) define advertising as any paid form of non-personal communication about an organisation, product, service or idea by an identified sponsor. The non-personal component means that advertising involves mass media that can transmit a message to large groups of individuals (often at the same time), with generally no opportunity for immediate feedback from the message recipient (Belch & Belch, 2017). Advertising can create unique, favourable images and associations, especially for products or

services that are difficult to differentiate on the basis of functional attributes (Belch & Belch, 2017). Bird (2004) explains that advertising has four main purposes; to attract attention, to inform, to persuade and to remind. Advertising can raise awareness, increase intent to buy and transform passive buyers into customers (Akkaya et al., 2017). Companies spend a large share of their marketing budget on advertising to produce and run promotions that convey information about their corporation and products (Clow & Baack, 2016; Tehria, 2016).

Advertising can be classified based on purpose, geographic area, target audience and medium. The advertising by purpose classification includes primary versus selective-demand advertising, direct versus delayed response advertising, and corporate versus brand advertising (Belch & Belch, 2017; O'Guinn et al., 2014). The geographical area class is further segregated into global, international, national, regional and local advertising (Belch & Belch, 2017; O'Guinn et al., 2014). There are five broad groupings of target audiences in advertising; household consumers, business-to-business, members of trade channel, professionals, and government officials and employees (Belch & Belch, 2017; O'Guinn et al., 2014). Advertisers have an array of media available to them to deliver their message. These media can be categorised based on their distribution channel for example; broadcast (television, radio), print (newspapers, magazines, specialty, direct mail), interactive (internet, social media, video games, kiosks), support or alternative media (outdoor, directories, point-of-purchase displays, film and program brand placement, event sponsorship) (Belch & Belch, 2017; Clow & Baack, 2016; O'Guinn et al., 2014; Todorova, 2015).

William McGuire's information processing model of advertising effects suggests that a receiver goes through a series of steps in being persuaded (exposure, attention, comprehension, acceptance, retention and purchase behaviour), which constitutes a response hierarchy (Belch & Belch, 2017; Bird, 2004). These steps correspond to the sequence (awareness, knowledge, liking, preference, conviction and purchase) in hierarchy of effects model by Robert Lavidge and Gary Steiner, which has become the foundation for setting and measuring advertising objectives (Belch & Belch, 2017). The hierarchy of effects model features similarities with theories regarding attitudes and attitudinal change, covering concepts of cognitive, affective and conative elements (Clow & Baack, 2016). The basic premise of these two models (illustrated in Table 2.1) is that advertising effects occur over a period of time. Each stage is a dependent variable that must be attained and may serve as an objective of the communication process. Likewise, each stage can be measured, providing the advertiser with feedback

regarding the effectiveness of various strategies designed to move the consumer to purchase. Successful adverts should result in changes in consumers' cognitions and affections, as well as their conations (Yilmaz et al., 2011).

Table 2.1 Models of the response process related to advertising

Stages	Element / Component	Models	
		Hierarchy of effects	**Information processing**
Cognitive	Mental images, understanding and interpretation of person, object or issue	Awareness Knowledge	Exposure / Presentation Attention Comprehension
Affective	Feelings or emotions a person has about an object, topic or idea	Liking Preference Conviction	Acceptance / Yielding Retention
Conative	Intentions, actions or behaviours	Purchase	Purchase behavior

Source: (Belch & Belch, 2017; Clow & Baack, 2016)

The hierarchy of effects and information processing models support the strong theory of advertising which is universally accepted as the basis for commercial activity. The strong theory suggests that advertising can influence target audiences' knowledge, beliefs, attitudes and behaviour (Bird, 2004; Fennis & Stroebe, 2015). In contrast, the weak theory of advertising assumes a consumer's purchasing behaviours are more driven by habit than exposure to advertising (Belch & Belch, 2017; Bird, 2004). The weak theory implies that while advertising can increase awareness and knowledge, it is not powerful enough to counter strong beliefs and change attitudes (Bird, 2004). This study rides on the strong theory to investigate the influence of fuel advertisement on consumer attitudes and purchase intention, by leveraging advertising elements that are within the advertiser's control. The advertising elements are discussed in detail after the following sections on benefits and limitation of advertisements.

2.3.1 Benefits of advertisements

The benefits consumers perceive from advertising can be looked at from utilitarian (or functional) and emotional gains (Shimp & Andrews, 2017; Zhang et al., 2014). Zhang, Sun, Liu and Knight (2014) relate utilitarian benefits to Moslow's hierarchy of needs with regards to consumers' basic motivation levels, such as their physiological, informational and safety needs, which involve a desire for problem-solving or avoidance. The basic role of advertising, as a tool of marketing communication, is to inform potential consumers about the products of the advertiser and to provide necessary information so that they are able to compare them with products of the competition, Advertising also creates awareness in potential consumers that these products are adequate for purchasing, reminds consumers about the products, and finally leads to a purchase in favour of the product which is being advertised (Jovanovic et al., 2016). In addition to utilitarian benefits, advertising provides emotional benefits that relate to the aesthetic, pleasurable and hedonic values that ads can provide (Zhang et al., 2014). Emotional benefits usually relate to consumers' underlying needs for stimulation, personal expression, social approval and self-esteem (Zhang et al., 2014).

2.3.2 Limitations of advertisements

There are inherent limitations of advertising that companies need to be mindful when marketing their products or services. Belch and Belch (2017) describe advertising as a one-way, non-personal form of mass communication. Therefore, advertisers would not be able to receive feedback immediately nor address any queries or doubts from the target audience simultaneously. Also, since advertising is a form of a mass communication, it would not be very cost-effective if the target audience is very small – for example in the case of industrial products. In addition, being a one-way communication, advertising is quite inflexible where the message cannot be modified to match the response of the target audience. Advertising is not feasible as a promotional tool in the case of unbranded and undifferentiated products, to sell an inferior product or to save a dying brand (Bird, 2004). Lin (2011) describes advertising as general, informative and persuasive in nature, therefore it is not suited to convey a technical message. The message conveyed through advertising is less believable compared to, for example, electronic word-of-mouth (Wu & Wang, 2010). This may be due to the fact that product features are normally exaggerated, and weaknesses or side effects are not fully disclosed. Another common limitation in advertising is the inability to eradicate clutter. Clow

& Baack (2016) define clutter as noise or anything that distorts delivery of the message at any stage in the communication process. The average person encounters more than six hundred advertisements per day, delivered by an expanding variety of media (Clow & Baack, 2016). This causes ad-wars among companies and ad-avoidance by consumers, which companies need to address to fight for the audience's attention.

2.4 ADVERTISING ELEMENTS

The earliest form of advertising originated from ancient civilisations – the Romans, Greeks, Egyptians and Mesopotamians used outdoor advertising as a medium (Fennis & Stroebe, 2015). Advertising catapulted to new heights with the rise of newspapers as a mass medium at the back of the industrial revolution (Tungate, 2007). Since then, advertising has weathered the depression and war period, and thrived during the creativity and designer revolution that led to the new era of IMC – all this amidst consumer empowerment as well as rapid advances in technology (O'Guinn et al., 2014).

Despite the many changes in marketing and advertising landscapes over the last decades, advertisers realised the value of strategically integrating the various communications or promotional mix rather than having them operate autonomously (Clow & Baack, 2016). In addition, there are a number of variables related to the various elements in the communication model that may influence effective and persuasive interaction (Bird, 2004). Belch and Belch (2017) describe advertising as having controllable and non-controllable elements in relation to the communication model. The controllable elements or independent variables have been identified as source, message, and channel or medium, that interact with receivers' response process (Belch & Belch, 2017; Steyn, Ewing, van Heerden, Pitt & Windisch, 2011), as seen in Figure 2.1. On the other hand, non-controllable elements or dependent variables are the steps receivers go through in being persuaded (Belch & Belch, 2017; Steyn et al., 2011) as depicted under information processing model in Figure 2.3.

This study will focus on the controllable elements in the communication model, specifically sender/source, message and channel – which are discussed in the following section. This is based on the premise that these elements are within the advertisers' full control in developing an effective advertising and promotional campaign. Advertisers can choose the spokesperson

or source who delivers the message, the type of message appeal used, and the channel or medium that carry the message. While they can select their target audience, advertisers are not fully in control of the receiver. Belch and Belch (2017) highlight that the decisions about each independent variable or controllable element influence the stages of the response hierarchy, hence it is vital that advertisers do not enhance one stage at the expense of another.

2.4.1 Advertising source

As part of the four key elements of the communication process (i.e., source, message, channel, and receiver), sources refers to where the message originates (Wu et al., 2016). According to Belch and Belch (2017), source is the individual or organisation involved in communicating a marketing message, either directly or indirectly to a group of people. Fennis and Stroebe (2015) define a direct source as a spokesperson delivering a message or demonstrating a product. In contrast, an indirect source is associated with the product or service despite not delivering the message (Fennis & Stroebe, 2015). Steyn, Wallstrom and Pitt (2010), describe source effects as the influences that the origin (or beliefs concerning the origin) of the advertising message have on subsequent processing and evaluation of it by the consumer.

Source can be a corporation, the brand behind a product/service or individuals like senior management of a company, celebrities, experts, or typical persons (Fennis & Stroebe, 2015; Lin, 2011; Sallam, 2011). A highly visible and personable chief executive officer of a company is an example of senior management source for an advertisement (Yan, Ogle & Hyllegard, 2010). Celebrities from the entertainment industry, athletes, and social media or marketing influencers can be used to endorse the advertised products and appear in advertisements (Fleck et al., 2012; Raluca & Ioan, 2010). They are normally seen as being exceptionally dynamic people with amiable and appealing qualities, such as cool, exciting and spirited (Singh & Banerjee, 2018; Srivastava & Sharma, 2016). An expert source has the professional knowledge gained through learning, training and experience, which render their advice or judgement as correct and reliable (Lin, 2011). Typical persons can be hired models or consumers who share their own experiences and testimonials of using the products and services (Clow & Baack, 2016). Petrol companies in India signed up celebrities to endorse their fuel post liberalisation to boost advertising (Dugar, 2007). Fuel companies in South Africa such as Shell, Engen and Total have also adopted the same approach featuring celebrities (e.g. F1 drivers, sportsmen,

influencers), senior management, as well as typical persons (e.g. staff, customers) to endorse their petrol or appear in their advertisements.

Advertisers seek to enhance the quality of message by relying on the source's attributes or characteristics, which was said to have profound influence on individuals' attitudes after advert exposure (Wu, Huang, Li, Bortree, Yang, Xiao and Wang, 2016). The attributes or characteristics of a spokesperson include credibility, power, expertise, trustworthiness, likeability, attractiveness and similarity (Belch & Belch, 2017; Clow & Baack, 2016). Most sources do not score highly on all the attributes, yet they need to score highly on multiple characteristics to be viewed as believable and acceptable. According to Yilmaz, Iscioglu and Bodur (2011) source can be classified into two major categories, namely source credibility and source likeability, with the remaining attributes becoming their dimensions or yardsticks. The following sections discuss the source credibility and likeability:

2.4.1.1 Source credibility

Source credibility advocates the communicator's specific and positive qualities that adhere to the recipient's acceptance and belief of a message (Bhatt et al., 2013; Fleck et al., 2012; Singh & Banerjee, 2018). Credibility refers to the extent of which the receiver sees the source as having relevant knowledge, skill or experience, and trusts the source to give unbiased, objective information (Belch & Belch, 2017; Bird, 2004). Source credibility is described as either a categorical variable (where individuals are presented as having high or low credibility) or a construct with multiple dimensions (Bhatt et al., 2013). This study adopts the latter approach, on the basis that commonly used single-item measures lack reliability and validity, and single-item scales do not contribute to understanding likeability as a multidimensional concept (Nguyen, Ekinci, Simkin & Melewar, 2015).

The two most enduring dimensions to explain credibility – be it corporation or person – which formed the focus of this study, are expertise and trustworthiness (Sallam, 2011; Wu et al., 2016; Yilmaz et al., 2011). The source credibility model signified that the effectiveness of a message depends on the perceived level of expertise and trustworthiness of the sender (Amos et al., 2008; Erdogon, 1999; Fleck et al., 2012; Hovland & Weiss, 1951; Ohanian, 1990). Expertise refers to the receiver's perception of the source's qualifications, knowledge and experience to provide a credible statement (Bird, 2004). Lin (2011) defines an expert as a person who is an

authority in his/her own professional field. Information from a sender with a high level of expertise is assumed to be more credible as the receiver of the information has no reasons to doubt the correctness given the knowledge and competence of the sender (Ismagilova, Slade, Rana & Dwivedi, 2020). Trustworthiness represents the degree of confidence or the level of acceptance consumers place in the spokesperson's message (Clow & Baack, 2016). A trustworthy reviewer is considered more credible as they show a high degree of objectivity and sincerity, thus the receiver has no reason to question the validity of the information provided (Ismagilova et al., 2020). Amos, Holmes and Strutton (2008) suggest that when considered jointly, expertise and trustworthiness are presumed to embody the source credibility construct.

Source credibility can be conceptualized as a "weight" that can enhance the value of information in a message (Sallam, 2011). Information from a credible source influences beliefs, opinions, attitudes, and/or behaviour by way of an internalisation process, which occurs when the receiver adopts the opinion of the of the credible communicator as he or she believes information from this source is accurate (Belch & Belch, 2017; Bhatt et al., 2013). Source credibility influences message processing and persuasion mainly when recipients are not particularly motivated to process the message – which is normally the case with advertising messages (Fennis & Stroebe, 2015). Furthermore, a highly credible communicator is particularly important when message recipients have a negative position toward the company, product, service or issue being promoted, since the credible source is likely to inhibit counterarguments (Belch & Belch, 2017). Source credibility has prominent effects on attitudes towards the advertisement, brand attitudes and purchase intentions, (Amos et al., 2008; Bhatt et al., 2013; Singh & Banerjee, 2018; Wu et al., 2016).

2.4.1.2 Source likeability

Source likeability, as a persuasion tactic and a scheme of self-presentation (Nguyen et al., 2015), is generally described as the ability to create a pleasant and enjoyable perception (Yilmaz et al., 2011). Nguyen, Ekinci, Simkin and Melewar (2015) also portray source likeability as a multidimensional construct with cognitive and affective components. Likeability is defined as the recipient's feeling of affection towards the source, attributed to the source's physical appearance, behaviour and other personal traits (Amos et. al, 2008; Lin, 2011; Bhatt et al., 2013; Nguyen & Nguyen, 2017). Some studies treated likeability as

analogous to attractiveness, friendliness, similarity and familiarity (Amos et al., 2008; Bhatt et al., 2013; Nguyen & Nguyen, 2017; Yilmaz, 2011;).

Attractiveness is generally associated with a person's physical appearance, such as height, weight and facial beauty, which are the first expressions perceived by another (Bhatt et al., 2013). According to Belch and Belch (2017), advertisers often draw attention to their ads by featuring a physically attractive person who serves as a passive or decorative model rather than as a communicator. Some researchers opine that attractiveness transcends physical attributes: it also requires personality, art talents, mental skills, athletic ability and lifestyle (Amos et al., 2008; Nguyen & Nguyen, 2017). Similarity is a supposed resemblance between the source and the receiver of the message, which is measurable if the source and receiver have similar needs, goals interest and lifestyle (Bhatt et al., 2013). People will be more easily influenced when they find the similarity between them and the message source (Nguyen & Nguyen, 2017). Familiarity means the feeling of similarity by means of emotions and contact with a source through exposure (Bhatt et al., 2013; Nguyen & Nguyen, 2017). Kunkel, Walker and Hodge (2019) deem likeability as an overall/aggregate evaluation of liking a person amid the physical appearance, similarity and familiarity. Therefore, likeability is chosen as another construct besides credibility to measure source in this study. Other characteristics used to measure likeability include friendliness, approachability, agreeableness, sincerity, warmness and charisma (Nguyen et al., 2015; Yilmaz et al., 2011).

Source likeability leads to persuasion through a process of identification, whereby the receiver is motivated to seek some type of relationship with the source and thus adopts similar beliefs, attitudes, preferences or behaviour (Belch & Belch, 2017; Bhatt et al., 2013). Unlike internalisation, identification does not usually integrate information from a likeable source into the receiver's belief system. The receiver may maintain the attitudinal position or behaviour only as long as it is supported by the source or the source remain likeable (Belch & Belch, 2017). Evidence shows that likeable sources score higher on attitude change than neutral sources, and likeability of a spokesperson in an ad correlates positively with attitudes towards advertisement, brand attitude and willingness to purchase (Yilmaz et al., 2011). Moreover, researchers posit that likeability concerns all phases; pre-, during and post-purchase and consumption (Nguyen et al., 2015).

2.4.2 Advertising message

Message is the integral part of an advertisement that attempts to convey the intent of the advertiser to the target audience through visuals and/or verbals (Ruchi, 2012). O'Guinn, Allen, Semenik and Scheinbaum (2014) describe the intent or goals of the advertiser and how those goals will be achieved as the message strategy. Clow and Baack (2016) posit message strategy into three broad categories; cognitive, affective and conative approaches, which correspond to the components of attitudes as discussed previously in Section 2.3. These message strategies are summarised in Table 2.2 below.

Table 2.2 The message strategies in relation to components of attitudes

Component / hierarchy of effects stages	Uses	Instrument
Cognitive Awareness Knowledge	▪ Presents rational arguments or pieces of information to consumers ▪ Require cognitive processing ▪ Describe the product's attributes or benefits	▪ Generic ▪ Pre-emptive ▪ Unique selling value proposition ▪ Hyperbole ▪ Comparative
Affective Liking Preference Conviction	▪ Evoke feelings or emotions and match those feelings with the product, service or company ▪ Enhance the likeability of the product, recall of the appeal or comprehension of the advertisement	▪ Resonance ▪ Emotional
Conative Purchase	▪ Incite consumer response / encourage action ▪ The goal is to make sale	▪ Support other promotional effort e.g. coupon redemption, cash back rebate

Source: (Clow & Baack, 2016)

An advertisement that directly promotes the product's attributes or benefits without any claim of superiority transmits a generic message, which works best for a brand leader firm or one that dominates the industry (Clow & Baack, 2016). On the other hand, a pre-emptive message claims superiority by highlighting a product's specific attribute or benefit with the intent of preventing competitors from making a similar statement (Clow & Baack, 2016). A message with a unique selling proposition has an explicit, testable claim of uniqueness or superiority that can be supported or substantiated in some manner (O'Guinn et al., 2014). On the other hand, hyperbole is an untestable claim based on some attribute or benefit, and often uses puffery terms like "best" or "greatest" (Clow & Baack, 2016). A comparative advertisement allows an advertiser to directly or indirectly compare a product to the competition using some product attribute or benefit (Belch & Belch, 2017; O'Guinn et al., 2014). Clow and Baack (2016) define resonance advertising as connecting a brand with a consumer's experience in order to develop stronger ties between the product and the consumer, while the emotional affective approach attempts to elicit powerful emotions that lead to product recall and choice. Conative advertisements are intended to trigger action for making sales.

Akbari (2015) refers to message strategy as the appeal, or general overall approach adopted by the advertisement. Advertising appeals are part of a creative strategy of advertising that forms the theme of a certain advertised message to attract the attention of potential consumers, efficiently influence their awareness, beliefs and attitude towards the advertised product, and consequentially, the purchase intention (Javanovic et al., 2016). Appeals need to be unique and need to give a positive impression about the product to the target audience (Akbari, 2015). Advertising appeals are the driving power that can influence the way consumers view themselves and how buying certain products can be of value to them (Lin, 2011; Sadeghi et al., 2015). Different appeals evoke some emotional reaction and desire in the target audience towards a product or services (Akbari, 2015). Among the advertising appeals featured throughout the years are rational, emotional, humourous, fearful, musical, sexual and scarcity (Clow & Baack, 2016). Despite the numerous advertising approaches, Kotler and Keller (2015) classify advertising appeal into two categories; rational and emotional(based on the underlying benefits consumers gain from paying attention to the advertisement or purchasing a product/services.

This study perpetuates the classification to focus only on the rational and emotional appeals. The selection of these two appeals are twofold: firstly, they are the most used tactics in

advertising and secondly, the assumption that consumers make their purchasing decisions based on rational or emotional motives, and that those beliefs and attitudes which influence the purchase intentions contain a cognitive (rational) and an affective (emotional) component (Akbari, 2015; Jovanovic et al., 2016; Lin, 2011; Sadeghi et. al, 2015; Zhang et al., 2014). Moreover, Belch and Belch (2017) opine that effective advertising requires combining practical reasons for purchasing a product with emotional values, indicating the prominence of both rational and emotional appeals. These appeals also correspond to the functional and emotional benefits that consumers gain from advertisements, as discussed earlier in Section 2.3.1. There is consensus in investigations that the type of appeal must be consistent with the product for maximum effectiveness – rational appeal is more effective for a useful product in practice, and emotional appeal is appropriate for experimental products or those that confirm a value (Borborjafari, Khorshid & Rastegar, 2016). Likewise, Jovanovic, Vlastelica and Kostic (2016) indicate that rational appeal alone sometimes is not adequate for certain products, especially those perceived as not that differentiated from the products of their competitors in functionality, olfactory or technical characteristics – which is the case for the fuel industry. Most fuel companies highlight their product attributes, services and offerings under rational messages, while injecting customer experience, and "local is lekker" sentiment as part of emotional elements. The succeeding sections deliberate the rational and emotional appeals:

2.4.2.1 Rational appeal

Lin (2011) defines rational appeals as functional, informative or logical, and focus on the attributes of a product or service that benefit consumers. Zhang, Sun, Liu and Knight (2014) describe rational appeal as a straightforward presentation of factual information, characterized by objectivity. Advertising messages that feature rational appeal will emphasise the product or service characteristics, as well as concrete benefits that consumers would get if they opt for the advertised product or service such as quality, performance, value, economy and reliability (Jovanovic et. al, 2016; Kotler & Armstrong, 2014). Borborjafari, Khorshid and Rastegar (2016) indicate that rational appeal is suitable for goods where the purchaser is interested to know its technical details and operation. By reason of its informative nature, companies use rational appeal when they wish to persuade potential consumers that the advertised product is superior in certain characteristics or advantages it offers, compared to the one made by their competitors (Jovanovic et. al., 2016; Kazmi & Batra, 2009). Rational appeals in advertising can be classified into one of the following categories: feature appeal, competitive advantage

appeal, favourable price advantage appeal, news appeal and product popularity appeal (Belch & Belch, 2017; Jovanovic et al., 2016; Akbari, 2015; Kazmi & Batra, 2009).

In relation to the response models discussed in Section 2.3, a message with rational appeal follows the hierarchy of effects stages (Clow & Baack, 2016), and is particularly appropriate when the communication objective is awareness or comprehension of a product, service or an issue, since facts trigger information processing (Noble, Pomering & Johnson, 2014). Clow and Baack (2016) suggest that an ad oriented to the knowledge stage transmits basic product information, while in the preference stage, the message shifts to presenting logical reasons that favour the brand – such as superior gas mileage of a particular fuel. Studies have shown that individuals with a high need for cognition remember the information better, and use their thinking in processing and evaluation of advertising information more than those with a low need for cognition, which fits the rational appeal strategy (Borborjafari et al., 2016; McKay-Nesbitt, Manchanda, Smith & Huhmann, 2011; Ruiz & Sicilia, 2004). Generally, rational appeal succeeds when potential customers have a particular interest in the product or brand, exhibit high levels of involvement and are willing to pay attention to the advertisement. If this does not happen, people tend to ignore rational appeal ads (Clow & Baack, 2016). McKay-Nesbitt, Manchanda, Smith and Huhmann (2011) indicate that younger adults better like and recall rational as opposed to emotional appeal. Conversely, gender doesn't have significant bearing response to messages with rational appeal, as the focus is on the presentation of information and expectation that the audience will elaborate on the factual content (Noble et al., 2014). A rational advertisement should lead to stronger conviction about a product's benefits, so that the consumer eventually makes the purchase (Clow & Baack, 2016).

2.4.2.2 Emotional appeal

Emotional appeal, on the other hand, associates with emotions and feelings which can be further differentiated in terms of valence: positive (e.g., joy, warmth, happiness, pride) or negative (e.g., fear, guilt, worry) to encourage certain behaviour (McKay-Nesbitt et al., 2011; Zhang et al., 2014). Positive emotional appeals in an advertising message focus on benefits and advantages for the consumers of using the advertised product, while the negative emotional appeals emphasize danger, and negative consequences that can occur if the consumers do not use the advertised product (Jovanovic et al., 2016; Padhy, 2011). A number of needs and connected feelings can be used as a basis for emotional appeals in advertising (Kazmi & Batra,

2009). Emotional appeals target the psychological or social needs of the consumer to cause positive or negative emotions that could lead to purchasing (Kotler & Armstrong, 2014; Lin, 2011). Psychological or personal needs can be in the form of happiness, love, joy, security, safety, pride, excitement, attraction, pleasure, accomplishment, confidence and ambition (Jovanovic et al., 2016). While social and symbolic feelings could include respect, status, recognition, involvement, sense of belonging, affiliation, shame and rejection (Jovanovic et al., 2016).

Emotional appeal is based on three ideas; first, consumers ignore most advertisements, second, rational appeals go unnoticed unless the consumer is in the market for a particular product at the time it is advertised, third and most important, emotional advertising can capture a viewer's attention and create an emotional attachment between the consumer and the brand (Clow & Baack, 2016). Emotions can be more important than attributes, functions or features of the advertised product (Sharma & Singh, 2006). Emotional appeal, whether "cold'' or "warm'' can be effective, where a warm appeal stimulates the purchasing intent, and the cold one positively influences the change in attitude, persuasion and consequential behaviour in purchasing (Jovanovic et al., 2016; Lovric, 2016). Most creatives view emotional advertising as the key to brand loyalty (Clow & Baack, 2016). The use of emotional appeals in the case of products which are not that differentiated harness a unique emotional proposition instead of a unique selling proposition (Jovanovic, et al., 2016; Kazmi & Batra, 2009). McKay-Nesbitt, Manchanda, Smith and Huhmann (2011) indicate that older adults better like and recall emotional than rational appeals. Studies have shown that males and females are likely to respond to emotional message appeals differently, with females being more aware of their emotional state and place greater emphasis on insights gained from their emotions (Kemp, Kennett-Hensel & Kees, 2013; Noble et al., 2014). Clow and Baack (2016) posit that music, visual as well as peripheral cues are important components of emotional appeals, and can be incorporated to make an advertisement more dramatic to capture viewers' attention.

2.4.3 Advertising channel

The final controllable element of the communication process in advertising is the channel. Rodgers and Thorson (2019) define advertising channel as the medium used to deliver message to the target audience. Communication theorist Marshall McLuhan's thesis, "The medium is the message", implies that the medium communicates an image which is independent of any

message it contains (Belch & Belch, 2017), and that media affect individuals and society not by the content delivered but primarily by their modalities (Valkenberg, Peter & Walther, 2015). McLuhan's notion was that different types of modalities (e.g. text, visual, auditory, and audio-visual) influence the media effects in terms of information processing and learning (Liu & Stout, 1987; Valkenberg, Peter & Walther, 2015). Belch and Belch (2017) describe the influence the medium has on a message as qualitative media effect, and that interpretation of an advertising message can also be influenced by the context or environment in which the ad appears. Wendel and Dellaert (2005) suggest that the media channel benefits affect consumers' channel consideration, and this effect is influenced by the usage situation.

Advertising channels are proliferated with the rapid launch and widespread uptake of new electronic media. The technology advancement has revolutionised advertising channels in terms of method, reach, interactivity, real-time and personalisation (Schultz & Schultz, 2004). Since the 1980s, media use has become increasingly individualised and, with the advent of the internet, has also taken a decidedly personalised character (Valkenberg et al., 2015). Media selection is where the money is spent, invested wisely, or wasted (Belch & Belch, 2017). As such, selecting an appropriate advertising media channel is the cornerstone of any effective advertising programme to carry a message to the target audience. Advertising expenditure in South Africa rose by 2.8% year-on-year, reaching a total of ZAR29.5 billion in 2018 (PwC, 2019). The 2018 advertising spending among various media in South Africa is provided in Table 2.3 below.

Table 2.3 South Africa advertising expenditure by media

No	Media	Advertising expenditure (ZAR millions)
1	Business-to-business	5,059
2	Cinema	428
3	Internet	4,873
4	Magazines	1,936
5	Music and podcasts	437
6	Newspapers	4,179
7	Out-of-home	2,735
8	Radio	4,368
9	TV and video	7,232

10	Video games	70
11	E-sports	38
Total		**29,509**

***S**ource: (PwC, 2019)*

Due to a growing number of advertising media – as well as increase in prices for advertising time and space, and virtually stagnant advertising budgets within firms – it is becoming increasingly important for companies to make decisions about the allocation of their advertising spend across different media channels (Clow & Baack, 2016; Danaher & Rossiter, 2011; Schreiner, Rese & Baier, 2019). Therefore, it is crucial to investigate the effectiveness of advertising messages, and in particular of personalised advertising across different media channels in order to derive recommendations for companies on how to best approach customers, as stronger demands for results and accountability emerged (Clow & Baack, 2016; Schreiner et al., 2019).

Communication channels differ in their trustworthiness, authenticity and many other attributes (Danaher & Rossiter, 2011). Clow and Baack (2016) suggest that when choosing a particular media, marketers should consider the number of consumers the media reaches, the frequency they are exposed to the channel, opportunity to see, media expenditure, continuity and the impact of advertising campaigns (e.g. rating, impression) on such media. Danaher and Rossiter (2011) also suggested it is possible that the channels' evaluations depend on the demographic status of the respondent, especially for the newer channels. Advertising channels can be classified into various categories; offline versus online (Naik & Peters, 2009), traditional versus new/online media (Danaher & Dagger, 2013) and personal versus non-personal (Belch & Belch, 2017). The major fuel companies in South Africa have embraced multiple channels under these categories in their advertising strategy. The traditional and online channels categorisation is applied in this study to gather information about the medium that carry the fuel ad recalled by participants. Although channel only serves as a moderating variable in this study, the benefits and limitations of both traditional and online channels are presented in Annexure E and F respectively to provide wholeness to the investigation.

2.5 ATTITUDE

An attitude is a mental position taken toward a topic, person, or an event that influences the holder's feelings, perceptions, learning processes and subsequent behaviour (Clow & Baack, 2016; O'Guinn et al., 2014). Attitudes consists of three components; cognitive, affective, and conative or behavioural (Clow & Baack, 2016; Zikmund et al., 2013). The cognitive component represents one's awareness of, and knowledge about, an object. The affective component reflects an individual's general feelings or emotions toward an object. The behavioural component includes buying intentions and behavioural expectations, and reflects a predisposition to action. Attitudes are important to marketers/advertisers because they theoretically summarise a consumer's evaluation of an object (or brand, or company) and represent positive or negative feelings and behavioural tendencies (Belch & Belch, 2017). Attitudes reflect the consumer's personal values or beliefs about an object. The values underpin the attitudes, which make it a relatively stable and enduring predisposition for consumers to behave in a particular way (Sallam & Algammash, 2016). Attitudes can drive purchase decisions. A consumer holding a positive attitude toward a brand becomes more likely to buy it (Goldsmith, Lafferty & Newell, 2000). Someone who enjoys an advertisement will also be more inclined to purchase the product.

Most marketing managers hold the intuitive belief that changing consumers' or prospects' attitudes toward a product is a major marketing goal, as collective attitude change translates to aggregate sales volume changes. Advertising and promotions are used to create favourable attitudes towards new products/services or brands, reinforce existing favourable attitudes, and/or change negative attitudes (Belch & Belch, 2017; O'Guinn et al., 2014). The source characteristics, message strategy and applicable broadcasting channel can be targeted at respective components of attitudinal change to resonate with the receiver. For example, messages with rational appeal provide cognitive linkage to stimulate awareness, while messages featuring emotional appeal evoke the affective component. Attitudes are hypothetical constructs; which means the variables can be measured indirectly, even though they are not directly observable. Numerous methods for measuring attitudes have been developed, such as ranking, rating, sorting, and choice techniques (Zikmund et al., 2013). This study examined consumers' and prospects' attitudes towards fuel advert and brand using hypothetical constructs based on rating (measuring the influence of the controllable elements in advertising

effectiveness and impact on their fuel purchase intention). The attitude towards the advertisement and attitude towards the brand are discussed separately below.

2.5.1 Attitude towards the advertisement (ATA)

Attitude towards the advertisement is defined as the predisposition to respond in a favourable or unfavourable manner to a particular advertising stimulus during certain exposure situation (Lee et al., 2017; Sallam & Algammash, 2016). Lin (2011) defined advertising attitude as a continuously reactive orientation learned from a certain object, where such orientation represents an individual's personal standards such as like and dislike, and/or right and wrong. An attitude is regarded as having two components; belief about a topic or a phenomenon followed by an evaluative factor (Usman, 2019). Belief is the knowledge and feelings from frequent observation, and attitude is a conclusion of belief to be true or false, positive or negative, favourable or unfavourable (O'Guinn et al., 2014; Usman, 2019). Attitude towards advertisement is a process of turning belief into attitude, which then triggers the behaviour after consumers' exposure to the ad (Usman, 2019).

A good advertisement can change one's perception, as proven by a New York advertising agency, who have managed to associate the public's perception of diamonds with romance, and a symbol of commitment and everlasting love (Sallam & Algammash, 2016). Usman (2019) highlighted numerous studies that show perceptions towards advertising are somehow influenced by demographic variables, such as:

- the middle- and lower- classes having more positive attitudes than the upper classes (Initiative Media & BBC World, 2002)
- adults being more negative than youth (Grusell, 2007)
- youth having more positive attitudes towards ads than adults (Lysonski & Pollay; 1990; Zhou et al., 2002)
- men being more negative than women (Grusell, 2007)
- female students having more negative attitudes towards advertising than male students (Petroshius, 1986; Andrews, 1989)
- education level influencing negatively towards ads (Grusell, 2007)

Researchers have identified determinants of attitude towards the advertisement as:

- attitude toward ads in general
- attitude towards the advertiser
- assessment of the ads' execution (message format)
- the mood evoked by the ads
- the viewers' perceptions of the credibility and believability of the ads
- the extent to which the ads affects viewers' encouragement and trigger their reaction (Owhal, 2015; Raluca & Ioan, 2010)

Therefore, advertisers can influence consumers' attitudes towards the advertisement by leveraging on the advertising controllable elements (source and message, as discussed earlier) to achieve maximum impact and return on investment. For example, messages in adverts may affect the relationship between attitude towards the advertisement and attitude towards the brand, specifically when consumers are not familiar with the advertised brand due to a lack of prior knowledge on which to base their brand attitude evaluation (Ganesan et al., 2017; Sallam & Algammash, 2016). Apart from the influence of advertising elements, Raluca and Ioan (2010) also indicate that intimate use products, household products and long-term use products most often influence advert attitude, despite insignificant differences among statistical averages with other product/service categories. Fuel can be considered as a long-term product based on the usage and importance in transporting/moving people around.

Numerous studies have also shown that advert attitude has a positive effect on brand attitude, as well as purchase intentions (Lee et al., 2017; Raluca & Ioan, 2010; Sallam & Algammash, 2016; Singh & Banerjee, 2018; Yan et al., 2012). Raluca and Ioan (2010) suggest that advert attitude affects brand attitude both directly and indirectly by shaping brand cognitions. Attitude towards the advertisement often contributes to attitude towards the brand under both high and low involvement on the part of the consumer, where, under low involvement conditions, the feelings evoked by the ad are a major contributor to ad liking, while under high involvement conditions, feelings and the ad's usefulness jointly contribute to ad liking (Raluca & Ioan, 2010). While brand familiarity affects the relationship between advert attitude and brand attitude differently, the impact of attitude towards the advertisement on purchase intention is not only direct, but also applicable to both known and unknown brands, especially under conditions of low involvement when affective responses are evoked (Goldsmith et al., 2000;

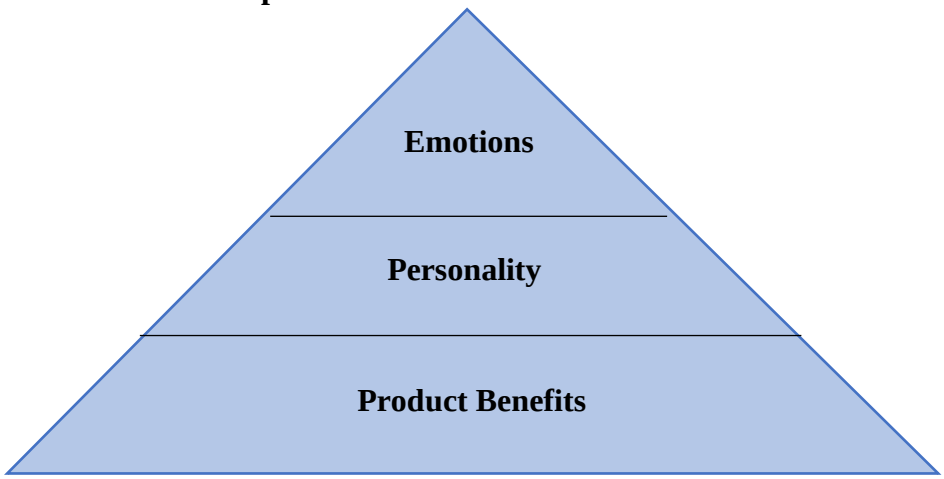
Sallam & Algammash, 2016). There can also be an indirect relationship between advert attitude and purchase intention via brand attitude. It is affirmative that favourable advert attitude leads to positive brand attitude, which subsequently triggers purchase intention (Abdul Wahid & Ahmed, 2011; Sallam & Algammash, 2016).

2.5.2 Attitude towards the brand (ATB)

Attitude towards the brand is the customer's belief in attributes of the brand (Ganesan et al., 2017). Foroudi (2019) defines brand attitude as consumers' favourable or unfavourable responses to a particular brand, which is impacted by aroused associations and beliefs that create reputation towards the brand. Consumer brand attitude is viewed as a process of perception and acceptance (Chaoying et al., 2011). It is a summary of evaluation that reflects preferences for various products and services (O'Guinn et al., 2014). Spears and Singh (2004) suggest that attitude towards the brand is different from feelings elicited by the brand, but a relatively enduring, unidimensional summary evaluation of the brand that presumably energises behaviour. Brands are valuable, acting as marketers of the companies' offering in influencing consumer preferences, as well as being assets in a financial sense (Veloutsou, 2015). Brand image and user experience with the brand create attitude towards the brand, which in turn help the customer to select a specific brand during purchase over competitors (Ganesan et al., 2017).

The consumer-brand relationship can be seen as an indicator of brand engagement, as the required emotional state and the interactivity with the brand have been captured through the dimensions of brand relationship, emotional connection and communication with the brand (Veloutsou, 2015). Consumers usually experience three stages of relationship with brands before an emotional bond is developed (Belch & Belch, 2017). These stages are illustrated in Figure 2.3 below.

Figure 2.3 Levels of relationship with brands



Source: (Belch & Belch, 2017)

The first stage indicates how consumers think about the brands in respect to product benefits. This occurs, for the most part, through a rational learning process and can be measured by how well advertising communicates product information. Consumers at this stage are not very brand loyal and brand switching is common. At the next stage, the consumer's judgment of a brand has moved beyond the attributes or delivery of product/service benefits and assigns a personality to the brand. The brand personality is formed based on the overt and covert cues in advertising. The strongest relationship and goal of all marketers is the emotional attachment consumers have with the brand, which can instil brand loyalty. Veloutsou (2015) suggests that brand relationship mediates the link among brand evaluation, trust, satisfaction and loyalty. The more a customer interacts with a brand, the more likely it is to affect the user's attitude towards the brand (Sheth, 2013). Veloutsou (2015) denotes that consumer–brand relationships exist in various contexts, especially in well-defined groups of consumers and sub-cultures. Some of the examples quoted by Veloutsou (2015) include; gay men supporting their community members through positive emotions and reciprocity towards brands perceived as allies, while in negative relationships with other brands (enemies), children developing strong links with brands between middle childhood and early adolescence, and these childhood memories influencing lifelong brand relationships.

When consumers evaluate alternatives using their evoked set and the company's brand becomes the part of the set being considered, the advertisement succeeds (Clow & Baack, 2016). Ganesan, Sridhar and Priyadharsani (2017) posit brand familiarity, brand credibility and brand choice are the components that not only determine attitude towards the brand, but also

mediate the relationship between advert attitude and brand attitude. Since the relationship between advert attitude and brand attitude has been discussed in an earlier section, it will not be elaborated further here, focusing instead on the relationship between attitude towards the brand and purchase intention. Attitudes toward a brand often affect consumers' purchase intention. A positive attitude toward a particular brand motivates consumers to make a purchase against competing brands – likewise, a negative attitude will have an adverse effect on consumers' decision to purchase (Lee et al., 2017; Sallam & Algammash, 2016; Singh & Banerjee, 2018; Yan et al., 2012).

2.6 PURCHASE INTENTION

At some point in the buying process, the consumer must stop searching for evaluating information and make a purchase decision. Purchase intention or predisposition to buy a certain brand is an outcome of the alternative evaluation stage (Belch & Belch, 2017). Akbari (2015) defines purchase intention as the likelihood that consumers will buy a particular brand versus competing products in future. Purchase intentions are generally based on matching of purchase motives with attributes or characteristics of brands under consideration, and include personal sub-processes such as motivation, perception, attitude formation and integration (Belch & Belch, 2017). Intention and attitude differ; whereas attitude is a summary of evaluations, intention is an individual's conscious plan to exert effort to purchase a brand (Spears & Singh, 2004). Belch and Belch (2017) also caution that a purchase intention is not the same as an actual purchase or behaviour. As such, attitude threshold needed for a subject to indicate a favourable intent should be much lower than the threshold needed for behaviour (Spears & Singh, 2004). Notwithstanding, purchase intent is closer to actual behaviour than attitudes, and thus closer to the desired sales (O'Guinn et al., 2014).

The consumer's level of involvement in the purchasing decision is another factor which bears on the influence exerted by the advert and brand attitude (Raluca & Ioan, 2010). Belch and Belch (2017) also highlight the impact of consumers' level of involvement on their purchase intention from a time perspective – often there is a time delay between the formation of a purchase intention and the actual purchase. The time duration between the formation of purchase intention and the actual purchase – particularly for highly involved and complex purchases such as automobiles, personal computers and consumer durables – is longer (Belch

& Belch, 2017). In contrast, for nondurable, low-involvement items – such as consumer package goods –t the time between the decision and the actual purchase may be shorter, while nondurable, convenience items sometimes take place almost simultaneously with the purchase (Belch & Belch, 2017).

Purchase intention can be used as a dependent variable for evaluating effectiveness on various spheres and levels. It can be used to explain the purpose of running an advertisement (Kim & Han, 2014), likewise to describe the purchase of products or services resultant from a match between an advertisement and consumer (Chu, Kamal & Kim, 2013; Md Husin, Ismail & Ab Rahman, 2016). It is also used to evaluate the impact of advertising (Khandelwal & Bajpai, 2013; Dehghani & Turner, 2015; Tehria, 2016), to determine the factors that trigger a purchase (Mirabi, Akbariyah & Tahmasebifard, 2015; Shaouf, Lu & Li, 2016) as well as repurchase (Kim, Galliers, Shin, Ryoo & Kim, 2012; Kumar & Gupta, 2016). Thus, purchase intention is considered as an imperative dependent variable for appraising effectiveness on various levels (Lee et al., 2017). This study examined the impact of advert and brand attitude on consumers' purchase intent, riding on the reported positive linkages by other prevailing studies (Abdul Wahid & Ahmed; 2011; Ganesan et al., 2017; Kaushal & Rakesh, 2016; Lee et al., 2017; Sallam & Algammash, 2016).

2.7 OVERVIEW OF SOUTH AFRICA OIL INDUSTRY

The oil industry in South Africa is divided into three major activities; upstream, midstream and downstream. The value chain of the petroleum industry is illustrated in Annexure G. Upstream activities involve the exploration and initial production of crude oil; midstream covers the transportation, processing, storage and distribution; while downstream activities include the refining, transportation and marketing of end-user products (South African Petroleum Industry Association [SAPIA], 2020). South Africa has no crude oil reserves of its own, and imports about 60% of its crude oil requirements from the Middle East (e.g. Saudi Arabia, United Arab Emirates, Qatar) and Africa (e.g. Nigeria, Angola, Ghana) (SAPIA, 2016). The breakdown on sources of crude oil import by is provided in Annexure H. The country is also a significant exporter of petroleum products, especially to neighbouring African countries like Botswana, Namibia, Lesotho and Swaziland (SAPIA, 2016; SAPIA, 2018). The South African petroleum industry accounts for R405 billion in turnover, R145 billion in duties and levies, R4 628 in

capital expenditure, R6 billion in annual payroll, 8.5% of national Gross Domestic Product (GDP) and provides over 750 000 direct and indirect jobs, which account to almost 5% of the total formal employment in this country (SAPIA, 2018).

Currently South Africa produces 5% of its fuel needs from gas, 59% from coal, 16% from local crude oil refineries and the remaining balance from nuclear as well as renewable energy (WhoOwnsWhom, 2019). South Africa has the second largest refining capacity in Africa after Egypt, with more than 700 000 barrels per day combined (SAPIA, 2016). The supply of petroleum products in the country comes mostly from domestic refineries – four on the coast and two inland. The capacity and location of the refineries that make up the supply side is provided in Annexure I (SAPIA, 2018). Petroleum products are moved from refineries by pipelines, rail, sea and road to approximately 200 depots, 4 600 service stations and 100 000 direct consumers who are mostly farmers (SAPIA, 2020). The industry is complex in the sense that not only its components comprise of activities that contribute to the economy, these components also link and drive several other sectors' economic contribution.

The major petroleum products that are sold in South Africa are petrol, diesel, jet fuel, illuminating paraffin, fuel oil, bitumen and liquefied petroleum gas (LPG), with petrol and diesel the major liquid fuels used as per Annexure J. The Department of Energy (DoE) estimates that approximately 70% of petrol and diesel is consumed by the transport sector, and in that sector, 98% of the energy consumed is derived from liquid petroleum fuels (WhoOwnsWhom, 2019). The South Africa government regulates wholesale margins and controls the retail price of petrol based on an import parity price formula. The domestic price therefore is influenced by international crude oil prices, supply and demand for petroleum products in international markets, as well as fluctuations in the rand/dollar exchange rate. (DoE, 2020). The diesel retail price on the other hand, is not regulated, although its retail margin is estimated to be similar to the regulated retail margin on petrol (SAPIA, 2020).

2.7.1 Fuel retailing industry in South Africa

Sartorius et al. (2007) also describe the fuel retail sector as highly competitive, with low profit margins and high stock turnover. The major players in the South African oil industry are Engen Petroleum Limited, Shell South Africa, Chevron South Africa, BP Southern Africa, Total South Africa, Sasol Oil and Petro SA (SAPIA, 2020). These companies are also integrated members of SAPIA, as listed in Annexure K. They own refineries, and operate storage

terminals and distribution facilities throughout the country. The major oil companies in South Africa sell about 50% of petrol, diesel and other liquid fuels to the retail market through petrol stations on their own direct distribution network, branded-marketers/integrated wholesalers or independent wholesalers (SAPIA, 2016). There are over 6 000 licenses issued and approximately 4 600 service stations in South Africa (Esterhuizen, 2011; SAPIA, 2016). Engen is the country's largest fuel retailer and market leader, with an estimated market share of 26% and approximately 1 039 service stations in South Africa (Engen, 2018).

The retail stations sell about 950 million litres of petrol and 830 million litres of diesel a month (Esterhuizen, 2011; SAPIA, 2016). At the same time, customers often buy more than just fuel when visiting a fuel retail station, and customer convenience appears to be driving the industry (Sartorius et al., 2007). While fuel sales account to 50% of revenues, many oil companies and service station owners rely on non-fuel offerings – such as convenience stores, food courts, and car washes – or partner with retail and fast food brands to boost profit (Bello & Cavero, 2008; Sartorius et al., 2007; WhoOwnsWhom, 2019). The major oil companies' network and offerings are provided in Annexure L.

Fuel is a commodity product and aspects like quality of fuel are essentially a hygiene factor, not a differentiator ("South Africa's petrol stations…", 2020). Dugar (2013) echoes this perception based on the following; fuels are deemed to be a commodity, with prices regulated by the government, and consumers perceive the quality to be the same regardless of brand name. Most consumers have no understanding of the fuel quality of the brands available, and expect that they will get a product of appropriate standard at every fuel station. As such, fuel is considered to be a product with low-involvement from customers. What is not a commodity is the customer experience and the choice that consumers have – here the stakes are high to attract the patronage of customers who are prepared to go out of their way to use a specific brand because of the experience and perceived value they get at a particular fuel station ("South Africa's petrol stations…", 2020).

Besides location, other factors that can influence customers' experience and increase repeat customers are quality and speed of service, general cleanliness and appearance, staff (skills, knowledge, attitude), as well as rewards and value for money (Srivasta, Kumar & Bisht, 2019; Sartorius et al., 2007; "South Africa's petrol stations…", 2020). Sartorius, Eitzen and Hart posit that all these factors are even more important within a South African context, where price

is regulated and fuel stations need to differentiate themselves by a means other than fuel price in order to maintain and increase market share. While Engen is the market leader with the highest market share and footprint, there is no outright leader when it comes to customer satisfaction. All the fuel station brands perform on par in terms of overall customer satisfaction scores, with the exception of Caltex, which is below par ("South Africa's petrol stations…", 2020). This indicates that while fuel station brands deliver a high-quality experience for customers, it is largely an undifferentiated experience. An 'on par' score refers to the fact that there is no statistical difference compared with the rest of the industry ("South Africa's petrol stations…", 2020).

2.7.2 Paradigm shift in fuel marketing

The idea of fuel price deregulation was proposed by the National Treasury as one of the various initiatives to invigorate economic growth (National Treasury, 2019). Although a deregulated environment may lead to lower fuel prices, it would however heighten competition among wholesalers and retailers in determining their own pricing to attract customers (Sartorius et al., 2007). While the matter is still being debated, the dynamics of fuel industry in South Africa continue to evolve. As it is, the fuel retail market is already crowded with the major players, wholesalers and private independent fuel retailers. In addition, the industry is seeing emerging petroleum retail brands such as Quest Petroleum, Elegant Fuel, MBT Petroleum and Viva Oil (WhoOwnsWhom, 2019). Consumers' orientation in terms of perception and buying behaviour is also changing. Customers expect on-the-go shopping, healthy food options and a differentiated experience (Adhi et al., 2019; Boyle, 2019). They look for technology to personalise, enhance and simplify their shopping experience (Boyle, 2019; Adhi et al., 2019). The case of visionary companies in America turning fuel retail stations into more convenient transitory stops or even final destinations by providing a variety of services through a 'village hub' type service station is perhaps something that oil companies in South Africa could emulate (Sartorius et al., 2007).

2.7.3 Advertising in fuel industry

According to Atkin (2019), the five biggest fossil fuel corporations in America spent a combined $3.6 billion on advertisements from 1986 to 2015. These advertisements have served to sell the public ideas rather than products, especially that fossil fuels are good and necessary;

and that the companies extracting and burning them are effectively fighting environmental problems like air pollution and climate change (Atkin, 2019). BP, Chevron, ConocoPhillips, Exxon and Shell have historically used advertising as a key part of their multi-pronged strategy to oppose climate legislation in the United States (Atkin, 2019; Brulle, Aronczyk & Carmichael, 2020). Geoffery Supran, a Harvard University researcher who co-authored a peer-reviewed analysis of ExxonMobil's 40-year history of climate change communications, said the fossil fuel industry's ad campaigns are state of the art propaganda developed in partnership with public relations experts and based on almost a century of collaborative experience (Atkin, 2019). He was also quoted saying "oil companies run ads for one reason, and one reason only: because they work" (Atkin, 2019).

Apart from advertising, fuel companies' previous focus was primarily on expanding their geographical coverage and strengthening their distribution network, by adding more forecourts to their network in the name of marketing (Dugar, 2007). This is justifiable based on prevailing factors such as the nature of the commodity, demand outweighing supply, administered pricing mechanisms and a protected market (Dugar, 2007). Nowadays, this is no longer sustainable, with intensifying competition among fuel retailers, consumers' changing orientation, and rapid challenges in the event of price deregulation. Petrol selling companies in India adopted more aggressive marketing after liberalisation (price deregulation) due to an increase in competition at the back of globalisation, privatisation, the entry of private players and a change in consumer orientation (Dugar, 2013). Liberalisation also intensified the Spanish fuel sector when open competition was introduced (Bello & Cavero, 2007). These experiences could serve as an indication of what lies ahead for South African fuel companies in the event of price deregulation.

Advertising can benefit fuel companies in numerous ways; brand building and marketing, communicating their value proposition in terms of products, services and offerings to differentiate their brands; influencing the consumer perception of fuel as a low involvement commodity to high involvement brands; and emphasising customer experience and value-addition to attract consumers to forecourts beyond the location factor, thereby inculcating brand loyalty (Attri et al., 2012; Dugar 2007; Dugar, 2013). Advertising costs make up 0.50% of gross profit, which is undertaken by the oil companies and recouped through the marketing margin (Sartorius et al. 2007).

2.8 CHAPTER SUMMARY

Common perceptions among consumers are that fuel is an undifferentiated low commodity and quality is the same (Dugar, 2007; Dugar, 2013). The South African fuel retail sector operates in a highly competitive environment characterised by low profit margins and high stock turnover, despite the regulated environment (Sartorius et al., 2007). As a result, fuel companies and service stations turn to non-fuel product offerings and services to boost their profit. Fuel retailers in South Africa include major brands such as Engen, Caltex, Shell, BP, Total, Sasol and other independent players. The onus is on the oil companies to differentiate and promote their product through effective advertising that can influence consumers' purchase intention, especially if the market is liberalised in future. Notwithstanding the other factors that influence consumers' choice of fuel, advertising is key is changing customer belief, perception and attitude. By gaining insights on what resonates with consumers in terms of source and advertising message appeal, the fuel companies can create an impactful advert to influence consumers' attitude towards the advertisement, advertised brand and subsequently their purchase intention. They can also better allocate their resources and make calculated decisions pertaining to these controllable elements in line with their marketing strategy. The next chapter elaborates on the research design, sampling strategy and methods undertaken to test the conceptual framework of this study.

CHAPTER 3
RESEARCH DESIGN AND METHODOLOGY

3.1 INTRODUCTION

Businesses can attain and maintain a competitive advantage over their rivals through creative use of market information. The information is gathered through marketing research, which helps to refine ideas in strategy development and decision making by providing relevant, accurate and timely information (Burns, Veeck & Bush, 2017). Malhotra (2010) defines marketing research as the systematic process of gathering, recording and analysing information to dissect a problem that requires a solution. Marketers view information as valuable input and an asset to strategic and tactical planning of the business. This notion is reinforced by the evidence-based management theory, which proposes that managerial decisions and organisational practises should be supported with research instead of personal preference or unsystematic experience (Bryman, Bell, Hirschsohn, Dos Santos, Du Toit, Masenge, Van Aardt & Wagner, 2017). The primary objective of this study is to investigate the influence of advertising controllable elements, specifically, source and message appeals on South African consumers' attitudes towards the advertisement, attitudes toward the brand and their purchase intention for fuel.

Based on the literature review that was provided in the previous chapter, a proposed model incorporating constructs relevant to the study was developed and subsequently tested. This chapter outlines the research methodology used to collect and analyse data for the study, including justification for the chosen methods. The chapter begins with a discussion on the underlying concepts of the research paradigm, the design and the approach which guided this research. This is followed by an explanation on the sampling procedure and data collection process, as well as the techniques applied to analyse the data. Lastly, a recap of this chapter with hints of the next chapter is provided.

3.2 RESEARCH PARADIGM

Research paradigm represents a set of fundamental beliefs and assumptions as to how the world is perceived, which then serves as a guideline to conduct study and resolve research problems

(Alghamdi & Li, 2013; Makombe, 2017). The selection of paradigm determines the motivation, intent and expectations for the research (Mackenzie & Knipe, 2006). Research paradigms are classified into four main categories, namely, constructivism/interpretivism; transformative; pragmatism and positivism (Alghamdi & Li, 2013; Creswell, 2014). These paradigms are discussed in the following section:

3.2.1. Constructivism or interpretivism

Constructivism or interpretivism is subjective – individuals form understanding of the world based on their own background, assumptions and experiences (Creswell, 2014; Wahyuni, 2012). Bryman, Bell, Hirschsohn, Dos Santos, Du Toit, Masenge, Van Aardt and Wagner (2017) highlight the need to respect the differences between people and objects of the natural sciences. The objectives of an interpretivist study are both emic and idiographic, resulting in a narrative form of analysis with highly detailed accounts and specifics of a particular social reality being studied (Wahyuni, 2012). Interpretivism paradigm is supported by observation and interpretation using meaning (versus measurement) methodologies – such as interviews – to collect data and make inferences for some abstract pattern (Antwi & Hamza, 2015).

3.2.2. Transformative

A transformative worldview is centred on the needs of individuals or groups in society that may be marginalised (Creswell, 2014). This type of paradigm advocates critical analysis, collaboration, as well as participation, and it utilises mixed methods to provide a more comprehensive understanding of the social reality through the use of multiple lenses and perspectives (Mackenzie & Knipe, 2006; Sweetman, Badiee & Creswell, 2010). The goal of a transformative study is to help resolve gross power imbalances in the society such as injustice, oppression, alienation, domination, and inequality, and move towards a fairer, democratic, equitable and sustainable civilisation (Makombe, 2017; Taylor & Medina, 2019).

3.2.3. Pragmatism

Pragmatism is not compelled to any one system of philosophy and reality (Mackenzie & Knipe, 2006). Pragmatists believe that objectivist and subjectivist perspectives can be combined to study social phenomena (Creswell, 2014; Wahyuni, 2012). Pragmatism allows freedom in the

selection of methods, procedures and techniques that best satisfy the needs and purposes of the study (Alghamdi & Li, 2013).

3.2.4. Positivism

According to Bryman, Bell, Hirschsohn, Dos Santos, Du Toit, Masenge, Van Aardt and Wagner (2017), positivism is an epistemological approach that advocates using scientific methods to study and understand social reality in the same way as the natural reality. Positivism involves problem identification, theoretical hypotheses proposition, and verification of these hypotheses using methods such as investigation or experimentation (Makombe, 2017). Positivistic study aims to derive an explanation that ultimately enables prediction and control of events (Mackenzie & Knipe, 2006). Positivism is objective and promotes a statistical generalisation to relate findings to a larger population (Creswell, 2014; Wahyuni, 2012).

This study adopted a positivist approach where the findings are compared to the stated hypotheses. This study sought to investigate the influence of advertising controllable elements on advert attitude, brand attitude and purchase intentions. The positivism paradigm is deemed appropriate for this study because the objective of this research is to test the hypotheses. Furthermore, this paradigm is heavily utilised in consumer research (Chang, 2017; Grix, 2018). The research was undertaken in a value-free and etic approach, where the researcher maintained an objective or neutral stance, and is independent of the data (Wahyuni, 2012).

3.3 RESEARCH DESIGN

Research design can be described as a framework of the research project, which guides data collection and data analysis (Bryman et al., 2017; Creswell, 2014). Research design is the master plan or detailed blueprint that stipulates the methods to be followed in executing the study to meet its objectives (Aaker, Kumar, Day & Leone, 2011; Zikmund et al., 2013). According to Malhotra (2010) as well as Sreejesh, Mohapatra and Anusree (2014), research design can be classified into three broad categories, namely, exploratory, causal and descriptive designs. These designs are illustrated in Table 3.1.

Table 3.1 Different research designs

Types	Uses	Instrument
Exploratory research	▪ Formulate problem more precisely ▪ Establish priorities for research ▪ Eliminate impractical ideas ▪ Clarify concepts ▪ Develop hypotheses	▪ Literature search ▪ Experience survey ▪ Analysis of select cases ▪ Projective tests ▪ Ethnography ▪ Focus groups ▪ Interviews
Causal research	▪ Provide evidence regarding causal relationships by means of time order in which variables occur ▪ Elimination of other explanations ▪ Concomitant variations	▪ Field experiment ▪ Laboratory experiment
Descriptive research	▪ Describe segment characteristics ▪ Estimate proportion of people who behave in a certain way ▪ Make specific predictions	▪ Longitudinal studies ▪ True panel ▪ Omnibus panel ▪ Sample survey

Source: Akhtar (2016)

3.3.1. Exploratory Research

Exploratory research is flexible in nature and is intended to gain insights of a situation. The findings are tentative, which may require further research (Sekaran & Bougie, 2016). Aaker, Kumar, Day and Leone (2011) describe exploratory research hypotheses started as either ill-defined, vague or non-existent. The exploratory research process progressively narrows the scope of the research topic, transforming ambiguous problems into well-defined ones that incorporate specific research objectives and established priorities (Akhtar, 2016; Zikmund et

al., 2013). Akhtar (2016) suggests that hypotheses are developed after eliminating impractical ideas and the concepts have been clarified. This type of research employs techniques such as literature search, observations, experience survey, case study analysis, projective tests, ethnography, focus groups and in-depth interviews which are part of qualitative research methods (Aaker et al., 2011; Akhtar, 2016).

3.3.2. Causal Research

Causal research investigates the cause and effect relationship between variables, where the research problem has been narrowly defined (Sekaran & Bougie, 2016). Zikmund, Carr and Griffin (2013) indicate that casual research is structured, systematically planned and provides statistically conclusive data. Akhtar (2016) suggests the causal relationships are demonstrated by means of time order in which variables occur. Causal research eliminates other explanations and allow for concomitant variations (Akhtar, 2016). This type of research tends to rely on field and laboratory experimentation, and entails more specific hypotheses involving causal relationships (Aaker et al., 2011; Akhtar, 2016).

3.3.3. Descriptive Research

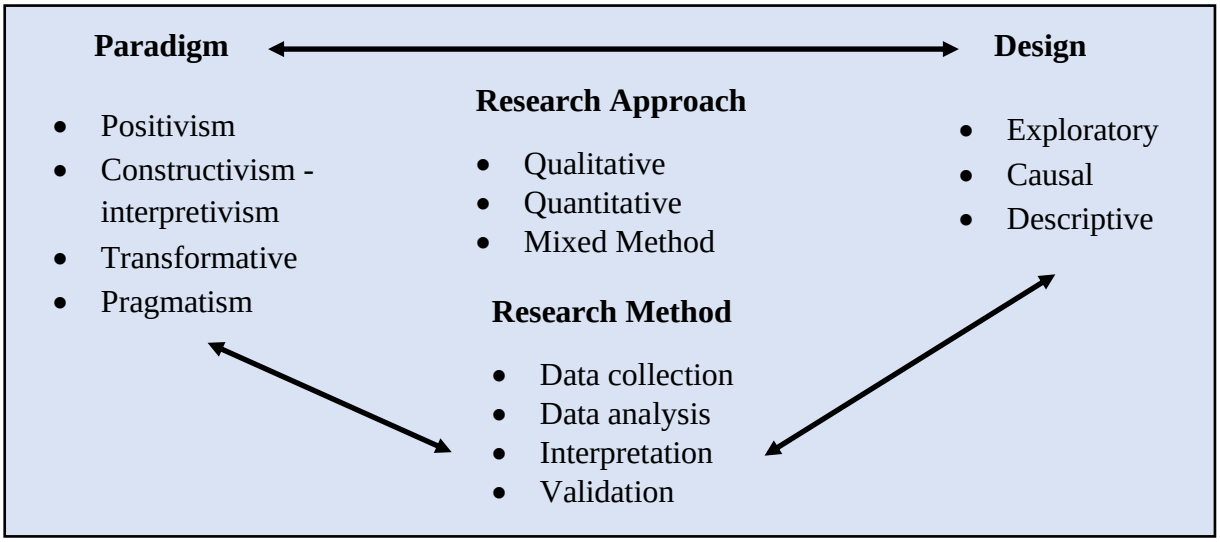
Descriptive research describes characteristics of objects (e.g. organisations, persons, products/brands), events or situations (Sekaran & Bougie, 2016). Zikmund, Carr and Griffin (2013) highlight that descriptive research is often used to reveal the nature of consumer behaviour. It estimates the proportion of people who behave in a certain way and makes specific predictions (Akhtar, 2016). Descriptive research – which mostly uses longitudinal studies, true or omnibus panels, as well as sample survey data – is differentiated by tentative and speculative hypotheses to test relations that fall short of specifying causal relationships (Aaker et al., 2011; Akhtar, 2016).

This study adopted descriptive design, which allows for the collection of primary data in large amounts to build information that answers the research questions or hypotheses. It focused on examining whether relationships exist between two variables in the hypotheses, based on the occurrence of a specific conditions to ascertain the extent of differences in opinions, attitudes and needs among the target population (Zikmund et al., 2013).

3.4 RESEARCH APPROACH

Creswell (2014) defines research approach as the plans and procedures that outline the steps from broad assumptions to detailed methods of data collection, analysis and interpretation. The selection of research approach is dependent on the nature of the research problem, linking the intersection of research design, paradigm and specific method to response to the research questions as illustrated in Figure 3.1 below. Numerous publications recognised three different approaches in conducting research, namely, qualitative, quantitative, and a mixed method research approach (Bryman et al., 2017; Creswell, 2014; Gay et al., 2012; Wilson, 2018).

Figure 3.1 Interconnection of research approach and method



Source: Adapted from (Creswell, 2014)

The features of each research approach is summarised in Table 3.2 below and elaborated thereafter.

Table 3.2 Difference between qualitative, quantitative and mixed approaches

Factors/ Characteristics	Qualitative approach	Quantitative approach	Mixed approaches
Research objectives	Discovery and identification of new ideas, thoughts, feelings; preliminary insights on, and	Validation of facts, estimates, relationships, predictions	Discovery and identification of new ideas, thoughts, feelings; preliminary insights on, and understanding of, ideas and objects;

	understanding of, ideas and objects		Validation of facts; estimates; relationships; and predictions
Types of research	Normally exploratory designs	Descriptive and causal designs	Exploratory, descriptive and causal designs
Types of questions	Open-ended, semi-structured, deep probing	Mostly structured, close-ended	Both open and closed ended questions.
Types of execution	Relatively short time frames	Usually significantly longer time frames	Usually significantly longer time frames
Representativeness	Small samples, limited to the sampled respondents	Large samples, normally good representation of target populations	Large samples, normally good representation of target populations
Types of analysis	Debriefing, subjective, content, interpretive, semiotic analyses	Statistical descriptive, causal predictions and relationships	Combination; depending on the research types and questions
Researcher skills	Interpersonal communications, observations, interpretive skills	Scientific, statistical procedure translation skills, subjective interpretive skills	Interpersonal communications, observations, interpretive skills, scientific, statistical procedure translation skills, subjective interpretive skills
Generalisability of results	Very limited; only preliminary insights and understanding	Usually very good; inferences about facts, estimates of relationships	Usually very good as it provides insights and estimates relationships

Source: (Hair, Black, Babin & Anderson, 2010)

3.4.1 Qualitative approach

A qualitative approach uses non-numerical data like narrative, open-ended, semi-structured, deep, probing questions and visuals to gain insights into – and understand – a particular object or phenomenon of interest (Gay et al., 2012; Hair et al., 2010). The constructionist-interpretivist – along with transformative – paradigm supports the qualitative approach (Antwi & Hamza, 2015; Creswell, 2014), and normally adopts exploratory design (Hair et al., 2010). Qualitative approach employs an inductive methodology that focuses on the meaning individuals or groups place on a social or human problem, including the complexity associated

with the problem (Creswell, 2014). It is conducted in a relatively short time frame with a small group of sampled respondents (Hair et al., 2010). Hair, Black, Babin and Anderson (2010) describe qualitative analysis as subjective and requiring debriefing, in addition to interpretation of content and semiotics. Qualitative approach necessitates the researcher to have interpersonal communications, observations and interpretive skills (Hair et al., 2010). Hair, Black, Babin and Anderson (2010) also caution against generalising the result from qualitative approach as it is very limited and offers only preliminary insights and understanding.

3.4.2. Quantitative approach

On the contrary, a quantitative approach relies on numerical data and closed-ended, structured questions to describe, estimate, predict or control phenomena of interest (Gay et al., 2012; Hair et al., 2010). The objectivist ontology and empiricist epistemology contained in the positivist paradigm underpins quantitative approach (Antwi & Hamza, 2015), utilising causal – as well as descriptive – designs (Hair et al., 2010). It emphasises deductive tactic to validate facts, examine correlational relationships between variables, protect against biasness, control alternative explanations and being able to generalise and replicate the findings (Creswell, 2014). A quantitative approach usually requires longer time frames and involves a large sample of target population (Hair et al., 2010). The quantitative analysis emphasises statistical, descriptive, causal predictions and relationships, therefore it is important for the researcher to be equipped with scientific, statistical procedure translation and subjective interpretive skills (Hair et al., 2010). Ultimately, the results from a quantitative approach can be generalised to larger population based on inferences from facts to describe the relationships (Hair et al., 2010).

3.4.3 Mixed method approach

A mixed method or mixed-mode integrates the qualitative and quantitative approaches at different stages of inquiry, connecting the two forms of data sets – open-ended and closed-ended – in a single study (Mitchell, 2018; Wilson, 2018). Mixed method studies advocate transformative (Sweetman et al., 2010) or pragmatic (Creswell, 2014) paradigm as basis for its philosophical assumptions. It constitutes more than one type of research design among exploratory, descriptive and causal designs; involves large samples, which give rise to longer time frames required (Hair et al., 2010). According to Creswell (2014), the combination of qualitative and quantitative approaches provides a more comprehensive analysis, as well as

understanding of a research problems than either approach could achieve on its own. The researcher needs to be highly competent in both soft and technical skills to implement this approach (Hair et al., 2010). Hair, Black, Babin and Anderson (2010) also indicate that the results from mixed method study is usually very insightful and makes generalisation plausible.

This study undertook a quantitative approach, which tested the hypotheses (Creswell, 2014). Subsequently, it involved the collection of numerical data to validate the relations between theory and research deductively, using statistical analysis and interpretation to avoid biasness (Bryman et al., 2017; Mitchell, 2018).

3.5 SAMPLING DESIGN AND PROCEDURE

Aaker, Kumar, Day and Leone (2011) define sampling as the process of appraising parameters of a larger group (or dubbed as population) by reaching out to only a subset of that population. This subset (otherwise called a sample) is a group of events, individuals or items that represents the characteristics of the population from which the sample is drawn (Gay et al., 2012). Sampling is adopted due to funding and time constraints, besides the impossible task to get census from every member of the population (Aaker et al., 2011). The sampling design is a framework used to determine the sample participants that should be selected for the study (Sreejesh et al., 2014). The sampling procedure involves defining the target population of the study, identifying the sample frame, selecting a suitable sampling technique, and determining the sample size (Tustin et al., 2005). The following section describes the target population, sampling method and sample size for this study.

3.5.1 Target population

Target population is a specified group of interest, from where information is obtained for the study (Wilson, 2018), and consists of units like people, firms, cities, nations, regions, etc. (Bryman et al., 2017). Aaker, Kumar, Day and Leone (2011) highlight certain rules for consideration in defining target population, such as research objectives, reproducibility and convenience. The target population for this study is South African residents who are minimum 18 years old (which is the legal driving age in the country) and drive any form of road vehicles that necessitate fuel purchases. According to National Traffic Information System (eNaTIS), there are 12 729 325 live vehicle population in South Africa as at 31 January 2020 (eNaTIS,

2020). In addition to having valid driving license and drive any form of road vehicle, the respondents also have been exposed to any fuel brand advertisement in the last six months.

3.5.2 Sampling method

Sampling method is the mechanism for selecting the required sample to gain information about a target population (Aaker et al., 2011). Sharma (2017) highlights certain factors to be considered in choosing a sampling method, such as objectives of the study, size and nature of the population, precision in desired result (including generalisation) as well financial implications. The sampling method can be classed into two categories, namely probability and non-probability sampling (Wilson, 2018).

Probability sampling uses a random selection where every member of the target population has an equal chance of being chosen (Bryman et al., 2017; Wilson, 2018). According to Sharma (2017), probability sampling is also known as random sampling, and although requiring more work, it is much more accurate. The advantages of using probability sampling are the sample's representativeness, which allows variation due to a sample being used instead of a census of population and a more explicit identification of possible biasness (Aaker et al., 2011). Simple random sampling, systematic sampling, stratified sampling, cluster sampling and multistage designs are among the various techniques available in probability sampling (Zikmund et al., 2013).

On the other hand, non-probability sampling is not random, where some members of the population are more likely to be selected than others (Bryman et al., 2017; Wilson, 2018). Sharma (2017) claims that non-probability sampling is entirely based on judgment. Non-probability sampling typically is used in situations such as exploratory stages of a research project, dealing with a homogenous population, pretesting a questionnaire, when a researcher lacks statistical knowledge and when operational ease is required (Aaker et al., 2011). Non-probability sampling techniques include convenience sampling, judgement sampling, quota sampling and snowball sampling (Zikmund et al., 2013). Table 3.3 illustrates the sampling methods with their associated sampling techniques, and the advantages and disadvantages they offer the researcher.

Table 3.3 Sampling methods and techniques

Sampling Method : Probability Sampling			
Techniques	**Description**	**Advantages**	**Disadvantages**
Simple random sampling	Each population member has an equal chance of being selected, using lottery/envelope method or random number table method	▪ Unbiased / fair selection ▪ Minimal knowledge of population is needed ▪ High internal/external validity Easy to analyse data ▪ Representative of population	▪ Requires sampling frame ▪ High cost ▪ Large errors compared to stratified sampling for same sample size
Systematic sampling	Sampling is done by identifying the first member randomly, and then using a periodic process to select every nth member thereafter from the sampling frame	▪ Moderate usage and cost ▪ Spreads the sample more evenly over the population ▪ Easy to draw and analyse sample ▪ High internal/external validity	▪ Hidden patterns in data could affect sample's representativeness ▪ If sampling interval is related to periodic ordering of the population, may introduce increased variability
Stratified sampling	The population is divided into subgroups or strata based on shared attributes, and then members are randomly selected from each strata	▪ Strata reinforce representativeness ▪ Comparisons can be made between strata ▪ Reduces variability from systematic sampling ▪ Results can be generalised	▪ Requires accurate information on proportions of each strata ▪ Stratified lists are costly to prepare
Cluster sampling	The population is divided into subgroups or clusters. A random sample of clusters is selected and all members of the	▪ Low cost ▪ Frequently used ▪ Practical when dealing with large population	▪ Cluster selected might not be representative of population ▪ Likely to produce more sampling errors

	clusters are interviewed	▪ Less dependent on lists of distinct sampling units	
Multistage sampling	Progressively smaller areas are selected in each stage by some combination of the first four techniques	▪ Frequently used, especially in nationwide surveys ▪ Depends on techniques combined	▪ High cost ▪ Depends on techniques combined
Sampling Method : Non-probability Sampling			
Techniques	**Description**	**Advantages**	**Disadvantages**
Convenience sampling	Sampling units are selected based on availability and convenience of the researcher	▪ Cost and time effective ▪ Extensively used ▪ No need for list of population	▪ Bias and variability cannot be measured or controlled ▪ Unrepresentative samples – cannot be generalised
Judgement sampling	The sampling units are selected based on their appropriateness for the target population of interest and meet specific objectives of study	▪ Moderate cost ▪ Average use ▪ Fast and convenient	▪ Unrepresentative of population – inappropriate to generalise beyond sample
Quota sampling	Sampling units are classified based on pertinent attributes, the desired proportion to sample from each class is determined and fixed as quotas for selection	▪ Moderate cost ▪ Very extensively used ▪ Similar to stratified sampling but no need for list of population	▪ Unrepresentative of population – inappropriate to generalise beyond sample
Snowball sampling	Initial sampling units randomly selected, additional sampling units are obtained by referrals from initial sampling units	▪ Low cost ▪ Can collect samples very quickly ▪ Useful in locating members of rare populations	▪ High biasness ▪ Unrepresentative samples – cannot be generalised ▪ Difficult to get samples if no one willing to cooperate

Sources: Adapted from (Acharya, Prakash, Saxena & Nigam, 2013; Sharma, 2017; Zikmund et. al, 2013)

This study employed the convenience technique of non-probability sampling method, leveraging on its benefits of accessibility and practicality to the researcher (Bryman et al., 2017). A convenience sample does not require a list of all the population elements (Acharya et al., 2013). The population members were selected on the basis of proximity, ease of access and willingness to contribute to the study. The convenience sampling technique is also straightforward, requires less time to design and execute, and is inexpensive compared to probability sample of the same size (Aaker et al., 2011).

3.5.3 Sample Size

Sample size (N) of the target population can be determined through the use of statistical methods (Wilson, 2018) or ad hoc methods such as rule of thumbs and comparable studies (Aaker et al., 2011). Bryman, Bell, Hirschsohn, Dos Santos, Du Toit, Masenge, Van Aardt and Wagner (2017) caution that invariably a compromise will have to be made between the constraints of time and cost, the need for precision and other considerations when deciding on the sample size. The sampling method, be it probability or non-probability sampling, also determines the choice of a sample size. Probability sampling procedures employ statistical methods for sample size determination (Hair et al., 2008:274). On the other hand, non-probability sampling procedure employs subjective methods such as historical evidence approach, utilising comparable sample size used by others when studying similar constructs (Churchill Jr, Brown & Suter, 2010:366).

In addition, the sample size consideration needs to take into account the minimum data requirement for Structural Equation Modelling (SEM) and Confirmatory Factor Analysis (CFA). According to Mundfrom, Shaw and Ke (2005), the minimum necessary sample size in factor analysis is related to the number of variables, the number of factors, the number of variables per factor, and the size of the communalities. While it is generally accepted that larger samples are better (Comrey & Lee, 1992; Cudeck & O'Dell, 1994; Kline, 1994; MacCallum et al., 1999; Velicer, Peacock, & Jackson, 1982), there is evidence that simple SEM models can be meaningfully tested even if the sample size is quite small (Hoyle, 1999; Hoyle & Kenny, 1999). Some researchers consider 150 responses as the minimum sample size for conducting SEM (Gorsuch, 1983; Tinsley & Tinsley, 1987; Anderson & Gerbing, 1988; Kline, 1994; Ding et al., 1995; Tabachnick & Fidell, 2001; Muthen & Muthen, 2002), while others use an even

larger sample size N = 200 to perform the analysis (Boomsma & Hoogland, 2001; Hoogland & Boomsma, 1998; Kline, 2011).

Drawing from the guidelines above, a final sample size of 200 was deemed appropriate. The selected sample size is suitable for SEM analysis and comparative to similar studies that utilised the following sample sizes; 150 participants (Sallam, 2011), 160 participants (Akbari, 2015), 175 participants (Zhang et al., 2014), 183 participants (Tran & Corner, 2016); 200 participants (Kamran & Siddiqui, 2019), 200 participants (Balakrishan et al., 2014) and 242 participants (Visentin et al., 2019).

3.6 DATA COLLECTION METHOD

Data collection methods are procedures utilised to gather data from the participants (Sreejesh et al., 2014; Wahyuni, 2012). The data for this study was collected using a survey method in the form of self-administered, web-based electronic questionnaires. Gay, Airasian and Mills (2012) define a questionnaire as a collection of formalised questions designed to capture a wide variety of information on many topics and subjects, to be answered by a selected group of participants. This method is in line with the descriptive research design and quantitative approach that necessitates the collection of mass data at one time, along with the versatility of employment in virtually any setting, offering respondents convenience to complete the survey at their own time and speed (Aaker et al., 2011). The online survey method, however, lacks depth in examining comprehensively the subjects being studied as no one was present to assist respondents if they were having difficulty answering a question (Bryman et al., 2017). Malhotra (2010) states that the overall design of a questionnaire can influence participants' willingness to participate in a study. As such, the following sections elucidate on the aspects of the questionnaire structure, measurement and scale, layout, pre and pilot testing, and actual administration.

3.6.1 Structure of the questionnaire

A questionnaire can incorporate unstructured (open-ended) and/or structured (closed-ended) questions (Aaker et. al, 2011). Open-ended questions allow respondents to answer on their own terms, enable unusual responses, and tap into their levels of knowledge and understanding of issues. They are useful for exploring new areas and generating fixed-choice format answers

(Bryman et al., 2017). Although open-ended questions can provide in-depth discoveries, it is more expensive and time consuming to administer, code as well as analyse the data (Zikmund et al., 2013). Closed-ended questions provide respondents specific, limited-alternative responses to choose the ones closest to their own viewpoints. They are inexpensive, easy to complete or process the answers, enhance comparability (i.e. relationship between variables), and reduce variability (Bryman et al., 2017). Nonetheless, there is loss of spontaneity in respondents' answers, as well as difficult to cover all possibilities and make the fixed answers mutually exclusive (Zikmund et al., 2013).

This study utilised a combination of dichotomous, multichotomous and multi-item structured or closed-ended questions. Zikmund, Carr and Griffin (2013) highlight that for dichotomous and multichotomous questions, respondents can choose their answers from a predetermined number of two or multiple responses respectively. Most of the dimensions used to measure these constructs are in reference to previous related studies, as cited under literature review, where modifications were made to wordings of the statements and scales to fit the context and purpose of this study. Table 3.4 indicates the dimensions used to measure each construct, as well as the various authors from whom the dimensions were adapted. The specific statements employed in the questionnaire are provided in Annexure D.

Table 3.4 Dimensions used in questionnaire

Dimension	Author(s) & Year
Source Credibility (SC)	
Well-known, expert, trustworthy, experienced, reliable	Bhatt et al. (2013); Nguyen & Nguyen (2017); Raluca & Ioan (2010); Singh & Banerjee (2018); Visentin et al. (2019); Yilmaz et al. (2011)
Source Likeability (SL)	
Friendly, charismatic, sincere, appealing / attractive, familiar	Nguyen & Nguyen (2017); Nguyen et al. (2013); Vien et al. (2017); Yilmaz et al. (2011)
Rational Message (RM)	
Product quality, product benefits	Akbari (2015); Ganesan et al. (2017); Jovanovic et al. (2016); Lin (2011); Sadeghi et al. (2015); Zhang et al. (2014)
Other non-fuel products, services, convenience	Self-created
Emotional Message (EM)	

Love, relationship, sense of belonging, humour, happiness, excitement	Akbari (2015); Ganesan et al. (2017); Jovanovic et al. (2016); Kamran & Siddiqui (2019); Lin (2011); Mogaji et al. (2018); Sadeghi et al. (2015); Zhang et al. (2014)
Pride of local / national brand	Self-created
Attitude Towards the Advertisement (ATA)	
Good, enough interest to hold my attention, believable, positive impression, can recall ad and company easily	Abdul Wahid & Ahmed (2011); Owhal (2015); Sallam & Algammash (2016); Singh & Banerjee (2018); Yilmaz et al. (2011)
Attitude Towards the Brand (ATB)	
Interested in the brand, think the brand is good, favourable opinion of the brand, trust the brand, would recommend the brand	Abdul Wahid & Ahmed (2011); Ganesan et al. (2017); Sallam & Algammash (2016); Singh & Banerjee (2018); Spears & Singh (2004); Visentin et al. (2019); Yilmaz et al. (2011);
Purchase Intention (PI)	
Probably make a purchase, likely to make a purchase, definitely going to make a purchase, would like to have more info, neither influenced by the ad nor the brand	Abdul Wahid & Ahmed (2011); Sallam & Algammash (2016); Singh & Banerjee (2018); Spears & Singh (2004);

3.6.2 Measurement and scale employed in the questionnaire

Aaker, Kumar, Day and Leone (2011) define measurement as a standardised process of assigning numbers or other symbols to certain characteristics of the objects of interest, according to some pre-specified rules. Measurement allows for fine differences in magnitude relating to the concept in question to be quantified, act as a consistent yardstick for making such distinctions and gauging differences, and provides a basis for more precise estimates of the relationship between concepts (Bryman et al., 2017). Scale is a continuum on which objects are located according to the amount of the measured characteristics they possess (Aaaker et al., 2011). Zikmund, Carr and Griffin (2013) indicate that the type of scales used for measurement (whether nominal, ordinal, interval or ratio) would determine the form of statistical analysis. The appropriate descriptive statistics for each type of scale are summarised in Table 3.5 below.

Table 3.5 Descriptive statistics for types of scales

Type of Scale	Description	Numerical Operation	Descriptive Statistics
Nominal	▪ A scale in which the numbers or letters	▪ Counting	▪ Frequency in each category

	assigned to objects serve as labels for identification or classification ▪ Dichotomous "Yes" or "No"		▪ Percentage in each category ▪ Mode
Ordinal	▪ A scale that arranges objects or alternatives according to their magnitude in an ordered relationship ▪ Comparative, rank order, itemised category, paired comparison	▪ Rank ordering	▪ Median ▪ Range ▪ Percentile ranking
Interval	▪ A scale that both arranges objects according to their magnitudes and distinguishes this ordered arrangement in units of equal intervals ▪ Likert, Thurstone, Stapel, associative, semantic-differential	▪ Arithmetic operations that preserves order and relative magnitudes	▪ Mean ▪ Standard deviation ▪ Variance
Ratio	▪ A scale that has absolute rather than relative quantities and an absolute zero where there is an absence of a given attribute ▪ Certain scales with special instructions	Arithmetic operations on actual quantities	▪ Geometric mean ▪ Coefficient of variation

Source: (Aaker et al., 2011; Zikmund et al., 2013)

In this study, the questionnaire consisted of nominal and interval scale items. The items in the nominal scale were assigned to mutually exclusive labelled categories, while interval scale items were used to demonstrate the correlation between the two constructs (Aaker et al., 2011). The constructs in interval scale were measured using a five-point Likert Scale – with items ranging from 'Strongly Disagree' (1) to 'Strongly Agree' (5). Likert-type scale questions require respondents to indicate their level of agreement or disagreement with a variety of statements related to the object, which then are summed over all statements to provide a total score (Aaker et al., 2011).

3.6.3 Layout of the questionnaire

Once the questions were developed, it was important to determine the sequence and flow of questions, as well as layout of the questionnaire. According to Bryman, Bell, Hirschsohn, Dos Santos, Du Toit, Masenge, Van Aaardt and Wagner (2017), the presentation of closed-ended questions and the layout are important considerations for self-administered questionnaires. A well laid-out questionnaire will make it interesting and easy for respondents to go through the questions, enhance participation and minimise error (Zikmund et al., 2013).

The layout of the questionnaire commenced with a preamble. This preamble featured information such as identity of the researcher, purpose of the study, request for assistance in providing data, and the estimated time required to complete the questionnaire. The preamble also assured that participation is voluntary, and that all responses will be kept confidential and secured. In this study, the questionnaire was divided into ten sections based on the types of information required, including screening questions to confirm respondent's eligibility to participate (i.e. minimum 18 years old, the legal driving age in South Africa) and whether they had been exposed to a fuel advertisement in the last six months. Section A consisted of seven questions which were designed to solicit information regarding the respondents' age group, the type of vehicle they drive, the number of hours per day they spend watching television, listening to radio, using online or social media, the fuel advertisement they were exposed to in the last six months, the medium that carried that advertisement and the fuel brand they are currently using. Section B to Section I comprised of five specific statements to measure the influence of source credibility, source likeability, rational message, emotional message, attitude towards the advertisement, attitude towards the brand and purchase intention constructs based on the possible dimensions adapted from work of various authors in Table 3.4. The structure, format, scales and layout employed in this study are outlined in Table 3.6 below, while the questionnaire is provided in Annexure D.

Table 3.6 Questionnaire structure, format, scales and layout

Sec*/ Qst*	Abbrev*	Nature of Question / Construct	Structure	Scaling
Format: Dichotomous (Two responses – Yes / No)				
Screen S1	AQLF	Minimum Age 18 years old and above	Close-ended	Nominal

Screen S2	EXFA	Exposure to any Fuel Ad in the last 6 month	Close-ended	Nominal
Format: Multichotomous (Multiple responses / by categories)				
Sec A / 1	AGRP	Age Group	Close-ended	Nominal
Sec A / 2	TOV	Type of Vehicle	Close-ended	Nominal
Sec A / 3	TSTR	Time Spend watch TV / listen to Radio per day	Close-ended	Nominal
Sec A / 4	TSOS	Time Spend Online / Social media per day	Close-ended	Nominal
Sec A / 5	FBAE	Fuel Brand Ad Exposed to	Close-ended	Nominal
Sec A / 6	MCAD	Medium that Carried the Fuel Brand Ad	Close-ended	Nominal
Sec A / 7	FBCU	Fuel Brand Currently Using	Close-ended	Nominal
Format: Multiple-items / Likert-type-scale – Strongly Disagree (1) to Strongly Agree (5)				
Sec B/1-5	SC1 – SC5	Source Credibility	Close-ended	Interval
Sec C/1-5	SL1 – SL5	Source Likeability	Close-ended	Interval
Sec D/1-5	RM1 – RM5	Rational Message	Close-ended	Interval
Sec E/1-5	EM1 – EM5	Emotional Message	Close-ended	Interval
Sec F/1-5	ATA1 – ATA5	Attitude Towards the Advert	Close-ended	Interval
Sec G/1-5	ATB1 – ATB5	Attitude Towards the Brand	Close-ended	Interval
Sec H/1-5	PI1 – PI5	Purchase Intention	Close-ended	Interval

Notes: Sec = Section, Qst* = Question, Abbrev* = Abbreviation*

3.6.4 Pre and pilot testing the questionnaire

Pre-testing involves testing specific questions or the whole questionnaire on a small sample of respondents (Aaker et al., 2011). The purpose of pre-testing is to ensure that the questionnaire meets the researcher's expectations in terms of data to be collected. Furthermore, it is to identify and remove any deficiencies, as well as enhance the questionnaire (Guy et al., 2012). Aaker, Kumar, Day and Leone (2011) highlight that every aspect of the questions or

questionnaire – namely variation, meaning, task difficulty, flow, skip patterns, length, respondent interest and attention – should be pre-tested. The respondents used in the pre-testing exercise are normally selected on a convenience basis, and should be similar in makeup to members of the population that ultimately will be sampled (Zikmund et al., 2013). Pre-testing can use either a debriefing or protocol approach (Aaker et al., 2011). In debriefing, respondents are only informed it was a pre-test after they have completed the questionnaire. They are then asked to explain the meaning of each question and whether they encounter any problems when answering the questionnaire. Protocol approach on the other hand, requires respondents to write comments on the questionnaire while they are answering it. Problems identified during pretesting should be corrected, after which the questionnaire should again be pre-tested using a different set of respondents (Zikmund et al., 2013).

In this study, the questionnaire was pre-tested with 26 respondents from a comparable population using a debriefing approach. Their responses were excluded from the actual sample used for data analysis to avoid biasness (Bryman et al., 2017). The respondents did not indicate any difficulty in understanding or answering the questions. Other feedback included proposed enhancement to the sequence of questions for smooth and coherent flow, which was then adjusted in the final questionnaire.

Subsequently, the questionnaire was subjected to pilot testing on a conveniently selected sample of 50 respondents from the target population. A pilot test is a trial run, albeit on a smaller scale, before launching the full-fledged survey (Memon et al. 2017). The purpose of this pilot testing is to assess reliability and validity of the instrument (Babbie & Mouton, 2010). While pilot testing is important as part of good research design, it does not guarantee success in the full-fledged study, though it does increase the likelihood (van Teijlingen & Hundley, 2001). The results from the pilot testing are presented under Section 4.2 of this study.

3.6.5 Administration of the questionnaire

The web-based electronic questionnaire was designed using Qualtrics, and the link was shared on social media portals (Facebook), as well as major oil companies operating in South Africa, where the majority of qualifying participants were expected to be present. This approach for data collection offers a host of benefits in terms of time and cost effectiveness, is easily personalised and has wider reach (Wilson, 2018). Another approach adopted by the researcher

is through distribution of the link at strategic locations in Cape Town, e.g. mall and forecourts with high a concentration of motorists. Cape Town, the largest metro and capital city of Western Cape province (where the researcher is based) offered ease of access, as well as being among the top three provinces with the highest population of motorists (eNaTIS, 2020).

3.7 MANAGEMENT OR PREPARATION OF DATA

The management or preparation of data needs to be done once the survey responses have been collected, and before any data analysis and interpretation can take place (Cooper & Schindler, 2010). The degree to which the data was prepared and converted into a form suitable for analysis determines the quality of results obtained from the statistical analysis and subsequent interpretation (Aaker et al., 2011). The data processing steps include cleaning and editing, coding, as well as tabulation, which are explained briefly hereafter.

3.7.1 Data cleaning and editing

Data cleaning involves consistency checks, dealing with values that are out of range and treatment of missing responses (Malhotra, 2010). Zikmund, Carr and Griffin (2013) suggest several options available for handling missing responses, such as substitution of an imputed response, substitution of a neutral value such as the mean, pairwise deletion or case-wise deletion. Data editing entails identifying omissions, ambiguities, inconsistencies, lack of cooperation and ineligible respondents (Aaker et al., 2011). Its purpose is to ensure the completeness, consistency and readability of data (Zikmund et al., 2013).

3.7.2 Data coding

Coding includes deciding how the responses are captured using a numerical score or other character symbol (Aaker et al., 2011). The coding categories should be independent, exhaustive, mutually exclusive and provide for all possible responses (Zikmund et al., 2013). The process of coding entails transforming participants' responses into numbers or codes that represent the answers they choose.

3.7.3 Tabulation

Tabulation refers to the orderly arrangement of data in a table or other summary format that exhibit the count of responses for each category assigned to a variable (Zikmund et al., 2013). Besides aiding in data cleaning aspects – such as identifying the degree of omissions, ambiguities, and errors in responses – the key benefits of tabulation are determining the empirical distribution of the variable in question and calculating the descriptive statistics at a later stage (Aaker et al., 2011). Malhotra (2010) explains that tables can take on various forms such as univariate tabulation, bivariate tabulation and multivariate tabulation. The next section examines the statistical analysis procedures that were applied in this study.

3.8 STATISTICAL ANALYSIS

Version 26.0 of the SPSS (Statistical Package for the Social Sciences) and AMOS (Analysis of a Moment Structures) packages were used to analyse the data collected. The purpose of data analysis is to produce information from raw data that will help to address the problem at hand (Aaker et al., 2011). The type of measurement scale used in the study dictates the form of statistical analysis performed (Zikmund et al., 2013). Since this study adopted nominal and interval measurement scales, the statistical analysis methods used on the data sets include frequency, reliability, descriptive (measures of central tendency, measures of variability, measures of shape, measures of relationship) and structural equation modelling. Each of these statistical analysis can be described as follows:

3.8.1 Frequency distribution analysis

Frequency distribution reports the number of responses that each question received and is applicable to nominal as well as ordinal values (Aaker et al., 2011). The count (N) represents the number of raw responses to each category for any type of variable, while percentage (%) is the proportion of those who answered a question in a certain way, multiplied by a hundred (100) (Bryman et al., 2017; Gay et al., 2012). The results can be illustrated in the form of a frequency table or diagrams such as histograms, bars and pie charts (Aaker et al., 2011; Bryman et al., 2017; Zikmund et al., 2013). Aaker et al. (2011) and Zikmund et al. (2013) also suggest cross-tabulation, where frequency distribution of observations on two or more sets of nominal variables are joined to examine the differences among groups. In this study, the observations

for the categorical data, including from the cross-tabulation method, were presented in the form of diagrams. The non-categorical data was tabulated in the form of frequency tables.

3.8.2 Descriptive statistics analysis

Descriptive statistics, combined with frequency distribution analysis for interval and ratio variables can provide meaningful figures by summarising information in a dataset (Aaker et al., 2011). These descriptive statistics include measures of central tendency (mode, median, mean), measures of variability (range, variance, standard deviation), measures of shape (skewness, kurtosis) and measures of relationships (correlation) (Aaker et al, 2011; Bryman et al., 2017; Gay et al. 2012). The measures are described as follows:

- *Measures of central tendency* – Measures of central tendency are indices that represent a typical score among a group of scores and summarise the distribution of values (Aaker et al., 2011; Bryman et al., 2017; Gay et al., 2012). Bryman, Bell, Hirschsohn, Dos Santos, Du Toit, Masenge, Van Aardt and Wagner (2017) describe mode as the value that occurs most frequently in a distribution and can be employed to all types of variables. The median is the mid-point in a distribution after the data has been ranked from the smallest to the largest value and split into halves (Gay et al., 2012). The median is not affected by outliers and is applicable for interval, ratio and ordinal variables (Bryman et al., 2017). The mean is the arithmetic average of the scores, calculated by adding up all the scores and dividing that total by the number of scores (Aaker et al., 2011). The mean is suitable to describe interval and ratio variables, and is the most frequently used measure of central tendency (Bryman et al., 2017; Gay et al., 2012). It is also the selected measure of central tendency for this study, and the computed result is reported under section 4.4.

- *Measures of variability* – Measures of variability show how spread out a group of scores are, where the three most frequently used measures entail the range, quartile deviation and variance (Bryman et al., 2017; Gay et al., 2012). Gay, Airasian and Mills (2012) define the range as the difference between the highest and lowest score in a distribution, and is determined by subtraction. Bryman, Bell, Hirschsohn, Dos Santos, Du Toit, Masenge, Van Aardt and Wagner (2017) highlight that the range is applicable for interval or ratio variables, and can be influenced by outliers. The quartile deviation is described as one half of the difference between the upper quartile (the 75th percentile) and lower quartile (the

25th percentile) in a distribution (Gay et al., 2012). The variance measures how far each observation is from the mean, and is computed as the sum of the square of the difference between each value in a distribution and the mean, divided by the number of observations (Bryman et al., 2017). The standard deviation is the most frequently used and a stable variability index. It can be used with interval and ratio data, and is the square root of the variance of a set of scores (Gay et al., 2012). The standard deviation method is employed as a measure of variability for this study and is reported under section 4.4.

- *Measures of shape* – Measures of shape describe the pattern or distribution of the data as opposed to the normal distribution using skewness and kurtosis values (Malhotra, 2010). Skewness denotes that a distribution 'leans' one way or the other and has an asymmetric tail (Cain, Zhang & Yuan, 2017). Distribution with positive skewness has a longer right tail in the positive direction, and the mode is lower than median and mean (Cain et al., 2017; Ho & Yu, 2015). The negative skewness has a longer left tail in the negative direction, and the mode is higher than median and mean (Cain et al., 2017; Ho & Yu, 2015). Cain, Zhang and Yuan (2017) associate kurtosis with the shoulder, tail and peaked-ness of a data distribution. The normal distribution is defined as having a kurtosis of 3 (Cain et al., 2017; Ho & Yu, 2015). Ho and Yu (2015) describe positive kurtosis (>3) as leptokurtic (more peaked-ness, heavy tails, weak shoulders), and negative kurtosis (<3) as platykurtic (less peaked-ness, weaker tails, heavy shoulders). The findings for the skewness and kurtosis are reported under section 4.4. of this study.

- *Measures of relationship* - Measures of relationship indicate the strength of the relationship between two variables (Aaker et al., 2011). This degree of relation is expressed as a correlation coefficient and is computed using two sets of scores from a single group of participants (Gay et al., 2012). Bryman, Bell, Hirschsohn, Dos Santos, Du Toit, Masenge, Van Aardt and Wagner (2017) named the following techniques to measure the relationship between two variables; *phi coefficient ø* (for dichotomous variables), *Spearman's rho-p* (for ordinal variables, or when one variable is ordinal and the other is an interval or ratio variable) and *Pearson's correlation coefficient r* (for interval or ratio variables). The *Pearson r* is the most appropriate measure of correlation for this study as the sets of data to be correlated are expressed as interval scales. The correlation coefficient, ranging from -1.00 to +1.00 indicates the direction and size of the relation between variables (Gay et al., 2012). In addition, the corrected item-total correlation test is performed to determine if any

item in the construct with value below 0.5 may impact the reliability of the overall scale (Francis & White, 2002; Kim & Stoel, 2004), and therefore needs to be discarded. The computed results are reported under section 4.4.

3.8.3 Reliability and validity of measurement instrument analysis

Reliability refers to the consistency of the survey questionnaires to measure a particular concept (Bryman, 2012). The two (2) dimensions underlying the concept of reliability are repeatability and internal consistency (Zikmund et al., 2013). Reliability is a necessary condition for validity, however a reliable instrument may not be valid (Aaker et al., 2011). Construct reliability of the research measures in this study was examined by the computation of four different methods, namely *Cronbach's alpha reliability test (Cronbach α), average inter-item correlations*, *composite reliability test (CR)* and *average value extracted (AVE) test*. A short description of each test is provided below.

- *Cronbach's alpha reliability test (Cronbach α)* – The Cronbach's alpha test calculates the average of all possible split-half reliability coefficients (Aaker et al., 2011; Bryman et al., 2017; Zikmund et al., 2013). Bryman, Bell, Hirschsohn, Dos Santos, Du Toit, Masenge, Van Aardt and Wagner (2017) suggest the alpha correlation coefficient varies between zero (no correlation, therefore no internal consistency) and one (perfect correlation, thus complete internal consistency). The reliability of a construct is supported if Cronbach's alpha is 0.6 or higher (Hume et al., 2006; Malhotra, 2010; McMinn et al., 2009; Sim &Wright, 2000).

- *Average inter-item correlation* – Determines if different individual questions in a questionnaire meant to measure the same general construct or idea give consistent, appropriate results or similar scores (Phelan & Wren, 2006; Trochim, 2020). Clark and Watson (1995) recommended average inter-item correlation in the range of 0.15 to 0.50, with 0.15 – 0.20 for broad higher order construct and higher mean intercorrelation (0.40 – 0.50) for a narrower construct. In addition, Schiavolin, Ferroli, Acerbi, Brock, Cusin, Schiariti, Visintini and Broggi (2015) suggest inter-item correlation values higher than 0.4 as indicator of a good reliable scale.

- *Composite reliability test (CR)* – Measures the overall reliability of a set of items loaded on a latent construct. CR is a less biased estimate of reliability than Cronbach's alpha. Value ranges between zero and one, and values greater than 0.70 reflect good reliability (Chin, 1988; Fornell & Larcker, 1981; Nunnally, 1978). Values between 0.60 and 0.70 are also acceptable if other indicators of the construct's validity are good (Hair et al., 2010).

- *Average variance extracted test (AVE)* – Measures the level of variance captured by a construct against the level due to measurement error. Values above 0.7 are considered very good, whereas, the level of 0.4 is acceptable (Fraering & Minor, 2006).

Validity is concerned with whether or not an indicator (or set of indicators) devised to gauge a concept really measures that concept (Bryman et al., 2017; Zikmund et al., 2013). There were two approaches used to establish validity, namely, content and construct validity.

- *Content validity* – Also known as face validity, describes how well the content of the measure matches the conceptual definition of the phenomena under study (Nunnally,1978). Establishing content validity is essentially an intuitive process, intended to eliminate errors related to sampling, measurement or analysis of the variables (Aaker et al., 2011; Bryman et al., 2017; Zikmund et al., 2013). Burns and Grove (2010) posited that content validity could be obtained from three sources, namely literature review, experts in the field and representatives of the population. The content of the measurement instrument was adapted from other studies discovered through the literature review. In addition, the questionnaire was also subjected to pre- and pilot testing, as discussed in Section 3.6.4.

- *Construct validity* – The ability of a measure to provide empirical evidence consistent with a theory based on the concepts and established during the statistical analysis of the data. It can be considered only after *convergent* and *discriminant* validity have been established (Aaker et al., 2011; Bryman et al., 2017; Zikmund et al., 2013). *The convergent* and *discriminant* validity are described below:

    - *Convergent validity* – The degree of confidence that a trait is well measured by its indicators, where each item correlates strongly with its assumed theoretical construct. The values range between zero and one, and a value of 0.5 and higher is recommended (Aldalaigan & Buttle, 2002; Barclays et al., 1995; Fornell & Larcker, 1981).

- *Discriminant validity* – The degree to which a construct is truly distinct from other constructs, where measures of different traits are unrelated, and do not correlate strongly. Discriminant validity exists when each measurement item correlates weakly with all other constructs, except for the one to which it is theoretically associated. Thus, correlations with a value below 0.8 are recommended (Fraering & Minor, 2006).

3.8.4 Structural Equation Modelling (SEM)

Hoyle (2014) describes Structural Equation Modelling (SEM) as a multivariate data analysis technique that tests hypotheses about relations among observed and latent variables. The observed variables are indicator variables that are measured during the data collection process, and used to define or infer the latent variables (Hoyle, 2014; Kline, 2011; Raykov & Marcoulides, 2012). In contrast, latent variables are typically referred to as theoretical or hypothetical constructs, which allude to the abstract and unobservable concepts specified in the theories (Hoyle, 2014; Kline, 2011; Raykov & Marcoulides, 2012). Schumacker and Lomax (2010) suggest the variables, whether observed or latent, can also be defined as independent (exogenous) variables that predict others, or dependent (endogenous) variables being predicted.

Hoyle (2014) highlights SEM's capacity to estimate and test relations between latent variables as its most compelling characteristic. In SEM, a series of regression equations are used to elaborate on hypothesised relationships among constructs, which are later modelled diagrammatically, thereby providing a pictorial representation of a specific theory (Byrne, 2010). Albeit a natural extension of regression models, SEM is more complex as it involves a simultaneous analysis of many layers of variables to determine the goodness-of-fit (Byrne, 2010). The goal of SEM analysis is to determine the extent to which the theoretical model is supported by sample data (Schumacker & Lomax, 2010). Byrne (2010) suggests that if the goodness-of-fit is adequate, the model argues for the plausibility of postulated relations among the variables, otherwise the tenability of such relations is rejected.

The SEM model comprises two sub-models; the measurement model and structural model (Byrne, 2010; Fan et al., 2016). A measurement model tests the relations between observed and latent variables (Byrne, 2010; Hoyle, 2014; Kline, 2011), while the structural model

assesses all the hypothetical dependencies based on path analysis (Byrne, 2010; Hoyle, 2014; Kline 2011). In this study, the conceptual model was developed 'a priori', thus only Confirmatory Factor Analysis (CFA) was used to represent the measurement model. The CFA process determines whether the hypothesised model provides a good fit to the data, or in other words, if a relationship between the observed variables and their underlying latent or unobserved constructs does exist (Child, 1990). There are five common logical steps undertaken in performing SEM; model specification, model identification, model estimation, model evaluation and model modification (Byrne 2010; Hoyle, 2014; Kline 2011; Fan et al., 2016). These stages are elaborated next.

- *Model specification* is defining the hypothesised relationships among the variables, and can be depicted in three general formats; a schematic diagram using graphical symbols, a set of equations or a matrix notation (Kline, 2011). The graphical presentation – termed as path diagram – made it easy to identify which variables are in the model, whether they are latent or observed, and the type of relations between them (Hoyle, 2014). By convention, squares or rectangles represent observed variables, circles or ellipses represent unobserved latent factors, single-headed arrows represent the impact of one variable on another, and double-headed arrows represent covariances or correlations between pairs of variables (Byrne, 2010). The equations can be defined either as measurement equations or structural equations, while the matrix notation enables identification of specific parameters in a model (Hoyle, 2014). Kline (2011) emphasises the importance of a correct model specification as it determines the results from later steps.

- *Model identification* is to derive a single, unique estimate of every free parameter (Hoyle, 2014; Kline, 2011). Fan, Chen, Shirkey, John, Wu, Park and Shao (2016) describe model identification as examining if the model is under-identified, just-identified, or over-identified. An under-identified model is one in which it is not possible to uniquely estimate all the model's parameters, and whenever there is more unknown than known information (Hoyle, 2014; Kline, 2011). A just-identified model is identified, has the same number of known and unknown information, and the degrees of freedom equal to zero (Hoyle, 2014; Kline, 2011). An over-identified model is identified, has more known information than unknown information, with degrees of freedom more than zero (Hoyle, 2014; Kline, 2011). The model coefficients can be only estimated in a just-identified or an over-identified model (Fan et al., 2016).

- *Model estimation* involves appraising numerical values for the unknown information or free parameters, such as path coefficients, factor loadings, variances and covariances of latent variables (Hoyle, 2014). The main focus of the estimation process is to produce parameter values that minimise the discrepancy or residual between the sample covariance matrix and the population covariance matrix inferred by the model (Byrne, 2010). Some popular estimation techniques used in SEM include the maximum likelihood, least squares family and Bayesian method (Hoyle, 2014; Kline, 2011).

- Model evaluation assesses model performance or fit, with measurable indices computed for the overall goodness of fit (Kline, 2011). According to Fan et al. (2016), SEM evaluation is based on the fit indices for the test of a single path coefficient (i.e., p value and standard error) and the overall model fit (i.e., χ 2, RMSEA). Generally, a model is considered a good fit if the value of the chi-square test is insignificant, and a combination of at least one incremental fit index (e.g. CFI, GFI, TLI) and one badness of fit index (e.g. RMSEA, SRMR) meet the predetermined criteria (Fan et al., 2016; Schermelleh-Engel et al., 2003). While there are no well-established guidelines of what minimal conditions constitute an adequate fit, there are some rules of thumb criteria for goodness-of-fit indices which are presented in Table 3.7.

Table 3.7 Indices for model evaluation

Indices	Description
Chi-square test (χ 2)	▪ tests the hypothesis for any discrepancy between model-implied covariance matrix and the original covariance matrix ▪ non-significant discrepancy is preferred ▪ optimal fitting would be ideal with $p > 0.05$ ▪ very sensitive to sample size and not comparable among different SEMs
Comparative fit index (CFI)	▪ represents the amount of variance that has been accounted for in a covariance matrix ▪ ranges from 0.0 to 1.0 ▪ a higher CFI value indicates a better model fit ▪ in practice, the CFI should be close to 0.95 or higher ▪ CFI is less affected by sample size than the χ 2 test
Goodness-of-fit index (GFI)	▪ range from 0 to 1.0, with the best fit at 1.0 ▪ GFI is affected by sample size, hence it is no longer recommended

Adjusted goodness-of-fit index (AGFI)	▪ adjust for a bias resulting from model complexity ▪ range between 0 to 1.0 ▪ 0.90 is indicative of good fit, AGFI > 0.85 an acceptable fit
Normed fit index (NFI)	▪ acceptable NFI should be 0.90 or higher ▪ highly sensitive to the sample size thus no longer used to assess model fit
Incremental fit index (IFI)	▪ adjusts the NFI for sample size and degrees of freedom ▪ over 0.9 is a good fit, but the index can exceed 1.0
Tucker-Lewis index (TLI)	▪ a non-normed fit index (NNFI) that partly overcomes the disadvantages of NFI ▪ proposes a fit index independent of sample size ▪ a TLI of > 0.90 is considered acceptable
Root mean square error of approximation (RMSEA)	▪ RMSEA is a "badness of fit" index where 0 indicates the perfect fit and higher values indicate the lack of fit ▪ useful for detecting model misspecification and less sensitive to sample size than the χ 2 test ▪ a good fit should be less than 0.05 while acceptable RMSEA should be less than 0.08
Standardized root mean square residual (SRMR)	▪ SRMR is similar to RMSEA ▪ a model good fit should be less than 0.05 while acceptable SRMR should be less than 0.10
Akaike information criterion (AIC) and Bayesian information criterion (BIC)	▪ relative measures from the perspectives of model selection rather than the null hypothesis test ▪ AIC offers a relative estimation of the information lost when the given model is used to generate data ▪ BIC is an estimation of how parsimonious a model is among several candidate models ▪ AIC and BIC are not useful in testing the null hypothesis but are useful for selecting the model with the least overfitting

Sources: (Fan et al., 2016; Schermelleh-Engel et al., 2003)

- *Model modification* entails adjusting a specified, identified and estimated model to improve model fit (Fan et al., 2016). Hoyle (2014) suggests that a model requires modification if it either has an adequate fit to the data with excessive parameters (over-parameterization), or does not have an adequate fit to the data (under-parameterization). In the earlier case, the initial model needs to be simplified by enforcing constraints on (or removing) free parameters to achieve a more compact model (Chou & Bentler, 2002; Hoyle, 2014). In the latter case, the initial model needs to be adjusted by releasing constraints on (or freeing) fixed parameters to acquire better fit to the data (Chou & Bentler, 2002; Hoyle, 2014). The

two modification methods are called “backward search” and “forward search” respectively (Chou & Bentler, 2002; Hoyle, 2014).

3.9 INTERPRETATION OF DATA

The interpretation of data uses the results from statistical analysis. Interpretation involves making inferences about the real world and drawing conclusions about the data’s managerial implications (Zikmund et al., 2013).

3.10 ETHICAL CONSIDERATION

The study was approved by the University of Cape Town Commerce Research Ethics Committee and ethics permission was obtained with clearance number REF: REC 2019/012/004 (Annexure A). The purpose of the study was clearly explained to all participants and their consent was obtained before proceeding with the survey. This was an anonymous study survey and participation was voluntary. Participants were not requested to supply any identifiable information. Privacy and anonymity of respondents were kept confidential throughout the study. The participants have rights to withdraw from the study at any stage if they wish to do so. Adequate information and assurances were provided to allow participants to understand the implications of partaking in the study. This enabled them to make a fully informed and considered decision of whether or not to participate, without any coercion. The data collected is stored on a password protected computer and UCT institutional data repository, namely ZivaHub. The results of this study are used for academic purposes only and a summary of findings can be provided on request.

3.11 CHAPTER SUMMARY

The main objective of this study is to examine the effect of advertising controllable elements – namely source and message – on South African consumers’ attitude towards the advertisement, attitude toward the brand and purchase intention for fuel. Given the nature of the study, a positivist and descriptive research design using a quantitative approach was adopted. This study employed the convenience technique of non-probability sampling method on a random sample of South African residents who are minimum 18 years old, which is the

legal driving age in the country. The study targeted people who have previously bought fuel for their vehicles. The required data was collected using a web-based, self-administered questionnaire that comprised scales drawn from previously published studies, and these responses were measured on a five-point Likert scale. The questionnaire also included questions designed to gather demographical information such as respondents' age group and contextual data required for the study. The captured data was analysed using SPSS and AMOS version 26.0 for Windows. The statistical analysis performed included frequencies, descriptive statistics, reliability and validity, as well as structural equation modelling. The next chapter, Chapter 4, presents and discusses the findings resulting from the analysis of the captured data for both pilot and main study. Data is reported as meaningful information, in the form of tables and charts with respective interpretations given in each case.

CHAPTER 4
RESULTS AND DISCUSSIONS

4.1. INTRODUCTION

This chapter presents a discussion and interpretation of the results obtained from the fieldwork phase of the study. The chapter commences with a discussion on results from the pilot testing, followed by the procedures undertaken to prepare the data – which include cleaning and editing, coding and tabulation of the scaled responses. Next, the demographic and other contextual information of the respondents are presented in the form of charts to give insights of the main sample composition. This is followed by discussion on descriptive statistics results to frame and put the overall research results in context. The reliability and validity analysis is a mandatory procedure prior to applying any form of multivariate analysis to provide fidelity and quality assurance of the data. The structural modelling analysis was performed to determine the statistical relationships between variables or constructs of interest in order to test the hypotheses. The procedure commenced with the specification of a measurement model through Confirmatory Factor Analysis and evaluation of model fit indices. Thereafter, the structural model was developed using path analysis to test the hypotheses. SPSS and AMOS, Versions 26.0 for Windows, were used to perform the analysis. The data analysis was conducted in two stages: the first stage involved analysing the results of the pilot testing of the questionnaire, and the second stage involved analysing the main survey's findings. The next section will discuss the data analysis procedures involved in the pilot phase.

4.2. PILOT TEST RESULTS

Succeeding the pre-testing stage, the measurement instrument was piloted on a convenience sample of 50 South African motorists to verify the internal consistency reliability of the measurement instrument. In addition, the pilot testing established that the questions were properly formulated or worded, and understood by the participants. The pilot test results are summarised and presented in Table 4.1 below.

Table 4.1 Summary of pilot test results

Items	Number of variables	Mean	Standard deviation	N	Cronbach Alpha	Average inter-item correlation
SC1-SC5	5	3.6880	0.75502	50	0.877	0.643
SL1-SL5	5	3.8320	0.60792	50	0.856	0.539
RM1-RM5	5	3.9200	0.64270	50	0.809	0.468
EM1-EM5	5	3.6800	0.75485	50	0.894	0.633
ATA1-ATA5	5	3.8200	0.58589	50	0.855	0.555
ATB1-ATB5	5	4.0480	0.69466	50	0.917	0.692
PI1-PI5	5	3.6400	0.62727	50	0.640	0.295
Overall Cronbach's alpha coefficient values of the entire scale = 0.819						

Note: SC=Source Credibility; SL=Source Likeability; RM=Rational Message; EM=Emotional Message, A=Attitude Towards the Advertisement, ATB=Attitude Towards the Brand, PI=Purchase Intention

Cronbach alpha coefficient values for the seven constructs range between 0.640 and 0.917, thereby exceeding the 0.6 acceptable threshold (Malhotra, 2010:319). The five-point Likert scale returned a Cronbach alpha of 0.877 for source credibility, 0.856 for source likeability, 0.809 for rational message, 0.894 for emotional message, 0.855 for attitude towards the advertisement, 0.917 for attitude towards the brand and 0.640 for purchase intention. The pilot study retains an overall Cronbach's alpha coefficient value of 0.819, hence demonstrating a satisfactory evident of the scales' reliability.

The descriptive statistical analysis results for all the constructs are as follows; source credibility (Mean=3.6880, SD=0.75502), source likeability (Mean=3.8320, SD=0.60792), rational message (Mean=3.9200, SD=0.64270), emotional message (Mean=3.6800, SD=0.75485), attitude towards the advertisement (Mean=3.8200, SD=0.58589), attitude towards the brand (Mean=4.0480, SD=0.69466) and purchase intention (Mean=3.6400, SD=0.62727). All the reported mean values above 3.500, signified a level of agreement among the respondents with regards to the influence of the controllable elements on their attitudes and purchase intention.

Although most of the inter-item correlation means fell outside of the recommended range of 0.15 and 0.50 (Clark & Watson, 1995:316), these are consistent with the principles where higher coefficient alpha lead to higher average inter-item correlations (Peterson, 1994:390), demonstrating a stronger relationship among the items in a construct (Pallant, 2010:100) and

considered to have good reliability as the values are more than 0.40 (Schiavolin et al. 2015:442).

4.3. DATA GATHERING PROCESS

A self-administered electronic survey was dispensed on a random sample of South African residents who are minimum 18 years old, which is the legal driving age in the country. The study targeted people who have previously bought fuel for their vehicles and have been exposed to any fuel advertisement in the last six months. The participants were informed that their participation is voluntary and that they may choose to withdraw at any stage without any consequences. They were also informed that their responses are confidential and no identifiable information was requested.

4.4. PRELIMINARY DATA ANALYSIS

As described in section 3.8.1, the management or preparation of data involves three steps; data cleaning and editing, coding and tabulation to make it viable for statistical analysis. These steps are discussed next.

4.4.1. Data cleaning and editing

The editing and cleaning of data are important to ensure eligibility, completeness and consistency in responses. There were 397 responses received. This data was exported into an Excel spreadsheet for review. Assessment of the data revealed that only 298 respondents met the requirements in terms of minimum age and exposure to fuel advertisement in the last six months. They also drive a form of road vehicle or made fuel purchases. Further checking was done to detect and eliminate any missing responses and values that are not defined or fall out of range for a particular variable using a simple algorithm. The study adopted case-wise deletion where all questionnaire responses from a respondent is removed if responses to one or more questions are missing from that respondent, which left a sample of 201 usable data. The usable data makes up a sample realisation rate of 51%, and the 201 responses obtained were subsequently subjected to data analysis. This approach ensured a complete and same set of

observations, as well as a certain minimum standard of quality on the data that has been collected.

4.4.2. Data coding

During this step, similar codes were assigned to similar responses in specific categories that are mutually exclusive as per the questionnaire. The coding information is presented in Table 4.2.

Table 4.2 Coding information

Question / Item	Code	Target Variable / Construct measured	Value assigned to responses
Screening questions to determine participants eligibility			
1	S1	Age identification	Under 18 years old (1), 18 years old and above (2)
2	S2	Exposed to any fuel ad in last 6 months	Yes (1), No (2)
Section A: Age group and related information			
1	A1	Age group	18-25 (1), 26-30 (2), 31-35 (3), 36-40 (4), 41-45 (5), Above 45 (6), Prefer not to answer (7)
2	A2	Type of vehicle drive	Motorcycles (1), Passenger cars (2), Sport utility vehicles (3), Utility vehicles, trucks, buses, trailer (4), Prefer not to answer (5), Not applicable (6)
3	A3	Length of time spend on TV/Radio	1 to 2 hour(s) (1), 3 to 4 hours (2), 4 to 5 hours (3), More than 5 hours (4), Prefer not to answer (5)
4	A4	Length of time spend online / social media	1 to 2 hour(s) (1), 3 to 4 hours (2), 4 to 5 hours (3), More than 5 hours (4), Prefer not to answer (5)
5	A5	Fuel brand ad exposed to in last 6 months	BP (1), Caltex (2), Engen (3), Sasol (4), Shell (5), Total (6), Others (7)
6	A6	Medium carry the fuel ad	TV (1), Radio (2), Print (newspapers/magazine (3), Billboard and banner (4), Internet (website/display ads/search engine) (5), Social Media (6), Mobile App (7), YouTube (8)
7	A7	Fuel brand currently used	BP (1), Caltex (2), Engen (3), Sasol (4), Shell (5), Total (6), Others (7), Prefer not to answer (8)

Section B - J: Determinants of source credibility, source likeability, rational message, emotional message on consumers attitude towards the advertisement, attitude towards the brand and purchase intention			
1 – 5	SC1 - SC5	Source Credibility	Strongly disagree (1), Disagree (2), Neither disagree nor agree (3), Agree (4), Strongly agree (5)
1 – 5	SL1 - SL5	Source Likeability	Strongly disagree (1), Disagree (2), Neither disagree nor agree (3), Agree (4), Strongly agree (5)
1 – 5	RM1 - RM5	Rational Message	Strongly disagree (1), Disagree (2), Neither disagree nor agree (3), Agree (4), Strongly agree (5)
1 – 5	EM1 - EM5	Emotional Message	Strongly disagree (1), Disagree (2), Neither disagree nor agree (3), Agree (4), Strongly agree (5)
1 – 5	ATA1 - ATA5	Attitude Towards the Advertisement	Strongly disagree (1), Disagree (2), Neither disagree nor agree (3), Agree (4), Strongly agree (5)
1 – 5	ATB1 - ATB5	Attitude Towards the Brand	Strongly disagree (1), Disagree (2), Neither disagree nor agree (3), Agree (4), Strongly agree (5)
1 – 5	PI1 - PI5	Purchase Intention	Strongly disagree (1), Disagree (2), Neither disagree nor agree (3), Agree (4), Strongly agree (5)

4.4.3. Tabulation of variables

After coding and cleaning the data, the researcher deemed it is necessary to organise the data into pre-determinable categories. The frequencies of the scaled responses for each item in the survey questionnaire are organised based on intended constructs. Table 4.3 reports on frequencies of the scaled responses for each construct in the measuring instrument. The total number of valid (N) for each item is captured in the reporting.

Table 4.3 Frequency table for the scaled response data (non-categorical)

Scale item	Strongly disagree	Disagree	Neither disagree nor agree	Agree	Strongly agree
	1	**2**	**3**	**4**	**5**
Construct 1: Source Credibility					
SC1	18	50	47	58	28
SC2	6	39	21	100	35
SC3	3	7	25	108	58
SC4	4	8	30	119	40
SC5	2	8	25	115	51
Construct 2: Source Likeability					
SL1	3	27	18	115	38

SL2	3	23	55	90	30
SL3	2	8	31	110	50
SL4	3	13	42	110	33
SL5	2	11	48	108	32
Construct 3: Rational Message					
RM1	**5**	12	29	105	50
RM2	3	9	23	112	54
RM3	3	29	67	66	36
RM4	2	10	29	104	56
RM5	1	9	33	94	64
Construct 4: Emotional Message					
EM1	7	25	71	63	35
EM2	3	14	49	89	46
EM3	2	14	41	104	40
EM4	2	19	59	78	43
EM5	4	14	52	75	56
Construct 5: Attitude Towards the Advertisement					
ATA1	2	31	18	104	46
ATA2	3	17	28	114	39
ATA3	3	10	50	94	44
ATA4	2	7	41	107	44
ATA5	2	15	31	96	57
Construct 6: Attitude Towards the Brand					
ATB1	3	10	27	96	65
ATB2	1	3	29	92	76
ATB3	1	5	35	94	66
ATB4	1	4	26	93	77
ATB5	4	6	28	81	82
Construct 7: Purchase Intention					
PI1	2	8	22	99	70
PI2	3	9	23	107	59
PI3	2	13	42	80	64
PI4	9	41	69	59	23
PI5	19	56	37	53	36

4.5. DEMOGRAPHIC AND OTHER CONTEXTUAL INFORMATION

This section summarises the study's sample in detail and provides contextual information about the respondents' fuel advertisement as well as fuel brand consumptions. The frequencies and

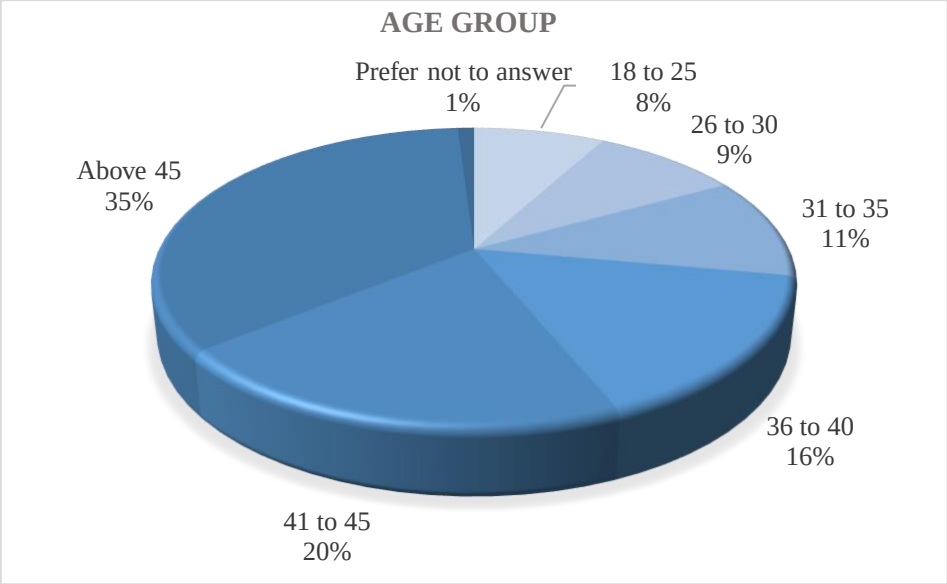
percentages recorded in this section relate to categorical data obtained from section A of the questionnaire. The sample description is provided in the following sub-sections.

4.5.1. Sample description

Of the 397 responses received, 201 returned questionnaires were usable, which yields a response rate of 51%. The demographic data of the main study is presented next.

The participants of this study were grouped into six age categories. The majority of respondents were above 45 years old of age (35%, n=70), followed by 41 to 45 years old category (20%, n=41), 36 to 40 years old category (16%, n=32), 31 to 35 years old category (11%, n=22), 26 to 30 years old category (9%, n=18) and 18 to 25 years old category (8%, n=16). There were 2 respondents who preferred not to disclose their age which make up 1% of the total sample. The sample's age distribution is illustrated in Figure 4.1.

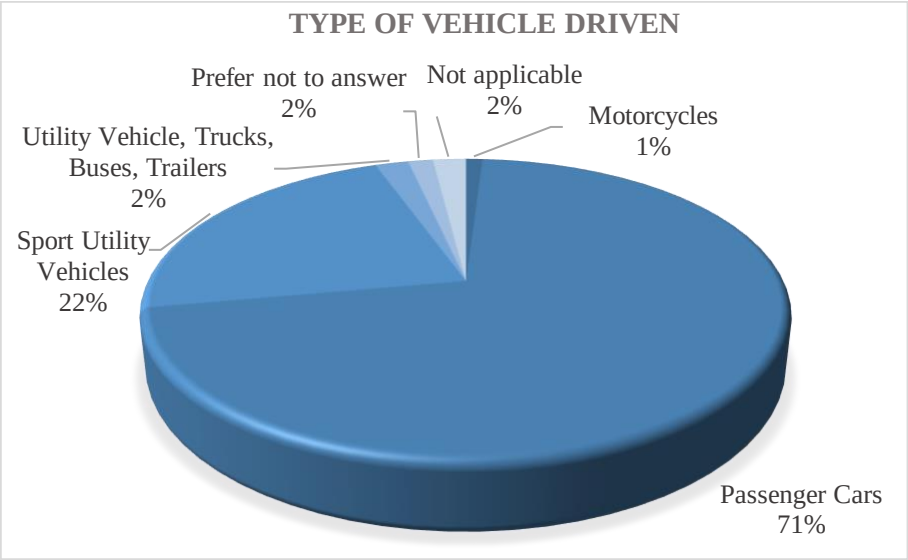
Figure 4.1 Respondents age group



The participants were also asked on the type of vehicle they use, where 71% (n=143) of them drive passenger cars. The sport utility vehicles form the second group of vehicle with most respondents (22%, n=45). The respondents who drive utility vehicles/trucks/buses/trailers make up 2% (n=4) of the sample, followed by motorcycles (1%, n=3), and 2% of respondents have chosen not to divulge the type of vehicle they drive (n=3). While another 2% (n=4) respondents answered "Not applicable", despite the fact that they do purchase fuels based on

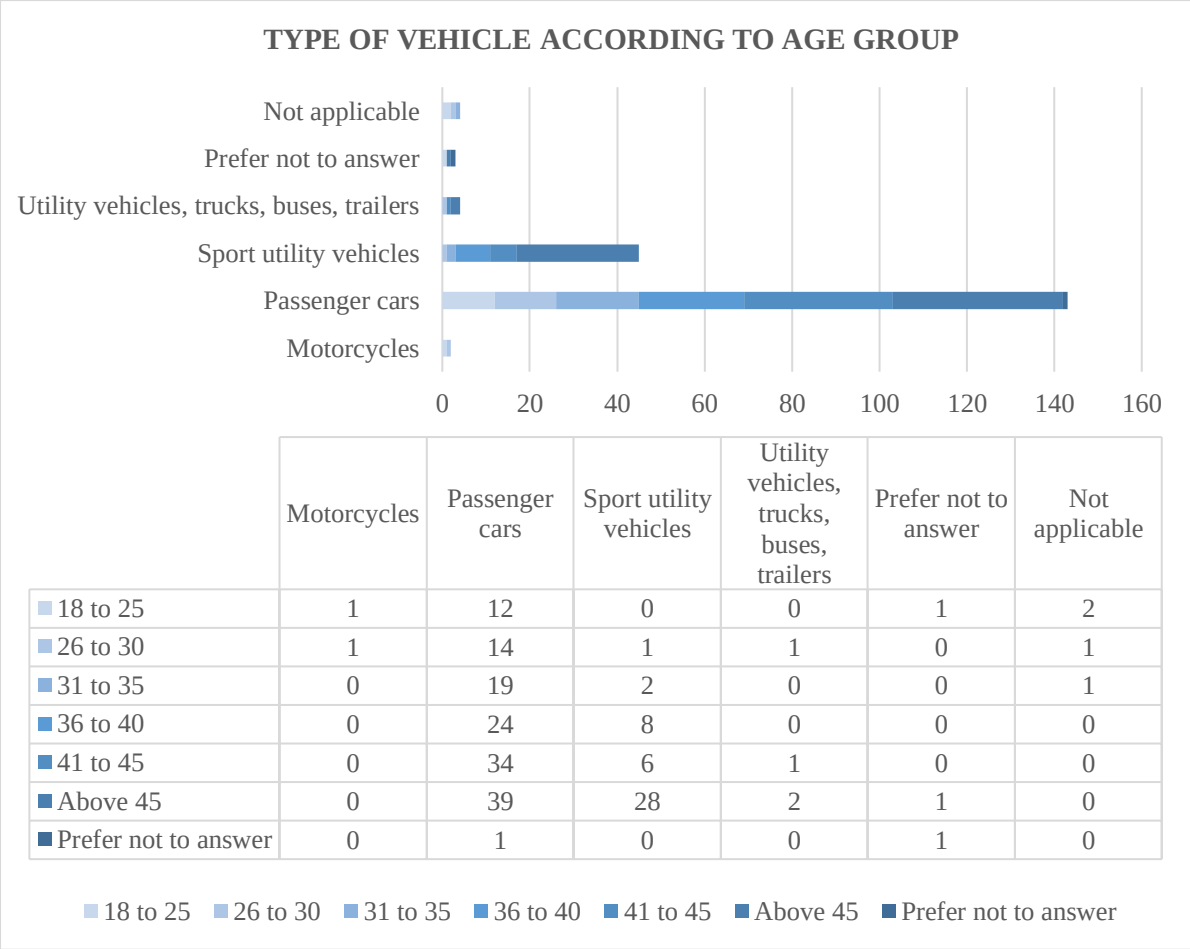
their response for the fuel brand they are currently using. The breakdown of participants based on their type of vehicle is exhibited in Figure 4.2.

Figure 4.2 Type of vehicle driven by respondents



A cross tabulation on these two sets of data provide insights of the type of vehicle use in accordance with age group category, as presented in Figure 4.3. The data showed that passenger cars are well represented by all the age groups, while motorcycles are mostly driven by respondents within age brackets of 18 to 30 years old. Respondents who drive sport utility vehicles are mostly above 45 years old.

Figure 4.3 Type of vehicle driven by respondents according to age group



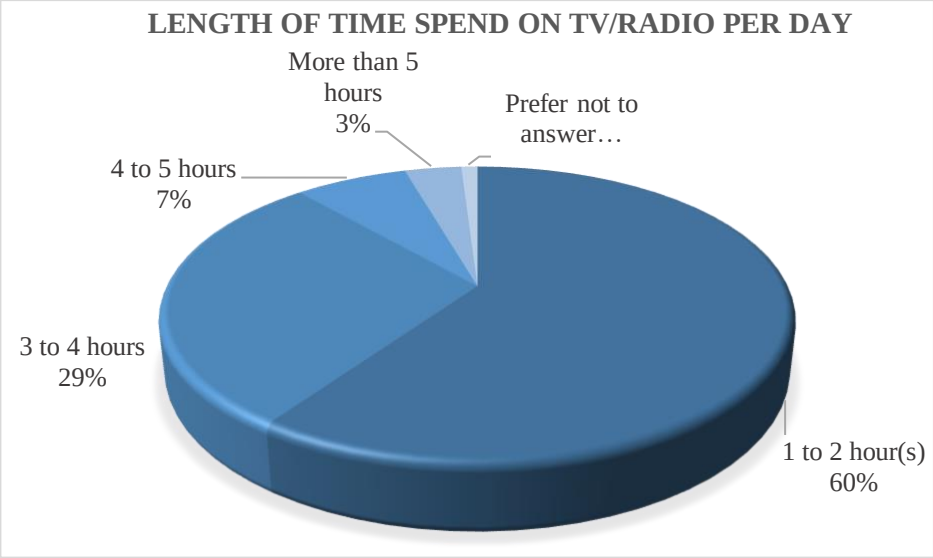
	Motorcycles	Passenger cars	Sport utility vehicles	Utility vehicles, trucks, buses, trailers	Prefer not to answer	Not applicable
18 to 25	1	12	0	0	1	2
26 to 30	1	14	1	1	0	1
31 to 35	0	19	2	0	0	1
36 to 40	0	24	8	0	0	0
41 to 45	0	34	6	1	0	0
Above 45	0	39	28	2	1	0
Prefer not to answer	0	1	0	0	1	0

18 to 25 26 to 30 31 to 35 36 to 40 41 to 45 Above 45 Prefer not to answer

4.5.2. Channel utilisation / time spend

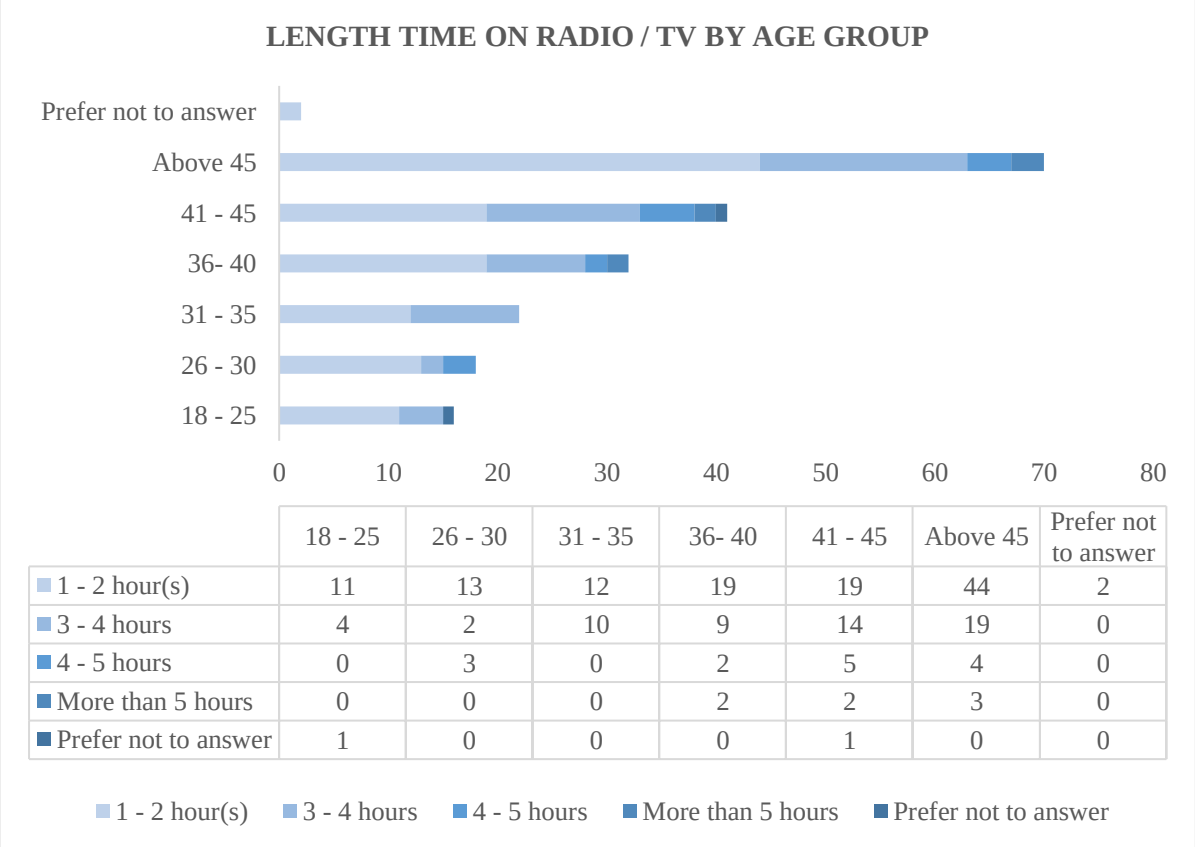
Figure 4.4 shows that 60% of the respondents (n=120) spend at least 1 to 2 hours on traditional channels like television and radio in a day, 29% of respondents (n=58) spend between 3 to 4 hours on these traditional channel in day, followed by 4 to 5 hours (7%, n=14) and more than 5 hours (4%, n=7). Two respondents (1%) prefer not to share the time they spend on traditional channels in a day.

Figure 4.4 Time spend on traditional channels e.g. television / radio per day



A further analysis indicates that all age group spend between 1 to 4 hours in a day on television or radio. Respondents in the younger age group tend to spend less time on traditional channels compared to those above 35 years old, as exhibited in Figure 4.5.

Figure 4.5 Length of time spend on traditional channels by age group



	18 - 25	26 - 30	31 - 35	36- 40	41 - 45	Above 45	Prefer not to answer
1 - 2 hour(s)	11	13	12	19	19	44	2
3 - 4 hours	4	2	10	9	14	19	0
4 - 5 hours	0	3	0	2	5	4	0
More than 5 hours	0	0	0	2	2	3	0
Prefer not to answer	1	0	0	0	1	0	0

Figure 4.6 reported that 41% of the respondents (n=83) spend 1 to 2 hours in a day on online channels, including social media. While this number is lower, it also showed that the majority of respondents tend to spend more time on online channels, evident by the higher number for the remaining categories, compared to the same in traditional channels. 34% of respondents (n=69) spend between 3 to 4 hours in day on online channels, followed by 11% respondents (n=22) spending 4 to 5 hours and 13% (n=26) for more than 5 hours respectively. One respondent (1%) preferred not to share this information.

Figure 4.6 Time spend on online channels and social media per day

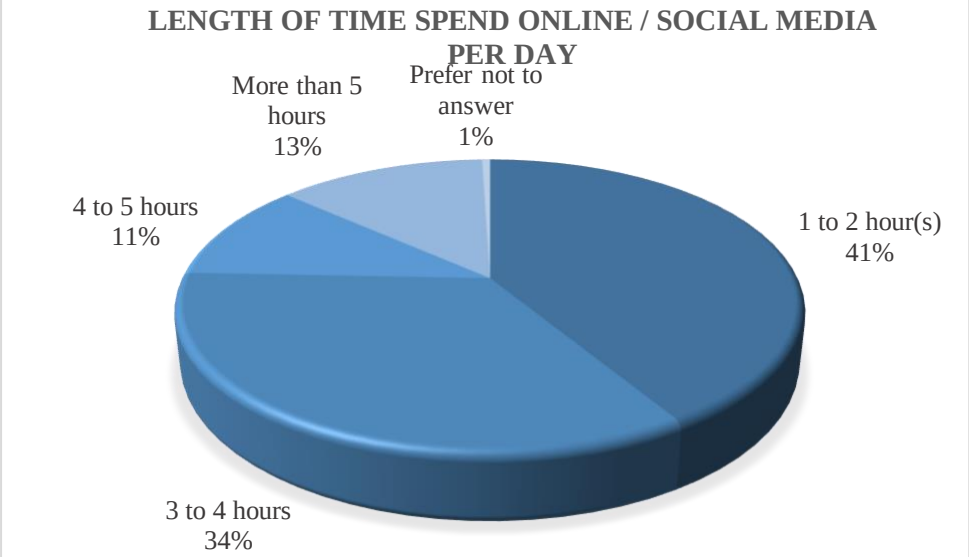
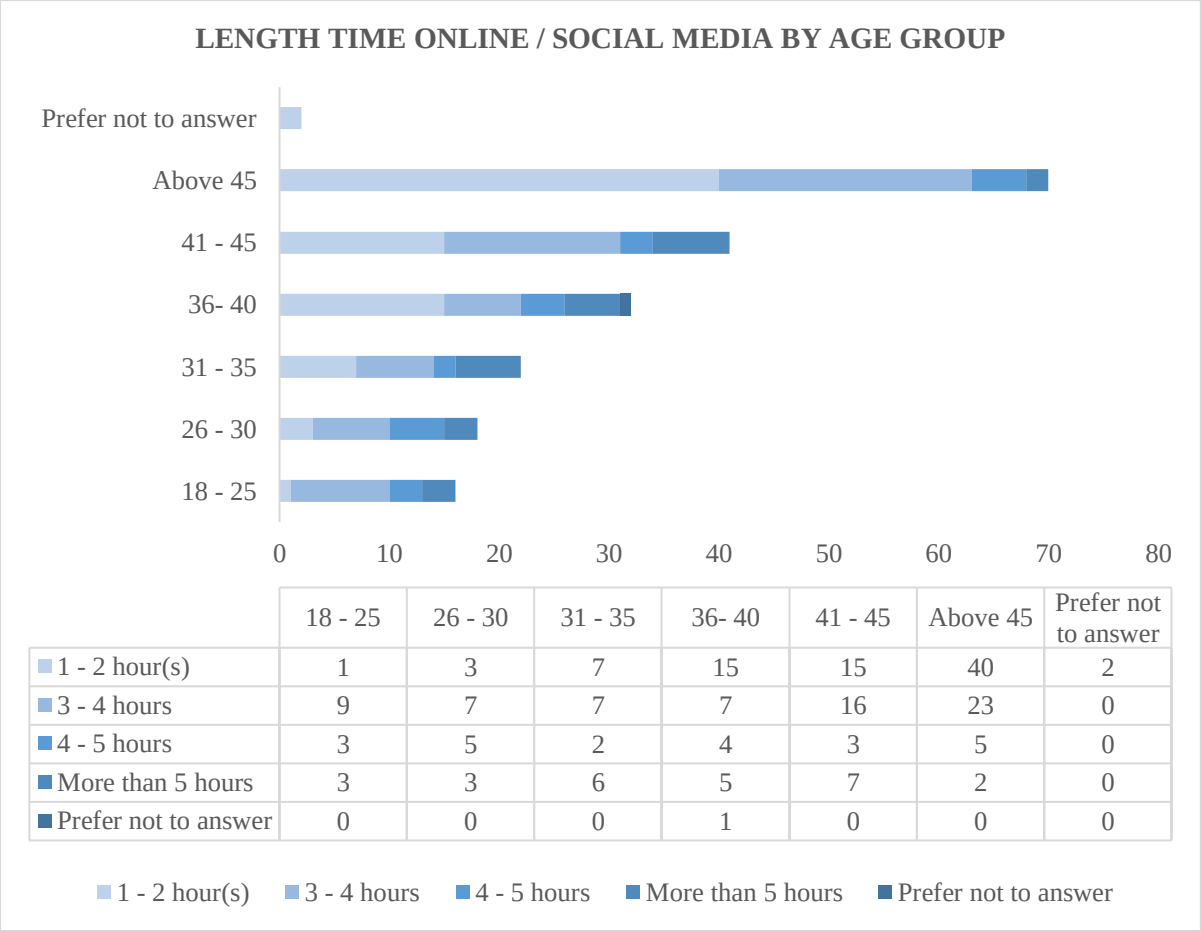


Figure 4.7 illustrates how respondents embrace online channels with representation from all age and time categories. The responses are more distributed compared to the results from traditional channels.

Figure 4.7 Length of time spend on online channels by age group



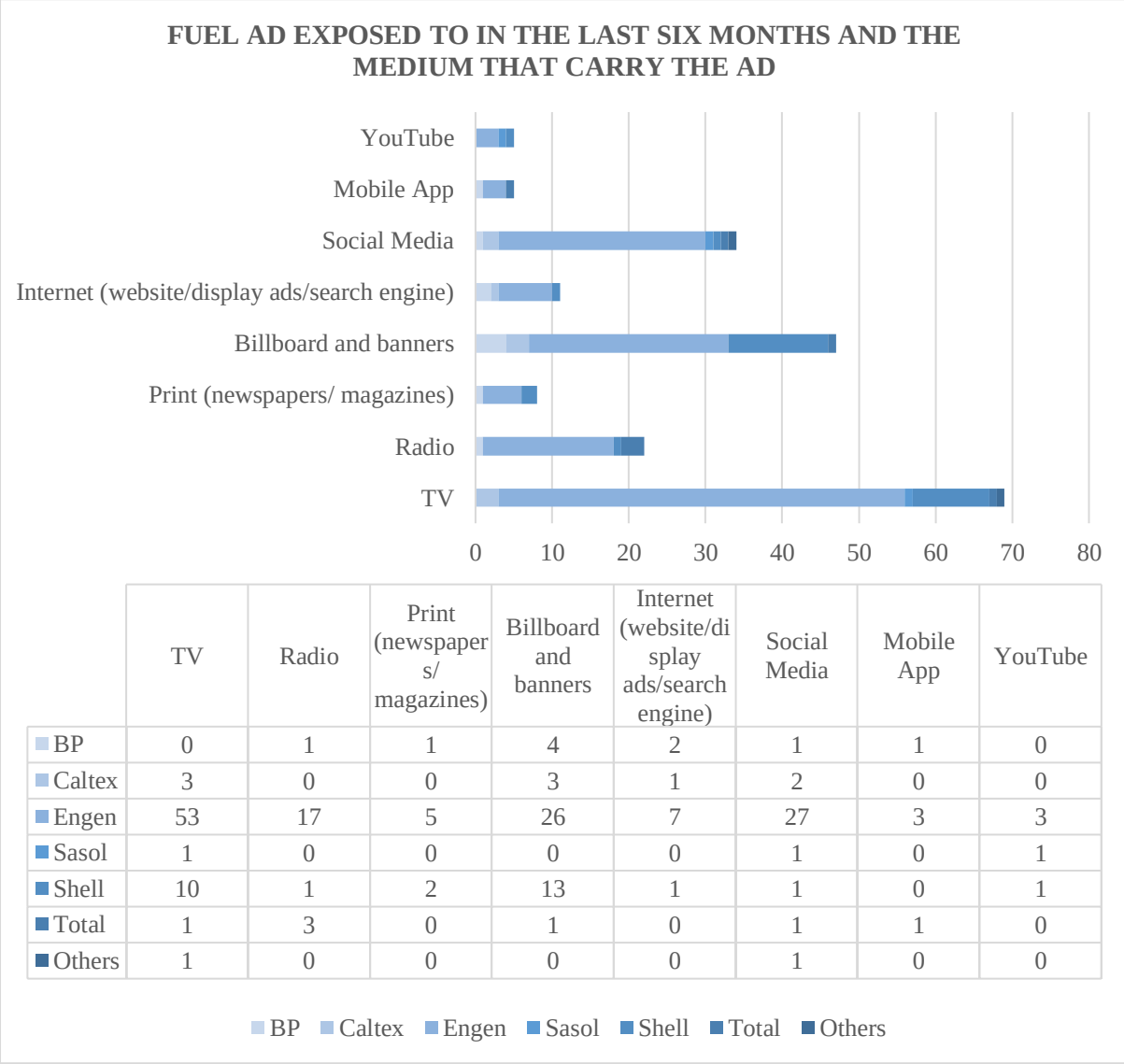
	18 - 25	26 - 30	31 - 35	36- 40	41 - 45	Above 45	Prefer not to answer
1 - 2 hour(s)	1	3	7	15	15	40	2
3 - 4 hours	9	7	7	7	16	23	0
4 - 5 hours	3	5	2	4	3	5	0
More than 5 hours	3	3	6	5	7	2	0
Prefer not to answer	0	0	0	1	0	0	0

4.5.3. Fuel advertisement exposed to and the medium that carry the fuel ad

Figure 4.8 is based on the cross-tabulation of data for questions A5 (the fuel brand advert respondents have been exposed to in the last six months) and A6 (the medium that carry the fuel ad) to provide more meaningful insights. The results showed that majority of the respondents were exposed to fuel advert by Engen brand (70%, n=141). The Engen fuel advert was widely viewed on television (38%), followed by social media (19%), billboards and banners (18%), radio (12%), internet (5%), print (4%), mobile application (2%) and YouTube (2%). The second highest fuel brand advert exposed to is the Shell brand (14%, n=29). The Shell fuel advert on billboards and banners received the highest response (45%), followed by television (34%), print (7%), internet (3%), social media (3%), radio (3%) and YouTube (3%). BP was the third highest fuel brand respondents were exposed to in the last six months (5%, n=10). The BP fuel ad was noticed on billboards and banners (40%), internet (20%), radio (10%), print (10%), social media (10%) and mobile application (10%). The fourth highest fuel

advert was by the Caltex brand (5%, n=9). The Caltex fuel ad was seen on television (33%), billboards and banners (33%), social media (22%) and internet (11%). Total fuel ad was the fifth highest observed (3%, n=7) with radio being the highest medium (43%), followed by television (14%), billboards and banners (14%), social media (14%) and mobile application (14%). Sasol fuel ad was in the sixth spot with 1% (n=3) where each respondent viewed it on television, social media and YouTube respectively. Lastly, the fuel ads from Others category received two responses, which make up 1% of total sample. These fuel ads were observed on television (50%) and social media (50%).

Figure 4.8 Fuel ad exposed to in the last 6 months and the medium that carry the ad

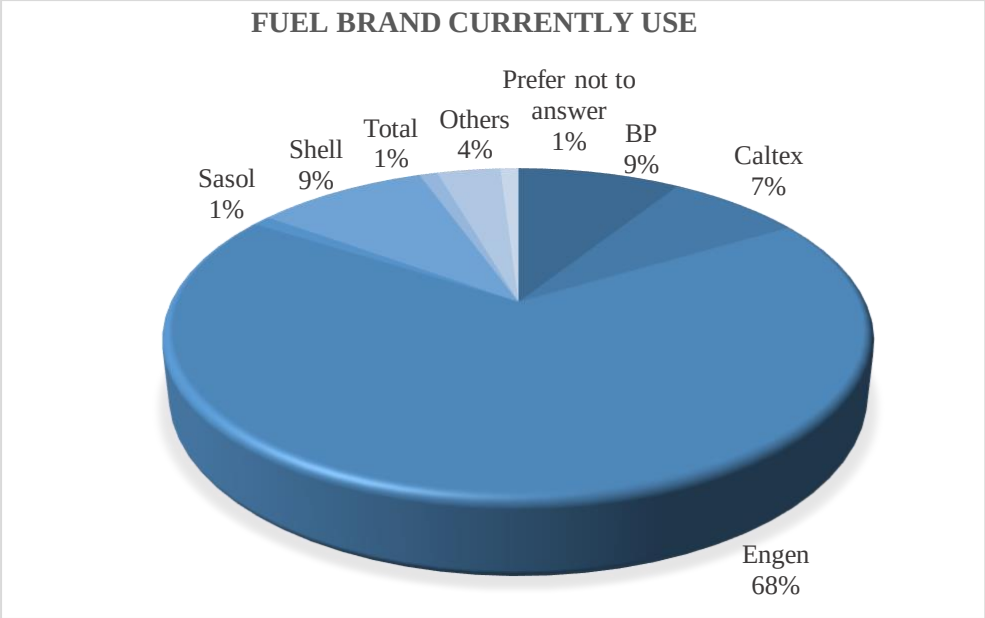


	TV	Radio	Print (newspapers/ magazines)	Billboard and banners	Internet (website/display ads/search engine)	Social Media	Mobile App	YouTube
BP	0	1	1	4	2	1	1	0
Caltex	3	0	0	3	1	2	0	0
Engen	53	17	5	26	7	27	3	3
Sasol	1	0	0	0	0	1	0	1
Shell	10	1	2	13	1	1	0	1
Total	1	3	0	1	0	1	1	0
Others	1	0	0	0	0	1	0	0

4.5.4. Fuel brand choice

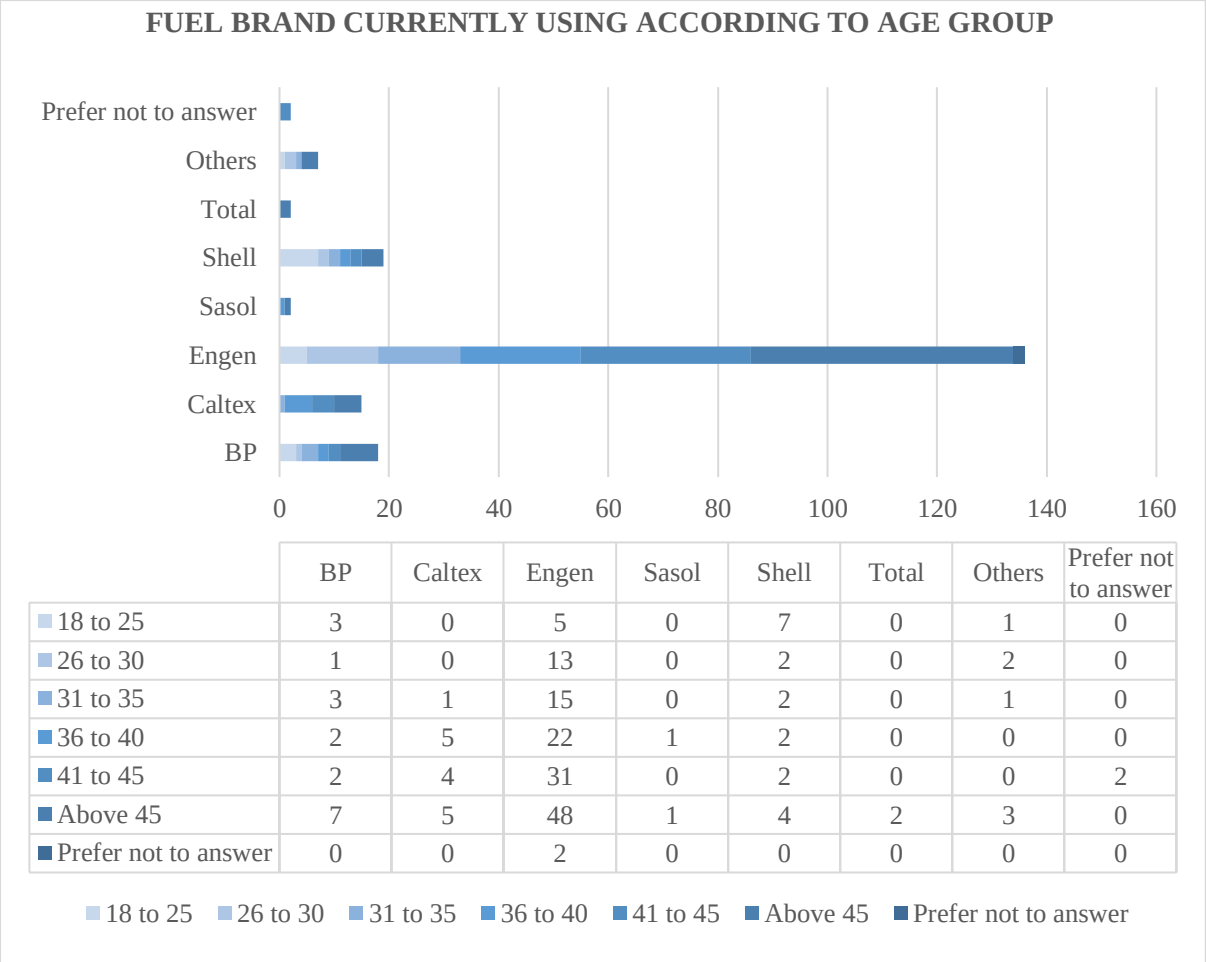
The majority of respondents use Engen brand for their fuel (68%, n=136), followed by Shell (9%, n=19), BP (9%, n=18), Caltex (7%, n=15), Others category (4%, n=7), Sasol (1%, n=2) and Total (1%, n=2). 1% of respondents (n=2) prefer not to share the fuel brand they are currently using. This data is illustrated in Figure 4.9.

Figure 4.9 Fuel brand respondents currently using



Out of the 68% of Engen users, 73% (n=101) are 36 years old and above. Most of the respondents who opted for Shell brand are from 18 to 25 years old age group. In contrast, respondents who use BP brand are mostly from above 45 years old category. The breakdown of fuel brand choice by age group is presented in Figure 4.10.

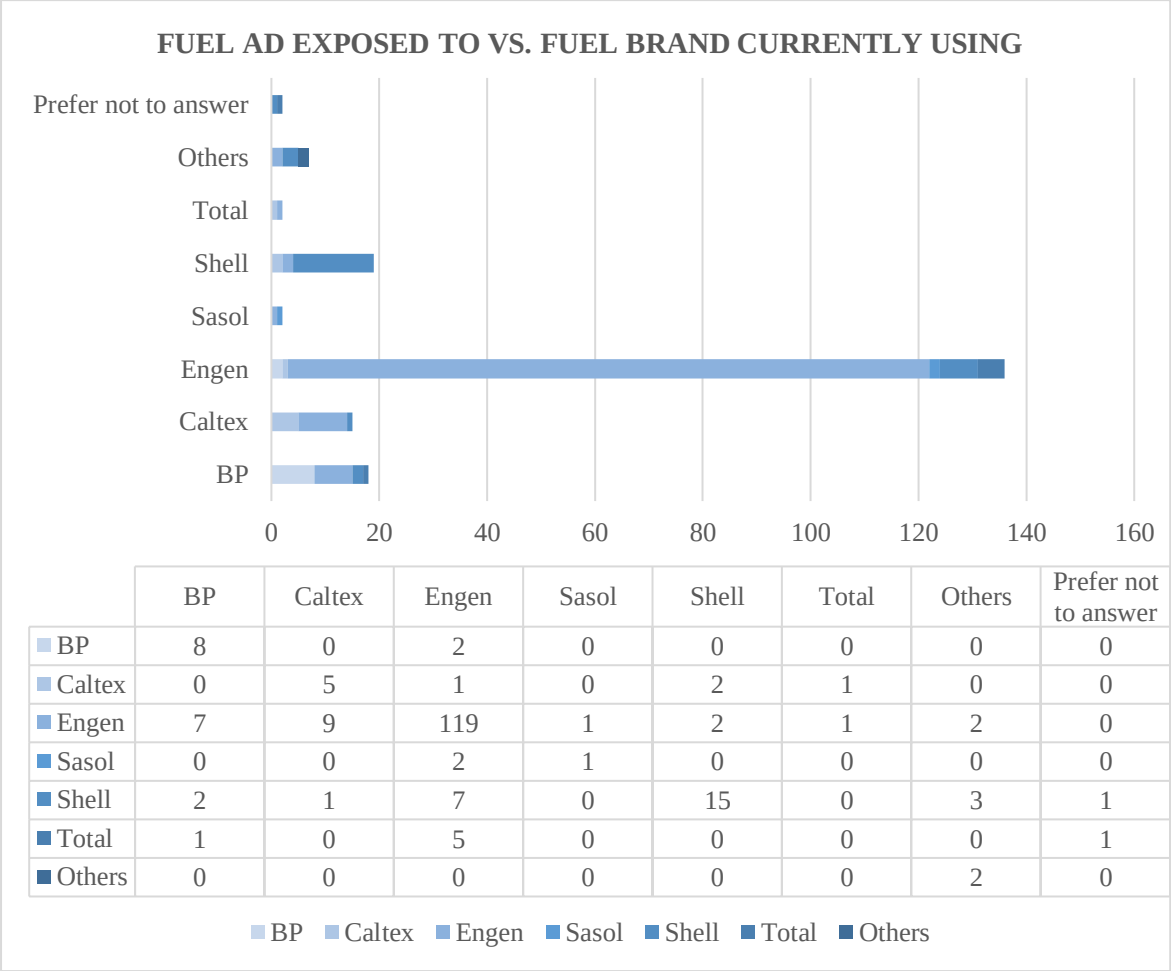
Figure 4.10 Fuel brand choice by age group



	BP	Caltex	Engen	Sasol	Shell	Total	Others	Prefer not to answer
18 to 25	3	0	5	0	7	0	1	0
26 to 30	1	0	13	0	2	0	2	0
31 to 35	3	1	15	0	2	0	1	0
36 to 40	2	5	22	1	2	0	0	0
41 to 45	2	4	31	0	2	0	0	2
Above 45	7	5	48	1	4	2	3	0
Prefer not to answer	0	0	2	0	0	0	0	0

While the Engen fuel advert received the highest response rate in terms of exposure, only 119 out of the 141 respondents who recalled the ad are actually using the brand for their fuel. The remaining 17 respondents who use Engen as their fuel brand recalled other fuel adverts. Only 15 out of 29 respondents who recalled Shell fuel ad, are actually using the brand. BP has 8 out of 10 respondents who viewed its fuel ad are using the brand. 5 out of 9 respondents who recalled Caltex fuel ad are users of this fuel brand. While 7 respondents remembered Total fuel ad, none of these respondents are actually using the brand. Only 1 out of 3 respondents who recalled Sasol fuel ad is using the brand. 2 out of 7 respondents who recollected fuel ad by other brands are also using fuel from other brands. These outcomes are represented in Figure 4.11 below.

Figure 4.11 Fuel ad exposed to versus fuel brand currently using



	BP	Caltex	Engen	Sasol	Shell	Total	Others	Prefer not to answer
BP	8	0	2	0	0	0	0	0
Caltex	0	5	1	0	2	1	0	0
Engen	7	9	119	1	2	1	2	0
Sasol	0	0	2	1	0	0	0	0
Shell	2	1	7	0	15	0	3	1
Total	1	0	5	0	0	0	0	1
Others	0	0	0	0	0	0	2	0

4.6. DESCRIPTIVE STATISTICAL ANALYSIS

The descriptive statistics results shown in Table 4.4 exhibit summary measures of the mean, standard deviation, skewness and kurtosis that reflect the central tendency, variability and distribution of the scaled responses in the dataset. The scaled responses were measured on a five-point Likert scale that ranged from 1 = Strongly disagree to 5 = Strongly agree.

Table 4.4 Descriptive statistical analysis results

Research Construct		Descriptive statistics						
		Mean value	Scale mean	SD value	Scale SD	Scale Skewness	Scale Kurtosis	Corrected item-total correlation
SC	SC1	3.14	3.7423	1.200	0.75515	-0.738	1.254	0.449
	SC2	3.59		1.078				0.699
	SC3	4.05		0.829				0.748
	SC4	3.91		0.826				0.760
	SC5	4.02		0.793				0.760
SL	SL1	3.79	3.7871	0.953	0.68471	-0.739	1.460	0.605
	SL2	3.60		0.928				0.714
	SL3	3.99		0.809				0.718
	SL4	3.78		0.850				0.656
	SL5	3.78		0.814				0.571
RM	RM1	3.91	3.8995	0.923	0.62036	-0.621	1.908	0.435
	RM2	4.02		0.836				0.507
	RM3	3.51		0.996				0.451
	RM4	4.00		0.846				0.572
	RM5	4.05		0.841				0.536
EM	EM1	3.47	3.7234	1.030	0.77891	-0.511	0.787	0.640
	EM2	3.80		0.922				0.687
	EM3	3.83		0.863				0.834
	EM4	3.70		0.944				0.781
	EM5	3.82		0.984				0.632
ATA	ATA1	3.80	3.8667	0.995	0.75956	-0.689	0.959	0.734
	ATA2	3.84		0.886				0.787
	ATA3	3.83		0.880				0.758
	ATA4	3.92		0.805				0.819
	ATA5	3.95		0.910				0.692
ATB	ATB1	4.04	4.1343	0.890	0.74731	-0.778	0.719	0.812
	ATB2	4.19		0.771				0.844
	ATB3	4.09		0.801				0.844
	ATB4	4.20		0.775				0.852
	ATB5	4.15		0.910				0.861
PI	PI1	4.13	3.7015	0.833	0.58621	-0.213	0.758	0.578
	PI2	4.04		0.850				0.606
	PI3	3.95		0.937				0.488
	PI4	3.23		1.043				0.261
	PI5	3.15		1.273				-0.142

Note: SC=Source Credibility; SL=Source Likeability; RM=Rational Message; EM=Emotional Message, ATA=Attitude Towards the Advertisement, ATB=Attitude Towards the Brand, PI=Purchase Intention, SD=Standard Deviation

Theoretically, higher means are associated with a greater degree of agreement. All the seven constructs reported scale mean values above the mid-point (3.50). The highest reported scale mean values were computed along attitude towards the brand (4.1343), followed by rational message (3.8995), attitude towards the advertisement (3.8667), source likeability (3.7871), source credibility (3.7423), emotional message (3.7234) and purchase intention (3.7015). These results proved that both source and message in fuel ads influence consumers' attitude towards the advertisement and advertised brand. In addition, rational message received the highest response or pull factor among all the controllable elements. On the whole, the consumers seemed to have a positive attitude towards the fuel advert and fuel brand, affecting positive behaviour towards intention to purchase.

Standard deviation was used to measure the spread of data from the mean. The highest standard deviation manifested on emotional message (0.77891) indicate a greater data spread around the arithmetic mean for that construct. The lowest standard deviation recorded on purchase intention (0.58621) revealed data points tend to be closely clustered around the arithmetic mean.

The dataset for source credibility, source likeability, rational message, emotional message, advert attitude, brand attitude, as well as purchase intention, appeared to be negatively and moderately skewed. In addition, the kurtosis values indicate that the dataset was platykurtic, with shorter and thinner tails than the normal distribution.

The corrected item-total correlation value was used to establish whether or not an item can be considered logically contributory in an overall scale. If an item yields corrected item-total correlation below 0.5 (Francis & White, 2002; Kim & Stoel, 2004), the overall internal consistency of the scale is weakened. As such, six items were excluded due to the low corrected item-total correlations; SC1 (0.449), RM1 (0.435), RM3 (0.451), PI3 (0.488), PI4 (0.261) and PI5 (-0.142). The remaining 29 items were subsequently subjected to reliability and validity analysis, and deliberated in the next section.

4.7. RELIABILITY AND VALIDITY ANALYSIS

The statistical measures of accuracy tests shown in Table 4.5 specify the different measures that were used to assess the reliability and validity of the constructs for the study.

Table 4.5 Accuracy statistics analysis for the model

Research Construct		Cronbach's Test		Factor Loading	CR	AVE
		Item-Total	α Value			
SC	SC2	0.699	0.869	0.708	0.900	0.700
	SC3	0.748		0.878		
	SC4	0.760		0.867		
	SC5	0.760		0.875		
SL	SL1	0.605	0.845	0.669	0.850	0.530
	SL2	0.714		0.768		
	SL3	0.718		0.807		
	SL4	0.656		0.722		
	SL5	0.571		0.656		
RM	RM4	0.572	0.740	0.737	0.770	0.620
	RM5	0.536		0.839		
EM	EM1	0.640	0.882	0.691	0.890	0.610
	EM2	0.687		0.762		
	EM3	0.834		0.916		
	EM4	0.781		0.832		
	EM5	0.632		0.685		
ATA	ATA1	0.734	0.904	0.786	0.900	0.660
	ATA2	0.787		0.845		
	ATA3	0.758		0.810		
	ATA4	0.819		0.878		
	ATA5	0.692		0.722		
ATB	ATB1	0.812	0.942	0.849	0.940	0.770
	ATB2	0.844		0.875		
	ATB3	0.844		0.872		
	ATB4	0.852		0.884		
	ATB5	0.861		0.895		
PI	PI1	0.578	0.618	1.000	0.930	0.870
	PI2	0.606		0.860		

Note: SC=Source Credibility; SL=Source Likeability; RM=Rational Message; EM=Emotional Message, ATA=Attitude Towards the Advertisement, ATB=Attitude Towards the Brand, PI=Purchase Intention, CR= Composite Reliablity, AVE= Average Variance Extracted

4.7.1. Reliability analysis

Construct reliability of the research measures was examined by the computation of three different methods, namely Cronbach's alpha reliability test (Cronbach α), the composite reliability test (CR) and the average value extracted (AVE) test.

4.7.1.1 Cronbach's coefficient alpha test

The Cronbach's coefficient alpha was used to assess the internal consistency of each construct employed in the study. According to Malhotra (2010), the reliability of a measure is supported if Cronbach's alpha is 0.6 or higher. The results provided in Table 4.5 range from the lowest Cronbach's alpha (0.618) to the highest (0.942). The Cronbach's alpha scores indicated that each construct demonstrated acceptable to excellent internal reliability (Ebrahimzadeh et al., 2015; Hume et al., 2006; McMinn et al., 2009; Sim & Wright, 2000). Since Cronbach's alpha values of the constructs exceeded the threshold level 0.60, this shows that all the variables were reasonably reliable.

4.7.1.2 Composite reliability (CR)

The results of composite reliability are shown in Table 4.5. The results yielded CR indexes between 0.770 and 0.940. The exhibited CR level exceeded the estimated criteria of greater than 0.70, which is recommended as adequate for internal consistency of the constructs (Chin, 1998; Nunnally, 1978), thus finding satisfactory support for the scale composite reliability.

4.7.1.3 Average variance extracted (AVE)

The AVE estimates in Table 4.5 reflected that the overall amount of variance in the indicators was accounted for by the latent construct (Neuman, 2006). All AVE values were above 0.4, thus acceptable (Fraering & Minor, 2006). AVE values indicated indexes between 0.530 and 0.870. These results provided evidence for acceptable levels of research scale reliability.

4.7.2. Validity analysis

The validity of the latent constructs, including corresponding measurements, were examined using content validity, along with construct validity (convergent plus discriminant), and are discussed in this section.

4.7.2.1 Content validity

Burns and Grove (2010:335) established that content validity could be obtained from three sources, namely, literature review, experts in the field and representatives of the population. The content of the dimensions related to the constructs (source credibility, source likeability, rational message, emotional message, advert attitude, brand attitude and purchase intention) is retrieved from the current literature under Chapter 2, thus, the content validity is achieved. The constructs were also pre- and statistically pilot tested, as discussed in Section 3.6.4 and 4.2 respectively for reaffirmation of their validity.

4.7.2.2 Convergent validity

Item loadings for each corresponding research construct were above the recommended value of 0.5 (Aldalaigan & Buttle, 2002). As shown in Table 4.5, the item loadings ranged between 0.656 and 1.000, which means that the instruments loaded well on their respective constructs. RM2 did not meet the recommended threshold and was removed from its construct. The results also indicate an acceptable individual item convergent validity, as more than 50% of each item's variance was shared with a respective construct. The results imply that all items converged well on the construct they were supposed to measure and hence, confirmed the existence of convergent validity.

4.7.2.3 Discriminant validity

One of the methods used to check the discriminant validity of the research constructs is the evaluation of whether the correlations among latent constructs were less than 1.0. As indicated in Table 4.6, the inter-correlation values for all paired latent variables are less than 1.0, therefore indicating the existence of discriminant validity. In addition, the results show weak to moderate relationships for all paired latent variables. Respectively, the variables did not present any

problems of multicollinearity, such as a high correlation value greater than 0.89 (Brown & Cudeck, 1993). All correlations were below 0.8 and were therefore in conformity with the recommended threshold, hence indicating discriminant validity (Fraering & Minor, 2006). The study also used AVE as an alternative method to check discriminant validity related to the correlation matrix (Nunnally & Bernstein, 1994).

Table 4.6 Inter-construct correlation matrix

	ATA	ATB	PI	SC	SL	RM	EM
ATA	1						
ATB	.637**	1					
PI	.348**	.480**	1				
SC	.370**	.340**	.302**	1			
SL	.392**	.352**	.323**	.561**	1		
RM	.364**	.360**	.387**	.504**	.515**	1	
EM	.370**	.301**	.276**	.332**	.566**	.551**	1

Note: SC=Source Credibility; SL=Source Likeability; RM=Rational Message; EM=Emotional Message, ATA=Attitude Towards the Advert, ATB=Attitude Towards the Brand, PI=Purchase Intention
* Scores: *1= Srongly Disagree; 2= Disagree; 3=Neutral; 4=Agree; 5 Strongly Agree*
Significance level <0.05; ** significance level <0.01; *** significance level <0.001

The inter-construct correlations ranged between -0.431 (showing signs of discriminant validity) and 0.637 (indicating a fair level of convergent validity). Based on the inter-construct correlation matrix, discriminant validity existed as a result of highly dissimilar constructs.

4.8. STRUCTURAL EQUATION MODELLING

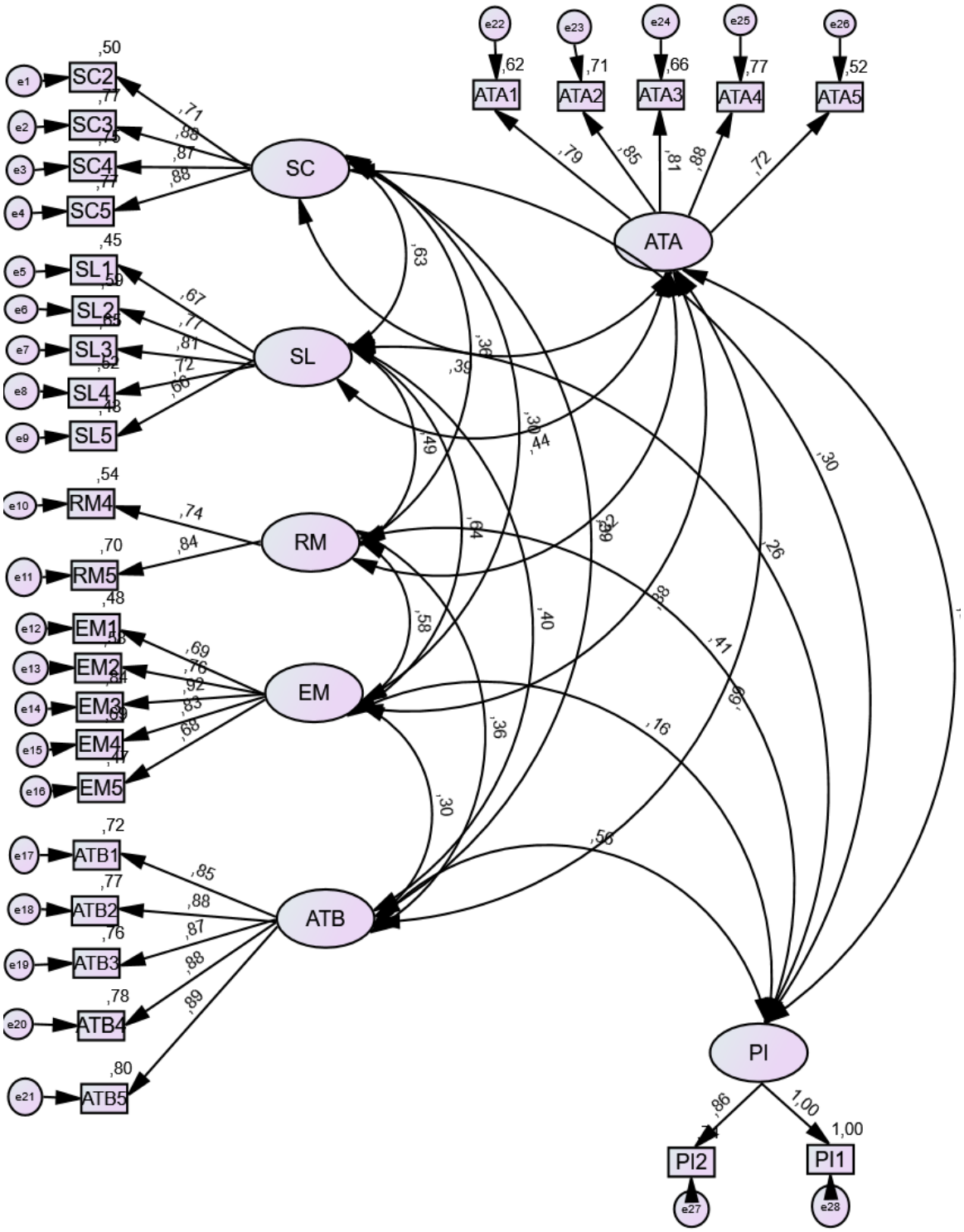
This section outlines the process undertaken to conduct structural equation modelling.

4.8.1. Measurement model / Confirmatory Factor Analysis (CFA) specification

Figure 4.12 is a diagrammatic representation of the CFA model. Latent variables are signified by the circular or oval shape, while observed variables are represented by the rectangular shapes. Adjacent to the observed variables are measurement errors, which are represented by circular shapes as well. The bi-directional arrows connote the relationship between latent variables. This CFA model serves two purposes; firstly, to determine whether a relationship

between the observed variables and their underlying latent (unobserved) constructs exist and second, to provide evidence that all items are properly aligned with the correct latent variables within the construct being measured.

Figure 4.12 Overall measurement model / CFA model



4.8.2. Measurement model identification

The CFA model in this study is an over-identified model as it shows positive degrees of freedom based on output drawn from the AMOS. There were 406 distinct sample moments and 77 parameters to be estimated, which leaves 329 degrees of freedom (df), and a chi-square value of 461.001 with a probability level equal to p=0.000.

4.8.3. Measurement model estimation

This study adopted the maximum likelihood estimates (MLE) technique to estimate the parameters. The measurement model was evaluated for problematic estimates such as negative error variances and standardised factor loading above 1.0 or below -1.0 (Hair et al., 2010:706). There were no negative error variances or factor loadings above 1.0 or below -1.0 observed. In addition, Table 4.5 shows that factor loading on each item of the seven constructs were all above the recommended 0.5 level. Overall, the minimum iteration was achieved, thereby providing assurance that the estimation process yielded an admissible solution and eliminated any concern about multicollinearity effects.

4.8.4. Fit indices for the measurement model

The measurement model was assessed for model fit using the indices explained under Section 3.8.4 of this study, namely the chi-square, the comparative fit index (CFI), the Tucker-Lewis index (TLI), the incremental fit index (IFI), the standardised root mean residual (SRMR) and the root mean square of approximation (RMSEA). Table 4.7 summarises the measurement model fit indices that were computed for this study, including their recommended thresholds.

Table 4.7 Measurement model fit indices

Measure	Recommended level	Default model value	Decision
Chi-square **Chi square/Degree of Freedom (CMIN/DF)**	Low values $2.0 \leq \chi 2/df \leq 5.0$ is tolerable yet values less than 3.0 are ideal	461.001 1.401	Accepted
Comparative fit index (CFI)	≥0.90	0.966	Accepted

Tucker-Lewis index (TLI)	≥0.90	0.961	Accepted
Increment fit index (IFI)	≥0.90	0.966	Accepted
Standardised root mean residual (SRMR)	≤0.05	0.039	Accepted
Root mean square error of approximation (RMSEA)	≤0.08	0.045	Accepted

The results in Table 4.7 show acceptable goodness-of-fit of the model as mentioned in Section 3.8.4 of Chapter 3. The chi square value of 461.001 with 329 degree of freedom indicates acceptable model fit. The other fit indices, namely CFI=0.966, TLI=0.961, IFI=0.966, SRMR=0.039 and RMSEA=0.045, demonstrated a satisfactory fit between the measurement model and the data. All these measures confirm a robust and acceptable model fit (Schreiber et al., 2006:330).

Since the acceptable Confirmatory Factor Analysis measurement model fit was secured, the study proceeded to the next stages of the analysis of the SEM model fit and the structural model path analysis.

4.8.5. SEM model fit analysis

The measurement of model fit of this study was done using the following indices; chi-square value over degree of freedom (CMIN/DF), the comparative fit index (CFI), the Tucker-Lewis index (TLI), the incremental fit index (IFI) and the root mean square of approximation (RMSEA) as specified in Section 3.8.4 of Chapter 3. Table 4.8 reports the structural equation model fit results.

Table 4.8 SEM model fit indices

Fit Indices	Acceptable threshold	Study test results	Decision
Chi-square/Degree of freedom (CMIN/DF)	≤3.0	2.048	Accepted
Comparative fit index (CFI)	≥0.90	0.908	Accepted
Tucker-Lewis index (TLI)	≥0.90	0.897	Accepted
Increment fit index (IFI)	≥0.90	0.909	Accepted
Root mean square error of approximation (RMSEA)	≤0.08	0.072	Accepted

Despite the slightly lower TLI value of 0.897, this model is considered a good fit as the value of the chi-square test (2.048 (df=339), p<0.000) is ideal, and a combination of at least one incremental fit index (CFI=0.908 or IFI=0.909) and one badness of fit index (RMSEA=0.072) met the predetermined criteria (Fan et al., 2016; Schermelleh-Engel et al., 2003). Therefore, it can be concluded that the data confirms and fits acceptability of the model.

4.8.6. The structural model path analysis

The structural model path analysis involves the estimation of presumed causal relations among observed variables (Garson 2008:2). In SEM, relationships between variables are referred to as path coefficients and are depicted by single-headed arrows. The path diagram for the model structure is reflected in Figure 4.13. Much like the CFA model, the circle or oval shapes represent the latent variables while measurement items are represented by rectangles. Adjacent to measurement items in circular shapes are measurement errors and the unidirectional arrows between latent variables are used to convey the causal relations.

Figure 4.13 SEM path model structure

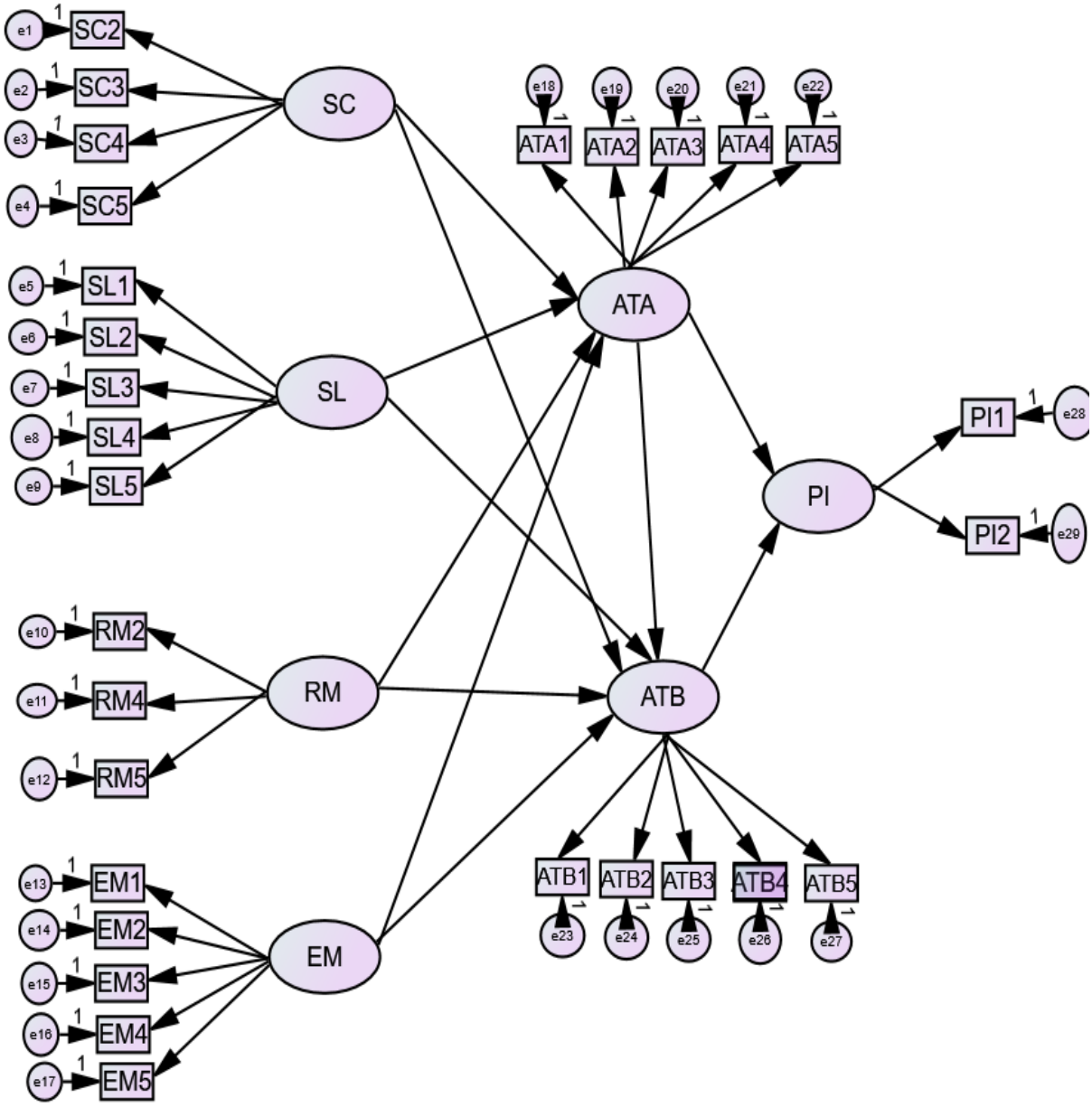


Table 4.9 Results of structural equation modelling analysis

Path/ proposed hypothesis relationship	Hypothesis	Path coefficient estimate	P Value	Results
ATA <---SC	H1	0.240	0.002	Positive and significant
ATB <---SC	H2	0.116	0.066	Positive and significant
ATA <---SL	H3	0.197	0.012	Positive and significant
ATB <---SL	H4	0.043	0.502	Positive and insignificant
ATA <---RM	H5	0.064	0.378	Positive and insignificant
ATB <---RM	H6	0.154	0.012	Positive and significant
ATA <---EM	H7	0.192	0.011	Positive and significant
ATB <---EM	H8	-0.053	0.394	Negative and insignificant
ATB <--ATA	H9	0.603	0.001***	Positive and significant
PI <--ATA	H10	-0.079	0.376	Negative and insignificant
PI <--ATB	H11	0.610	0.001***	Positive and significant

Note: SC=Source Credibility; SL=Source Likeability; RM=Rational Message; EM=Emotional Message, ATA=Attitude Towards the Advertisement, ATB=Attitude Towards the Brand, PI=Purchase Intention

* Significance level <0.05; ** significance level <0.01; *** significance level <0.001

4.8.7. Hypotheses testing

This section provides results of the preliminary formulated hypotheses developed out of the research hypotheses and objectives as specified in Chapter 1. The study's hypotheses were tested in order to evaluate the relationships between latent variables. Table 4.9 represents the results elicited following the hypotheses test. They are discussed hereafter.

4.8.7.1 Discussion of hypothesis 1

With reference to the first hypothesis (H1), the study hypothesised that source credibility has a positive and a significant impact on attitude towards the advertisement. The path coefficient value for hypothesis 1 is 0.240, which is an indication of a strong association and relationship between source credibility and attitude towards the advertisement. The P value indicates a 0.002 level of confidence, which, therefore, means that the hypothesis is positive and significant. Thus, hypothesis 1 is supported. These results are in line with other similar studies which pointed out that source credibility exerts significant effects on attitude towards the advertisement. (Bhatt et al., 2013; Raluca & Ioan, 2010; Yilmaz et al., 2011).

4.8.7.2 Discussion of hypothesis 2

The second hypothesis (H2) states that 'source credibility has a significant positive effect on attitude towards the brand'. Based on the results of the final model testing, the relationship between source credibility and attitude towards the brand shows a path coefficient value of 0.116 at P value 0.066. This evidence demonstrates that hypothesis 2 is supported. These findings reinforce the results obtained in previous studies that established source credibility has a significant positive effect consumer's attitude towards the brand (Bhatt et al, 2013; Singh & Banerjee, 2018; Wu & Wang, 2011).

4.8.7.3 Discussion of hypothesis 3

The third hypothesis (H3) asserts that 'source likeability has a significant positive effect on attitude towards the advertisement'. The final structure model presents the relationship between source likeability and attitude towards the advertisement with a coefficient value of 0.197, at P value 0.012. Therefore, hypothesis 3 is supported. The results obtained in this study are in accord with Yilmaz, Telci, Bodur and Iscioglu (2011), who also examined the effect of source likeability on advert attitude. Moreover, their study revealed that source likeability seems to have a stronger effect on attitude towards the advertisement than source credibility in situations where processing (involvement) motivation and product category knowledge are not at matching levels.

4.8.7.4 Discussion of hypothesis 4

With reference to the fourth hypothesis (H4), the study hypothesised that source likeability has a significant positive effect on attitude towards the brand. The path coefficient value for hypothesis 4 is 0.043, with P value at 0.502 level of confidence, which, consequently, means that the relationship is positive, yet insignificant. Although the positive relationship is in agreement with previous studies (Vien et al., 2017; Yilmaz et al., 2011), the magnitude of impact is non-significant in accordance with findings by Yilmaz, Telci, Bodu and Iscioglu (2011) for low involvement and low product category knowledge. Thus, hypothesis 4 is only partially supported.

4.8.7.5 Discussion of hypothesis 5

Hypothesis 5 (H5) suggests that 'rational appeal has a positive and significant relationship with attitude towards the advertisement'. Based on the results of the final model testing, the relationship between rational appeal and attitude towards the advertisement shows a path coefficient value of 0.064 at P value 0.378. The results obtained in this study indicate that while rational appeal has a positive influence on attitude towards the advertisement – similar to previous studies (Akbari, 2015; Lin, 2011; Sadeghi et al. 2015) – the enormity of such association is insignificant. Therefore, these findings have yielded partial validation of hypothesis 5. Generally, advertisements by fuel companies have served to sell the public on ideas rather than product (Atkin, 2019). The notions that fossil fuels are good and needed, differentiated customer experience at forecourts, and environmental and social responsibility initiatives by the companies underlines the messaging in fuel advertisements. This may explain the lack of meaningful functional information on product attributes and benefits that could significantly influence advert attitude.

4.8.7.6 Discussion of hypothesis 6

The sixth hypothesis (H6) asserts that 'rational appeal has a positive and significant relationship with brand attitude'. The final structure model presents the relationship between rational appeal and attitude towards the brand with a coefficient value of 0.154 at P value 0.012 level of confidence. Hence, hypothesis 6 is supported. It is also essential to mention that these findings corroborate the results obtained in the works of Akbari (2015) as well as Sadeghi, Fakharyan, Dadkhah, Khodadadian, Vosta and Jafari (2015), who elucidated that rational appeal has a positive and significant relationship with brand attitude.

4.8.7.7 Discussion of hypothesis 7

Hypothesis 7 (H7) contends that 'emotional appeal has a positive and significant relationship with attitude towards the advertisement'. The results of the final model testing indicate a path coefficient value of 0.192 at P value 0.011, which depict affirmative association between emotional appeal and attitude towards the advertisement. This evidence determines that hypothesis 7 is supported. These findings reinforce the results obtained in the studies of Akbari (2015) as well as Mogaji, Czarnecka and Danbury (2018) who established that emotional

appeal has a significant positive effect on advert attitude. Moreover, Sasol's famous "Glug Glug" commercial showing the performance of Sasol fuel through innocent eyes tops the list of the most-liked TV ads over the past 35 years (Maggs, 2019), is a testament of the power of emotional appeal.

4.8.7.8 Discussion of hypothesis 8

In regard to the eighth hypothesis (H8), the study posited that emotional appeal has a positive and significant relationship with brand attitude. The results of the final model testing reveal a path coefficient value of -0.053 at P value 0.394, which insinuates a negative and non-significant relationship between emotional appeal and attitude towards the brand. These are in contrast to other studies that showed emotional appeal has a significant and positive influence on attitude towards the brand (Matilla, 1999; Sadeghi et al., 2015). Hence, hypothesis 8 is rejected.

4.8.7.9 Discussion of hypothesis 9

The ninth hypothesis (H9) asserts that 'attitude towards the advertisement has a positive effect on attitude towards the brand'. The final structure model implies a positive and significant relationship between these two constructs, with a coefficient value of 0.603 at P value 0.001. Therefore, hypothesis 9 is supported. These findings uphold the direct and positive linear relationship model between advert attitude and brand attitude (Mitchell & Olson, 1981; Shimp, 1981). The results obtained in this study are also in accord with other studies, which found similar effects of attitude towards the advertisement on attitude towards the brand (Abdul Wahid & Ahmed, 2011; Lee et al., 2017; Sallam & Algammash, 2016).

4.8.7.10 Discussion on hypothesis 10

In relation to the tenth hypothesis (H10), the study hypothesised that attitude towards the advertisement has a positive effect on purchase intention. The results of the final model testing reveal a path coefficient value of -0.079 at P value 0.376, which illustrates the non-significant and adverse effect advert attitude has on purchase intention. These findings are in contrast with the studies by Abdul Wahid and Ahmed (2010), Lee, Lee and Yang (2017) as well as Sallam

and Algammash (2016) who ascertain direct positive and significant relationship between the two constructs. Consequently, hypothesis 10 is rejected.

4.8.7.11 Discussion on hypothesis 11

Hypothesis eleven (H11) contends that 'attitude towards the brand has a positive influence on purchase intention'. Based on the results of the final model testing, the association between brand attitude and purchase intention shows a path coefficient value of 0.610 at P value 0.001 which denotes a positive and significant relationship. Hence, hypothesis 11 is supported. These findings reinforce the results obtained in other studies, which established significant and positive relationship between brand attitude and purchase intention (Abdul Wahid & Ahmed, 2011; Lee et al., 2017; Sallam & Algammash, 2016).

4.9. CHAPTER SUMMARY

This chapter reports the findings of the study and provides a discussion relating to the outcomes of the pilot study, including the reliability and validity, which infers that the scale used was both reliable and valid. The preliminary data analysis, which involved coding, data cleaning and tabulation, is subsequently discussed. Descriptive statistics, including mean, standard deviation and frequency distributions were calculated to summarise the sample data description. Frequencies for the non-categorical data were presented in table format, while categorical data that makes up demographic and contextual information of the main sample is presented in charts. Next, reliability of the measurement instrument was substantiated using Cronbach's coefficient alpha, composite reliability and average variance extracted methods. Validity assessment was achieved through content, convergent and discriminant methods to ensure the sufficiency of the data set for conducting stringent statistical tests such as structural equation modelling. Pearson's correlation analysis was carried out to ascertain that there are significant relationships between the constructs in the scale. Existence of significant relationships between the constructs in the inter-construct correlation matrix serves to corroborate the nomological validity of the study. Following these tests, some observable indicators were dropped from respective constructs i.e. source credibility (SC1), rational message (RM1, RM2, RM3) and purchase intentions (PI, P2, P3) for not meeting the recommended acceptable values.

In relation to testing of the measurement model, the data proved to be both reliable and valid using correlation coefficient values, CR values and AVE value. In addition, an examination of the model fit indices – namely the chi-square, CFI, TLI, IFI, SRMR, RMSEA– confirmed the CFA model fit surpassed the acceptable goodness-of-fit. Assessment of the SEM model fit using CMIN/DF, CFI, TLI, IFI and RMSEA also exhibit values above acceptable thresholds. These results indicate that the specified structural model exhibits a good representation of the data and suitable for path analysis. This led to the following hypotheses H1, H2, H3, H6, H7, H9 and H11 accepted, whereas Hypotheses H4 and H5 are partially accepted. On the other hand, hypotheses H8 and H10 rejected and their alternatives being concluded.

In the next chapter, the major findings of the study are presented with a view to draw conclusions for the study. The findings are interpreted in light of the initial objectives that were set out at the beginning of the study, with a view to determine the extent to which they are achieved. Thereafter, the research implications and limitations are discussed. The contribution made by this research is also alluded to in the next chapter.

CHAPTER 5
CONCLUSIONS AND RECOMMENDATIONS

5.1 INTRODUCTION

The regulated market, plus paradigm shift in fuel retailing, give rise to a challenging and competitive environment for fuel companies in South Africa. Given the number of major players and new entrants, the fight for market share is ferocious and will further intensify with the prospect of liberalisation. Fuel companies need to influence customers to choose their brand, non-fuel products and services through an impactful advert, capitalising on the identified advertising controllable elements. In the previous chapter, the impact of these elements on attitudes, and subsequently purchase intention, were tested, followed by presentation of the results. This chapter commences with an overview of the study. Next, the chapter examines whether the objectives of this study were achieved, before drawing the conclusions and implications from the main findings. Thereafter, the contribution, recommendations and limitations of the study, including opportunities for future research, are discussed. The concluding remark winds up this chapter and denotes the completion of this study.

5.2 OVERVIEW OF STUDY

The purpose of this study was to investigate the influence of advertising controllable elements on attitude towards advertisement, attitude towards brand and purchase intention of South African motorists. In order to achieve this – and to provide context of the variables under study – related literature reviews were discussed. The research methodology that guided this investigation was then deliberated. Ultimately, the discussion on results, conclusions and recommendations established whether the objectives stated were achieved.

Chapter 1 provides a background and laid out the groundwork of this research. The problem statement under Section 1.2 highlighted the gap that exists in present studies pertaining to the impact of advertising elements on advert attitude, brand attitude and purchase intention for fuel, under competitive and regulated environments in developing countries such as South Africa. The aim, questions and objectives of this study were framed in Section 1.3 to address

the problem statement. The relevant literature review concerning marketing communication, advertising, attitudes, purchase intention, the petroleum industry and its fuel retail sector – including the operating landscape – were briefly discussed in Section 1.4 to 1.7 (including sub-sections) respectively, to provide the context that led to the formulation of eleven hypotheses to be validated. These hypotheses formed the conceptual framework proposed for this research under Section 1.8. This is followed by a brief outline of the research design and methodology procedures in Section 1.9, which specified how the components of the study were conducted. Section 1.10 underlined the contribution, while Section 1.11 explicated the limitations of this research. Moreover, the ethical consideration was stipulated under Section 1.12, before the thesis chapters were delineated in Section 1.13.

Chapter 2 further elucidates the literature review mentioned in the previous chapter. Section 2.2 discussed marketing communication as the foundation of advertising. The definition of advertising, related models that describe the response process, benefits and limitations were deliberated in Section 2.3. The advertising controllable elements – namely source, message and channel – were introduced in Section 2.4. The elements' attributes – specifically source credibility, source likeability, rational message, and emotional message as antecedent of consumer attitudes – were the variables in study and discussed under respective sub-sections. Meanwhile, channel serves as a moderating variable to gather information about the medium that carries the fuel ad being recalled, as well as the length of time participants spend on respective channel categories. The philosophy of attitude was reviewed under Section 2.5, particularly attitude towards the advertisement and attitude towards the brand, which constituted the dependent variables in this study. Section 2.6 contained discussion on purchase intention, which is another dependent variable of interest. Section 2.7 looked into the oil industry in South Africa, specifically the downstream fuel retail sector – including its operating landscape, where a paradigm shift in fuel marketing signified the importance of advertising under regulated and competitive environment. The notion that fuel adverts can influence attitudes and purchase intention, by leveraging on controllable elements to appeal to each stage of responses, is the epitome of this study, particularly with fuel branded as a commodity and low involvement product, albeit in a regulated yet competitive environment.

Chapter 3 outlines the research design and methodology undertaken for this study. Positioned within the positivist research paradigm (Section 3.2), this study adopted deductive reasoning to frame the investigation. As a result, the research was able to specify theory and thereby draw

relevant statistical conclusions by rigorous testing of the hypotheses. Logically, a descriptive research design was followed (Section 3.3) by applying a quantitative research approach, which was explained in Section 3.4. The chapter provides a detailed account of the sampling strategy for the study (Section 3.5). In particular, a non-probability, convenience sampling method was applied to gather input from eligible motorists in South Africa. The questionnaire design process was discussed at length in Section 3.6 of this study. Pre- and pilot testing were conducted to assess the validity and reliability of the adapted measurement scale, which was drawn from previous literatures. Thereafter, minor modifications were implemented on the self-administered questionnaire, and the final survey was commissioned using Qualtrics online platform. The collected data underwent a preparation process (Section 3.7), which resulted in a final 201 usable responses for statistical analysis. The statistical methods used for analysing the data were deliberated in Section 3.8. These methods include frequency distributions (Section 3.8.1), descriptive statistical analysis (Section 3.8.2), reliability and validity analysis (Section 3.8.3) and Structural Equation Modelling (Section 3.8.4). The chapter concludes with allusions to data interpretation (Section 3.9) and ethical consideration (Section 3.10) respectively.

Chapter 4 reports findings from the investigation. The results presented in this chapter are in accordance to the theoretical objectives formulated for the study.

5.3 MAIN FINDINGS OF THE STUDY

This section discusses the main findings of this study in line with the objectives formulated in Chapter 1:

- to investigate and compare the impact of source credibility and likeability on attitude towards the advertisement and attitude towards the brand
- to examine and compare the impact of rational and emotional appeals in message on attitude towards the advertisement and advertised brand
- to assess the effect of attitude towards the advertisement on attitude towards the brand
- to study and compare the influence of attitude towards the advertisement and attitude towards the brand on purchase intention

In accordance to the literature review, source credibility, source likeability, rational message, and emotional message were identified as having influence on attitude towards the advertisement and brand attitude. In addition, the literature review also indicated that attitude towards the advertisement and attitude towards the brand subsequently impact purchase intention. In total, these seven constructs constitute the measurement instrument used for the investigation. This measurement instrument surpassed the reliability tests (Cronbach's alpha, average inter-item correlation, CR, AVE) as well as validity analysis (content, convergent and discriminant) to be considered mutually reliable and valid. With scale means above 3.5 being recorded on the descriptive statistical analysis results for source credibility, source likeability, rational message and emotional message, it appears that consumers hold positive attitudinal and behavioural intentions towards fuel advert and brand. The inter-item correlation analysis revealed that there is weak to moderate association between each of the constructs in the scale. Moreover, the inter-item correlation analysis procedure determined that there was no multicollinearity problem in the study.

In order to assess the conceptual framework, Structural Equation Modelling was performed to examine the relationship between hypothesised constructs. This was done through confirmatory factor analysis, with fit indices (chi-square, CFI, TLI, IFI, SRMR and RMSEA) computed to assess the measurement model fit. Thereafter, a structural model was employed to evaluate causal relationships between constructs, along with model fit testing (CMIN/DF, CFI, TLI, IFI and RMSEA). With exception of the chi-square values which is typically sensitive to sample size, the other fit indices demonstrated satisfactory fit for both the measurement model and structural model. The main findings are presented in Table 5.1, as shown by the hypotheses testing.

Table 5.1 Results of the hypothesised relationships

Hypothesis		Decision rejected/supported
H1	Source credibility has a significant positive effect on attitude towards the advertisement	Supported
H2	Source credibility has a significant positive effect on attitude towards the brand	Supported

H3	Source likeability has a significant positive effect on attitude towards the advertisement	Supported
H4	Source likeability has a significant positive effect on attitude towards the brand	Supported, but weak
H5	Rational appeal has a positive and significant relationship with attitude towards the advertisement	Supported but weak
H6	Rational appeal has a positive and significant relationship with brand attitude	Supported
H7	Emotional appeal has a positive and significant relationship with attitude towards the advertisement	Supported
H8	Emotional appeal has a positive and significant relationship with brand attitude	Rejected, and insignificant
H9	The attitude towards the advertisement has a positive and significant effect on attitude towards the brand	Supported
H10	The attitude towards the advertisement has a positive and significant effect on purchase intention	Rejected, and insignificant
H11	The attitude towards the brand has a positive and significant influence on purchase intention	Supported

In light of the findings, the following conclusions and implications may be drawn.

- Source credibility and source likeability positively influence advert attitude and brand attitude. Motorists are more likely to have favorable attitudes towards the fuel ads viewed and the advertised brand when they perceive the source to be credible and likeable. Moreover, source credibility has a significant impact on attitude towards the advertisement and attitude towards the brand compared to source likeability, when it comes to fuel adverts.

- Rational message appeal has a positive relationship with both advert and brand attitude. However, the degree of association is more significant on attitude towards the brand compared to attitude towards the advertisement. These results can be attributed to the nature of fuel retailing business and advertisements. Panda, Panda and Mishra (2013) posit that it is challenging to create a rational platform for buying a commodity when the

cognitive arguments are not effective. This is caused by the difficulty to distinguish a product from another, especially in a highly competitive and matured market (Panda et al., 2013). Rather than focusing on the product attributes, fuel ads usually highlight ideas that appeal to consumers' affective side. The lack of functional information in fuel advertisements may have contributed to the insignificant impact rational appeal has on advert attitude. On the other hand, the rational appeal gives credence to fuel and non-fuel products or services by highlighting the value they offer, which significantly influences attitude towards the brand.

Panda, Panda and Mishra (2013) suggest that emotional appeals can help lift the commodity from its level of sameness and position it differently in customers' minds. Conversely, this study revealed that emotional appeal only positively and significantly impacts advert attitude but has no bearing on brand attitude. The significant impact emotional appeal has on attitude towards the advertisement may result merely because the ad evokes an emotive response, such as feelings of joy, love, pride, sorrow or nostalgia, without any conscious processing of informational elements that could affect the same in attitude towards the brand (Shimp, 1981). The findings from this study are consistent with prior theoretical notions that emotional response has a significant impact on attitude towards the advertisement, which in turn influences attitude towards the brand (Liu & Stout, 1987; Mitchell, 1983; Shimp; 1981). Emotional message is shown to influence consumers' reaction to advertisements by captivating and enhancing their attention in order to affect brand attitude (Liu & Stout, 1987; Shimp, 1981). Moreover, emotional appeal performs better in a low-involvement commodity (Akbari, 2015; Dens & De Pelsmacker, 2010; Panda et al., 2013), as the case with fuel and non-fuel products.

- South African motorists were indeed affected by the fuel advertisements they were exposed to. This influenced them to form a significant positive attitude towards the brand. From an advertising perspective, attitude towards the advertisement is the prior variable to be considered for new brands before attitude towards the brand (Ganesan et al., 2017). The attractiveness of a fuel advert impresses customers and thus creates a positive brand image and attitude, especially for new brands. For existing brands, it reinforces the gravity of the effect and serves as a reminder of a brand's unique value proposition. Mitchell (1983) empirically examined the influence of attitude towards the advertisement on brand attitude and concluded that the advert attitude effect would in fact persist over time. The

effect remains accessible in consumers' minds, and brand recognition and recall subsequently influences brand choice behavior.

- Purchase intention for fuel is influenced by attitude towards brand, but not attitude towards advert. This could be attributed to the fact that the existing fuel brands in South Africa are already well-known to customers, and they have developed brand attitude derived from own knowledge and experience with these brands, thereby influencing their purchase intention. Additionally, fuel ads by-and-large are quite subtle in nature, rather than calls to action – they have underlying ideas and create association, thereby remaining in consumers' minds. This could explain the insignificant, nonexistent impact attitude towards advertisement has on purchase intention. Shimp (1981) suggests two alternative mechanisms leading to the brand choice behavior or purchase intent. In the first, consumers' beliefs and evaluations are influenced by processing an advertisement or ad campaign – attitude towards the brand is engendered, and the choice of whether or not to purchase the brand is contingent on how favorable the attitude towards the brand is. Alternatively, there is the affect-referral path through which attitude towards the advertisement is transferred to attitude towards the brand, which in turn determines the buying intent. Data from this study indicates that the persuasion route followed the latter mechanism. As such, the link between attitude towards the advertisement and purchase intention can still be achieved using brand attitude as an intermediary.

Apart from the main findings, the responses received for the categorical sections provide interesting and useful insights, which are shared as follows:

- The sample population was well presented in all age categories. The largest group of the respondents are above 45 years old and drive passenger car or sport utility vehicles. The majority of respondents between 31 to 44 years old drive passenger cars, while those who drive motorcycles are in the 18 to 30 years' group. For private vehicles, age factor may influence the type of vehicle they drive, which in turn reflects their fuel consumption.

- The majority of the respondents spend between 1 – 4 hours a day on traditional channels. The numbers are higher compared to online channels for the same amount of time. Therefore, traditional channels remain a prominent medium to broadcast fuel ads to

consumers. The traditional channels in which respondents recalled the fuel ad were television, radio, print, billboards and banners.

- Despite traditional channels having the lead, South African fuel companies embraced online channels as a formidable medium to carry their fuel advertisements. Fuel ads on social media received the highest recall among all the platforms under online channels.

- Fuel ads by Engen received the highest recollection. It is also the brand used by the majority of the respondents, which is not a surprise since Engen is the market leader in South Africa. Interestingly, the data in Figure 4.11 revealed that the fuel ads the respondents recalled may not be the same as the fuel brand they are using. This supports one of the main findings, which showed that attitude towards the advertisement has no influence and no significant impact on purchase intention. They recalled the fuel ad as it evoked some cognitive or emotive elements, however it is not enough to influence their fuel brand choice.

5.4 CONTRIBUTION OF THE STUDY

The contribution of this study can be viewed from the theoretical and practical perspectives.

5.4.1 Theoretical or conceptual contribution

Theoretically or at conceptual level, this research advances the body of knowledge by developing a new model for fuel advertisement, drawing from the underlying influences of certain elements in advertising. While numerous studies cited under literature review have appraised the influence of source and message appeals on consumers' attitudes and behavioural intention, none were conducted on low involvement commodity such as fuel. This study contributes to the knowledge base by empirically testing the impact of advertising controllable elements, specifically source and message appeals on the attitudes and, subsequently purchase intention of South African motorists for fuel products and services. The study also provides awareness on the different level of impact between distinctive source characteristics (credibility/likeability) and types of advertising appeals (rational/emotional) on attitudes towards the advertisement along with advertised brand, as well as behavioural intention within a single integrated model. Moreover, unlike previous studies that were conducted in matured

countries, this research provides insights on the effectiveness of fuel advertising in developing economies such as South Africa.

The use of robust structural equation modelling by means of maximum likelihood estimation technique is proven to be a more coherent approach to concurrently test the theoretic-driven propositions in marketing modelling. Moreover, generating path estimation for the specified model provides greater flexibility than the use of precedent first-generation techniques to interchange between theory and data. Previous studies have examined several sets of constructs but have yet to date attempted to integrate these into a comprehensible framework, moving from antecedent variables, intermediate variables and finally concluding with outcome variable. With the use of rich, primary data obtained through online sampling of South African motorists, it was possible to test the fit of the research model to the data, thereby confirming the goodness of individual relationships as well as the overall model. As a result, the research does not merely address the relationship between source, message appeals, attitudes, and purchase intention, but simultaneously integrates them in a holistic model that determines the efficacy of the fuel ads. Succinctly, the research offers a comprehensive yet parsimonious model, besides simple to understand and practical to apply, which could prove useful for an academic understanding of the subject.

5.4.2 Managerial or practical contribution

In terms of managerial contribution, the study presents a model that can be used to create an impactful advertisement which touch customers, and influence their attitudinal and behavioural intention. By way of marketing, fuel companies tend to focus more on expanding their geographical coverage or distribution network and less on advertising. Unlike other commodities, fuel advertisements have been lacking or rarely produced, whilst enduring consumer perception of fuel as a low involvement commodity with no difference in quality. Fuel companies need to develop impactful advertisements to successfully differentiate their business, effectively capture prospects and customers' attention, generate leads, initiate and increase sales, as well as inspire loyalty, while remain conscious of the cost. By understanding which advertising elements within their control have the biggest positive influence on attitude towards the advertisement, brand, and subsequently purchase intention, marketers of fuel companies can focus on specific elements to create an impactful advert. The aim is to stand out and be the preferred fuel brand in a crowded and regulated marketplace. Better allocation in

terms of resources among the elements also can be achieved, which improve budgeting and optimise return on investment.

The findings of this study are expected to provide brands and marketing practitioners with insights into the preference of consumers when it comes to source attributes (credibility or likeability), and whether they rely on rational or emotional (or both) systems to process information in fuel advertisement. This area of research has not been pursued previously, particularly within the context of South African fuel market. Moreover, acknowledging the direct and different level of effect source credibility, source likeability, rational as well as emotional appeals have on consumers' attitudes and ensued purchase intention, could provide marketers sound information for decision-making, thereby enabling them to better understand the value judgements and expectations of South African motorists. The conclusions drawn from this research and upon which the implications are based, provide significant albeit small contribution to pool of knowledge regarding consumers' view of fuel advertisement. Henceforth, the research offers practical suggestions to marketers and managers to optimise their fuel ads strategy by employing the recommendations in next section.

5.5 RECOMMENDATIONS

One of the major challenges fuel companies face is how best to create an advertisement that ensure their organisations stands out in this regulated and competitive market environment. Marketers therefore need to develop strategies for fuel adverts that not only position the brand in a positive light and remain atop customers' mind, but also influence their fuel choice behaviour. Such strategies may include focusing on advertising elements within their control to develop an impactful fuel advert. Therefore, based on the findings, this section outlines several recommendations pertaining to the use of advertising controllable elements to make an effective advert. Recommendations emanating from this study are aligned with the research objectives formulated to appeal to marketers of fuel companies for consideration and adoption.

- **Feature a credible and likeable source in their advertisement**

The credibility of an advertisement and consumers' preference for a brand depends on their overall perception; and whether they view the ad and advertised brand to be reliable, truthful, dependable, trustworthy and legitimate. By featuring a credible and likeable source in the fuel

advert, it brings credence to the communication, enhances the value of information in the message, and charms the viewers. From the responses received, for fuel products and services, source credibility is viewed more favourably based on the following traits; trustworthiness, reliability, experience and expertise, in comparison to a well-known personality. A likeable source is considered highly based on sincerity, friendliness, attractiveness/appeal, familiarity, and charisma. These attributes or characteristics bring to light the persona that appeals to customers. The source's positive qualities and charisma influence consumers' belief and acceptance of a message. The consumers see the source as having relevant knowledge, skill or experience, and trust the source to give unbiased, objective information that fulfils the cognitive side of attitude. The congeniality traits attract the affective side of attitude. Although a credible source is viewed more favorably than a likeable source when it comes to fuel products and services, the likeability attribute is still vital when considering the substantial influence it has on advert attitude, and consequently the influence advert attitude has on brand attitude. Therefore, both credibility and likeability are important determinants of an ads' success, which need to be given due consideration when choosing a source for the fuel advertisement.

- **Combine rational and emotional appeal in the message**

The message in fuel adverts needs to contain both rational and emotional appeals to resonate with the different component of attitudes and make an impact. As evident from the main findings, attitude towards advertisement is significantly induced by emotional appeal, while rational appeal benefits the brand attitude. Insights from the categorical sections indicate that consumers are highly in favour of rational message, emphasising the fuel products' benefits, services offered and convenience aspect, followed by quality of fuel products as well other non-fuel products available. Messages that contain emotional appeal relating to happiness, humour, local/national brand and excitement received higher agreement compared to love, relationship and sense of belonging.

The rational appeal with information on fuel products plus services – targeted at the cognitive component of attitude for consumers to be able to evaluate and come up with a decision – is important to highlight a brand's value proposition. Nonetheless, it is imperative to ensure the right amount of information is being showcased, as not to overload the message, causing it to

lose its impact. The information on the products and services attributes, as well as benefits over competing brands (for example, quality, speed, value for money), must be precise. Since fuel is perceived to be a commodity and low involvement product, the attachment consumers feel towards a brand is more of practicality rather than psychology. Advertisements are mostly ignored, and rational appeal usually goes unnoticed. For those reasons, emotional appeal is a prerequisite to captivate viewers' attention, resonating with the affective component of their attitude that creates a liking to the advert and develops a connection to the brand. Thus, the emotional appeal is essential to establish positive and significant attitude towards the advertisement that subsequently positively and significantly impacts the advertised brand.

- **Produce more direct-action ads of the core products to influence fuel brand choice in addition to the indirect-action approach**

Advertising can be developed to focus on the organisation, products or services. As an extension of the public relation function in shaping corporate image, institutional advertising is aimed at cultivating favourable consumer attitudes towards the organisation by highlighting the innovation, achievement, development and initiatives undertaken under corporate social responsibility. However, the intent is more on developing goodwill and confidence in the advertiser and convincing consumers of the integrity of the company, rather than to generate demand. Product or service advertising, on the other hand, focus on creating demand and generating sales by highlighting the company's value proposition to counteract similar products/services offered by competitors. This type of advertising can be in the form of direct-action, indirect-action, or a combination of both. Direct-action advertising prompts consumers to take immediate action by offering some benefits or rewards to make the purchase. Its effect can be statistically computed from the responses received. Indirect-action advertising is similar to institutional advertising – where the goal is to build and maintain reputation, as well as develop a relationship with consumers to obtain better result in the long-term. The expectation is that the positive perception would lead to positive attitude, which subsequently influences purchase intention. The effect of indirect action advertising, however, can only be felt but cannot be accurately measured. A combination of direct and indirect-action approach builds a brand image, along with responsive schemes to encourage consumers to react instantly in favour of purchase decision.

In general, the advertisements by fuel companies adopt an indirect action approach and are quite subtle in nature when it comes to fuel products or services offered at their forecourts. The underlying content in fuel ads usually sells ideas rather than the core products. This messaging focuses on customer experience or highlights social and environmental efforts. The intent is to position the fuel companies as responsible and caring organisations in consumers' minds, which in turn creates favourable attitude and behaviour towards the products. It is also to create a mental association with consumers in order to remain at the top of their mind for understanding in the long run. Fuel companies do run direct action adverts occasionally, but these are focused more on promoting assortments from their convenience stores, rather than on core products, or in conjunction with an event or launch.

In order to develop an advert attitude that not only positively and significantly influences brand attitude but also purchase intention, fuel companies should adopt a proactive two-pronged advertising strategy that combines both a direct and indirect-action approach. Since fuel companies cannot compete on price for petrol due to the regulated market, the goal is to sell more volume to increase sales and gain lead in market share. On the other hand, it is an open market for diesel and other fuel products. Direct-action ads that feature and promote fuel products can be invigorated over and above promotional ads on convenience assortments to increase revenues. This can be coupled with specific and frequent marketing campaigns that encourage consumers to fuel up to maximum to earn certain benefits or rewards. At the same time, the indirect-action approach and institutional advertising should still be maintained to create and sustain mental association with consumers. As part of the implementation, both types of adverts should feature a credible and likeable source in delivering a message interweaved with rational as well as emotional appeals to touch all three different components of attitudes.

- **Broadcast the fuel ads on both traditional and online channels to gain maximum impact**

Data on channels as moderating variables revealed that the majority of the respondents still spend between 1 – 4 hours a day on traditional channels, proving this medium is still effective to carry the fuel ads. In addition, most of the fuel ads recalled by the respondents were on traditional channels like television, billboards and banners, as well radio. The recollection of fuel ads on online channels is much lower than traditional channels, and fuel ads on social

media received the highest recall compared to internet (website/search engine), YouTube and mobile applications. Nevertheless, the number of respondents who spend more than 4 hours a day is higher on online channels, compared to traditional channels. This could be attributed to the mobility factor, as online channels are accessible from any location throughout the day. Moreover, respondents who are 35 years old and below tend to spend more time on online channels. Fuel companies can use these insights for their channel strategy, selecting the appropriate platform based on its strength to reach mass and specific target customers.

5.6 LIMITATIONS AND FUTURE RESEARCH

Despite producing meaningful results, this study, like most studies, is not without limitations, which may present several future research opportunities.

Firstly, this study only utilised a quantitative research method. Future research may benefit from a mixed-method approach, utilising both quantitative and qualitative research techniques to gain a deeper insight or more in-depth understanding of the impact of advertising controllable elements on advert and brand attitude, as well as purchase intention. Moreover, the variables in study only served as proxies for real behaviour with no adequate picture of how the participants truly act, which to some extent may impact the accuracy of the measurement instrument.

Secondly, the sample was drawn using a non-probability convenience sampling method –which does provide ease of access to participants, but may have resulted in sampling biases. Therefore, care should be taken in generalising the findings of this study to the wider target population of South African motorists. Also, the sample size of 201 participants may be deemed too small, and not representative of the population. Henceforth, external validity could be enhanced by selecting a larger sample size.

Thirdly, this study was conducted in the specific context of fuel advertisements within the South African market. Thus, it is undependable to generalise the findings of this study to cover a broader context or different industry. A similar study can be duplicated to different industries or populations of other countries to determine whether there are similarities and/or differences in the main findings from this study.

Fourthly, this research investigates motorists' fuel purchase intention from the context of fuel advertisement i.e., the impact of source and message appeals in the advert they were exposed to, on their attitudes towards the advertisement, advertised brand and subsequently purchase intention. Whether the motorists are forced to fuel at certain garage because of their employer/company fuel card or loyalty programme partnership was not under consideration of this research. It could be undertaken for future studies.

Lastly, it should be noted that the aforementioned limitations do not necessarily negate the contributions of this study, but open up avenues for future research.

5.7 CONCLUDING REMARKS

In conclusion, the controllable advertising elements – namely source credibility, source likeability, rational message and emotional message – have a positive impact on attitude towards the advertisement and the advertised brand, which consequently positively influence purchase intention. The magnitude of impact that respective elements have on attitudes and purchase intention, however, varies. Source credibility has a more significant impact on advert and brand attitude compared to source likeability. While source likeability has a substantial effect on attitudes towards the advertisement, the influence it has on brand attitude is immaterial. Nonetheless, source likeability is still vital due the strong influence it has on attitude towards the advertisement. From a message perspective, rational appeal positively and significantly influences brand attitude, while emotional appeal has a positive and enormous effect on advert attitude. In a nutshell, the specific attributes of source and message are essential to the success of an advert by targeting the relevant component of attitudes. Ultimately, the findings showed that when it comes to fuel products and services, purchase intention is positively and significantly influenced by brand attitude, rather than advert attitude. Alternatively, the absence of a direct relationship between attitude towards the advertisement and purchase intention can be mitigated using brand attitude as an intermediary based on the positive and strong impact it has on buying decision.

This study examined the impact of advertising controllable elements on attitude towards the advertisement, attitude towards the brand, and purchase intention with regards to fuel products and services. Taking cognisance of the findings, fuel companies can incorporate these elements

into their advertisements to get maximum impact and return on investment. The advertising strategy must adopt a two-pronged; indirect and direct-approach so as to not only create mental association with the consumers, but also elicit purchase. Additionally, with the advancement in digital technology, advertisers have numerous options for channel or medium selection to broadcast the ad. While online channels seem to gain momentum, the role of traditional channels should not be discounted. The appropriate choice of channel as vehicle to carry the ad is important in ensuring that it reach the intended audience.

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ANNEXURE A

ETHICS APPROVAL LETTER

Faculty of Commerce
Private Bag X3, Rondebosch, 7701
2.26 Leslie Commerce Building, Upper Campus
Tel: +27 (0) 21 650 4375/ 5748 Fax: +27 (0) 21 650 4369
E-mail: com-faculty@uct.ac.za
Internet: www.uct.ac.za
@Commerce UCT UCT Commerce Faculty Office

03/12/2019

Suhaila Arshad

School of Management Studies

University of Cape Town

REF: REC 2019/012/004

The Impact of Advertising Controllable Elements on Consumers' Attitude Towards Advert, Brand and Purchase Intention

We are pleased to inform you that your ethics application has been approved. Unless otherwise specified this ethical clearance is valid until 31 December 2020

Your clearance may be renewed upon application.

Please be aware that you need to notify the Ethics Committee immediately should any aspect of your study regarding the engagement with participants as approved in this application, change. This may include aspects such as changes to the research design, questionnaires, or choice of participants.

The ongoing ethical conduct throughout the duration of the study remains the responsibility of the principal investigator.

We wish you well for your research.

Signature Removed 2019.12.03 08:30:14 +02'00'

Jacques Rousseau
Commerce Research Ethics Chair
University of Cape Town
Commerce Faculty Office
Room 2.26 | Leslie Commerce Building

Office Telephone: +27 (0)21 650 2695 / 4375
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Website: https://www.commerce.uct.ac.za/Pages/Ethics-in-Research

ANNEXURE B

COVER LETTER

Faculty of Commerce,
School of Management Studies,
Section of Marketing

Dear Sir/Madam,

This survey is conducted in fulfilment of a Master of Commerce degree (MCom) in Marketing for which I am currently enrolled at University of Cape Town. The purpose of the questionnaire is to determine the impact of advertising controllable elements on consumers' attitude towards advertisement, brand and purchase intention in the fuel retailing segment in South Africa. This research has been approved by the Commerce Faculty Ethics in Research Committee.

Please complete all questions in the enclosed questionnaire. I assure you that the information you provide will be treated with the strictest confidentiality. The responses will be used for academic purposes only. The questionnaire will take approximately 15 minutes to complete.

Thank you for your contribution to this study.

Sincerely,

Suhaila Arshad
MCom student at University of Cape Town
Cell number: 076 204 7519
E-mail: arssuh001@uct.ac.za

Supervisor: Mr. Nkosivile Madinga

ANNEXURE C

CONSENT FORM

Faculty of Commerce,
School of Management Studies

Title of the study

'THE IMPACT OF ADVERTISING CONTROLLABLE ELEMENTS ON CONSUMERS' ATTITUDE TOWARDS ADVERT, BRAND AND PURCHASE INTENTION'

Research conducted by:
Suhaila Arshad (ARSSUH001)
Email: arssuh001@uct.ac.za

Dear Participant,

You are invited to take part in an academic research study conducted by Suhaila Arshad, Masters of Commerce (MCom) student from the School of Management Studies at the University of Cape Town (UCT).

The purpose of this study is to investigate the impact of advertising controllable elements on consumers' attitude towards advertisement, brand and purchase intention in the fuel retailing segment in South Africa. This research has been approved by the Commerce Faculty Ethics in Research Committee.

Please note the following:

- You will not be requested to supply any identifiable information, ensuring anonymity of your responses. The answers you give will be treated as strictly confidential and secured accordingly.
- Your participation in this study is very important to us. You may, however, choose not to participate and you may also stop participating at any time without any negative consequences.
- Please answer the questions in the attached questionnaire as completely and honestly as possible. This should not take more than 15 minutes of your time.
- The results of the study will be used for academic purposes only and may be published in an academic journal. We will provide you with a summary of our findings on request.
- Please contact my supervisor, Nkosivile Madinga on nkosivile.madinga@uct.ac.za if you have any questions or comments regarding the study.

By clicking begin the survey at the end of this page, you are confirming that:

- You have read and understand the information provided above.
- You give your consent to participate in the study on a voluntary basis.

ANNEXURE D

QUESTIONNAIRE

SCREENING QUESTIONS

This section is to ensure the respondents are eligible to participate in the survey.

S1	Before we begin, we would like to make sure you qualify for our study. Please indicate your age:	
	Under 18 years old	18 years old and above

S2	Have you been exposed to any fuel brand advertisement in the last 6 months?	
	Yes	No

SECTION A: DEMOGRAPHICAL FACTORS

This section seeks some background information about the participant. It is important to obtain this information, as this will have a bearing on the results of the survey. For all the questions below please put a cross (X) over the number indicating your choice.

A1	**Age:**	18-25	1	26-30	2	31-35	3	36-40	4
		41-45	5	Above 45	6	Prefer not to answer	7		

A2	**Type of Vehicle**	Motorcycles	1	Passenger Cars	2	Sport Utility Vehicles	3	Utility Vehicle, Trucks, Buses, Trailers	4
	Prefer not to answer	5		Not applicable	6				

A3	**Length of time watching television / listening to radio in a day**	1-2 hour	1	3-4 hour	2	4-5 hour	3	> 5 hours	4
	Prefer not to answer	5							

A4	**Length of time online or on social media in a day**	1-2 hour	1	3-4 hour	2	4-5 hour	3	> 5 hours	4
	Prefer not to answer	5							

A5	**Fuel brand advertisement you have been exposed to in the last 6 months**	BP	1	Caltex	2	Engen	3	Sasol	4	Shell	5
		Total	6	Others	7						

A6	**The medium which carry the advertisement**	TV	1	Radio	2	Print (newspapers / magazines)	3	Billboard and Banner	4	Internet (website / display ads / search engine)	5
		Social Media	6	Mobile App	7	YouTube	8				

A7	**Fuel brand you are currently using**	BP	1	Caltex	2	Engen	3	Sasol	4	Shell	5
		Total	6	Others	7	Prefer not to answer	8				

Please indicate the extent to which you agree or disagree with the statements by ticking (✓) on the corresponding number between 1 (strongly disagree) and 5 (strongly agree)

		Strongly Disagree	**Disagree**	**Neither Disagree Nor Agree**	**Agree**	**Strongly Agree**
Section B: Source Credibility						
B1	An ad which employs a well-known source (e.g. celebrities, sports person, F1 drivers, influencers) affect me more.	1	2	3	4	5
B2	An ad which uses an expert source influence me more.	1	2	3	4	5
B3	An ad which uses a trustworthy source affect me more.	1	2	3	4	5
B4	An ad that uses an experienced source influence me more.	1	2	3	4	5
B5	An ad that uses a reliable source influence me more.	1	2	3	4	5
Section C: Source Likeability						
C1	An ad which employs a friendly source influence me more.	1	2	3	4	5
C2	An ad which uses a charismatic source affect me more.	1	2	3	4	5
C3	An ad which uses a sincere source influence me more.	1	2	3	4	5
C4	An ad that employs an appealing source affect me more.	1	2	3	4	5
C5	An ad that uses a familiar source influence me more.	1	2	3	4	5
Section D: Rational Message						
D1	An ad that emphasises the quality of the fuel influence me more.	1	2	3	4	5
D2	An ad that call attention to the benefits of the fuel influence me more.	1	2	3	4	5

D3	An ad that highlights other non-fuel products available influence me more.	1	2	3	4	5
D4	An ad that put emphasis on services offered influence me more.	1	2	3	4	5
D5	An ad that make a feature of convenient influence me more.	1	2	3	4	5
Section E: Emotional Message						
E1	Emotion of love, relationship and sense of belonging in an ad influence me more.	1	2	3	4	5
E2	Emotion of humour in an ad influence me more.	1	2	3	4	5
E3	Emotion of happiness in an ad influence me more.	1	2	3	4	5
E4	Emotion of excitement in an ad influence me more.	1	2	3	4	5
E5	Emotion of local/national brand in an ad influence me more.	1	2	3	4	5
Section F: Attitude towards the Advert						
H1	The ad is good.	1	2	3	4	5
H2	The ad creates enough interest to hold my attention.	1	2	3	4	5
H3	The ad is believable.	1	2	3	4	5
H4	The ad creates positive impression in my mind.	1	2	3	4	5
H5	I can recall the ad and the company easily.	1	2	3	4	5
Section G: Attitude towards the Brand						
I1	I'm interested in this brand.	1	2	3	4	5
I2	I think the brand is very good.	1	2	3	4	5
I3	My opinion of the brand is very favourable.	1	2	3	4	5
I4	I trust this brand.	1	2	3	4	5
I5	I would recommend this brand.	1	2	3	4	5
Section H: Purchase Intention						
J1	I will probably make a purchase.	1	2	3	4	5
J2	I am likely to make a purchase.	1	2	3	4	5
J3	I am definitely going to make a purchase.	1	2	3	4	5
J4	I would like to have more information.	1	2	3	4	5
J5	My purchase of fuel is neither influenced by the ad nor the brand.	1	2	3	4	5

ANNEXURE E

TRADITIONAL CHANNELS ATTRIBUTES

Medium	Benefits	Limitations
Television	• Mass coverage • High reach • High prestige • Low cost per contact / exposure • High intrusion value / attention getting • Quality creative opportunities • Favourable image – impact of sight, sound and motion • Segmentation through cable	• High cost • Low recall • Channel surfing during ads • DVRs skipping ads • Short message life • Rigid/inflexible - cannot change once aired • High level of clutter
Radio	• High frequency • Low cost • Recall promoted • Narrower target markets • Ad music can match audience • High segmentation potential • Flexibility in making ads • Modify ads to local conditions • Intimacy with DJs • Mobile – listen anywhere • Creative opportunities with sound and music	• Audio only • Short exposure time • Rigid/inflexible - cannot change once aired • Low attention getting • Difficult to reach national audiences • Target duplication with several stations using the same format • Information overload • Fleeting message • Clutter
Newspapers	• Geographic selectivity • High flexibility • High credibility • Strong audience interest • Longer copy	• Poor buying procedures • Short life span • Poor quality reproduction • Internet competition • Aging readership

	• Cumulative volume discounts • Coupons and special-response features	• Clutter
Magazines	• High market segmentation • Targeted audience by magazine • Direct-response-techniques • High colour quality • Long-life • Read during leisure – longer attention to ads • Availability of special features	• Declining readership • Long lead time • Little flexibility • High cost • Clutter
Direct mail	• High selectivity • Reader controls exposure • High information content • Opportunities for repeat exposures	• High cost / contact • Poor image (junk mail) • Clutter
Out-of-home / Outdoor	• Selected key geographic areas • Accessible for local ads • Low cost per impression • Broad reach • High frequency and repetition on major commuter routes • Large visuals possible hence easily noticed • Digital capabilities	• Short exposure time • Brief messages • Little segmentation possible • Poor image • Local restrictions • Clutter

Sources: (Belch & Belch, 2017; Clow & Baack, 2016; O'Guinn et al., 2006)

ANNEXURE F

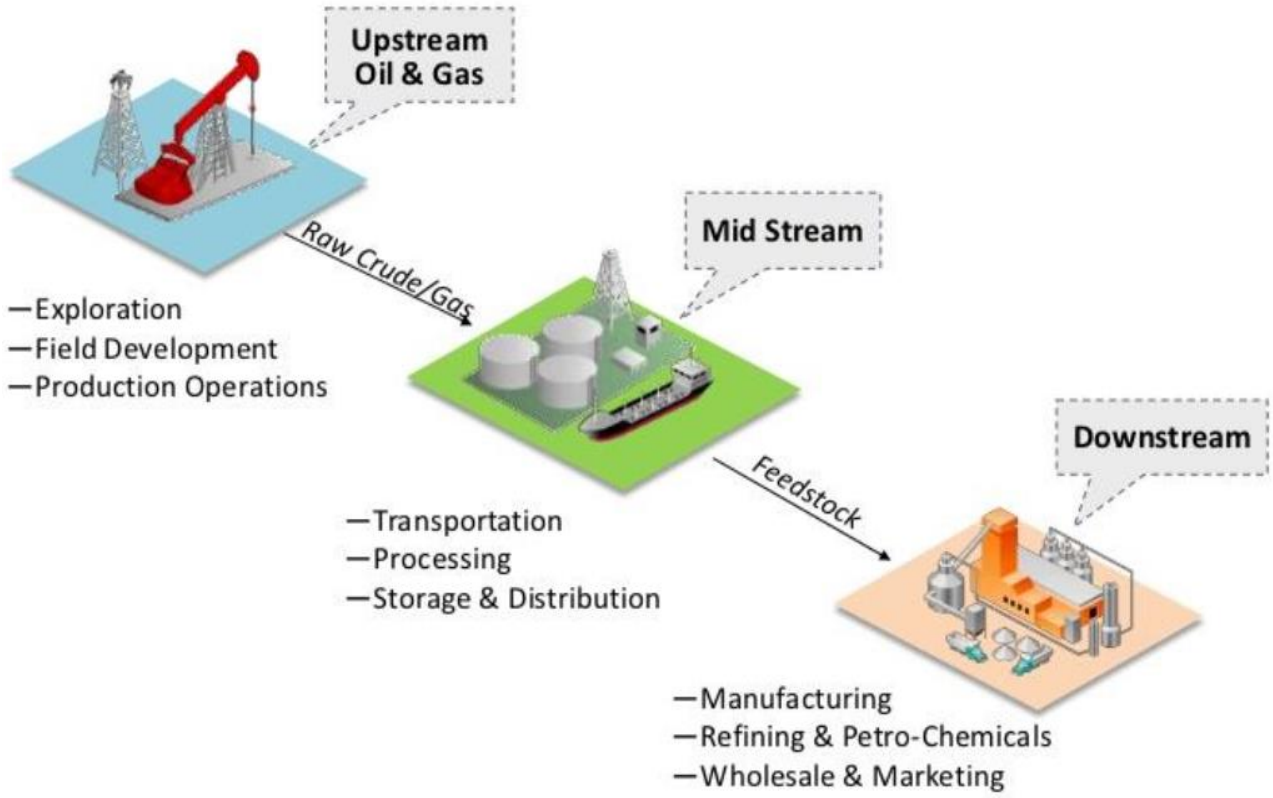
ONLINE CHANNELS ATTRIBUTES

Channel	Advantages	Disadvantages
Internet	• Target market selectivity • Tracking • Deliverability and flexibility • Interactivity • Cost • Integration • Available 24-hours a day	• Customer can ignore ads • Ad fatigue – too many options • Technical issue e.g. viewing problem • Security and privacy issue • Maintenance cost due to constantly evolving environment • Worldwide competition through globalisation
Mobile	• Highly personal • Always on mode • Allow immediate viewing • High segmentation potential • Have built-in payment system • Available at the point of inspiration	• Myriad screen sizes, operating systems and browsers that may impact ads viewing • Limited inputting of information • Security and privacy issues
Social media	• High engagement with online community • Potential to go viral • Interactivity • Facilitates two-way conversation / ability to garner feedback • High segmentation potential • Tracking • Low cost	• Possibility of bad messages to spread as quickly as good ones • Require constant involvement with the audience • Security

Sources: (Clow & Baack, 2016)

ANNEXURE G

PETROLEUM INDUSTRY VALUE CHAIN



Source: (DoE, 2019)

ANNEXURE H

SOURCES OF CRUDE OIL FOR SAPIA MEMBERS: 2008 TO 2018

Country of Origin											
	2008	**2009**	**2010**	**2011**	**2012**	**2013**	**2014**	**2015**	**2016**	**2017**	**2018**
Angola	3 598	3 817	3 409	1 948	3 356	2 444	2 614	3 348	4 000	3 420	2 352
Cote d'lvoire	0	0	88	0	0	0	0	0	0	0	90
Ghana	0	0	0	0	259	746	756	0	0	125	1 149
Nigeria	2 517	3 963	3 594	3 755	4 310	4 336	6 658	7 291	6 131	4 083	6 745
Qatar	0	0	0	266	242	0	202	832	682	0	133
Saudi Arabia	6 265	6 968	4 584	4 793	8 437	9 723	8 120	4 895	7 939	8 170	8 780
Togo	0	0	0	0	0	0	0	0	0	297	157
United Arab Emirates	855	553	1 018	598	538	307	924	1 337	673	107	794
Total	**22 090**	**21 067**	**25 040**	**19 254**	**17 834**	**18 940**	**18 658**	**21 279**	**19 233**	**20 666**	**16 770**

Sources: (SAPIA, 2018

ANNEXURE I

SOUTH AFRICA REFINERY OWNERSHIP AND CRUDE THROUGHPUT

Name	Crude throughput	Ownership	Product
CHEVREF	100 000 bbl/d	Chevron South Africa	Crude oil refiners
ENREF	135 000 bbl/d	Engen Petroleum	
NATREF	108 000 bbl/d	Sasol (64%) / Total South Africa (36%)	
SAPREF	180 000 bbl/d	Shell South Africa (50%) / BP Southern Africa (50%)	
Sasol Secunda	150 000 bbl/d	Sasol	Coal-to-Liquid (CTL) Gas-to-Liquid (GTL)
PetroSA	45 000 bbl/d	PetroSA	Natural Gas to liquid fuels

Source: (SAPIA, 2018)

MAP SHOWING LOCATION OF REFINERIES IN SOUTH AFRICA

Source: (SAPIA, 2018)

ANNEXURE J

CONSUMPTION OF PETROLEUM PRODUCTS IN SOUTH AFRICA

	Millions of litres					
Year	**Petrol**	**Diesel**	**Paraffin**	**Jet Fuel**	**Fuel Oil**	**LPG**
2007	11 558	9 755	696	2 402	465	636
2008	11069	9 762	532	2 376	555	613
2009*	11 321	9 437	551	2 349	724	554
2010*	11 455	10 170	545	2 308	468	612
2011*	11 963	11 225	581	2 434	477	717
2012*	11 714	11 262	470	2 367	568	656
2013*	11 153	11 890	530	2 223	523	485
2014*	11 344	13 169	558	2 197	487	398
2015*	12 072	14 178	573	2 441	591	588
2016*	10 160	10 846	558	2 121	562	557
2017**	11 174	12 147	648	2 713	523	551
2018**	11 142	12 539	702	2 346	552	504

Sources: (SAPIA, 2018)

**Paraffin includes power paraffin and illuminating paraffin,*

***2018 data sourced on 26 April 20*

ANNEXURE K

SAPIA MEMBERSHIP AS AT 31 DECEMBER 2018

Integrated Members	Non-integrated Members	
	Fuel Wholesalers	**LPG Wholesalers**
Astron Energy (Pty) Ltd	Afric Oil (Pty) Ltd	Afrox Ltd
BP Southern Africa (Pty) Ltd	Elegant Fuel (Pty) Ltd	Avedia Energy(Pty) Ltd
Engen Petroleum Ltd	Gulfstream Energy (Pty) Ltd	Camel Fuels (Pty) Ltd
PetroSA Ltd	Imbizo Petroleum Traders (Pty) Ltd	Easigas (Pty) Ltd
Sasol Oil (Pty) Ltd	FFS Refiners (Pty) Ltd	Indigas (Pty) Ltd
Shell Downstream South Africa (Pty) Ltd	Makwande Energy Trading (Pty) Ltd	Totalgaz Southern Africa (Pty) Ltd
Total South Africa (Pty) Ltd	MBT Petroleum (Pty) Ltd	Wasaa Gasses (Pty) Ltd
	Puma Energy (Pty) Ltd	
	Royale Energy Ltd	
	SA Bunkering & Trading (Pty) Ltd	

Source: (SAPIA, 2018)

ANNEXURE L

MAJOR FUEL COMPANIES NETWORK AND OFFERINGS

	ENGEN	CALTEX	Shell	bp	TOTAL	SASOL
Service Stations	1039	845	615	558	547	400
Fuel	Primax Unleaded 95 Primax Unleaded 93 Dynamic Diesel 50PPM	95 Lead/Unleaded T 93 Lead/Unleaded T Diesel 50 with Techron	Shell V-Power 95 Shell V-Power Diesel	BP Ultimate Unleaded ACTIVE BP Ultimate Diesel ACTIVE	Total Excellium Excellium Diesel	Sasol Turbofuels R95/R93 Sasol Turbodiesel ULS
Convenience Store	Quickshop	Freshstops	Shell Select	BP Express	Bonjour / La Boutique	Sasol Delight
Express Retailer	Woolworths	Fruit and Veg	Spar	Pick n Pay	No formal partnerships	No formal partnerships
Fast Food Brands	Wimpy Steers Debonairs Fishaways Barcelos Nandos Bimbos Corner Bakery Krispy Kreme	Crispy Chicken Hooked on Fish Flame Grill Biltong Bar Doughnut Delight	Steers Deli by Shell	Wimpy Steers Debonairs Fishaways Rock 'n Rooster Nandos McDonalds KFC Chicken Licken	-	Burger King
Coffee	Equatorial Coffee	Seattle Coffee Lavazza	Vida e Torrador	Wild Bean Café	Mug and Bean	
Phamarcy			Pharmashop			
Parcel Locker	DSV ByBoxes					
Loyalty Programme	eBucks Clicks	Ucount Rewards	V+	Discovery Smart Shopper	Dis-Chem Diners SA Voyager	-

Sources: (Company Websites and Publications)