Gordon Institute of Business Science
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The effect of fake news on the relationship between consumer-based brand equity and consumer responses to premium brands

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ABSTRACT

The landscape for brand management in the 21st century is dynamic and global with the creation of the Internet and more particularly social media where consumers are able to interact in real-time with brands and other consumers. Fake news (often shared through social media) has become popular in recent times owing to the low barriers to entry in the media industry which has created conducive space to spread information that is not fact-checked or verified which may affect the reputation of brands. The impact of word of mouth, particularly through electronic word of mouth on brands has been the focus of researchers recently. This study investigated the role of fake news on the relationship between consumer-based brand equity and consumer responses to premium brands.

A conceptual model was developed from the literature review testing the relationship between consumer-based brand equity (independent variable), brand preference, willingness to pay a price premium and brand loyalty (dependent variables) with fake news via electronic word of mouth as the moderating variable. By employing a quantitative study, 191 valid responses were received from the middle-class consumers in South Africa through an online survey to test the developed hypotheses. Structural equation modelling (SEM) was used to analyse the relationship the consumer-based equity, and consumer responses and a moderation interaction analysis was used to examine the effect of the fake news through electronic mouth on these relationships.

The result revealed that brand awareness, brand image, perceived quality and brand association were strong indicators of the consumer based-brand equity of premium brands. However, the strongest dimensions were brand awareness and brand image in the context of South Africa. The relationship of consumer-based brand equity was found to be the strongest with brand preference, followed by brand loyalty and willingness to pay a price premium. It was further revealed that fake news through electronic word of mouth does not moderate any of the relationships between brand equity and consumer responses in this case. These findings are relevant for both academics and brand managers as it revealed that the building of strong brand equity would shield premium brands from any fake news that may be disseminated through social media platforms.

Key words: Consumer-based brand equity, consumer responses, fake news via electronic word of mouth, middle-class, premium brands.

DECLARATION

I declare that this research project is my own work. It is submitted in partial fulfilment of the requirements for the degree of Master of Business Administration at the Gordon Institute of Business Science, University of Pretoria. It has not been submitted before for any degree or examination in any other university. I further declare that I have obtained the necessary authorisation and consent to carry out this research.

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CHAPTER 1: INTRODUCTION TO THE RESEARCH PROBLEM

Over the past twenty years, there has been an emergence of a fast-growing middle class in South Africa (Consumer Survey, 2017) who are buyers of high-quality products and services owing to the growth of income (Seth, 2011; Kravet & Sandikci, 2014). This increase in income has increased the spending power of these consumers. The continued growth of this class creates a market segment where there is an aspiration for more quality goods and thus creating the desire for status identity leading to increased potential market for the purchase of premium and luxury brands (Deloitte,2015). Mass prestige, as these brands have become known are important to middle-class consumers as these are often purchased for the consumer to identify with their social class (Truong, Simmons, McColl & Kitchen, 2008). An increased market for these brands translates into more retail sales growth, thereby growing the private sector and creating more job opportunities, which fosters economic growth (Kravet & Sandikci, 2014). The newly affluent shoppers seek quality over quantity (Euromonitor, 2016) which may be as an aspiration to identify with their new economic class creating a social identity.

Brands are highly valuable to organisations and creating strong brand equity in consumers' memory by producing compelling brand messages is every manager's aim (Keller 1993). This is often achieved by investing hugely in the advertisement to build strong brand equity (Keller & Brexendorf, 2017). Premium brands are different from the non-premium brands by the perceived prestige and superior functionality that can improve their purchase likelihood and justifies firms to dictate a price premium (Trefzger, Barccarella, Scheiner & Voigt, 2016). Trefzger et al., (2016) further argued that managing premium brands in the social media age is difficult as they cannot rely solely on their huge marketing investments but must employ new communication strategies.

There is increased use of the Internet for sharing information, which is disseminated without checking the validity of the contents (Allcott & Gentzkow, 2016). The number of people using the Internet exceeds 4 billion, which represents 51.8% of the entire world's population. The Internet report (2017) reveals that in Africa, there are over 412million Internet users which represents 10.2 of the total Internet users in the world and South Africa alone has 29.9million Internet users. The post-modern environment is characterised by a two-way communication between consumers and marketers making the previous one-way type of communication obsolete (Kohli, Suri & Kapoor, 2015). This means consumers' can share their experiences electronically by word of mouth through the Internet that is visible to a large number of people within a very short period (Kohli et al., 2015). The challenge is identifying whether an individual

has shared false or real information (Allcott & Gentskow, 2017). This poses a great risk for brands, which may experience brand damage as a result of news (in many cases fake news) being shared about the brand that is harmful to the brand reputation and diminishes their brand value (Borah &Tellis, 2016). The share price of Pepsi dropped by about four per cent during the 2016 US presidential election when a fake news story quoting the CEO of Pepsi (Indra Nooyi) telling the then-presidential candidate Donald Trump's supporters to "take their business elsewhere" (Berthon & Pitt, 2018, p. 2). In 2016, Kay Jewellers had their share of the downsides of social media through the accusation of swapping its customers' diamonds with fake stones. The company's stock fell by 3.7 per cent before they identified the claim to be false (Boland, 2017). Furthermore, there have been some fake news stories around automobile brands such as Lamborghini, Ferrari, Tesla and Fiat (Berthon & Pitt, 2018), making this a relevant industry for this study.

"Fake news arises in equilibrium because it is cheaper to provide than precise signals, as consumers cannot costlessly infer accuracy, and because consumers may enjoy partisan news" (Allcott & Gentzkow, 2017, p. 212). Fake news has been enabled more recently through the Internet with social media playing a major role in generating traffic to these false stories (Nelson & Taneja, 2018). It is important to protect brands in the social media environment particularly from consumer-generated stories that may negatively affect the perceived value of the established brand (Gensler, Völckner, Liu-Thompskin, Wiertz, 2013). A research funded by Twitter revealed that fake news spreads faster than authentic news on social media. (Kuchler, 2017). This poses a great risk for brands regarding protecting and managing brand equity and perception when they have no control over such messages being created or shared. Social media platforms such as Facebook have a structure where contents can be shared among followers with verification, fact-checking, or the use of any editorial judgment which enables just anybody to generate and post information which (in some cases) reach as many readers as Fox News, CNN, or the New York Times (Allcott & Gentzkow, 2016). On social media, consumers can select both the stories they read and the people they interact with (Berthon & Pitt, 2018) by following a brand they like and which identifies with their self-concept. The most popular fake news, during the US presidential elections, was shared through Facebook the most used social media platform, which outperformed the most popular real news channels (Allcott & Gentzkow, 2016). This may signal that people who encounter fake news on social media tend to believe these reports (Silverman, 2016).

Gensler et al. (2013) argued that due to the present dynamic market environment, consumers are becoming important creators and propagators of brand messages by sharing brand experiences on social media platforms

Brand managers can no longer play the role of pivotal authors of their brand stories (Kuksov, Shchar & Wang, 2013) with the advent of social media. In social media platforms, opinions and views are supported in a transitor between likeminded people driven by positive loop feedback, which protects these views from opposite perspectives (Allcott & Gentzkow, 2016). This means news on social media will be considered as the truth because of its popularity and people will tend to believe as the truth, which will both crave and fuel the spread of fake news (Berthon & Pitt, 2018). Kohli et al. (2015) argued that social media could disrupt brand positioning as consumers are likely to trust stories from their peers rather than sponsored commercialised messages.

Datta, Ailawadi & Heerde (2017, p.2) defined brand equity as "the differential preference and response to a marketing effort that a product obtains because of its brand identification". It is an intangible asset, which reflects a brand value for all stakeholders (Christodoulides, Veloutsou & Cadogan, 2015). It is used to create a competitive advantage by firms (Aaker 1991; Keller 1993) which can be viewed from both the consumers' and firm's perspectives. The dimensions of consumer-based brand equity have not been consistent across previous researches, which has mainly been studied empirically in the developed countries across product categories particularly in the United States. Godey, Manthiou, Pederzoli, Rokka, Aiello, Donvito & Singh (2016) studied the creation of brand equity from social media activities looking at two dimensions: brand awareness and brand image towards luxury brands. Christodoulides et al. (2015) used Aaker's (1991) dimensions of consumer-based brand equity in three European countries (the United Kingdom, Greece and Germany) towards a range of brands including goods, services and internet brands and indicated their applicability in these countries.

Consumer responses are desired business outcomes which have been argued to be behavioural outcomes of consumer-based brand equity (Ailawadi, Lehmann and Neslin, 2003; Godey et al., 2016). Consumers may respond positively or negatively towards a brand depending on what they feel, know and hear about a brand and as a result, may be willing to pay a price premium, recommend the brand to friends, or be likely to buy the brand before any other which may have an effect on the sales and profit of the brand (Keller & Lehmann, 2006). It is therefore imperative for brand managers and business leaders to protect their brands in this uncertain era, particularly in the online and virtual context.

This study will investigate the role of fake news in the form of electronic word of mouth through social media on the relationship between consumer-based brand equity of premium brands and consumers' behavioural outcomes (responses).

1.1 Research Purpose

The aim of this research is to examine the relationship between consumer-based brand equity and consumer responses towards premium brands in the context of South Africa and further examine the effect of fake news through electronic word of Mouth (eWOM) in a social media context on the relationship between consumer-based brand equity (CBBE) of premium brands and consumers' resulting behaviour.

Hudson, Huang, Roth & Madden (2015) argued that when engaging customers through social media, it positively influences the customer-brand relationship. Based on the research carried out by Godey et al. (2016) to determine the relationship between social media marketing efforts, brand equity and consumer responses towards luxury brands, this study aims to fill the research gap by examining the moderating role of fake news through electronic word of mouth on the relationship between brand equity and consumers' responses towards premium brands. It will also determine the relationship between brand equity and consumer responses of premium brands by adding perceived quality and brand association to brand awareness and brand image as dimensions of consumer-based brand equity as suggested by Godey et al., (2016).

This study will focus on the middle and upper-middle classes of South Africa owing to the fast growth of middle-class citizens in this emerging market. The new middle class are large-scale buyers and often first time buyers of cell phones, consumer electronics, appliances and automobiles (Sheth, 2011). Studies have noted the importance of this socio-economic class's consumption pattern on the growth of the emerging economy as they desire good quality materials (Kravet & Sandikci, 2014; Song, Cavusgil, Luo & Li, 2016) and they are most likely to purchase premium brands to identify with their new social class.

This study will address the following research questions:

What is the importance of brand awareness, brand image, perceived quality and brand association to building perceptions of strong brand in the context of South Africa?

What are the relationships between consumer-based brand equity and consumer behavioural outcomes (responses) to premium brands?

Will customers be willing to pay a premium price, have a brand preference for and remain loyal towards premium brands involved in targeted fake news?

This study employed the Information Adoption Theory of Sussman & Siegal (2003) which indicates the extent to which consumers use electronic information to influence their behaviour

depending on the source credibility and argument quality; Social Identity Theory of Tajfel & Turner (1979)) and the theory of planned behaviour (Azjen, 1985) which are discussed in the literature review.

1.2 Research Scope

The scope of this research is designed as follows:

Firstly, it will use the conceptual model of Godey et al., (2016) to examine the relationship between consumer-based brand equity of premium brands and consumer responses (brand preference, willingness to pay a price premium and brand loyalty).

Secondly, regarding fake news, previous studies have focused on fake news in a social media contexts by analysing its impact specifically with the backdrop of the US presidential election (Allcot& Gentzkow, 2016) where this study will consider this analysis in a different context. Pitt & Berthon (2018) considered the different types of fake news around brands with technology as an enabler and how brands can be managed in this context. Word of mouth plays a major role in the trust that influences how people act, feel or think (Fulgoni& Lipsman, 2017). eWOM also influences consumer decision making, and the effect may differ depending on the product and industry-specific factors (Yoo, Vadakkepatt & Joshi, 2015). The scope of this study will empirically examine the influence of fake news through eWOM in a social media context on the relationship between consumer-based brand equity of premium brands and consumer responses.

Thirdly, although this study might be applicable generally, this study will focus on South African consumers of premium brands particularly automobile brands as many customers choose car brands due to their exclusivity and prestige (Wagner, Scheiner, Baccarella & Voigt, 2016). South African middle to upper middle-class consumers will use premium brands to identify with their social stratification, and regarding premium vehicle brands, they can conspicuously consume these vehicle brands which will symbolise their status (Truong, Simmons, McColl & Kitchen, 2008). Fake news can cause reputational damages to brands (Berthons & Pitt, 2018) and if a fake news story is targeted at a premium brand, this will affect the ability of the middle class to use these brands in a conspicuous manner to show their status.

Finally, Godey et al., (2016) recommended that brand association and perceived quality be included in the dimensions of the consumer-based brand equity of their model and tested in a different country focusing on other brands asides luxury brands. This study has included both

brand association and perceived quality in their model which only included brand image and brand awareness to be tested in South Africa towards premium automobile brands.

1.3 Research Objectives

The research aims to develop a theoretical model

- To examine the relationship between customer-based brand equity of premium brands and consumer responses (brand preference, willingness to pay a price premium and brand loyalty).
- To analyse the main components of brand equity (brand awareness, brand image, brand association and perceived quality) on creating brand loyalty, brand preference and willingness to pay a premium price for premium brands in the context of South Africa.
- To determine the moderating role of fake news through eWOM in a social media context on the relationship between customer-based brand equity and consumer responses (brand preference, willingness to pay a price premium and brand loyalty).

1.4 Theoretical and Business Implication of Research

To manage brands in the social media environment can be challenging for businesses (Gensler et al., 2013). This is particularly true for established brands as the traditional marketing investments on advertisements will no longer build valuable brands as social media has the potential to disrupt the positioning of these brands (Kohli et al., 2015). The increased occurrence of fake news through the social media platforms and the easy circulation of this unfiltered information to consumers in this postmodern era can influence consumer-based brand equity (Berthon & Pitt, 2018). This study aims to provide brand managers and business leaders with insights on how fake news could affect consumer-based brand equity and as a result, consumers' willingness to pay a premium, their preference of the brand relative to other competing brands and whether they will remain loyal to the affected brands. This will also assist marketers in developing strategies to protect their brands from reputational damage caused by fake news disseminated through eWOM while protecting their revenue, cost and profit by leveraging on building brand equity to create sustainable brands.

Previous studies focusing on fake news in a social media context have analysed its impact specifically on the backdrop of the US presidential election (Allcot& Gentzkow, 2016).

Electronic word of mouth also influences consumer decision making and the effect may differ depending on the product and industry-specific factors (Yoo, Vadakkepatt & Joshi, 2015). The scope of this study will empirically examine the relationship between fake news through eWOM in a social media context on consumers perceived brand equity towards premium brands.

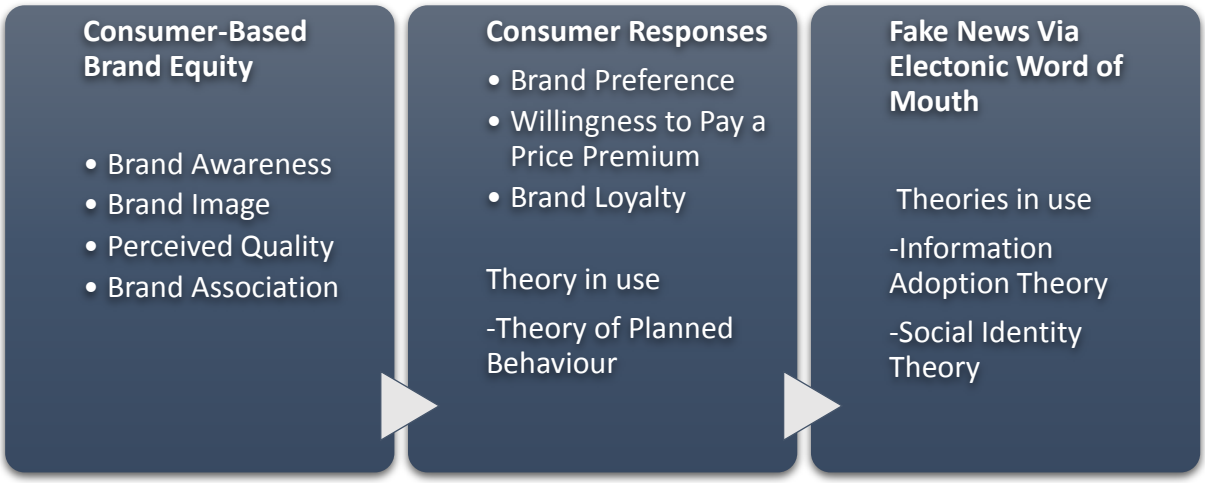
This study will make use of the dimensions of consumer-based brand equity as examined by Godey et al., (2016) and include two further dimensions from Aaker's (1991) brand equity model as suggested by Godey et al., (2016) to determine their impact on consumer behavioural outcomes in the context of South Africa.

A conceptual model is developed using Information Adoption Theory, Theory of Planned Behaviour and Social Identity theory to examine the effect fake news disseminating through eWOM has on the relationship between consumer-based brand equity and consumer responses.

CHAPTER 2: LITERATURE REVIEW

The purpose of this research is to examine the relationship between consumer–based brand equity and consumer responses and to assess the role of fake news on the relationship between brand equity and consumer responses. The following literature review aims to demonstrate the academic basis for the research to provide insight into the theories, hypotheses and rationale that assisted in building the research objectives.

Figure 1: Structure of Literature Review



2.1. Theoretical Frameworks

To build on the framework developed by Godey et al., (2016) used to examine the relationship between consumer-based brand equity and consumer responses (behaviour) towards luxury brands, this study used Information Adoption and the Theory of Planned Behaviour to determine the moderating role of fake news through electronic word of mouth and consumer responses focussing on the behaviour of the middle class in South Africa to premium automobile brands.

2.1.1 Information Adoption Model

Babić Rosario, Sotagio, Valck & Bijmolt (2016) noted that electronic word of mouth influences how consumers' make purchase decisions as they depend on word-of-mouth recommendations. Based on dual-process theory, which describes how people are influenced through the adoption of external information, ideas and knowledge, Sussman & Siegal (2003) developed the Information Adoption model using the Elaboration Likelihood model, which proposes that information influences people centrally, and peripherally (Petty & Cacioppo, 1986). The Information adoption model described how information in an online environment can influence people's behaviour. (Sussman & Siegal, 2003) as people are influenced differently depending on their perceptions and experiences (Bhattacherjee & Sanford, 2006). For this study, consumers may react differently to fake news through eWOM depending on their perception of a premium brand's equity.

The information adoption model considered argument quality (fake news via eWOM quality) which influences people centrally and source of credibility which influences people peripherally (Susmanie & Siegal, 2003; Bhattacherjee & Sanford, 2006).

The Elaboration Likelihood model determines how people are influenced by information based on the message they receive (Petty & Cacioppo, 1986). It proposes that in different situations, different people who receive messages will use it differently depending on how they congnitively analyse a particular information (Sussam & Siegal, 2003). Source of credibility is the peripheral cue that describes how people are influenced by other indicators rather than the message itself. Linking this to the information adoption model proposed by Sussam & Siegal (2003) fake news is the core content and the source of the message, credibility and likeability is the peripheral cue. In this study, source credibility is clearly shown in the case where Berthon and Pitt (2018) mentioned that brands could be negatively affected if they are on pages that contain fake news and that fake news is more believable if there are known and trusted brands advertising on the pages where the fake news is shared. Also depending on the social media platform where brands are targets of fake news, the receiver of the message may be influenced by the likeability of the source of the fake news. Filieri and McLeay (2014) found that information quality and source credibility has a huge influence on travellers seeking information from online reviews. Argument quality is important in an online-mediated environment where messages are disseminated with the ability to reach a large number of Internet users (Cheung, Lee & Rabjohn, 2008). Social media represents a significant change in communication as information can be accessed anytime, from any location, and with little or no verification (Kohli et al., 2015). Fake news is enabled through this medium without

filtering or fact-checking the content and intention of the messages before it is made available online to a large audience (Allcott& Gentzkow, 2016).

For the purpose of this study, argument quality will not be tested as part of the proposed model for the sake of simplicity. The study will focus on how the source of credibility, information usefulness and adoption of fake news through electronic word of mouth influences the relationship between consumer-based brand equity and consumer responses.

2.1.2 Social Identity Theory

Social identity theory has been considered to determine the effect of media on consumer-brand relationships. Social identity theory is a socio-psychological theory developed by Tajfel (1978) and further modified by Tajfel & Turner (1979) proposing that people categorise themselves as belonging to various groups such as professional groups, fan base groups of a sport team or pop band, nationality, marital status and gender to define who they are. This theory is relevant in the case of the research where consumers can join brand pages on social media such as Facebook and follow brands on Twitter and Instagram in order to define and enhance their self-concept by association (Albert, Merunnka & Valette-florence, 2013). eWOM is effective on social media when the information receiver can associate themselves with the sender of the eWOM (Babić Rosario et al., 2016). Also considering the nature of premium brands consumption, the growing middle class and upper middle class may conspicuously consume these brands to identify with their income group class (Truong et al.,2008) as consumers tend to identify themselves with brands they perceive to fit their self- concept (Wolter, Brach, Cronin & Bonn, 2016). The dissemination of fake news about brands can contaminate brands' reputation and thus indirectly, the consumer's sense of self (Berthon & Pitt, 2018).

2.1.3 Theory of Planned Behaviour

The Theory of Planned Behaviour (TPB), which was developed by Ajzen, (1985) as an extended model of the Theory of Reasoned Action, will form a further basis for this research. This theory proposes that behaviour is an outcome derived from the intention to perform a behaviour and perceived behavioural control (Ajzen, 1985). Perceived behavioural control (internal and external control) is formed by combining the perceived factors that can facilitate or negatively affect the performance of a behaviour. Teng, Khong & Chong (2017) used this theory to determine the effect of persuasive electronic word of mouth messages among social

media users. Using TPB, Roy, Datta & Mukherjee (2018) argued that mixed neutral word of mouth and rich electronic word of mouth content positively influences online purchase behaviour. In the social media context, this theory was also used to investigate the antecedents of consumers' intention to engage in electronic word of mouth (Fu, Ju & Hsu, 2015).

As the aim of this study is to understand the role of fake news through electronic word of mouth on the relationship between consumer-based brand equity and consumer responses (behaviour), only the behavioural and the perceived behavioural control components are used. Fake news (the perceived behavioural control- external control) can affect the relationship between brand equity and consumers' behaviour to remain loyal, prefer a specific brand and their willingness to pay a premium price, if they adopt the fake news information through electronic word of mouth in the social media context.

2.2 Premium Brands

Premium brands can broadly be defined as brands typically associated with a certain degree of superiority and perceived prestige (Trefzger, Barccarella, Scheiner & Voigt, 2016). They are highly priced and valued making them global brands (Steenkamp, 2014). In addition, premium branded products generally possess superior product attributes, such as an excellent quality or a high technological level as their unique selling point where consumers value quality over the price (Steenkamp, 2014).

In a vertical extension context, Dall'Olmo Riley, Pina & Bravo (2015) argued that luxury brands could grow downwardly by adding more affordable products to their product lines, which will democratise luxury brands. This allows customers at the lower end of the target market access to these brands in the hope that these customers will remain loyal and grow with the brand. There is a dilution risk for luxury and premiums brands in downward stretching in that the exclusivity and aspirational nature of these brands if they are accessible by too large a market.

Typically, premium brands are different from non-premium brands according to the products perceived quality and prestige, increasing the brand loyalty and allows companies to dictate a price premium from consumers (Trefzget et al., 2016). Premium brands can also be differentiated from luxury brands as premium brands are considered to be democratised luxury to enable these brands to reach the upper middle-income segment and thus to increase the size of their market. Premium brands are also referred to as new luxury brands with presence

most department stores and are more affordable than traditional luxury brands, which are characterised by high exclusivity and the highest price tags (Truong et al., 2008).

In the social media age, Kohli et al., (2015) argued that branding would become more transparent, which means that strong brands have to put in more effort to keep and grow their competitive advantage over other brands. With the advent of fake news, this may pose a high threat to premium brand competitiveness.

Premium brands are often tightly controlled regarding their image as this is key to the status that these brands have which makes them appealing to consumers and protects their aspirational value and hence the willingness to pay a premium price for these brands.

For the purpose of this research, our study is focused on premium automobile brands specifically Audi, BMW and Mercedes Benz because: Firstly, they have an undeniably premium branding approach (Trefzger,2016; Zoellner & Schaefers, 2015). Secondly, transportation represents a large portion of household consumption spending which was 16.2% in 2012(Santander, 2018). Thirdly, these brands also have a very large market share in the premium automobile brands in terms of brand value. Fourthly, according to an Interbrand (2017) report, Mercedes Benz, BMW and Audi have rankings 9th, 13th and 38th respectively of the 100 best global brands rankings with strong brand values and strong social media presence as indicated table 1 below.

Table 1: Social Media Impacts of Mercedes Benz, BMW and Audi

BRAND and Brand Value	POSITION	LIKES ON FACEBOOK	PEOPLE TALKING ABOUT IT ON FACEBOOK	TWITTER FOLLOWERS
Mercedes Benz 47,829 $m	9	20,847,149	146,874	2,034,921
BMW 41,533 $m	13	20,147,659	256,162	1,501,442
Audi 12,023 $m	38	11,166,380	30,392	1,797,699

Source: https://www.interbrand.com/best-brands/best-global-brands/2017/ranking/

The South African middle class are also likely to be able to purchase these premium automobile brands for their conspicuous nature with which they can signal their identity of social class, and if a fake news story is targeted at these brands, the consumption pattern towards these brands may change.

2.3 The Middle Class

Seth (2011) noted that continued growth of the middle class in emerging markets will create a market segment that desire for quality things in life. Leading to consumers desire to identify with their new social class and conspicuously consume premium brands as a symbol of their newly found financial status (Bartikowski & Cleverland, 2017).

There are difficulties defining middle class, particularly in emerging markets due to the radical economic and socio-cultural changes occurring globally in recent times (Kravet & Sandikci, 2014). Being middle class is having substantial disposable income and having experienced substantial lifestyle changes (Uner & Gungordu, 2016). According to Visagie and Posel (2013, p.2), the middle class is defined as "an individual is identified as being middle class if he or she lives in a household in which total household income, or per capita household income, lies within a certain range". Middle class means those in the actual middle of a nation's middle distribution and those with the middle-class standard of living, but in the South Africa context, due to the high level of poverty and inequality, the median based approach and affluent – based approach does not overlap (Visagie, 2015). Practically, the middle class can be measured using a range of indices such as measures of income, household asset, educational level and occupation (Visagie & Posel, 2013). In emerging markets, income sources and contradictory consumption patterns are considered (Kravet & Sandikci, 2014).

Middle-class consumers can utilise premium brands in a conspicuous manner which may assist them in communicating their sense of self (Truong et al., 2008). Middle-class consumers who are often aspirational consumers often use conspicuous consumption to signal their success to other. South Africa as an emerging market, is experiencing the rapid growth of the new middle class and exhibiting their new wealth is important (Consumer survey, 2017). Vehicle brands are often used in this way, particularly premium vehicles such as BMW, Mercedes and Audi since a vehicle is much more conspicuous than for example, a house.

2.4 Consumer-Based Brand Equity

According to Aaker (1991, p.15), brand equity is defined as "a set of assets and liabilities linked to a brand, its name and symbol, that add to or subtract from the value provided by a product service to a firm and/or that firm's customers". This means brand equity is defined from a consumers' perspective and the organisational perspective. Brand equity can be a consumer-based firm-based (Christodoulides et al., 2015) or sales-based (Datta et al., 2017).

Consumer-based brand equity (CBBE) focuses on what the customer feels and thinks of a brand which determines the choice and shares in the marketplace also known as the financial outcome sales-based brand equity and firm-based brand equity (Datta et al., 2017; Christodoulides et al., 2015). This research will focus on the consumer's perspective to analyse and determine brand equity.

It has been argued that consumer-based brand equity gives a firm a competitive advantage, which makes it necessary for consumers to identify a brand aware of a brand name with a differentiate brand association in mind (Keller 1993; Christodoulides et al., 2015).

Aaker (1991) proposed that the dimensions of consumer-based brand equity are brand awareness, brand association, perceived quality and brand loyalty which are the most popular empirically used dimensions of CBBE. In another context, however, brand equity dimensions consist of brand knowledge, perceived quality, brand loyalty and brand image (Keller, 1993). Keller (1993) posited that brand awareness and brand image creates brand knowledge. The models of Aaker (1991) and Keller (1993) have been used broadly. From their model, Yoo & Donthu (2011) developed a multi-dimensional scale to measure consumer-based brand equity. From Manger's perspective, consumer-based brand equity, four dimensions are used which are consumers' brand evaluation, consumers' affective response towards the brands, consumers' understanding of the brand and consumers' behaviour towards the brands (Veloutsou, Christodoulides and Chernatony, 2013)

Conceptually, it has been argued that brand loyalty is a behavioural outcome of brand equity and not as a dimension (Chaundry & Holbrook, 2001). Nam et al., (2011) also argued that physical quality, staff behaviour, ideal self-congruence, brand identification and lifestyle congruence, brand satisfaction are dimensions of brand equity which outcome is brand loyalty.

Godey et al., (2016) used brand awareness and brand image to evaluate brand equity towards luxury brands in the context of China, India, France and Italy, which both strongly indicated as dimensions of consumer-based brand equity. Godey et al., (2016), proposed that in addition to brand image and brand awareness used in their study, perceived quality and brand association should be incorporated as dimensions to re-examine consumer-based brand equity in another context. This is because brand equity might differ in terms of context and country due to the differences in both the micro and macro environment (Christodoulides, 2010). This study, therefore, focuses on brand image, brand awareness, brand association and perceived quality as dimensions of the consumer-based brand equity of premium brands in South Africa.

2.4.1 Brand Awareness

Brand awareness is when a consumer can recognises and recall that a brand belongs to a particular category (Aaker, 1991, p.61). Keller (2003, p. 76) defines brand awareness as “the customers' ability to recall and recognise the brand as reflected by their ability to identify the brand under different conditions and to link the brand name, logo, symbol, and so forth to certain associations in memory”. It is a psychological and knowledge-based dimension of brand equity (Keller 1993; Çifci, Ekinci, Whyatt, Japutra, Molinillo & Siala, 2016). Brand awareness plays an essential role in branding which is an important dimension of brand equity as it helps link brands to their target consumers (Aaker, 1996, Keller, 2003). It also helps to provide a learning advantage for brands and influences customers’ decision-making process (Keller, 2008). However, brand awareness is sometimes disregarded (Nam, Ekinci & Whyatt 2011). This study examined brand awareness as a dimension of consumer-based brand equity.

2.4.2 Brand Image

Brand image is the perception of a brand in the memory of consumers (Keller, 1993). Brand image consists part of brand knowledge, which is also a dimension of brand equity (Keller, 2003). Brand image plays an important role in marketing by generating value through distinguishing a brand, building sense and feeling which assists consumers with purchase decisions (Aaker, 1991). It is also essential for determining the consumer buying behaviour (Burmann, Schaefer& Maloney, 2008) particularly, willingness to paying a price premium (Anselmsson, Bondesson & Johansson, 2014) and was found by Godey et al. (2016) to be a strong dimension of brand equity. This study examined brand image as a dimension of consumer-based brand equity.

2.4.3 Perceived Quality

Perceived quality is how a consumer judges the overall performance of a product (Ziethaml, 1988). It is the cumulative consumer’s perception about the comparative performance of a brand to other competing brands (Aaker, 1991). Anselmsson et al., also argued that higher perceived quality brand can lead to the possibility of charging a premium price compared to another competing brand. This means perceived quality distinguishes brands and gives them a competitive advantage. Perceived quality is a strong determinant and dimension of brand

equity (Aaker 1991; Christodoulides et al., 2015). This study focussed on perceived quality as a dimension of consumer-based brand equity.

2.4.4 Brand Association

Brand association is a core component of consumer-based brand Equity (Aaker 1991; Christodoulides & de Chernatony, 2010; Keller, 1993). It is a consumers' positive feeling towards a brand depending on the relative degree of the strength of the brand (Lassar, Mittal & Arun, 1998). According to Keller (1993), brand association to a consumer reflects in three forms: attitude (customer's overall appraisal of a brand), benefit (the advantages to be derived from a particular product or services and attribute (feelings, experience and brand personality attributed to a brand). Brand association is often combined with brand awareness as one dimension of consumer-based brand equity (Yoo &Donthu, 2001). For this study, the brand association was treated separately from brand awareness as a dimension of consumer-based brand equityas recommended by (Godey et al., 2016)

2.5 Brand Equity and Consumer Responses

In marketing, consumer response is defined in terms of consumer perceptions, preferences, and behaviour which is produced from the activities of marketing mix where brand equity is a core aspect of the marketing mix (Keller 1993). The goal of branding is to influence consumers' responses in terms of willingness to pay a price premium, have a preference for a particular brand over competing brands and to increase brand loyalty creating a competitive advantage for brands (Godey et al., 2016). Keller and Lehmann (2006) developed a brand value chain revealing how consumers respond to a brand depending on how they feel and think about a brand by willingness to pay a premium price for a brand, willingness to recommend a brand and willingness to purchase a brand before another brand, which influences sales, cost and profit of a brand. One of the conditions highlighted that affects how a consumer feels and think of a brand is the industry and environment conditions. Depending on the marketing mix activity (product, price, promotion & placement), consumers can have a positive or negative perception of a brand which can result in a corresponding consumer response (Godey et al., 2016). Strong brand equity will contribute to the increased outcome in brand preference, willingness to pay a premium price and customer loyalty (Aaker 1991; Keller, 1993; Keller & Lehman, 2006). Godey et al., (2016) posited that brand equity created through social media

marketing activities have a positive influence on consumer behaviour (brand preference, willingness to pay a premium price and brand loyalty) towards luxury brands. This study focused on the dimensions of consumer responses used in the study of Godey et al., (2016).

2.5.1 Brand preference

Brand preference means consumers will tend to prefer a brand to several competing brand relative to what they feel and know about the brand (Keller, 2003). This will result in more sales, reduced cost and improved profit for the preferred brand. Past studies indicated that strong brand equity has a strong influence on brand preference (Cobb-Walgren, Ruble &Donthu, 1995; Lieven, Grohmann &Hermann, 201; Chang &Liu, 2009). Ebrahim, Ghoneim, Irani and Fan (2016) argued that consumer experiences with a brand create brand knowledge that develops a brand preference and purchase intention (Ebrahim et al., 2016). This study, therefore, hypothesises that:

H1: There is a positive direct relationship between consumer-based brand equity and brand preference.

2.5.2 Willingness to pay a premium

Premium brands are unique because of the exclusivity and prestige that makes consumers willing to pay a premium price (Trefzger et al., 2016). Netemeyer. Krishnan, Pulig, Wang, Yagci, Dean & Ricks (2004) argue that willingness to pay a premium price is the amount consumers are willing to pay for their brand compared to another brand of the same category. Kadirov (2015) proposed that consumers are willing to pay a premium price for a national label brand to a private label brand because of consumers' value authenticity gap than the quality gap between these two brand labels. Anselmsson et al., (2014) found that in addition to quality having a significant effect on paying a premium price for packaged food brand, other image dimensions such as uniqueness, social image and home country origin are the strongest determinants of willingness to pay a price premium. The willingness to pay a price premium for a brand has a positive relationship with brand equity (Ailawadi, Lehmann & Neslin, 2003). Siu, Kwan and Zeng (2016) argued that consumer-based brand equity of luxury brand has a strong influence on willingness to pay a price premium. Godey et al. (2016) also argued that CBBE predicted consumer responses where willingness to pay a premium price is a dimension. This study, therefore, hypothesises that:

H2: There is a positive relationship between consumer-based brand equity and willingness to pay a price premium towards premium brands

2.5.3 Brand loyalty

Brands are built by organisations to generate customer loyalty (Kotler & Keller, 2015). According to Oliver (1999, p.34) brand loyalty is a deeply held commitment to rebuy a preferred brand consistently in the future, thereby causing repetitive same-brand or same brand-set purchasing, despite situational influences and marketing effort having the potential to cause switch behaviour. This means customers will continue to remain loyal to a brand compared to other competing brands regardless of the situational factors (Oliver, 1999).

Brand loyalty is argued to be a dimension of consumer-based brand equity (Aaker, 1991; Keller 1993, Christodoulides, 2015). In contrast to Nam et al. (2011), brand loyalty is argued to be a behavioural component and an outcome of consumer-based brand equity. Choi, Kim & Mattila (2015) studying fashion sports brands found that there is a significant positive relationship between the perceived quality of a brand and brand loyalty. Pappu & Quester (2016) posited that brand trust, brand attitude, satisfaction and value for money positively influences brand. Godey et al., (2016) found a strong relationship between consumer-based brand equity and consumer responses where brand loyalty is considered as a dimension of consumer responses. Buil, Chernatony and Martinez (2013) also argued that brand associations, brand awareness, perceived quality and brand association positively influence brand loyalty.

Based on the argument above, this study hypothesises that:

H3: There is a positive relationship between consumer-based brand equity and brand loyalty towards premium brands.

2.6. Fake News

Fake news is news articles are purposely created to mislead readers which have been verified as untrue defined by Allcott & Gentzkow (2016, p. 212) as a "distorted signal uncorrelated with the truth". Fake news can also be termed as false information in the form of false stories, false polls, false pictures and false reviews (Berthon & Pitt, 2018). Wardle (2017) identified seven types of fake news which is described in table 2 below:

Table 2: Seven Types of Fake News

TYPES OF FAKE NEWS	MEANING
Satire or parody	The aimis not to cause harm but can potentially fool the reader.
False connection	When headlines, visuals or captions do not support the content
Misleading Content	Incorrect use of information to describe an individual
False context	When an authentic content is disseminatd with an untrue contextual information
Imposter content	When real sources are disguised with false created content
Manipulated content	When an authentic information is altered to deceive with a designed photo
Fabricated content	New content is entirely untrue, designed to deceive and do harm

Source: https://firstdraftnews.org/fake-news-complicated/.

Fake news cannot only be found in politics but it is also common in many other areas (Lazer, Baum, Benkler, Berinsky, Green hill, Menczer & Schudson, 2018). This means that no person, product, group and organization is exempt from fake news. Fake news has been in existence since humans could talk and deceive each other intentionally (Berthon & Pitt, 2018) and became more popular with the advent of newspapers, radio and television. However, in the 21st century, with the creation of the Internet, the impact and usage of the Internet have been significant and fake news has gained major importance (Fulgoni & Lipsman, 2017). First, the barriers to entry in the media industry have dropped drastically (Allcott & Gentkow, 2017), making the scale of the problem grow exponentially (Berthon & Pitt, 2018). Secondly, social media are conducive places for spreading fake news since information is not fact checked and verified (Allcott & Gentzkow, 2017) which can easily be shared to millions of followers in a blink of an eye. Social media usage has grown tremendously in 2017; the subscribers of Facebook, the most widely used social media platform are over 2.1 billion, of which 177 million are in Africa and 16 million in South Africa (Internet World Statistics, 2018).

Several websites produce fake news and some are also specifically developed to spread the fake news with names of these sites are often created to look like an ideal organisation (Allcott & Gentzkow, 2017). Following the US presidential election, a report emerged revealing that separate investigations carried out by BuzzFeed and The Guardian revealed numerous sites are posting fake news created in the small town of Velves, Macedonia (Subramanian, 2017). Disgruntled employees and customers often produce fake news towards brands (Financial Times, 2018). According to Allcott & Gentzkow (2017) and Fulgoni & Lipsman (2017), argued that there are two main motivations for providing fake news. First is for monetary gain, as news that goes viral on social media platforms attracts advertisement revenues when readers access the original site. The second motivation is intentional when fake news creators; for example, seek to advance political candidates they favour.

Gentzkow, Shapiro & Stone (2016) developed a model in the political environment to describe how consumers use information. First, they desire to know the truth and second consumers may derive psychological satisfaction from viewing reports that match their beliefs.

2.6.1 Fake News and Brands

Fake news can implicate brands directly and indirectly in four different ways (Berthon & Pitt, 2018). Firstly, brands can be directly targeted by fake news. For example, the fake news on social media through tweets advertising ”Dreamer Day” to supposedly give out free Frappuccino to illegal immigrants with the hashtag ‘borderfreecoffee’. This is a false story targeting Starbucks for supporting illegal immigrants in US(Financial Times, 2018); the CEO of Pepsi, Indra Nooyi was also indicted with a fake news of her telling the supporters US presidential candidate to “take their business elsewhere” (Berthon & Pitt,2018 p. 2) which affected the stock price of the company negatively.

Secondly, brands can indirectly be implicated by fake news when their advert is placed on the same page where a fake news story is published which can create the wrong impression amongst consumers that the story is the truth especially when the brand is a strong and trusted brand. However, when the story is confirmed to be false, this can implicate the brand whose advert was placed on the page, as was the case with brands such as Fiat Chrysler, Choice Hotel and Bose. A story posted online during the American presidential race in 2016 that Hillary Clinton, was having an affair with Yoko Ono. Consumers believed the story because Fiat Chrysler, a strong and trusted brand had an advert placed on the site where the story was posted (Kirkman, 2016).

Thirdly, association with a fake news site can implicate them indirectly when they associate themselves with popular stories without validating if it is true or false with the motive of reaching a large number of people within a short period. Brands are often the reason for a fake news as a break of fake news attracts attention and advertisement (Berthon & Pitt, 2018).

Fourthly, brands can be directly and indirectly affected by fake news when they fund fake news sites with the aim of reaching a wider audience. This is so because fake news tends to attract attention as it fits into people's view of how things should look like which pushes them to seek information that confirms these philosophies resulting in confirmatory bias (Liedtka,2015). However, this generates a negative view of such brands and destroys their reputation.

Fake news can damage brands' reputation and trust, which can lead to a decrease in stock price, revenues and profits (Financial Times, 2018). It also has a high social cost (Allcott & Gentzkow, 2016) where brands are faced with the additional cost of regaining the confidence of their consumers and public after the outbreak of a harmful fake news story. Facebook and Google have introduced ways to decelerate the spread of fake news by collaborating with Snopes, a fact checker, and by adopting artificial intelligence to help detect fake news stories. In the short-run, this means they will be losing revenue income from adverts, but in the long-run with their reputation preserved, these businesses are more likely to be sustained.

This study particularly focuses on premium brands as these brands are susceptible to being the target of fake news. In addition to their horizontal competitors, premium brands might be a threat to luxury brands and mass brands because of the ease of mobility between the two brand profiles. Consumers want to identify with their brands and a fake news event about their brand may not match their self-concept. This study further focuses on premium vehicle brands as consumers often use these brands for their conspicuous nature to enhance their self-identity in terms of status (Truong, 2008). Some examples of fake news reported about automobile brands include: Lamborghini faking the lap times of some of their cars; Ferrari intentionally resetting their odometers, so the mileage reading of cars appear lower than reality, and Tesla and SpaceX have been accused of spending billions of dollars of taxpayer's money (Berthon & Pitt, 2018).

2.6.2 Fake news and eWOM in the context of social media, brand equity and consumer responses

In the post-modernist era, fake news is popularly spread on social media platforms as electronic word of mouth (eWOM) (Fulgoni & Lipsman, 2017). Fake news can be either positive or negative depending on the motive of the producer (Allcott &Gentzkow, 2016). According to Henning-Thurau, Gwinner, Walsh & Gremlar (2004, p. 39) electronic word of mouth is 'any positive or negative statement made by potential, actual, or former customers about a product or company, which is made available to a multitude of people and institutions via the Internet. This information is facilitated through communication between peers and represents a new way of consumer socialisation that can influence consumers' behaviour (Wang, Yu, & Wei, 2012).

Fake news is popularly disseminated through social media (Berthon & Pitt, 2018; Allcott & Gentzkow, 2016) as digital word of mouth (Fulgoni & Lipsman, 2017) otherwise known as electronic word of mouth. Social media uses mobile and internet technologies to share, discuss, produce and modify information (Kohli et al., 2015). The technologies associated with social media have increased the powers of customers, as they are able to share stories to a wider audience through Facebook, Twitter, LinkedIn, Snapchat (Gensler, Völckner, Liu-Thompskin, Wiertz, 2013). Fulgoni and Lipsman (2017) argued that the existence of mobile Internet service is athreat to the digital environment by soiling it with different types of spam and fake news catalysed by the rise of digital advertisement where digital word of mouth is democratised making it difficult for marketers and brand managers to navigate disrupting digital advertising models and metrics. Schivinski & Dabrowski, (2015) argued that user-generated social media communication influences brand loyalty, brand awareness, brand association and the perceived quality of brands.

By conducting a meta-analysis research on eWOM elasticity, Yoo, Vadakkepatt & Joshi (2015) discovered that the valence (negative or positive) ratings do not affect sales the same way with negative ratings having a more significant impact on eWOM valence elasticity. Yoo et al., (2015) also noted that there is a need to account for product and industry-specific factors to understand the impact of eWOM valence and volume as not all eWOM has the same effect. This research focussed on the effect of fake news through eWOM in the automotive industry.

Berger (2014) noted that word of mouth strong influence on consumer behaviour and further argued that word of mouth serves five roles to manage impressions, acquire information, regulate information, persuasion and for social bonding. Acknowledging the importance of word of mouth and brands, Lovett, Peres and Shachar (2013) developed a theoretical framework and posited that consumers spread word of mouth because of social, functional

and emotional drivers with social and functional drivers influencing online word of mouth. This, however, can lead to brands trust declining as word of mouth plays an important purpose in the value of trust which can have an effect on how consumers 'feel', 'think', and act towards brands (Fulgoni & Lipsman, 2017).

Datta et al. (2017) argued that brands with strong consumer-based brand equity are brands that consumers can associated themselves with and have a good knowledge of. Liu & Shankar (2015) argued that a product-harm crisis situation focusing on automobile, leads consumers responding more negatively to product recalls with more increase in media attention and higher perceived product quality.

Fake news stories targeting brands can have a negative effect on their reputation and thus negatively influence consumers' responses (Berthon & Pitt, 2018) and therefore facilitate or impede consumers' behaviour towards such brands. We argue that brands with strong brand equity may be able to ward off the effect of fake news on consumer responses and that fake news may act as a moderator between brand equity and consumer responses. This study therefore, hypothesises that:

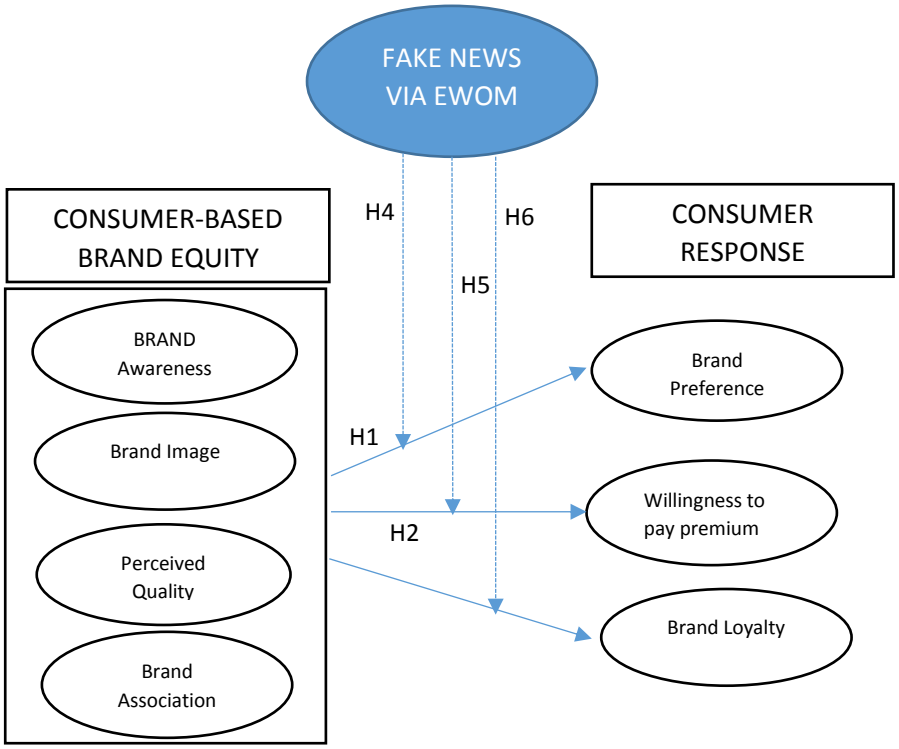
H4: Fake news through eWOM targeted at premium brands in a social media context moderates the relationship between brand equity and brand preference.

H5: Fake news through eWOM targeted at premium brands in a social media context moderates the relationship between brand equity and willingness to pay a premium price.

H6: Fake news through eWOM targeted at premium brands in a social media context moderates the relationship between brand equity and brand loyalty.

Based on the literature reviewed and the hypotheses developed above, the researcher proposes the following theoretical model (fig. 2) which this study empirically tested

Figure 2: Consumer-based brand equity and consumer responses theoretical model



CHAPTER 3: PROPOSITIONS AND HYPOTHESES

This chapter provides the hypotheses generated from the literature review in the previous chapter focusing on the objectives of the research.

The research aims to examine the relationship between consumer-based brand equity and consumer responses (brand preference, willingness to pay a price premium and brand loyalty) towards premium brands. Furthermore, it examines the moderating effect of fake news through electronic word of mouth on these relationships. A conceptual model is proposed in the literature to test these hypotheses (Figure 2).

3.1 Hypothesis One

The literature suggested that brands with strong consumer-based brand equity may influence consumers prefer a brand over other competing brands in the same category (Cobb-Walgreen et al., 1995; Lieven et al.,2015; Ebrahim et al.,2016, Godey et al., 2016). Hypothesis one thus proposes:

H1: There is a positive direct relationship between consumer-based brand equity and brand preference.

3.2 Hypothesis Two

Consumer-based brand equity will influence consumers' to be willing to pay a premium price for a brand compared to other brands (Ailawadi et al., 2003; Godey et al., 2016). Hypothesis two proposes:

H2: There is a positive relationship between consumer-based brand equity and willingness to pay a price premium towards premium brands

3.3 Hypothesis Three

Consumer-based brand equity influence consumers' to be loyal to a brand compared to other competing brands (Nam et al. 2011; Buil et al. 2013, Godey et al., 2016). Hypothesis three proposes:

H3: There is a positive relationship between consumer-based brand equity and brand loyalty towards premium brands.3.4. Hypotheses Four, Five and Six.

3.4. Hypotheses Four, Five and Six

Fake news stories targeting brands can have a negative effect on their reputation and thus negatively influence the perception of consumers towards their brand equity (Berthon & Pitt, 2018; Fulgoni & Lipsman, 2017) and therefore facilitate or impede consumers' behaviour towards such brands.

We argue that fake news targeted at premium brands can have a moderating effect on the relationship consumer-based brand equity has on consumer responses (Brand preference, willingness to pay a premium price and brand loyalty).

H4: Fake news through eWOM targeted at premium brands in a social media context moderates the relationship between brand equity and brand preference.

H5: Fake news through eWOM targeted at premium brands in a social media context moderates the relationship between brand equity and willingness to pay a premium price.

H6: Fake news through eWOM targeted at premium brands in a social media context moderates the relationship between brand equity and brand loyalty

CHAPTER 4: RESEARCH METHODOLOGY

4.1 Introduction

This chapter discusses the research methodology and design adopted to test the hypotheses proposed in the previous chapter. It further includes the population, the sampling methods, data collection, data analysis, research assumptions as well as identifying the potential limitation encountered during the study.

4.2 Research Design

According to Creswell & Creswell (2017) to have a good start for any research, is to identify the philosophical worldviews that determine the choices of research design. A research design is the intended methods to be used to solve and answer the research questions and problems (Creswell, 2014)

This study is grounded in a positivist research philosophy as it corresponds closely to the research problem to study the observable and measurable variables (fake news through eWOM, consumer-based brand equity and consumer responses) in a controlled environment. This approach is chosen as positivism seeks to predict and understand human behaviour by employing certain objectives, measurement using empirical science (Creswell, 2014). Research philosophy includes essential assumptions of how the researcher views the world, which informs the research strategy and data collection method (Saunders & Lewis, 2012).

A deductive approach is employed which involves the "testing of a theoretical proposition by using a research strategy specifically designed for the purpose of theory testing" (Saunders & Lewis, 2012, p. 108). In line with the central objective of this research, a deductive method is most suitable. A deductive approach often results in the use of surveys which enabled the collection of a large data from a huge population at a minimal cost (Saunders & Lewis, 2012). Surveys make it possible for the researcher to use sampling to generate data that can be generalised to a larger population (Saunders & Lewis, 2012). Given the above, a survey research strategy was employed for this study.

Quantitative research differs from qualitative research in that a quantitative approach test the proposed theories by analysing the relationship between variables while a qualitative approach explores and understand the meaning that participants attribute to a social problem (Creswell & Creswell, 2017). A quantitative research methodology provides data that is precise and numerical and the results of the findings are independent of the researcher (Mayoh & Onwuegbuezie, 2015). Based on the numerical and descriptive nature of this study's data, a

quantitative method is designed to study the research objectives. In addition, the use of questionnaire as a means of data collection qualified this study as quantitative which explains and examine cause-and effect relationships between independent and dependent variables (Saunders et al., 2012 & Lewis, 2012), like the relationships between the fake news via eWOM (moderating), consumer-based brand equity (independent) and the consumer responses (dependent) to brands in this study.

Due to time constraints, data was gathered at one specific period using a research survey, therefore a cross-sectional study was conducted and not longitudinal which involves data collection over an extended period of time (Saunders & Lewis 2012). A survey method for collecting data was used to test the hypotheses developed in this study which has been outlined in chapter 3.

4.3 Population

A population includes any complete group of members who share certain characteristics (Saunders and Lewis, 2012). A target population is defined as the complete group specific population attributes which are essential to the research problem (Babin & Zikmund, 2015). This study aimed to examine the behaviour of the middleclass when fake news is targeted at premium brands. Middle classes are stratified according to their income level, occupation and level of education (Song et al., 2016) .The UCT Unilever Institute of Strategic Marketing, (2013) characterised the middle class as persons living in a household income of between R16, 000 and R50, 000 a month or meets and meets two of these requirements: owns a vehicle, has a tertiary qualification or currently studying or works in a white collar job, lives in a city and pays rent of R4000 and above. The income criteria, educational level and occupation, were used to determine our target population which also aligns with the definition of middle class posited by Visagie & Posel (2013) as a level of affluence or lifestyle, which encompasses economic and social meaning. Regarding income criteria, the minimum income for this study was increased to a household income of R25 000 to ensure the affordability of a premium branded vehicle.

Since we are studying the behaviour of consumers' towards premium brands in the social media context, it was imperative that they had a social media account (Facebook, Twitter, Instagram, Snapchat, LinkedIn etc.) to ascertain that they are familiar with the social media context.

The population for this study was therefore, defined as a South African citizen with a household income of R25, 000 and above per month or who studied or is studying at a tertiary institution or has a white collar job and has a social media account.

4.4 Unit of analysis

The main entity that is examined and analysed in a research is the unit os analysis (Babin & Zikmund, 2015)

This study's unit of analysis, is an individual with an income of between R25, 000 above per month or/ and has a tertiary education or has a white collar job and has a social media account.

4.5 Sampling method and size

A sample is "a subgroup of the whole population" (Saunders &Lewis, 2012 p.132). It is not possible to use a probability sampling approach when the researcher does not possess the complete list of the population under study(Saunders & Lewis, 2012). In the case of this study, a complete list of all South Africans with a monthly household income of between R25, 000 and R50,000 or tertiary education or/and has a white-collar job and has a social media account is not available. For this reason, the non-probability sampling technique was employed to collect data.

For this study, non-probability convenience and snowballing sampling was used by collecting data through an online survey using social media platforms and emails to access respondents. Convenience sampling is based on the ease of access rather than the appropriateness of respondent hereafter, snowball sampling was employees where subsequent respondents are identified by earlier sample members (Saunders & Lewis, 2012).

Jackson (2003) established a rule of thumb to define the relationship between sample size and the complexity of the model proposed, using the 'n:q rule' representing the ratio of the respondents to the number of independent variables. The ideal sample size to the independent variable ratio would be 20:1 and using a ratio of 10:1 would still be adequate (Jackson, 2003). Based on the number of the variables used in this study, which was 31, applying the n: q ratio of 10: 1 meant that the ideal sample size for this study should be 310. However, due to time constraint faced during data collection, this sample size was not achieved. According to Kline

(2011) in studies where structural equation model is used, the sample can be approximately 200.

The sample size collected in this study, was 200 ,but after cleaning the data and removing unqualified respondents, the sample size used for further analysis was 191.

4.6 Measurement instrument

The survey strategy allowed the relationships between variables to be examined and enabled the hypotheses developed in chapter three to be tested (Bryman, 2012). A structured, self-completed questionnaire was developed, using Google forms, an online survey software and questionnaire tool. The questionnaire focused on the dimensions of consumer-based brand equity, consumer responses and fake news through electronic word of mouth. The questionnaire was created on Google forms after obtaining ethical clearance in July 2018. An online self-completed survey advantage includes the ease of sending to a large number of respondents at any time, ease of collecting the completed survey, reducing cost and response biases (Baltar & Brunet, 2012; Saunders & Lewis, 2012). However, honest opinions were difficult to articulate using structured and fixed responses.

A consent letter, containing a brief description of the research, confidentiality and voluntary participation of the respondents was included in the first section of the online questionnaire. Section 2 focused on the demographics of the respondents, which covered their age, gender, income, occupation and educational level. A filter question relating to their social media presence to determine respondents' eligibility. Respondents without any social media account were deemed ineligible and removed from the collected data for further analysis. To be deemed as middle-class respondents had to either earn R25,000 and above or/and have a tertiary form of education or/and white collar occupation such as professional, executive, office staff or skilled workers. Non- skilled workers that earn above R 25,000 were eligible as they could afford to purchase any of the premium automobile brands. Income alone could not be used as a measurement of the middle class due to the subjective nature of income and particularly in South Africa where inequality gap is wide resulting to a very low median income when the population is arranged from the lowest to highest earner (Visagie & Posel, 2013). The section also focused on their social media activity and currently owned automobile brands.

The premium automobile brands that they would likely purchase (Audi, BMW and Mercedes) was linked to the subsequent questions that examined, consumer-based brand equity, consumer responses and fake news through electronic word of mouth. According to the

Authors, asking about their likely to purchased premium brands was considered better than just asking about their favourite premium automobile brands as favourite premium brands may not mean that they will purchase any of these brands in the future and as such may not have any bottom-line impact for these brands on the long-run.

The concept of a premium brand is a subjective and context specific (Trefzget et al.,2016) therefore a list of specifically chosen premium automobile brands was chosen (Audi, BMW and Mercedes Benz). These brands all ranked within the top 100 global brands (Interbrands, 2017) and were indicated to be most popular in the South African market amongst the middle class (UISM, 2013). They have an undoubtedly premium appeal (Trefzger et al., 2016) which the middle class will conspicuously consume to express their self-identity (Truong et al., 2008).

The last section tested the propositions related to consumer-based brand equity (brand image, brand awareness, perceived quality and brand association), consumer responses (Brand preference, brand loyalty and willingness to pay a price premium) and fake news through electronic word of mouth. This was done using 31 closed-ended questions answered using a five-point Likert scale to test the developed model. All five constructs were measured using a five-point Likert scale.

The measurement scales for each of the eight variables were adapted from previous established empirical studies. The electronic word of mouth scales was modified for fake news to fit the context of the study because the research focused on how fake news through electronic word of mouth affects brands and consumer behaviour. As at the time of this study, to the best of the author's knowledge, there are no known scales that specifically contained the element of fake news through electronic word of mouth.

4.6.1 Consumer Based- Brand Equity

As discussed in chapter two, this study adapted the model developed by Godey et al., (2016) analysing the relationship between consumer-based brand equity (brand awareness and brand image) and consumer responses towards luxury fashion brands. In this study perceived quality and brand association were added to the dimensions of consumer-based brand equity Godey et al., (2016) suggested to include these dimensions of consumer-based brand equity for future studies.

For brand awareness, three scale items were derived from a scale developed by Kim & Hyun (2011). For the brand image, three scale items were derived from the work of Kim & Kim

(2005). Five scale items relating to perceived quality were derived from a scale developed by Lehman Keller & Farley., (2008). Four scale items for brand association based were derived from the work of Kim and Kim (2005) and Yoo, Donthu and Lee (2000). However, for the pilot test, these scales of brand association were considered not reliable which was further discussed in the pilot test section below. They were replaced by scale items used in the study of Christodoulides et al., (2015) to examine the dimensions of consumer based-brand equity in a multicultural context which were originally developed by (Aaker, 1991; Keller 1993; Yoo et al., 2000) for the final questionnaire. Table 3 below shows the details of the scale items used to measure the dimensions of consumer-based brand equity (Brand awareness, brand image, perceived quality and brand association).

Table 3: Consumer-Based Brand Equity Measurement Items

Construct	Dimensions	Scale Items	No	Source
Consumer-Based Brand Equity	Brand Awareness	I am always aware of this particular brand.	1	Kim and Hyun (2011)
		Some characteristics of the brand come to mind quickly.	2	
		I can quickly recall the symbol or logo of this brand.	3	
	Brand Image	This brand has a differentiated image in comparison to the other brands.	4	Kim and Hyun (2011)
		This particular brand has a clean image.	5	
		This particular brand is well established.	6	
	Perceived Quality	I can always count on this brand consistently for high quality.	7	Lehmann et al., (2008)
		This brand performs well.	8	
		This brand has served me well.	9	
		This brand lives up to its promise.	10	
	Brand Association	This brand has strong associations.	11	Keller (1993)
		This brand has favourable associations.	12	
		It is clear what this brand stands for.	13	Aaker (1991)
		I have difficulty imagining this brand in my mind. (r)	14	Yoo et al. (2000)

4.6.2 Consumer Responses

For consumer responses, the dimensions examined were brand preference, willingness to pay a price premium and brand loyalty. These dimensions were analysed in the model of Godey et al., (2016) to determine the relationship between consumer-based brand equity and consumer responses towards luxury fashion goods and their measurement items were therefore adopted for this study. The original measurement instrument was derived as follows: Three scale items relating to brand preference from the work of Kim & Hyun (2011). For willingness to pay a price premium, four scale items were derived from a scale developed by Netemeyer et al. (2004) and a five-item measurement scale based on the work of Aaker, (1991) and Yoo, Donthu and Lee (2000) was used to examine brand loyalty. Table 4 shows the details of the scale items used to measure the dimensions of consumer responses (Brand preference, willingness to pay a price premium and brand loyalty).

Table 4: Measurement Items for Brand Preference, Willingness to pay a Premium Price and Brand Loyalty

Construct	Dimensions	Scale	No	Source
Consumer Responses	Brand Preference	I prefer to purchase this brand to another brand that has the same features.	15	Kim and Hyun (2011)
		It seems smarter to purchase this brand.	16	
		I prefer to buy this brand to other competing brands that are as good as this brand.	17	
	Willingness to pay a prices premium	The price of this brand would have to increase quite a bit before I would switch to another brand.	18	Netemeyer et al., (2004)
		I am willing to pay a higher price for this brand than for other brands.	19	
		I am willing to pay more for this brand over other brands.	20	
	Brand Loyalty	I refer this brand to other consumers.	21	Aaker 1991 Yoo et al., (2000)
		I use this brand as my first choice in comparison with the other brands.	22	

		I would recommend this brand to others through social media.	23	
		I will not switch to another brand next time.	24	
		I will still be satisfied with this brand after every visit to the dealership.	25	

4.6.3 Fake News Via Electronic Word of Mouth

To measure the moderating effect of fake news, the first two scales were developed by the author based on the literature: People are likely to believe a post about brands on social media without verifying it, which can negatively influence individual behaviour posing a threat to brands (Allcott &Gentzkow, 2016). The other four scale items were adopted from the work of Sussman & Siegal (2003) which was originally developed by Wu and Shaffer (1987) for electronic word of mouth using information adoption model. The scales were further adjusted to include fake news because the research focus was on the role of fake news in the context of electronic word of mouth. Table 5 shows the details of the scale items used to measure the construct of fake news through electronic word of mouth.

Table 5: Fake News via Electronic Word of Mouth Measurement Items

Construct	Scale Items	No	Source
Fake News Via Electronic Word of Mouth	I believe posts regarding brands that are shared on my social media platform.	26	Author
	I will interrogate or verify posts on social media concerning my favourite brands.	27	
	I have reacted to a fake news story targeted at a premium brand on social media platforms	28	

	Fake news targeted at a brand motivate me to take an action	29	Sussam & Siegal (2003)
	I have agreed with a fake news story through electronic word of mouth concerning a premium brand	30	
	I am likely to believe a fake news story concerning this particular brand depending on how credible the source is.	31	

4.7 Rating Scale

The established scale items were measured on a five-point Likert scale as people are able to reasonably distinguish between scale values when 5 to 10 points are used, thereby reducing respondents errors (Kline, 2011). A balanced scale (equal number of negative and positive scales) was used and each selection on the scale was represented by a score: 1 represents "strongly disagree" and 5 represents "strongly agree" with a neutral scale represent by 3. The scale score will be subsequently calculated and analysed for interpretation.

Likert Scales allow responses to be easily quantifiable therefore making them fit to undergo mathematical analysis (Wegner, 2012). It also makes it easy for participants to respond in a degree of an agreement enabling the questions to be answered easily by the respondents (Kline, 2011). However, respondents are likely to be influenced by the answer to the previous question. To avert this, the sub-headings of the dimensions were not included in the questionnaire.

4.8 Pilot Test

In order to test for the reliability and validity of the measurement scales, a pilot test was conducted before distributing the final questionnaire to the sample population. The pilot test enabled the Author to evaluate the appropriateness of the research methodology and make corrections ahead of the main study (Bryman & Bell, 2011).

A pilot test was conducted (n=19) before sending out the final questionnaire. This is important in order to test the reliability and validity of the measurement scale (Babin & Zikmund, 2015).

A pilot test is cost effective and easy to control which allows the author to determine the suitability of the methodology and correct the necessary irregularities before launching the final survey (Saunders & Lewis, 2012). Questions that were duplicated, ambiguous and difficult to answer were identified during this process.

The pilot test was launched by sending out the prepared online survey through google forms to MBA students who participated in the consumer behaviour elective in July 2018 shortly after the ethical clearance approval was obtained. These participants were deemed ideal for pre-testing the survey as they were unarguable of middle-class status and had substantial knowledge on the subject matter. The forms were sent through email and were further asked to give their candid feedback about the questionnaire in (Appendix B). The internal consistency for all the eight dimensions was measured using Cronbach's alpha coefficient. The scales must have a Cronbach's coefficient above 0.7 to be considered reliable and internally consistent (Pallant, 2013). The following amendments were made to the questionnaire after the feedback and analysed pilot test from the respondents

- Some questions were adjusted in the questionnaire particularly, the fake news scales items.
- The scale items of the fake news had an initial Cronbach alpha of 0.696. To improve the Cronbach's Alpha value, an inter-item correlation matrix was used to decide on which scale item contribute the least to the dimension. When the least contributing item was deleted, the Cronbach's alpha coefficient improved to 0.787. The scale item was therefore removed from the final survey.
- The scale items showed the following Cronbach alpha values: brand awareness (0.789), brand image (0.720), brand association(0.546), perceived quality(0.929), brand preference (0.945), willingness to pay a premium price(0.831) and brand loyalty (0.791)
- All the scale items besides brand association had a Cronbach's Alpha coefficient greater than 0.7 which indicated the reliability of the measurement scales. Furthermore, the inter-items correlation matrix table of these dimensions confirmed that the scale items correlated well together measuring the scale item in the same direction which also indicated that there were no negative worded items and all the items contributed positively to the formation of their dimensions.

- However, for the brand association which had a Cronbach Alpha of 0. 546, the inter-item correlation matrix indicated that all the scale items did not measure brand association accurately. When an item one after the other was deleted, the Cronbach's

alpha did not meet the required threshold. Therefore, the entire scale items which were initially adopted from Yoo, Donthu and Lee (2000) where changed to the items used by Christodoulides et al., (2015) to examine the dimensions of consumer based-brand equity in a multicultural context which were originally developed by (Aaker , 1991; Keller 1993 ; Yoo et al., 2000) for the final questionnaire.

- Two experts in the fields of Consumer Behaviour and Branding further suggested that since people tend to believe information through social media as argued in the literature review, questions to measure this should be developed and included in the survey. The social media activity level question was also added to section 1 of the questionnaire.

4.9 Data Collection and Analysis

4.9.1 Data Collection Process

When the pilot test was concluded and corrections were made to the questionnaire, primary data was collected using a self-completed web-based questionnaire created on Google forms (Appendix A). This method of collection allowed for the gathering of a large amount of data from a wide population in a very cost effective, less time consuming and practical manner (Saunders & Lewis, 2012). Google form as an online data collection software, allowed the capturing of response real time. Data collection was over a period of four weeks that commenced on the 12th of August and Closed on the 10th of September 2018.

To ensure that the survey was of an ethical nature, a cover letter to inform the respondents of the survey purpose, its duration, voluntary participation and confidential nature of the survey was included. Respondent of 18 years of age and above was only able to participate as the questionnaire was designed to ensure this.

Considering the objective and research context, data were collected from surveys distributed via social media and e-mail, as this will enable the receipt of responses from respondents who are familiar with electronic word of mouth. Social media has been identified as a source where a wide amount of different data can be collected with easy access (Sloan & Quan-Haase, 2017). As the sampling method was convenience sampling, the online survey was sent to personal networks which included GIBS MBA students, friends, parents of a nursery school in Centurion either through emails or a social media platform (WhatsApp) and was asked to send the survey to similar respondents in their network (snowballing). WhatsApp was the only social

media used for data collection for control purposes to avoid non South African residence from participating in line with the context of this study.

When a respondent received the link via google forms with the questionnaire for the research study; they were able to complete the questionnaire anonymously which eliminated interviewer bias and social desirability. The drawback of online data collection is that there can be low response rate and to mitigate this, respondents were sent regular reminders at an interval of one week. However, assurance was given that their participation was voluntary. By September 10, 2018, a total number of 200 responses were received. However, 191 eligible respondents were used for the analysis.

4.9.2 Data Analysis

Using Structural Equation Modelling (SEM) as a statistical tool, the analysis was conducted using both IBM AMOS version 25 and SMART PLS version 3. SEM is a group of statistical models that are used to aid the simultaneous analysis of the hypothesised relationship among multiple variables (Hair, Hult, Ringle and Sarstedt, 2016). SEM-based method has the advantage of giving the author greater flexibility of interplaying theory and data compared to other methods such as principal components analysis, factor analysis, discriminant analysis and multiple regression analysis (Chin, 1998). The aim of this analysis is to evaluate the structural relationship of the developed model and test the moderating effect (fake news via electronic word of mouth) on the specified conceptual model (relationship between consumer-based brand equity and the variables of consumer responses i.e. Brand preference, willingness to pay a price premium and brand loyalty) in Figure 2. IBM AMOS was used for analysis because its covariance approach provides more detailed estimations of the model fit indices as well as its visual representation of the measurement model (Byrne, 2016). For ease of use, SMART PLS was used exclusively to perform the moderation analysis, as its component approach to run moderators is less complex than the covariance approach (IBM AMOS). The descriptive statistic of the data collected was analysed before presenting the SEM results and a moderating effect on the conceptual model. The data was analysed at 95% level of confidence which corresponds to the work of Godey et al. (2016) where the independent and depend variable measurement scales were adopted.

Step 1: Data Preparation

Data preparation is an essential step in the research process, which includes cleaning as well as coding (Malhotra, 2015). Collected data from google forms was transferred from google sheets to Microsoft Excel. Data was cleaned by removing invalid participants specifically respondents that do not have any social media accounts. Participants were selected based on an income above R25,000 or a tertiary education od a white collar job to be classified as middle class. All the respondents had one or more of these criteria. The occurrence of limited data and low response rate was minimised by making the question compulsory asides income which may be sensitive to some respondents. However, this might allow for bias in responses such as clicking consistently on one side of the scale.

A total sample of 200 respondents filled the online survey. Nine respondents were found not to be eligible to be included in the analysis as they did not have a social media account. The final SEM and moderation analysis was carried out using the remaining 191 responses from the survey participants.

A code book was developed which outlines the scale items of the variables in the dataset to a specific code (Appendix B). The reverse coded question under the scale items of brand association was eliminated in the final set of questions used for analysis to avoid statistical errors of negative factor loading.

Step 2: Demographic Statistics

The demographic statistics of eligible respondents from the data collected were analysed to describe the sample. This was compiled to provide the description of the sample which included gender, age, monthly income, occupation, education level, social media account possession, whether respondents following brand pages, social media activity level, automobile brands currently owned and automobile brands most likely to be purchased (Audi, BMW or Mercedes Benz).

Step 3: Descriptive Statistics of Scale items

The mean, standard deviation, Kurtosis and Skewness of the scale items in the question was determined before the inferential statistics. The kurtosis and skewness results were used to assess the normality of the data.

Step 4: Exploratory Factor Analysis

As a first step for validating the scale items used in this study, an exploratory factor analysis was carried out before the confirmatory factor analysis of the SEM. This was important because the author developed two scale items from the literature for fake news through electronic word of mouth (Worthington & Whittaker, 2006). This is important to determine the underlying factors for a set of scale items. Scale items not loading appropriately on the valid component were removed from measurement scales for further analysis.

Step 5: Structural Equation Modelling

Structural Equation Modelling was used to empirically validate the main theoretical model and to test the hypotheses between i.e. the independent variable (CBBE) and the dependent variables (brand preference, willingness to pay a price premium and brand loyalty) before examining the moderating effect of fake news via electronic word of mouth using IBM AMOS version 25.

Structural equation model (SEM) is a multivariate tool which is used to assess unobservable latent variables in a measurement model using one or more observed variables and a structural model which estimates the relationship between latent variables simultaneously (Kline, 2011). In relation to this study, the latent variables were consumer-based brand equity (Independent variable), brand preference, willingness to pay a price premium and brand loyalty. The observed variables were the scale items of the dependent and independent variables. Therefore, in addition to model testing, it determined which observed variables are a good measurement of the latent variables.

A confirmatory factor analysis through SEM was used to test the relationship between the observed variables and unobserved latent variables in order to determine if the data fits the proposed measurement model, which is based on theory and previous research (Kline 2014). The model research was based on previous research (Godey et al., 2016). Therefore CFA was used. A second-order factor analysis was used since consumer-based brand equity had 4 dimensions (brand awareness, brand image, perceived quality and brand association).

The assessment of the proposed model was done through a two steps approach. The first step was to assess the measurement model of the conceptual model consisting of the independent variable (Consumer-based brand equity) and the dependent variables (consumer responses) without the moderating variable using confirmatory factor analysis. Factor analysis is essential for examining variable relationships between the independent and dependent variables which also allows identifying concepts that are not easily measured directly by aggregating a large number of variables into some specific underlying factors (Kline, 2014).

The skewness and Kurtosis of the scale items on the measurement model were employed to determine the normality of the data collected. Generally, the value for skewness and kurtosis between -2 and +2 are proves that data is normally distributed and there is no presence of a significant outlier (George & Mallery, 2010). The data was normally distributed, therefore, a maximum likelihood method was used to confirm the model fit of the proposed structure. The reliability and validity of the scale items were examined. Validity and reliability are essential to examine a measurement instrument as they were derived from previous studies. Validity of an instrument is the ability to measure what it is intended to measure and reliability is the degree to which measurement instrument produce reliable results (Saunders & Lewis, 2012). Cronbach's alpha analysis was employed to determine the reliability of the measurement instrument and the threshold considered to establish this was 0.6 (Fields, 2013). However, all the scale items Cronbach's alpha coefficients exceeded 0.7.

The model fit of the final measurement scale using the maximum likelihood method where several fit indices are assessed to ensure that the proposed model meets the various threshold. To establish the accuracy of the proposed model in this study to explain the relationship between consumer-based brand equity and consumer responses of the middle-class consumers in South Africa, it was important to establish an appropriate goodness-of-fit measure for the proposed model (Chen. Curran, Kirby &Paxton, 2008). There are several types of the goodness of fit measures used to assess the fit of a conceptual model to the observed data (Hair et al., 2014). CFI and RMSEA are the commonly used fit indices (Kenny, Kaniskan and McCoach, 2015). To analyse the goodness-of-fit of the proposed model of the dependent (CBBE) and independent variables (brand preference, willingness to pay a price premium and brand loyalty), the measurement model was compared to the threshold values of the fit indices (Hair et al., 2014) discussed in Chapter 5 (Table 23).

Step 6: Assessment of Structural Model

This was the second stage approach of SEM which estimated relationship amongst a set of a latent variable which is represented by multiple observed variables incorporated into the conceptual model (Hair et al., 2014). Also, it was done to assess the proposed conceptual model by examining the correlations between the independent (consumer-based brand equity) and dependent variables (brand preference, willingness to pay a premium price and brand loyalty). To test the hypotheses against the data gathered from the reliable and valid measurement instrument, SEM was employed. The structural model was also assessed using the multiple models fit indices applied in step 5 above as suggested by Hair et al., (2014) to concurrently evaluate the model fit in order to desist from the possibility of incorrect solutions.

Step 7: Moderation Interaction Analysis

This was carried out to establish H4, H5 and H6 after analysing H1, H2, H3 examining the relationship between the independent variable and the dependent variables.

Moderation is the influence of a third variable (also called moderator) on the relationship between an independent variable and a dependent variable (Hayes, 2013). In this study, the independent variable was consumer-based brand equity, and the dependent variable was brand preference. Moderation interaction effect was analysed using SMART PLS because it is easier and less cumbersome than going through IBM AMOS that is involved in many processes (Chin, 2010). It was carried out using a product indicator approach where Smart PLS created an interacting variable which was responsible for causing the prediction of the dependent variables (brand preference, brand loyalty and willingness to pay a price premium. This interacting variable is simply the product of the independent variable (consumer-based brand equity) and the moderator which in this case is “Fake news through eWOM”. The products indicator is more accurate than going through the latent variable two-stage approach (Chin, 2010). Before running the moderation analysis, a reliability and validity test were performed on the fake news scale items.

Moderation analysis Fake news was considered as a moderator rather than a mediator on the relationship between consumer-based brand equity and consumer responses because of the significant relationship between the independent variable and dependent variables . The moderating variable can either strengthen or weaken these relationships depending on its interaction with the dependent variable (Hayes, 2013).

4.10 Assumptions

The following assumptions concerning this study were taken into consideration by the researcher

- Respondents who participated in this study did not include any non-South African residence.
- Respondents were not persuaded or incentivised to participate in the research as this may lead to the ingenuity of findings.

- Responses from the participants were the accurate perceptions of the agreement or disagreement statements in the questionnaire.
- Respondents were familiar with the premium brands in this study and social media environment.
- There were three dependent variables and one independent variable.
- A direct relationship exists between the dependent variable and the in dependent variables.
- There was equal standard error
- There was no multicollinearity
- The were no significant outliers as data was normally distributed

4.11 Potential Research Limitations

There were limitations embedded in the research design used for this study as regards to the generating the ideal sample.

Firstly, the study was limited to specific premium automobile brands (Audi, BMW and Mercedes Benz). The brands were derived from research conducted amongst the black middle class by the UISM (2013) and were listed as top 100 global brands with strong social media presence (Internet brands, 2017). This may be the case that other premium brands have become equally popular and have not been included in this study.

The study employed a non-probability sampling technique (convenience and snowballing). A non –probability sampling method cannot be generalised. Respondent was asked to forward the survey their network who may be deemed appropriate to complete the survey. Snowballing could result in selection bias, which can lead to homogeneity of responses because similar people may inevitably complete the survey by distributing the survey to their networks who may be similar to the respondents (Saunders &Lewis, 2012).

The study made use of a relatively small sample (191), and compared to the ideal sample size recommended for a structural equation modelling analysis of 200 (Kline 2011). Therefore findings cannot be generalised across all sectors or industries.

The time horizon used for this study was a cross-sectional approach as sampling took place at a specific period (August to September 2018). However, due to the to the speed of change in technology which may influence the social media environment and consumer behavioural pattern, the findings of this research may not stand the test of time, therefore, for future studies,

a longitudinal approach should be employed to understand the effect of market environment change on consumers' behaviour.

The study also focused on the upper middle class considering the respondent income level criteria for this study. There may be differences in this regard between the upper and lower middle-class consumers.

A causal relationship between the variables (independent, dependent and moderating) could not be established since no variable was manipulated or controlled (Babin & Zikmund, 2015)

4.12 Conclusion

This chapter presented the research methodology employed in this study in order to achieve the research objectives and hypotheses outlined in chapters 2 and 3. The summarised research methodology outlined in Table 6 below.

Table 6: Research methodology and design summary

Research Tools	
Research Design	Deductive and Descriptive (Explanatory)
Population	Middle class with at least a social media account who are 18 years and above
Context(Scope)	South Africa
Unit of Analysis	An individual who is a middle class defined in terms of income, education and occupation and has a social media account
Sampling Frame	Inexhaustible therefore it is unavailable
Sampling Method	Non Probability Method- Convenience and snowballing sampling methods
Sample Size	191 qualified responses.
Research Strategy	Online self-administered survey executed via Google Forms
Time Frame	Cross-sectional study- Data collected within a period of 4weeks
Statistical Tools	IBM AMOS Version 25 and SMART PLS
Statistical Method	Structural Equation Modelling (SEM) and Moderation Analysis

CHAPTER 5: RESULTS

5.1 Introduction

The findings of this study are presented, analysed and interpreted in this chapter. In line with the objectives of this study which was first to investigate through literature the relationship between consumer-based brand equity, consumer responses and fake news through electronic word of mouth. The second objective was to empirically test the theoretical model developed in Chapter 2 for this study through primary data collection via an online platform. The hypotheses developed through the literature review were tested in line with the proposed conceptual model (Figure 3). Another objective that was not hypothesised in the study was to examine the dimensions of consumer-based brand equity in the context of South Africa.

The demographic profile of the sample was analysed, followed by the descriptive statistical analysis of the variables. Reliability and validity of the scale items used to test the developed hypotheses in Chapter 3 were evaluated. Using SEM, the proposed structure was investigated to be of good fit and to test the hypotheses which consisted of the dependent and independent latent variables. Finally, moderation analysis through SMART PLS was used to test the moderating effect of fake news through electronic word of mouth on the relationship between the independent variable (CBBE) and dependent variables (brand preference, willingness to pay a price premium and brand loyalty). Data was analysed at 95% level of confidence.

5.2 Descriptive Statistics

5.2.1 Demographic Composition

The total sample size received for this was 200. However, 191 participants were deemed eligible (middle-class with social media account). The demographic details of the qualified respondents are shown in table 7 to 16 below.

Table 7: Gender distribution in the sample

Gender	Frequency	Valid Percentage

Female	120	62.8%
Male	71	37.2%
Total	191	100%

Table 7 shows the respondents by gender. The gender distribution of the 191 respondents, indicates that they were more female(62.8%) participants in the survey than they were male(37.2%)

Table 8: Age group distribution in the sample

Age Group	Frequency	Valid Percentage
18-25	16	9.5%
26-35	80	41.9%
36-45	75	39.3%
46+	20	10.5%
Total	191	100%

Majority of the respondents were between the age group of 26-35 (41.9%) and 36-45(39.3%) which was not surprising as these are typical age groups of young working and experienced professionals. These two groups make a total of 80.2 % of the respondents as indicated in table 8 above.

Table 9: Sample distribution by monthly income

Monthly Income	Frequency	Valid Percentage
less than 25K Rands	38	20.0%
25K-35K Rands	43	22.6%
36K-50K Rands	45	23.7%
Above 50K Rands	64	33.7%
Total	190	100 %

Table 9 shows the income distribution of the sample. Even though monthly income was optional due to the sensitivity, 190 of the participants responded to the question. Table 9 above indicated that 33.7% of the respondents had a monthly household income above R50 000

which can be classified as upper-middle class. Majority of the respondents (80.0%) had an income of above R25 000 which indicated that they could afford the premium automobile brands under study. The remaining respondents who have an income less than R25,000 have tertiary education or skilled or are professional were 20%. The results indicated that although they might not have the financial capability to purchase any of the premium automobile brands, they are still in a better position to earn a better income in the nearest future which would give them the financial capability to purchase any of these brands.

Table 10: Sample distribution by educational level

Education Level	Frequency	Valid Percentage
High school	11	5.8%
Technical or vocational qualification	9	4.7%
Tertiary	171	89.5%
Total	191	100%

A wide number of the respondents (171, n= 89.5%) had a tertiary education as indicated in table 10. Possessing a tertiary education according to this study characterises middle class.

Table 11: Sample distribution of occupation

Occupation	Frequency	Valid Percentage
Professional	114	59.7%
Office staff	20	10.5%
Skilled labour	28	14.7%
Non-skilled worker	3	1.6%
Executive	26	13.6%
Total	191	100%

The majority of the respondents were professionals. To be classified as middle class, they must have a white collar job which can be classified under this study as being a professional, skilled labour, office staff and executive which all made up a percentage of 98.4% of the total respondents (Table 11). Out of the seven unskilled workers, four of them responded that they do not have any social media account. Therefore, they were removed from the data set. The remaining three unskilled respondents have a social media account. Two of them had an

income of over R25 000, and the 3rd unskilled respondent has a tertiary education which allowed the data to be included.

Table 12: Sample distribution of social media account possession.

Social Media account	Frequency	Valid Percentage
Yes	191	96.0%
Total	191	100%

Table 12 showing the distribution of social media account possession was a filter question. Out of the 200 respondents who completed the survey, 191 had social media account.

Table13: Sample distribution of respondents who follow brand pages.

Brand pages	Frequency	Valid Percentage
Yes	121	63.4%
No	70	36.6%
Total	191	100%

The majority of the respondents (63.4%) followed brand pages. However, the specific brand pages being followed were not requested (Table 13).

Table 14: Sample distribution of social media activity.

Social Media Activity	Frequency	Valid Percentage
Highly active	19	9.9%
Active	58	30.4%
Fairly active	70	36.6%
Passive	31	16.2%
Highly passive	13	6.5%
Total	191	100%

Table 14 indicates that 36.6% of the participants considered themselves to be fairly active on social media. Of these respondents, 40.3% indicated that they are active and highly active on social media platforms.

Table 15: Sample distribution of brand of car owned.

Brand of an automobile owned	Frequency	Valid Percentage
Audi	10	5.2%
BMW	30	15.7%
Mercedes Benz	45	23.6%
Others	106	55.5%
Total	191	100%

The majority of the respondents (n=106) which represents 55.5%, owned other cars asides Audi, BMW and Mercedes Benz (table 15). Out of the 106 participants, 26 of them owned Toyota, which represented 13.6% of the 191 respondents. Of the respondents, 23% owned a Mercedes Benz which represented the largest number of respondents and the premium automobile brand studied.

Table 16: Sample distribution of likely to purchase a premium automobile

Likely to purchase Automobile	Frequency	Valid Percentage
Audi	41	21.5%
BMW	39	20.4%
Mercedes Benz	111	58.1%
Total	191	100%

Of the brands most likely to be purchased, 58.1 % of the respondents indicated Mercedes Benz which represented the largest proportion of the premium automobile brands offered (table 16).

5.2.2 Scale Items Descriptive Statistics

A five-point Likert scale where the value 1 corresponds to “Strongly disagree” and the value 5 corresponds to “Strongly Agree” was used to measure all the constructs. The mean value above and below three reflected that the majority of respondents tend to agree and disagree with the statements respectively. There were 31 scale items categorised into eight variables: fake news via electronic word of mouth, brand awareness, brand image, perceived quality, and brand preference, willingness to pay a price premium, and brand loyalty. The mean, standard deviation, skewness and kurtosis for each scale items are outlined in Table 17 below.

Table 17: Descriptive statistics for the scale items

REF	Mean	Std. Deviation	Skewness	Std Error	Kurtosis	Std Error
FK1	3,18	1,06	-0,07	0,18	-0,54	0,35
FK2	3,46	1,23	-0,40	0,18	-0,83	0,35
FK3	2,57	1,32	0,36	0,18	-1,04	0,35
FK4	2,76	1,21	0,22	0,18	-0,91	0,35
FK5	2,28	1,21	0,62	0,18	-0,62	0,35
FK6	3,02	1,34	-0,13	0,18	-1,23	0,35
BA1	3,75	1,13	-0,68	0,18	-0,44	0,35
BA2	3,88	1,11	-0,93	0,18	-0,02	0,35
BA3	4,47	0,94	-2,02	0,18	3,60	0,35
BI1	4,20	0,97	-1,08	0,18	0,49	0,35
BI2	4,15	0,93	-0,96	0,18	0,12	0,35
BI3	4,43	0,90	-1,08	0,18	0,76	0,35
PQ1	4,31	0,95	-1,44	0,18	1,58	0,35
PQ2	4,29	0,94	-1,42	0,18	1,70	0,35
PQ3	3,78	1,08	-0,67	0,18	0,02	0,35
PQ4	4,04	0,91	-0,67	0,18	0,02	0,35
BAS1	4,25	0,88	-1,08	0,18	0,49	0,35
BAS2	4,21	0,89	-0,96	0,18	0,12	0,35
BAS3	4,14	0,93	-1,08	0,18	0,76	0,35
BAS4	1,84	1,14	1,23	0,18	0,53	0,35
BP1	3,91	1,05	-0,87	0,18	0,23	0,35
BP2	3,87	1,02	-0,73	0,18	-0,05	0,35
BP3	3,88	1,04	-0,87	0,18	0,40	0,35

WTP1	3,27	1,21	-0,27	0,18	-0,77	0,35
WTP2	3,32	1,15	-0,23	0,18	-0,77	0,35
WTP3	3,50	1,15	-0,47	0,18	-0,60	0,35
BL1	3,71	1,08	-0,69	0,18	-0,01	0,35
BL2	3,73	1,17	-0,71	0,18	-0,32	0,35
BL3	3,43	1,25	-0,56	0,18	-0,59	0,35
BL4	3,12	1,16	-0,15	0,18	-0,65	0,35
BL5	3,63	1,04	-0,45	0,18	-0,19	0,35

The normal distribution of the data was measured using the skewness and kurtosis of the distribution. Skewness measures thte symmetrical distribution of data around its mean , where a perfectly normally distributed value of a normal distributed data will be equal to zero(Field. 2013). Kurtosis measure if a data set is normally distributed using the measure of the tails i.e. heavily-tailed or lightly-tailed, where a value of zero indicates a perfectly normally distributed data set (Field, 2013). Generally, the value for skewness and kurtosis between -2 and +2 are proves that data is normally distributed and there is no presence of a significant outlier (George & Mallery, 2010). Kurtosis value above 0.71 will indicate an abnormally distribute data is present (West, Finch and Curran, 1995) As outlined in Table 17, the skewness values ranges from -2.02 to 1.23 while the kurtosis values ranges from -0.77 t0 3.60. The results indicated a normal distribution of data for all items used to measure the constructs as all their values belong to the recommended intervals.

5.3 Exploratory Factor Analysis

Exploratory factor analysis (EFA) was performed to test the validity of the independent variable (consumer-based brand equity), the three dependent variables (brand preference, willingness to pay a premium price and brand loyalty) and the moderating variable (fake news via electronic word of mouth).

An EFA was performed because firstly, two scales on fake news through electronic word of mouth were developed from literature by the researcher. Therefore it was imperative to conduct an EFA before a confirmatory factor analysis (CFA) to assess the validity of the scale items used (Worthington & Whittaker, 2006). Secondly, EFA helped to determine the underlying factors for a set of measured variables while CFA allowed for hypothesis testing to establish a relationship between observed variables and their constructs.

To ensure that the sample is adequate for factor analysis, Kaiser-Meyer-Olkin (KMO) was examined (Table 18). The sample was suitable for factor analysis because the KMO value

was 0.894 and greater than the threshold of 0.6; and Bartlett's Test of Sphericity was significant (.000) (Pallant, 2013).

Table 18: KMOS and Bartlett's Test

KMO and Bartlett's Test		
Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		.894
Bartlett's Test of Sphericity	Approx. Chi-Square	3940.861
	df	465
	Sig.	.000

The principal component with orthogonal rotation (Varimax) was used as the extraction method. This method was selected because of its simplicity and clarity. It essentially captures the components with high eigenvalues and organises them by order of importance. Table 19 below provides details regarding the contribution of each factor to the total variance.

Table 19: Total variance explained

Component	Initial Eigenvalues		
	Total	% of Variance	Cumulative %
1	11.080	35.740	35.740
2	3.531	11.389	47.129
3	2.451	7.907	55.037
4	1.329	4.286	59.323
5	1.213	3.914	63.237
6	1.108	3.575	66.812

Extraction Method: Principal Component Analysis

The principal component analysis revealed the presence of six factors with eigenvalues exceeding 1. According to Table 19, component 1 had the highest eigenvalue (11.080) which corresponded to 35.740% of the total variance; Components 2 had the eigenvalue of (3.531) which accounted for 11.389%; component 3 eigenvalue is (2.451) which corresponded to

7.907%; component 4 has the eigenvalue of (1.329) which corresponded to 4.286%. Components 5 had the eigenvalue of (1.213) which corresponded to 3.914%, and component 6 had an eigenvalue of 1.108, which represented 3.575% of the total variance.

Table 20 and figure 4 below provide details on the items associated with each component or factor.

Figure 4: Scree Plot

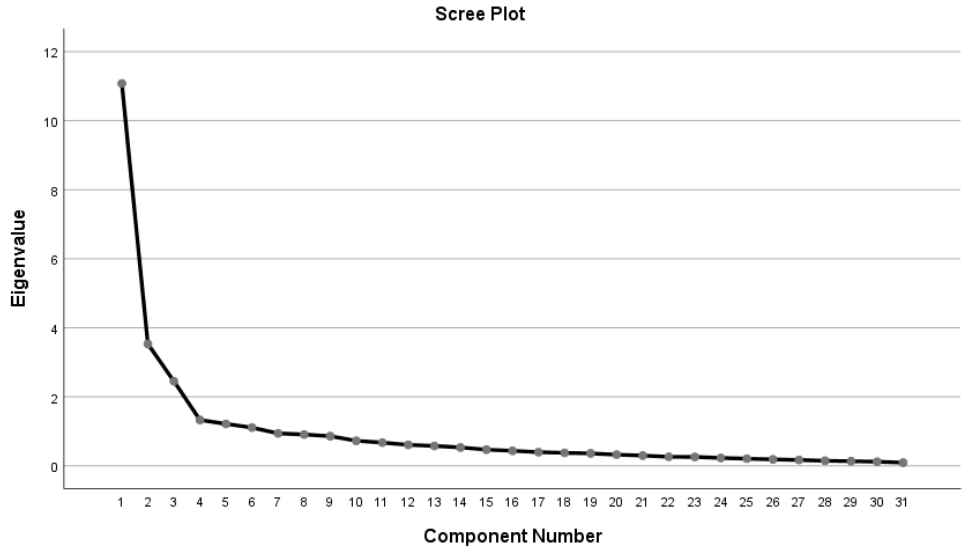


Table 20: Rotated Component Matrix

Rotated Component Matrix						
	Component					
	Factor 1	**Factor 2**	**Factor 3**	**Factor 4**	**Factor 5**	**Factor 6**
FK1			0.480			
FK2						0.819
FK3			0.757			
FK4			0.692			
FK5			0.736			
FK6			0.652			
BA1	0.679					
BA2	0.715					
BA3	0.839					
BI1	0.782					
BI2	0.778					
BI3	0.825					
PQ1	0.795					
PQ2	0.804					
PQ3					0.722	
PQ4	0.593					
BAS1	0.787					
BAS2	0.775					
BAS3	0.751					
BAS4						-0.543
BP1				0.501		
BP2				0.416		
BP3				0.481		
WTP1					0.548	
WTP2				0.766		

WTP3				0.737		
BL1		0.674				
BL2		0.772				
BL3		0.753				
BL4		0.779				
BL5		0.783				
Extraction Method: Principal Component Analysis. Rotation Method: Varimax with Kaiser Normalization.						
a. Rotation converged in 7 iterations.						

As indicated in table 20, the fifth factor was not considered as an adequate factor for this study because it included different items (PQ3 and WTP1) which are not theoretically related. Factor 6 was also not considered because it combined one fake news via electronic word of mouth item (FK2) with a brand awareness item (BAS4). Also, negative factor loadings often suggest deficient measures; given these reasons, the items PQ3, WTP1, BAS4, and FK2 were removed from the factor loading which was, therefore, excluded from the SEM analysis. The scree plot (fig 4) also that suggested a four-factor solution as indicated through a clear break after the fifth component. This study focused on the first four factors (components). Table 20 above also shows that all commonalities in the first four factors were above 0.5 except for FK1(0.480), BP2(0.416) and BP3(0.481). However, these items were retained because they were greater than 0.3 and close to 0.5.

As factor analysis does not differentiate items according to their variables (independent and dependent), it was the researcher's duty to go ahead to do this manually and name them according to their appropriate theme (Table 21) below. Component 1 grouped well under the theme consumer-base brand equity; component 2 was grouped as brand loyalty; component 3 was grouped as fake news via electronic word of mouth; component 4 was grouped as brand preference and willingness to pay a price premium. As it was noted in table 18, the first factor accounted for 35.740% of the total variance; the 2nd factor accounted for 11.389%; the 3rd factor corresponded to 7.907%, and the 4th factor accounted for 4.286%. The four factors retained accounted for 59.322% of the total variance. Practically, a robust solution should account for a minimum of 50% of the total variance.

Table 21: Factor Loading: Qualified Items for further Analysis

Code	Items	Loading	Code	Items	Loading
1.	Consumer-based Brand Equity			Brand Preference	
BA1	I am always aware of this particular brand.	0.679	BP1	I prefer to purchase this brand to another brand that has the same features.	0.501
BA2	Some characteristics of the brand come to my mind quickly.	0.715			
BA3	I can quickly recall the symbol or logo of this brand.	0.839	BP2	It seems smarter to purchase this brand	0.416
BI1	This brand has a differentiated image in comparison to the other brands.	0.782	BP3	I prefer to buy this brand to other competing brands that are as good as this brand	0.481
BI2	This particular brand has a clean image.	0.778			

BI3	This particular brand is well established	0.825		Willingness to pay a price premium.	
PQ1	I can always count on this brand consistently for high quality.	0.795	WTP2	I am willing to pay a higher price for this brand than for other brands.	0.766
	This brand performs well.				
PQ2	This brand lives up to its promise.	0.804	WTP3	I am willing to pay more for this brand over other brands	
PQ4		0.593		Brand Loyalty	0.737
	This brand has strong associations.			I refer this brand to other consumers.	
BAS 1	This brand has favourable associations.	0.787	BL1		0.674
BAS2	It is clear what this brand stands for.	0.775	BL2	I use this brand as my first choice in comparison with the other brands	0.772
BAS3		0.751	BL3	I would recommend this brand to others through social media.	0.753
			BL4	I will not switch to another brand next time.	0.779
			BL5	I will still be satisfied with this brand after every visit	0.783
	Fake news Via eWOM			mouth concerning a premium brand.	
FK1	I believe posts regarding brands that is shared on my social media platform.	0.480	FK6	I am likely to believe a fake news story concerning this particular brand depending on how credible the source is.	0.652
FK3	I have reacted to a fake news story targeted at a premium brand on social media platforms.	0.757			
FK4	Fake news targeted at a brand motivate me to take action.	0.692			
FK5	I have agreed with a fake news story through electronic word of	0.736			

As mentioned above, 4 out of the 31 items were removed from the factor loadings. These were:

FK2: I will interrogate or verify posts on social media concerning my favourite brands.

PQ3: This brand has served me well.

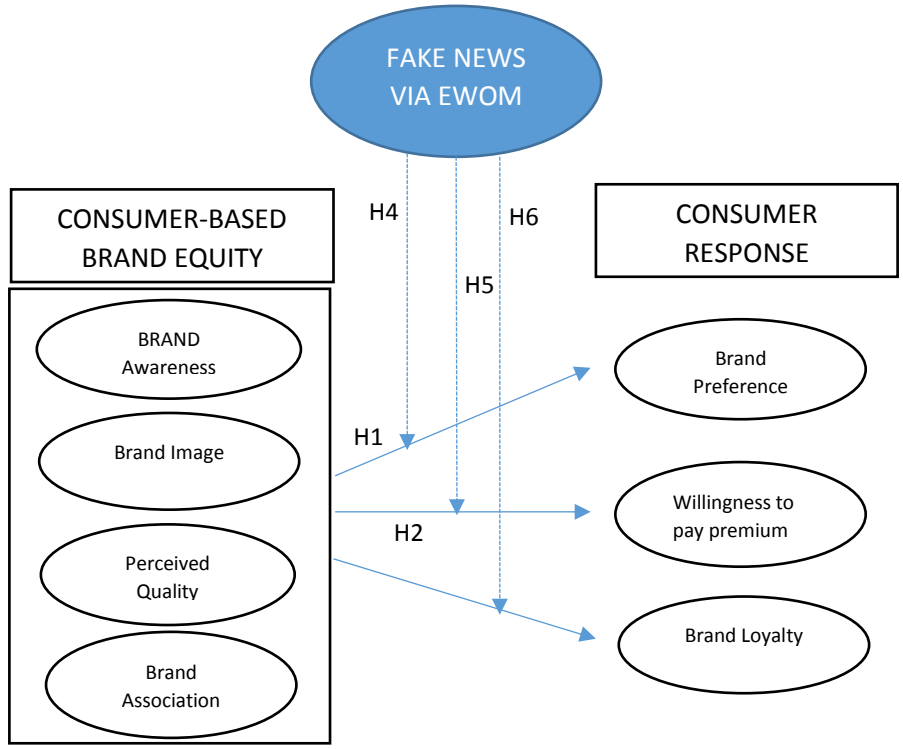
BAS4: I have difficulty imagining this brand in my mind.

WTP1: The price of this brand would have to increase quite a bit before I would switch to another brand.

The 27 scale items retained further analysis are listed in Table 21 above.

After conducting the EFA, two measurement models (**initial and refined**) were examined in the next section.

Fig 4: Proposed Conceptual Model



H1, H2 and H3 ← SEM using IBM AMOS 25

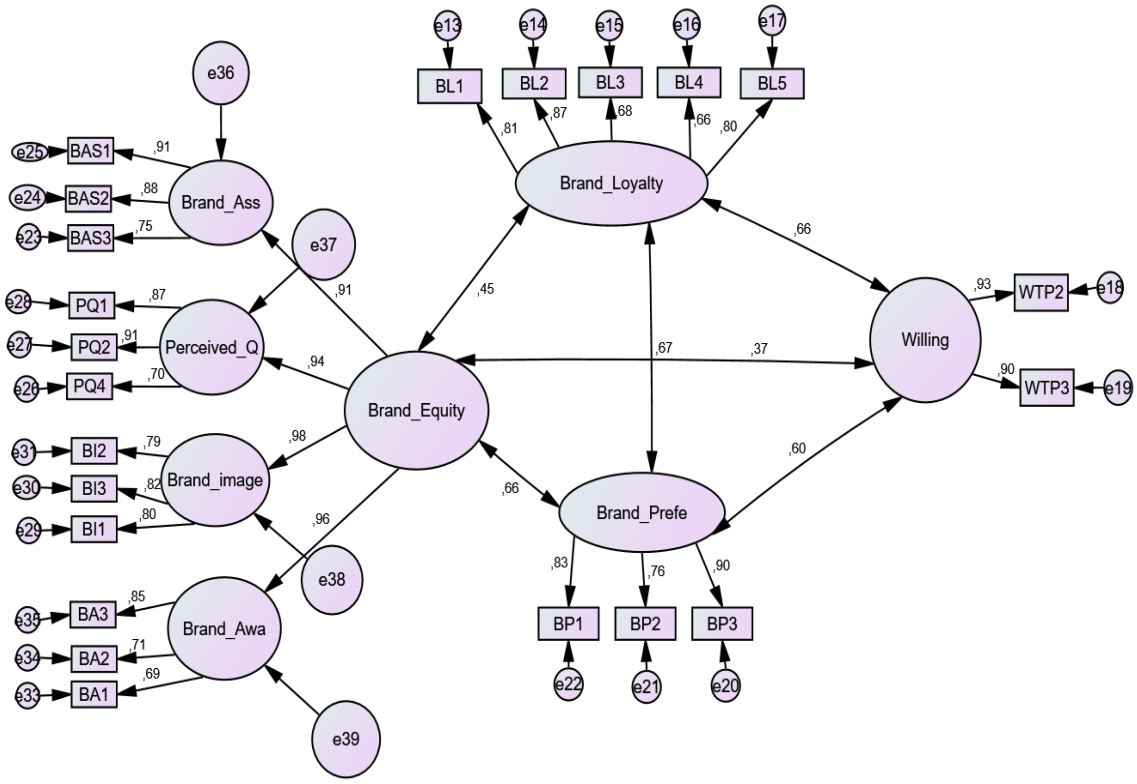
H4, H5 and H6 ← Moderation Analysis using SMART PLS

5.4 Structural Equation Modelling

As explained in Chapter 4 to validate the proposed conceptual model (Fig. 4)without the moderating effect and to test the hypotheses (H1, H2 and H3) Structural Equation Modelling (SEM) employed using IBM AMOS version 25.

The initial model developed for this research (without the moderating variable) was first assessed with confirmatory factor analysis (CFA) in the SEM (Fig 5).

Figure 5: Unimproved Initial Model



Each of the latent variables was measured by a minimum of two to a maximum of five observed variables. The observed variables were regressed into its respective latent variable. Consumer-based brand equity was measured as a second order factor. It was shown that

Consumer-based brand equity, brand loyalty, willingness to pay a price premium and brand preference were intercorrelated.

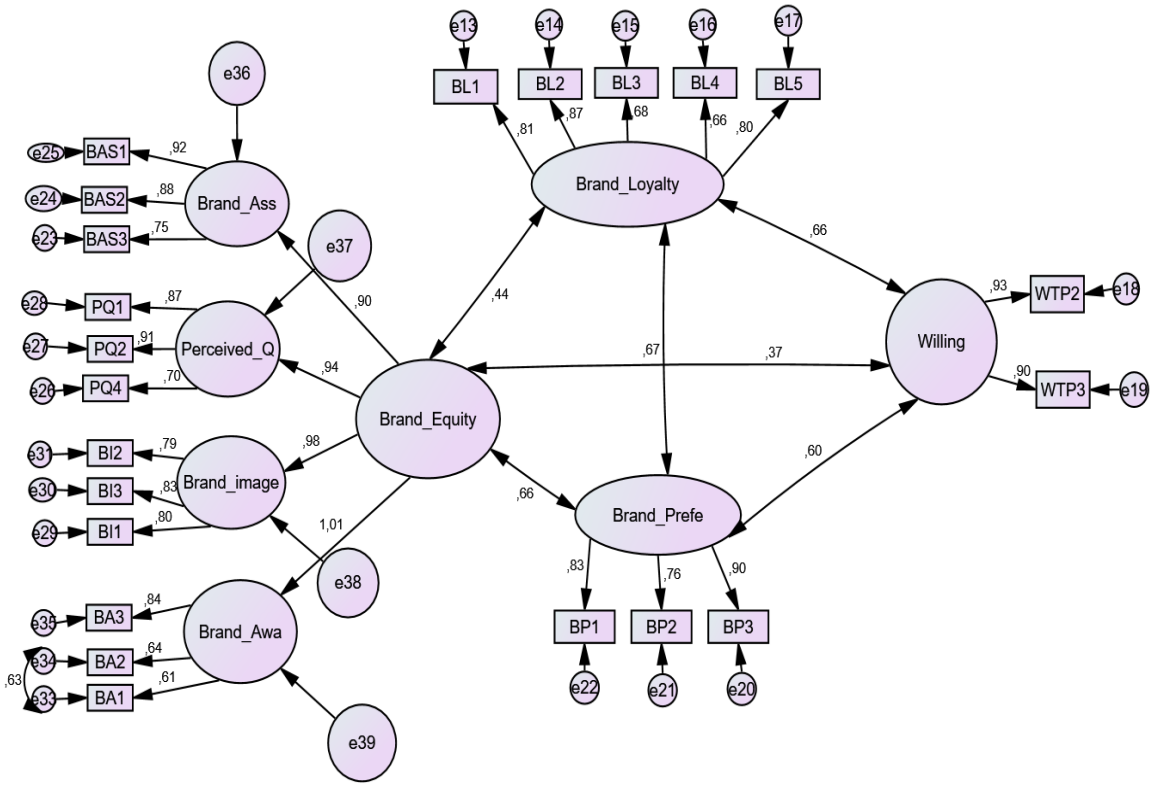
The model presented in Figure 6 is the measurement model before modifications its Chi-square is equal to 469,727; its p value= 000 (significant) and its degree of freedom (df)= 199. The fact that the Chi-square is very sensitive to the sample size is the reason why most Chi-square of large samples are often significant (Hair et al., 2014). The final sample size used for the SEM analysis was 191, which was close to the suggested sample size of 200 used for SEM analysis (Kline, 2011).

Although this initial model (Figure 6) suggested a significant Chi-square, further examination on the fit indices was conducted before concluding on the model fit of the measurement model.

The summary of the model fit indices presented in Table 22 below indicates a slightly poor fit on the initial model, meaning some amendments needed to be done to improve this model fit. In the previous EFA conducted at the early stage of this study analysis, three scale items WTP1, BAS4and PQ3 were excluded from the measurement model before conducting the SEM analysis.

To improve the model fit, “modification indices” function on IBM AMOS was used to add an inter-item correlation (Hair et al., 2014). This reduced the measurement error and improved the internal consistency of item which in turn also enhanced the model fit. Following this adjustment, the final measurement model was developed. Figure 6 below represents the final measurement model.

Figure 6: Improved Measurement Model



The final measurement model (Figure 6) showed a significant and lower Chi-square (χ^2 = 384,438; p value= 000; df = 198) which implied that the modified version of the model is much better than the initial measurement model (Figure 5). The initial measurement model was improved by adding a correlation between e33 and e34 as shown in Figure 6 above.

5.4.1 Assessment of the Measurement Models for Fitness

Before examining the model fit indices of the final measurement model, a univariate normality test was conducted to confirm whether the model can be estimated using the maximum likelihood method (Byrne, 2010). When the data are normally distributed, maximum likelihood is the best method (Li, 2016) as it allows the for the computation a wide range of indices fit of the model which test the statistical significance of factor loading and correlations among latent variables computing a confidence interval for these parameters.

Table 22 below indicated the means, Skewness and Kurtosis coefficients of all the items appearing in the final model. The results showed the normal distribution of data for all items used to measure the constructs as all their coefficients were in the interval (-2 and +2). Therefore, a maximum likelihood method can be used to assess the model fitness of the final model.

Table 22: Means, Skewness and Kurtosis coefficients of all the items appearing in the final model

	Mean	Median	Mode	Std. Deviation	Skewness	Kurtosis
Consumer-based brand equity	4.18	4.42	5.00	0.76	-1.38	1.47
Willingness to pay premium	3.41	3.50	4.00	1.10	-0.32	-0.63
Fake news	2.76	2.80	2.40	0.85	0.26	-0.38
Brand loyalty	3.52	3.40	3.40	0.93	-0.35	-0.16
Brand preference	3.89	4.00	5.00	0.92	-0.71	0.17

A summary of the model fit indices of both the initial and final measurement models are shown in Table 23.

Table 23: Summary of the model fit indices

Fit Indicator	Threshold Adapted from (Hair et al., 2014)	Initial Measurement Model	Final Measurement Model
CMIN/DF (Chi-square/degree of freedom)	Less than 3 (good) Between [3-5] (acceptable) Above 5 (bad)	2.360	1.942
RMSEA (Root Mean Square Error of Approximation)	Less than .05 (good) Between [.06-.1] (acceptable) Above .1 (bad)	0.085	0.070
NFI (Normed Fit Index)	Less than .80 (bad) Between [.80-.90] (acceptable) Above .90 (good)	0.862	0.887
CFI (Comparative Fit Index)	Less than .90 (bad) Above .90 (good)	0.914	0.941
TLI (Tucker Lewis Index)	Less than .80 (bad) Between [.80-.90] (acceptable) Above .90 (good)	0.901	0.931
GFI (Goodness-Of-Fit-Index)	Less than .80 (bad) Between [.80-.90] (acceptable) Above .90 (good)	0.818	0.846
AGFI (Adjusted Goodness-Of-Fit-Index)	Less than .80 (bad) Above .80 (good)	0.769	0.803

Source: Hair et al.(2014)

The first column of Table 23 represents the thresholds of the model fit indices commonly reported in SEM studies (Hair et al., 2014). These model fit indices are simply different ways (statistic fit) of calculating the model fit. According to Table 23, the model fit indices of the final measurement model were better than the initial model. Therefore, the final measurement model was adopted for this study.

5.4.2 Reliability, convergent and discriminant validity assessment of the Measurement model

5.4.2.1 Convergent Viability

To further confirm the viability of the scale items of the final measurement model in Fig 7, from the SEM analysis, a convergent and discriminant validity on the final measurement model were assessed.

Convergent validity is present when the scale or measurement items strongly correlates with its proposed theoretical construct, i.e., scale items that are indicators of a construct must share a high proportion of variance in common (Kline, 2011). As recommended by Hair et al., (2014), convergent validity can be assessed by using both the factor loadings and the Average Variance Extracted (AVE). For the measurement items to be valid, both the factor loading and the AVE value must exceed 0.50 (Hair et al., 2014). In Figure 7 and Table 25, it was observed that all the factor loadings were above 0.50 which proved a convergent validity of all the measurement items (Field, 2013). This indicates that all the 27 items in the model are good measures of their respective constructs.

5.4.2.2 Discriminant Validity

Discriminant validity is the extent to which constructs in a theoretical model differ from one another with respect to how a latent variable identifies with the variance of its scale items than the variance of other latent variables(Carmines & Zeller, 1979). Statistically, the loading of an item on it latent variable must be higher than any other latent variable. Additionally, the moderate level of correlations (less than .8) also suggests a discriminant validity of all four latent variables(Consumer-based brand equity, brand preference and brand loyalty). Discriminant validity is examined by comparing the shared variances between factors with the AVE of the individual factors.

The statistical evidence of discriminant validity is assessed and discussed through the matrix of correlations and AVE square root coefficients (Table 24). It requires that the AVE square root be greater than the square correlations between the latent variables (Hair et al. 2014).

Table 24: Correlation & Square root of AVEs Matrix Showing Discriminants Validity

	Brand Loyalty	Brand Preference	Brand Equity	Willing to pay a price premium
Brand Loyalty	0.768			
Brand Preference	0.671	0.831		
Brand Equity	0.441	0.657	0.960	
Willingness to pay premium	0.656	0.601	0.368	0.915

As evident above, the square root of the AVE values for each latent variable was greater than the squared correlations between the constructs (CBBE, brand preference, willingness to pay a price premium and Brand loyalty). Table 22, indicated that there was no discriminant validity concern in the final measurement model (Figure 7) for all correlation coefficients are lower than the square root of AVEs of their respective constructs. For example, the correlation between Brand loyalty and willingness to pay premium price was (.656) which was lower than the Square root of the AVE of Brand loyalty (.768) and the Square root of the AVE of Willingness to pay a premium (.915). The same observation can be seen for the other three latent variables in the final measurement model.

5.4.2.3 Reliability of the Final Measurement Model

Reliability is used to examine the degree of consistency amongst multiple measurements of variables (Hair et al., 2014). It ensures that the items in a scales measure the same latent variable or construct (Pallant, 2013). Cronbach's alpha measures the internal consistency of a scale by examining the extent to which the variables measure the same construct they are inertly related which was used to measure the internal consistency of various constructs.
Composite reliability (CR) was also provided to make the reliability analysis more robust. Composite reliability measures the overall reliability of a set of items loaded on a latent variable which value ranges between 0 and one (Carmine & Zeller, 1979). The threshold for both the Cronbach's alpha and composite reliability is 0.70 although 0.60 is sometimes acceptable (Field, 2013). All the Cronbach and composite reliability values for the latent variable

exceeded 0.70 which indicated adequate internal consistency and reliability of the measurement model.

The validity and reliability results are represented in Table 25 below

Table 25: Reliability and Validity Assessement

Constructs	Items	Factor loadings	P-value	Cronbach's Alpha	CR	AVE	Final number of items and initials
Brand loyalty	BL1	.83	***	.88	.87	.58	5(5)
	BL2	.88	***				
	BL3	.68	***				
	BL4	.62	***				
	BL5	.77	***				
Brand Preference	BP1	.83	***	.86	.87	.69	3(3)
	BP2	.76	***				
	BP3	.90	***				
Consumer-based Brand Equity	Brand awareness	1.00	***	.95	.98	.92	4(4)
	Perceived quality	.94	***				
	Brand image	.98	***				
	Brand association	.90	***				
Willingness to pay premium	WTP2	.93	***	.91	.91	.84	2(3)
	WTP3	.90	***				
Notes: ***: significance at 0.05 confidence level. CR= composite reliability; AVE: Average variance extracted							

The overall result indicates the good reliability of all the scales involved in this study as Cronbach's alpha and composite reliability coefficients were both above 0.70. The table shows that the factor loadings of all constructs are all above the recommended threshold of 0.5 (Fields, 2013). Similarly, the AVEs of all constructs are also above the required threshold of 0.5 (Chin et al., 1997).

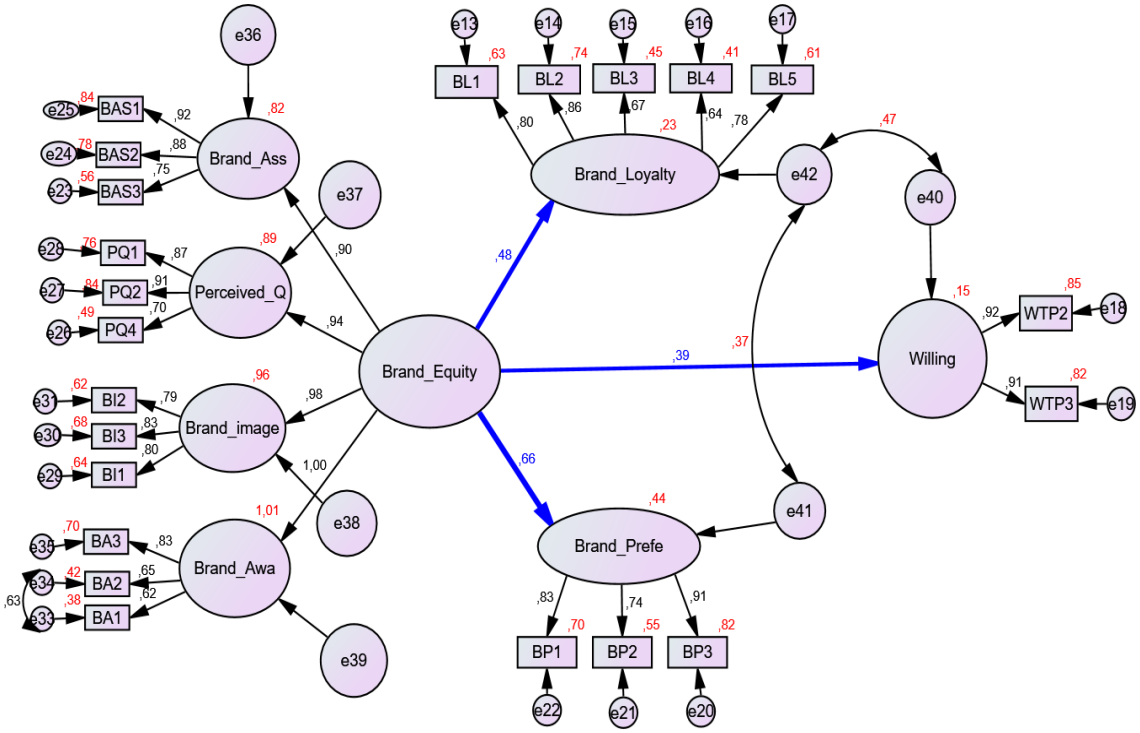
All the above estimates statistically confirm that there is the convergent validity of all the items in the final measurement model. This means that all the items selected are good measures of their respective constructs.

5.4.3 Assessment of the Structural Model (V-structural Model)

To establish the validity of the structural model, it was assessed using the maximum likelihood model following the general guidelines of the measurement model discussed earlier using AMOS 25. The graphical representation of the structural model below shows the hypotheses developed for the study. Structural equation modelling is the mathematical representation of the graphical equivalent, in which the relationship between dependent variables (brand preference, willingness to pay a price premium and brand loyalty) and their predicting variables (Consumer-based brand equity) is represented by a set of equations (Hooper et al., 2008).

The one-way arrows in Fig 8 below represent the structural coefficients and show the effect of one variable on another. The blue arrows represent the relationship between Consumer-based brand equity and the dimensions of consumer responses, which shows Hypotheses 1, 2 and 3 of this study.

Figure 8: The final structural model path model (V-structural)



A new SEM co-variance matrix is computed for the V-model, which is different from the measurement model with the assumption that the relationship between constructs in the structural model is zero. The structural model (Chi-square =423.182; p value= .000; df=199) displayed satisfactory model fit indices: (CMIN/DF=2.127; GFI =0 .834; AGFI= 0.788; TLI = 0.918; CFI =0.929, NFI = 0.875, RMSEA = .077). This indicated that the structural model fits the data satisfactorily. Therefore, the structural model **(figure 8**) was used with confidence to examine the research hypotheses of the study.

5.4.4 Regression Weights and Hypotheses Testing (SEM)

The proposed model is showing the independent variable (CBBE) and the independent variables (brand preference, willingness to pay a premium price and brand loyalty). Hypothesis 1, 2 and 3 paths were significant at (p-value less than 0.001), and hence supported. The standardised regression weights of the hypotheses are presented in Table 26 below.

Table 26: Hypotheses 1, 2 and 3, standardised regression weights and their significance

No	Hypotheses	Path	Beta Value	P-Value (significance)	Supported/Not Supported
H1	There is a positive direct relationship between consumer-based brand equity and brand preference.	CBBE → BP	0.67	0.000	Supported
H2	There is a positive direct relationship between consumer-based brand equity and willingness to pay a premium price.	CBBE → WTP	0.39	0.000	Supported
H3	There is a positive direct relationship between consumer-based brand equity and brand loyalty.	CBBE → BL	0.48	0.000	Supported

95% confidence level

5.5 Model Testing With the Moderating Variable

5.5.1 Reliability and Validity of the Moderating Variable (Fake news Via EWOM)

Table 27: Reliability and Validity of Fake news via EWOM

Constructs	Items	Factor Loadings	Cronbach's Alpha	CR	AVE	Final number of items and initials
Fake news	FK1	0.480	.73	.87	.58	6(5)
	FK3	0.757				
	FK4	0.692				
	FK5	0.736				
	FK6	0.652				

FK2 was removed during the exploratory factor analysis. The five items had a Cronbach's Alpha of 0.73 and composite reliability of 0.871 which were greater than 0.70, the recommended threshold. The validity of the scale items has also been confirmed during the EFA.

5.5.2 Moderating Interaction Effect

As previously discussed, structural equation modelling (SEM) using AMOS was used to test the relationship between the independent variable (Consumer-based brand equity) and the dependent variables (brand loyalty, willingness to pay a premium price and brand preference). The influence of fake news through electronic word of mouth as a moderator between these relationships was examined using moderation analysis (product indicator) on SMART PLS to examine H5, H6 and H7. SMART PLS was used because of ease of use for moderation effect compared to AMOS.

The interaction effect between the independent variable (CBBE) and the moderating variable (Fake news through electronic word of mouth) was used to determine how the relationship between the independent and dependent variable changes with the presence of fake news concerning the brands via electronic word of mouth.

Since the moderation effect was tested on three relationships, Smart PLS created three new interacting variables from the product of independent variable (CBBE) and the moderating variable (fake news through electronic word of mouth). The interaction variables were tested for significant effect on brand loyalty, willingness to pay a premium price and on brand preference. The moderation effects were assessed by examining the significance of the interaction variable on the three dependent variables (Table 28)

Table 28: Moderation Interaction Effect

	Effect Original Sample	T Statistic	P-Value
Interacting Variable → Brand Preference	-0.038	0.186	0.853
Interacting Variable → Willingness to Pay Premium Price.	-0.050	0.570	0.569
Interacting Variable → Brand Loyalty	-0.098	0.642	0.521

95% confidence level

As indicated in Table 28, the effect of the interacting variable on brand preference (-0.05) was non-significant as the T statistic (0.570) was lower than 1.96 and the P-value (0.569) was greater than 0.05. Therefore, fake news through electronic word of mouth does not moderate the relationship between consumer-based brand equity and brand preference.

The effect of the interacting variable on willingness to pay a price premium (-0.098) was not significant as the T statistics (0.642) was lower than 1.96 and the P-value (0.521) greater than 0.05. Therefore, fake news through electronic word of mouth does not moderate the relationship between consumer-based brand equity and willingness to pay a price premium.

Finally, as indicated in Table 27, the effect of the interacting variable on brand loyalty (-0.038) was also non-significant as the t statistic (0.186) was lower than 1.96 and the p-value(0.853) was greater than 0.05. Therefore, fake news through electronic word of mouth does not moderate the relationship between consumer-based brand equity and brand loyalty.

In conclusion, based on the results above, hypotheses four, five and six were rejected. Therefore, fake news through electronic word of mouth does not moderate any of the relationships between consumer-based brand equity and consumer responses (brand preference, willingness to pay a price premium and brand loyalty).

Since there was no moderating effect on the relationship between the independent variable (CBBE) and the dependent variables (brand preference, willingness to pay a price premium and brand loyalty), there was no need to include the interacting variable on the structural model in Fig 8 above.

5.6 Summary

All the propositions between the independent variable (consumer-based brand equity) and the dependent variables (brand preference, willingness to pay a price premium and brand loyalty) in the structural equation modelling (SEM) were all supported. Brand preference was influenced by CBBE (Beta= 0.66), Brand loyalty was influenced by CBBE (Beta= 0.390, Brand loyalty was influenced by CBBE (Beta= 0.48).Therefore, hypotheses one, two and three were supported

The moderation regression analysis conducted through SMART PLS indicated that the relationship between CBBE and consumer responses (brand preference, willingness to pay a premium price and brand loyalty) were not influenced by fake news through electronic word of mouth) as all the p-values were greater than 0.05. Therefore Hypotheses four, five and six were not supported.

CHAPTER 6: DISCUSSION OF RESULTS

The overarching aim of the research was to examine the effect of fake news through electronic word of mouth on the relationship between consumer-based brand equity and consumer responses (brand preference, willingness to pay a price premium and brand loyalty) focussing on premium brands particularly automobile (Audi, BMW and Mercedes Benz) in the context of South Africa. The study also aimed to examine the relationship between consumer-based brand equity and consumer responses towards premium brands.

The study examined the relationship between consumer-based brand equity and consumer responses using Structural Equation Modelling using IBM AMOS and the moderating effect of fake news was examined using SMART PLS.

The analysis and discussion of descriptive statistics as well as the implication of the results of the hypotheses, are outlined in this chapter.

6.1 Research Hypotheses Discussion

6.1.1 Hypothesis 1

H1: There is a positive direct relationship between consumer-based brand equity and brand preference.

The hypothesis analysed the relationship between consumer-based brand equity and brand preference focusing on premium automobile brands. The means of the independent variable (CBBE) and the dependent variable were 4.18 and 3.89 respectively. The results revealed a statistically significant positive relationship between consumer-based brand equity and brand preference. (Beta = 0.66, p-value= 0.000). This means 66% of the variation in brand preference is predicted by consumer-based brand equity. Therefore H1 was supported.

This supports the argument by Chang and Liu (2009) that brand preference is an outcome of consumer-based brand equity analysing their relationships through a structural equation model in the service industries context. Cobb-Walgreen et al. (1995) focussing on brand values found out that high brand equity when compared in a service and product categories generated significantly high brand preference and purchase intention. Ebrahim et al. (2016) focusing on brand preference as an important approach for determining consumer choice behaviour found brand knowledge which is a dimension of brand equity through consumer experiencepositively influences brand preference.

The standardised regression weight of in this study (0.667) is relatively high, which indicated that there is a strong influence of CBBE on brand preference towards premium brands. This may be as a result of social class identification of the middle-class to prefer these brands due their premium nature which may propagate the social identity of these consumers. Hence, brands with a high perceived brand equity would lead to the preferred choice amongst other competing brands.

This result supports the literature around consumer-based brand equity and its positive influence on brand preference on creating value. Brand preference leads to cost reduction, improved sales and profits for brands (Keller 1993).

6.1.2 Hypothesis 2

H2: There is a positive direct relationship between consumer-based brand equity and willingness to pay a premium price.

This hypothesis tested the relationship between consumer-based brand equity and willingness to pay a premium price focusing on premium automobile brands. The mean of the dependent variable willingness to pay a price premium was 3.41 which was the lowest mean score of all the dependent variables in this study. The results revealed a statistically significant positive relationship between consumer-based brand equity and a willingness to pay a premium price. (Beta = 0.39, p-value=0.000). The result implies that 39% variation in consumers willing to pay a price premium for premium automobile brands is explained by consumer-based brand equity. Therefore H2 was supported.

This results of the hypothesis supported Keller (1993) that brand equity and strength influence the price placed on a brand. Siu et al. (2016) in a luxury brand context, found that brand equity positively predicted willingness to pay a price premium. Brand image and perceived quality

are strong determinants that drives consumers to be willing to pay a premium price (Anselmsson bbet al., 2014)

The standardised regression weight (0.39) which indicated that consumer-based brand equity is a weak predictor of willingness to pay a premium price for premium automobile brands. This is also supported in Godey et al. (2016) study on the effect of CBBE on consumer responses where willingness to pay a price premium towards luxury brand had the lowest standardised regression value when compared to its other dimensions (brand loyalty and brand preference).

This may be because of the changing context of the market environment particularly in the automobile industry that is currently disrupted by technology, precisely UBER sharing economy that is has been found convenient by the young middle class (Cannon & Summers, 2014). Leading them to acknowledge the strong brand equity of premium brands but not influencing them to pay a price premium on these brands.

6.1.3 Hypothesis 3

H3: There is a positive direct relationship between consumer-based brand equity and brand loyalty.

The mean of the dependent variable (brand loyalty) was 3.54. The results revealed a statistically significant positive relationship between consumer-based brand equity and brand loyalty. (Beta = 0.48, p-value=0.000). Therefore, H3 was supported.

Although argued as a dimension of consumer-based brand equity (Aaker, 1991; Keller 1993, Christodoulides, 2015), this study focussed on brand loyalty as an outcome of consumer-based brand equity (Nam et al., 2011; Godey et al.,2016) based on the argument that other dimensions of brand equity create brand loyalty (Buil et al., 2013; Çifci et al., 2016).

Pappu and Quester (2016) could explain support for the above hypothesis that perceived quality a strong dimension of consumer-based brand equity is a strong predictor of brand loyalty support the result in this study. Su and Chang (2018) study focusing on fast fashion found the dimensions of consumer-based brand equity (brand awareness, perceived value, brand personality, perceived quality, brand personality. Brand uniqueness and organizational associations) are predictors of brand loyalty examining US college students.

The standardised regression weight value is (0.48) which means there is a fairly average influence of consumer-based brand equity on brand loyalty towards premium brands.

This study supported literature around consumer-based brand equity as a positive predictor of brand loyalty. Therefore, brand loyalty is a consumer-based brand equity outcome rather than a dimension of CBBE.

In line with one of the objectives of this research to analyse, the CBBE dimensions in the context of South Africa an emerging market. Fig. 7 of the model fit structure revealed that brand awareness, brand image, perceived quality and brand associations are strong dimensions of CBBE of premium brands with a path coefficient values of 1.00, 0.98, 0.96 and 0.90 respectively(table 25). This indicates that the four dimensions of consumer-based brand equity used in this study are highly relevant and non- negotiable for premium brands. However, brand awareness and brand image were the strongest predictors of CBBE which were also the two dimensions used in the study of Godey et al., (2016) to determine the effect of social media marketing efforts on the relationship between brand equity and consumer responses. This result may be due to the middle-class nature of the respondents who tend to conspicuously consume these brands to identify with their social class (Truong et al., 2008). Therefore, the premiumness of the brands in terms of awareness and image are the most essential to how they are perceived form a brand equity perspective.

6.1.4 Hypothesis 4, 5 and 6

Hypothesis 4 tested the relationship between fake news via electronic word of mouth in a social media context targeted at a premium automobile brand and its brand preference.

The mean of the moderating variable (fake news via electronic word of mouth) used in this study was 2.76. The findings confirmed non-significant predictive power for the interaction between fake news via social media and consumer-based brand equity in predicting brand preference for a premium brand (b= -0.050) at a p-value of 0.569 which is greater than 0.05. Therefore, H4 was not supported.

Hypothesis 5 tested the relationship between fake news via electronic word of mouth in a social media context targeted at a premium automobile brand and its willingness to pay a price premium.

The findings confirmed non-significant predictive power for the interaction between fake news via social media and consumer-based brand equity in predicting willingness to pay a price premium for a premium brand (b= -0.098) at a p-value of 0.521 which is greater than 0.05. Therefore, H5 was not supported.

Hypothesis 6 tested the relationship between fake news via electronic word of mouth in a social media context targeted at a premium automobile brand and its brand loyalty.

The findings confirmed non-significant predictive power for the interaction between fake news via social media and consumer-based brand equity in predicting brand loyalty for a premium brand (b= -0.038) at a p-value of 0.853 which is greater than 0.05. Therefore, H6 also was not supported.

This means fake news through electronic word of mouth does not affect the relationship between consumer-based brand equity and consumer behavioural responses (brand preference, willingness to pay a price premium and brand loyalty). This further indicates that a fake news story concerning a premium brand will not significantly affect the middle-class behaviour towards these brands. This may be because the brands (Audi, BMW and Mercedes Benz) in this study have high consumer-based brand equity and a strong brand value which are also considered as one of the best 100 brands in the world (Interbrand, 2017).

However, the beta coefficients of hypotheses 4, 5 and 6 were negative, which implies that should the p-value be significant, fake news through electronic word of mouth will negatively moderate and affect the relationship between consumer-based brand equity and consumer responses. In this study, the effect of is non-significant.

This results may be due to the brands (Audi, BMW and Mercedes Benz) used in this study which have also noted as one of the strongest global brands (Interbrand, 2017). According to The information adoption theory proposes that consumers behaviour may be influenced by the information encountered in an online environment(Sussam &Siegal). Word of mouth can affect the way consumers feel, act and think concerning brands and fake news through social media can affect the reputations of brand (Berthon & Pitt, 2018). This study indicates that fake news story targeted at premium brands through electronic word of mouth will not influence consumer behaviour towards these brands. In order words, the relationship between brand equity and consumer responses (brand preference, willingness to pay a price premium and brand loyalty)in relations to premium automobile brands will not be affected by fake news via electronic word of mouth.

Based on the Theory of Planned Behaviour, perceived behavioural control (fake news through electronic word of mouth which is the external behavioural control) did not affect the relationship between CBBE and consumer behavioural outcomes. This means that when a fake news story is targeted at a premium brand, consumer's behaviour in terms of brand preference, willingness to pay a price premium and brand loyalty will not be change.

Based on social identity theory, which proposes that people associate themselves to various classes to signify who they are (Taifel &Turner, 1979). In this study, the middle-class consumers will still purchase premium brands in the event of a targeted fake news towards these brands to identify with their middle-class status.

To the best of our knowledge, there is scant research on fake news effect on brands. This study empirically examined fake news disseminated through electronic word of mouth in the social media context.

Previous research has examined fake news disseminated through social media platforms in the context of the US Presidential elections confirmed that the fake news that was widely shared through social media platforms during that period favoured President Donald Trump (Allcott & Gentzkow, 2016).

6.2 Conclusion

This chapter provided a detailed discussion of the research results presented in Chapter 5. The results of the analysis were discussed and linked to the theoretical background. The results confirmed the influence of the independent variable (consumer-based brand equity) on the dependent variables (brand preference, willingness to pay a price premium and brand loyalty) as conceptualised by the proposed model. Brand awareness, brand image, perceived quality and brand association were seen to be strong dimensions of consumer-based brand equity towards premium brands in the context of South Africa.

However, the moderating effect of fake news via electronic word of mouth on the relationship between the independent variable and the independent variable was not supported as the p-values where not significant statistically.

The summary of the finding of the research, discussing the theoretical and managerial implications, limitations and recommendations for future research is discussed in the next chapter.

CHAPTER 7: RESEARCH CONCLUSION

7.1 Introduction

This focus of this study was on the behaviour of the middle-class consumers in South Africa towards premium brands when premium automobile brands are targeted by a fake news story. This research aimed to examine the relationship between consumer-based brand equity and consumer responses. These relationships were further tested by including a moderating variable (fake news via electronic word of mouth). This study was motivated by the increasing occurrence of fake news stories via social media on brands affecting both personal and organisational brands (Berthon &Pitt, 2018; Allcott &Gentzkow, 2016). This has been enabled by the dynamic, ubiquitous and real-time interaction of the social media environment creating a new era for brand management (Gensler et al., 2013).

Six hypotheses and the conceptual model were developed from the literature review. The hypotheses and the conceptual model included the constructs; consumer-based brand equity, brand preference, willingness to pay a price premium, brand loyalty and fake news via electronic word of mouth. Scale items were adapted and developed from the various literature concerning the five variables. These scales were tested for validity and reliability. The developed hypotheses were statistically tested using Structural Equation Modelling (SEM) and moderation interaction analysis which were applied to 191 eligible electronic questionnaires which enabled the collection of primary data through an online survey platform.

Hypotheses one, two, and three analysed with SEM were accepted based on the statistical significance of the p-value and positive path-coefficients. However, hypotheses four, five, and six testing the moderating variable on the relationship between the independent variable and dependent variables were not accepted as the p-values were not statistically significant.

This chapter summarises the main findings, implications (theoretical and managerial), limitations observed as well as recommended future research.

7.2 Principal findings and theoretical implications

This study has contributed towards understanding the middle-class consumer behaviour in an emerging market about premium brands through the developed theoretical model. It also provided insights concerning the behaviour of consumers towards brands when targeted by fake news through social media platforms. It further provided significant insights into the relative importance of the dimensions of consumer-based brand equity in the context of the South African market.The research was built on the combination of existing literature on consumer-based brand equity, electronic word of mouth, social media, fake news, premium brand, middle-class and the outcome of consumer-based brand equity(consumer responses: brand preference, brand loyalty, willingness to pay a price premium) were applied to build the conceptual model.

The results of this study revealed that consumer-based brand equity has a positive influence on consumer responses. The greatest impact of brand equity was on brand preference, followed by brand loyalty and willingness to pay a price premium for premium automobile brands. Brand awareness, brand image, brand association and perceived quality were found to be strong dimensions of consumer-based brand equity for premium brands in this context.

The findings of this research aligns with the findings to previous studies which have found one or more of these dimensions (brand image, brand awareness, brand association and perceived quality) as strong predictors of consumer-based brand equity (Aaker, 1991; Keller 1993; Christodoulides et al., 2015; Godey et al., 2016). The strong relationship between consumer-based brand equity and consumer responses also aligns with previous studies (Godey et al, 2016; Cobb-Walgreen et al., 1995; Chang and Liu, 2009; Siu et al., (2016; Anselmsson, Bondesson &Johansson, 2014; Buil et al., 2013; Çifci et al., 2016)

There is an increasing number of studies focusing on the downside of social media on brands and how to manage brands in the social media environmet (Fulgoni & Lipsman, 2017; Kohli et al., 2014; Gensler et al., 2013). Fake news stories about brands has been increasingly prevalent on social media platforms (Berthon & Pitt, 2018; Gentzkow & Allcott, 2016) which has made it important to empirically examine the effect of a fake news stories on brands, particularly on premium brands. To the best of the researcher's knowledge, there is a scant research on fake news and it's effect on brands. This study has adressed this gap in the

literature by empirically examining the effect of fake news disseminated through electronic word of mouth in the social media context.

The study also found that fake news stories on social media platforms do not affect the relationship between consumer-based brand equity and consumer responses in the premium motor vehicle brand context in this emerging market. The results revealed negative beta coefficients on these relations. However, the p-value was not statistically significant as they were greater than 0.05. This result can be attributed to the strong brand equity of the brands (Audi, BMW and Mercedes Benz) that were used for this study. This study has contributed to literature, by revealing that the dimensions of brand equity (brand awareness, brand image, perceived quality and brand association) do not only help to build strong brand equity. Enhancing these dimensions, with marketing activities could, in turn, lead to consumers preferring the specific brand over others in the same category, consumers being willing to pay a premium for these brands and strengthen brand loyalty. Since fake news stories shared on social media platforms are beyond the control of brand managers, the lack of the moderating effect of fake news between brand equity and consumer responses in this context indicates that strong brand equity can act as a form of protection for brands that are targeted by fake news.

7.3 Managerial implications

Apart from the theoretical implication discussed above, this study also holds value for marketing practitioners particularly brand and marketing managers in the premium brand space in emerging markets.

Brands are highly valuable assets for businesses and they are built over time by investing company resources. The dynamic nature of the marketing environment influenced in recent times by the social media environment where consumers are important authors of brand stories which can be shared in real-time to a wide number of people in the shortest time frame make it important for brand managers to protect their brands in the social media environment (Gensler et al., 2013).

From this study, brand managers of premium brands (which are aspirational to the middle-class) will benefit from creating brand awareness amongst their actual and potential customers. They can build their brand awareness by creating a strong social media presence where all stakeholders can participate (Ind, 2014). Awareness is particularly important in the context of aspirational brands – while brand awareness enhances the consumer response of actual consumers, it is equally important to create awareness particularly around brand image and status to non-consumers to allow the aspirational consumers an audience in being able

to use these brands to build and communicate their self-identity and status by conspicuously consuming these brands. The brands in this study have strong social media impact and presence (Table 1) particularly on Facebook and Twitter which may have led to their strong brand awareness as derived from this study. Secondly, the brand equity of brands positioned as premium should be built by creating and maintaining a clear brand image around the status that will allow consumers to enhance their self-identity by exhibiting these aspirational brands. Brand managers should also ensure that premium brands are associated with equally strong and reputable brands to avoid damage to the brand image.

This study revealed that brand equity of premium automobile brands is perceived to be strong amongst the middle-class, however, the relationship with consumers responses was weakest in terms of consumer being willing to pay a premium price for these brands. This may be due to their inability to actually afford these brands. This implies that there is an opportunity for marketing managers to grow their sales by capturing the middle-class market with a more affordable model through brand extensions. In order to increase profits, higher prices can be charged for customisable extras on vehicles, rather than raising the price of basic vehicle models so as to not exclude this market based on affordability and still be able to command a premium price based on these add-ons. However, caution should be taken to not damage the brand image, status and aspirational nature of these brands through lack of premium pricing.

The premium automobile brands used in this study were chosen based in the annual Interbrand (2017) global 100 brands where they are all positioned amongst the top 100 brands globally. Results of this study show that fake news had no significant effect on the relationship between brand equity of these brands and consumer responses. Brand managers and marketing practitioners should build their brand equity by spending marketing budgets on creating strong brand awareness, brand image, brand association and perceived quality which will assist in protecting brands from the downsides of the social media environment specifically from the fake news that may be targeted at their brands.

Managers of premium brands should continue to put in more effort in creating strong and consistent brand equity as a means of protecting their brands from the effect of fake news disseminated electronically via social media. This is particularly relevant for premium brands that are more vulnerable to the downside of social media due to their status and aspirational characteristics which enables them to command a price premium (Fulgoni & Lipsman, 2017).

7.4 Research limitations and recommendations for future research

This study revealed several insights for academic scholars and business managers. However, caution must be applied when interpreting the results due to the following constraints encountered in the course of the study:

This research only looked at the premium automobile brands that are ranked within the best 100 global brands with strong social media impact (Interbrands, 2017) and have been indicated to be most popular in the South African market amongst the middle class (UISM, 2013). While the results are likely to be useful in the premium automobile sector, they may not necessarily apply to other industries. To be able to generalise the findings of this study, there is a need to test this theoretical model in other premium brand products and services.

Furthermore, this study considered the theoretical model in the context of premium brands that have high brand equity. Future research could consider this theoretical model and the moderating effect of fake news on brands with lower brand equity to be able to compare the results which may be quite different from those in this study.

The research studied the behaviour of middle-class consumers in the context of South Africa. This was important as the middle-class has been noted to conspicuously consume aspirational goods to display their social class. The findings of this study particularly, the low willingness to pay a price premium may have been influenced by their affordability capacity in terms of income. Future studies should consider the relationships between brand equity, consumer response and fake news, in the higher income segment.

This study examined consumer behaviour in South Africa, which is an emerging market. This research should be extended to other emerging markets particularly Africa to enable marketers to to develop regional competitive strategies that will drive growth in emerging market economies.

This study employed brand awareness, brand image, brand association and perceived quality as dimensions of brand equity. Consumer-based brand equity has been found to have a positive relationship with sales –based brand equity using the dimensions of brand asset valuators differentiation, relevance, esteem and knowledge for CBBE (Datta et al., 2016). Future studies can replace the dimensions in this study with the brand asset valuator

dimensions as this may further assist in developing strategies to protect brands from fake news stories disseminated through social media. More recently, perceived brand authenticity construct have been noted as essential to branding and consumer behaviour as the consumers demand authenticity from brands due to the uncertainty in today's market place to question the trustworthiness of information (Morhart, Guevremont & Malar, 2015; Fritz, Schoenmueller & Bruhn, 2017). Future studies could replace the consumer-based brand equity in this model with consumer's perceived brand authenticity.

This research developed the scale items for the construct fake news via electronic word of mouth from literature and scale items developed for electronic word of mouth as there were no scale items specifically on fake news based on the knowledge of the authors as at the time of the study. Future research could look at exploring more literature to develop scale items for fake news through electronic word of mouth.

The study employed non probability sampling techniques (Convenience and snowballing). It has been argued that snowballing sampling techniques is prone to selection bias, which could result in homogeneity of sample collected due to the fact that similar respondents may have completed the survey (Saunders and Lewis, 2012). A cross-sectional sampling approach was used for the study where data were collected at a specific point in time (August-September, 2018). Due to the to the speed of change in technology which may influence the social media environment where brand managers can no longer solely control the communications concerning their brands, a longitudinal research could be considered to further understand how market change can affect consumers' behavioural patterns concerning brands. This will help brand managers and academic scholars learn how to cope with the arising difficulties and challenges that may be encountered in the social media environment.

This study focused on the moderating effect of fake news via social media on the relationship between brand equity and consumer responses. Future research could examine the direct effect of fake news via electronic word of mouth on consumer responses. This may give us more insights on understanding the downsides of social media on brands and to develop strategies to protect brands (Kohli et al., 2015). The social media activity of consumer can also be used to examine if it has a moderating effect between fake news through electronic word of mouth and consumer responses.

7.5 Conclusion to the research project

This study established that consumer-based brand equity of premium brands positively influenced consumer responses. However, the effect was strongest on brand preference, which indicated that middle-class consumers in South Africa will prefer a brand over other competing brands depending on the strength of their perceived brand equity. It also revealed that brand awareness, brand image, brand association and perceived quality are all important to building a strong consumer-based brand equity.

The overarching aim of this study was to determine the moderating role of fake news via electronic word of mouth on the relationship between consumer-based brand equity and consumer responses (brand preference, brand loyalty and willingness to pay a price premium). The study revealed that fake news disseminated through social media does not affect these relationships which means that brands with strong equity may not be affected by a fake news shared on social media platforms. Theoretical and business implications were suggested, as well as opportunities and recommendations for future research based on the findings of this study.

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APPENDICES

Appendix A: Questionnaire

Section 1

Cover Letter

Dear Participant,

I am Funmi Bankole, a final year student at the Gordon Institute of Business Sciences, University of Pretoria, South Africa. I am conducting a research as part of my MBA studies in the area of Branding and Consumer Behaviour. This research aims to investigate the role of fake news through electronic word of mouth in the social media context on the relationship between brand equity and consumer responses towards premium brands.
To that end, you can voluntarily participate in the survey which will take about 5 minutes of your time. You will be asked a few questions related to the research topic which will help us better understand the effect of fake news on brands in the social media context.
Your participation is voluntary, and you can withdraw at any time without penalty. Your participation is anonymous and only aggregated data will be reported. Data gathered and the insights obtained from you and the other participants will be used to write a quantitative research report. By completing the survey, you indicate that you voluntarily participate in this research. If you have any concerns, please contact my supervisor or me. Our details are provided below.
Research Student: Funmi Bankole (17386269@mygibs.co.za)
Research Supervisor: Mignon Reyneke (ReynekeM@gibs.co.za).

Thank you for your participation.

SECTION 2

Personal Information

- Gender
    - Male
    - Female
- Age
    - 18-25
    - 26-35
    - 36-45
    - 46+
- Your Monthly Income
    - Less than 25k Rands
    - 25K to 35K Rands
    - 36K to 50K Rands
    - 50K+
- Your Educational Level
    - Primary
    - High School
    - Technical or vocational qualification
    - Tertiary Education
- Your occupation
    - Professional
    - Office staff
    - Skilled worker
    - Non-Skilled worker
    - Executive
- Do you have a social media account?
    - Yes
    - No
- Do you follow brand pages on social media?
    - Yes

- No
-

- On how active are you on social media?
  - Highly active
  - Active
  - Fairly active
  - Passive
  - Highly passive
- Which of these automobile brands do you currently own?
  - Audi
  - BMW
  - Mercedes Benz
  - Others
- If you were to purchase one of the following brands in the future, which automobile brand are you most likely to purchase?
  - Audi
  - BMW
  - Mercedes Benz

Section 3 of 3

The following sections are based on the vehicle brand that you have selected as most likely to purchase (Audi, Mercedes or BMW) in the future in the previous question 10 in section 2.

Fake News Via Electronic Word of Mouth (social Media)

Fake news is false information which can be in the form of fake stories, fake polls, fake pictures and fake reviews.

The following statements relate to how you accept fake news stories through social media platforms. Please indicate to what extent you agree or disagree with the statements. Following is the understanding of the number scale:
1 - Strongly Disagree
2 - Somewhat Disagree
3 - Neither Agree or Disagree
4 - Somewhat Agree
5 - Strongly Agree

I believe posts regarding brands that is shared on my social media platform . *

	1	2	3	4	5	
Strongly Disagree	○	○	○	○	○	Strongly Agree

I will interrogate or verify posts on social media concerning this brand. *

	1	2	3	4	5	
Strongly Disagree	○	○	○	○	○	Strongly Agree

I have reacted to a fake news story targeted at a premium brand on social media platforms. *

	1	2	3	4	5	
Strongly Disagree	○	○	○	○	○	Strongly Agree

Fake news targeted at a brand motivate me to take an action . *

	1	2	3	4	5	
Strongly Disagree	○	○	○	○	○	Strongly Agree

I have agreed with a fake news story through electronic word of mouth concerning a premium brand. *

	1	2	3	4	5	
Strongly Disagree	○	○	○	○	○	Strongly Agree

I am likely to believe a fake news story concerning this particular brand depending on how credible the source is.

	1	2	3	4	5	
Strongly Disagree	○	○	○	○	○	Strongly Agree

The following sections are based on the vehicle brand that you have selected as most likely to purchase (Audi, Mercedes or BMW) in the future in the previous question 10 in section 2.

Consumer- Based Brand equity
The following question relates to how you perceive the premium automobile brand you are most likely to purchase . Please indicate to what extent you agree or disagree with the statements. Following is the understanding of the number of scale
1 - Strongly Disagree
2 - Somewhat Disagree
3 - Neither Agree or Disagree
4 - Somewhat Agree
5 - Strongly Agree

I am always aware of this particular brand. *

	1	2	3	4	5	
Strongly Disagree	○	○	○	○	○	Strongly Agree

Some characteristics of the brand come to my mind quickly. *

	1	2	3	4	5	
Strongly Disagree	○	○	○	○	○	Strongly Agree

I can quickly recall the symbol or logo of this brand. *

	1	2	3	4	5	
Strongly Disagree	○	○	○	○	○	Strongly Agree

This brand has a differentiated image in comparison to the other brands. *

	1	2	3	4	5	
Strongly Disagree	○	○	○	○	○	Strongly Agree

This particular brand has a clean image. *

	1	2	3	4	5	
Strongly Disagree	○	○	○	○	○	Strongly Agree

This particular brand is well established. *

	1	2	3	4	5	
Strongly Disgree	○	○	○	○	○	Strongly Agree

I can always count on this brand consistently for high quality. *

	1	2	3	4	5	
Strongly Disagree	○	○	○	○	○	Strongly Agree

This brand performs well. *

	1	2	3	4	5	
Strongly Disagree	○	○	○	○	○	Strongly Agree

This brand has served me well. *

	1	2	3	4	5	
Strongly Disagree	○	○	○	○	○	Strongly Agree

This brand lives up to its promise. *

	1	2	3	4	5	
Strongly Disagree	○	○	○	○	○	Strongly Agree

This brand has strong associations. *

	1	2	3	4	5	
Strongly Disagree	○	○	○	○	○	Strongly Agree

This brand has favourable associations *

	1	2	3	4	5	
Strongly Disagree	○	○	○	○	○	Strongly Agree

It is clear what this brand stands for.

	1	2	3	4	5	
Strongly Disagree	○	○	○	○	○	Strongly Agree

I have difficulty imagining this brand in my mind. *

	1	2	3	4	5	
Strongly Disagree	○	○	○	○	○	Strongly Agree

The following sections are based on the vehicle brand that you have selected as most likely to purchase (Audi, Mercedes or BMW) in the future question 10 of section 2.

Consumer Responses

The following question relates to your behaviour towards the premium automobile brand that you are most likely to purchase.Please indicate to what extent you agree or disagree with the statements. Following is understanding of the number of scale.
1 - Strongly Disagree
2 - Somewhat Disagree
3 - Neither Agree or Disagree
4 - Somewhat Agree
5 - Strongly Agree

I prefer to purchase this brand to another brand that has the same features. *

	1	2	3	4	5	
Strongly Disagree	○	○	○	○	○	Strongly Agree

It seems smarter to purchase this brand. *

	1	2	3	4	5	
Strongly Disagree	○	○	○	○	○	Strongly Agree

I prefer to buy this brand to other competing brands that are as good as this brand. *

	1	2	3	4	5	
Strongly Disagree	○	○	○	○	○	Strongly Agree

The price of this brand would have to increase quite a bit before I would switch to another brand. *

	1	2	3	4	5	
Strongly Disagree	○	○	○	○	○	Strongly Agree

I am willing to pay a higher price for this brand than for other brands. *

	1	2	3	4	5	
Strongly Disagree	○	○	○	○	○	Strongly Agree

I am willing to pay more for this brand over other brands. *

	1	2	3	4	5	
Strongly Disagree	○	○	○	○	○	Strongly Agree

I refer this brand to other consumers. *

	1	2	3	4	5	
Strongly Disagree	○	○	○	○	○	Strongly Agree

I use this brand as my first choice in comparison with the other brands. *

	1	2	3	4	5	
Strongly Disagree	○	○	○	○	○	Strongly Agree

I would recommend this brand to others through social media. *

	1	2	3	4	5	
Strongly Disagree	○	○	○	○	○	Strongly Agree

I will not switch to another brand next time. *

	1	2	3	4	5	
Strongly Disagree	○	○	○	○	○	Strongly Agree

I will still be satisfied with this brand after every visit to the dealership. *

	1	2	3	4	5	
Strongly Disagree	○	○	○	○	○	Strongly Agree

Appendix B: The Code Book

Demographic code

1	Female
2	Male

Age	
1	18-25
2	26-35
3	36-45
4	46+

Monthly Income	
1	Less than 25,000 Rands
2	25,000-35,000 Rands
3	36,000-50,000 Rands
4	Above 50,000 Rands

Educational Level	
1	Primary
2	High school
3	Technical or vocational qualification
4	Tertiary education

Occupation	
1	Professional
2	Office Staff
3	Skilled worker
4	Non-skilled worker
5	Executive

Do you have a social media account?	
1	Yes
2	No

Do you follow brands on social media	
1	Yes
2	No

Social media activity level	
1	Highly active
2	Active
3	Fairly active
4	Passive
5	Highly passive

Automobile Brands Possessed	
1	Audi
2	BMW
3	Mercedes Benz
4	Others

Social media activity level	
1	Audi
2	BMW
3	Mercedes Benz

Strongly Disagree – 1

Somewhat Disagree – 2

Neither Agree or Disagree – 3

Somewhat Agree – 4

Strongly Agree – 5

	FAKE NEWS VIA ELECTRONIC WORD OF MOUTH
Code	Scale items
FK1	I believe posts regarding brands that is shared on my social media platform.
FK2	I will interrogate or verify posts on social media concerning this brand.
FK3	I have reacted to a fake news story targeted at a premium brand on social media platforms.
FK4	Fake news targeted at a brand motivate me to take an action.
FK5	I have agreed with a fake news story through electronic word of mouth concerning a premium brand.
FK6	I am likely to believe a fake news story concerning this particular brand depending on how credible the source is.

	CONSUMER-BASED BRAND EQUITY
Code	BRAND AWARENESS(BA)
BA1	I am always aware of this particular brand.
BA2	Some characteristics of the brand come to my mind quickly.
BA3	I can quickly recall the symbol or logo of this brand.
	BRAND IMAGE (BI)
BI1	This brand has a differentiated image in comparison to the other brands.
BI2	This particular brand has a clean image.
BI3	This brand has served me well.
	PERCEIVED QUALITY (PQ)
PQ1	I can always count on this brand consistently for high quality.
PQ2	This brand performs well.
PQ3	This brand has served me well.
PQ4	This brand lives up to its promise.
	BRAND ASSOCIATION (BA)
BA1	This brand lives up to its promise.
BA2	This brand has favourable associations.
BA3	It is clear what this brand stands for.
BA4	I have difficulty imagining this brand in my mind.(r)

	CONSUMER RESPONSES
Code	BRAND PREFERENCE (BP)
BP1	I prefer to purchase this brand to another brand that has the same features.
BP2	It seems smarter to purchase this brand.
BP3	I prefer to buy this brand to other competing brands that are as good as this brand.
	WILLINGNESS TO PAY A PREMIUM PRICE (WTP)
WTP1	The price of this brand would have to increase quite a bit before I would switch to another brand.
WTP2	I am willing to pay a higher price for this brand than for other brands.
WTP3	I am willing to pay more for this brand over other brands.
	BRAND LOYALTY (BL)

BL1	I refer this brand to other consumers.
BL2	I use this brand as my first choice in comparison with the other brands.
BL3	I would recommend this brand to others through social media.
BL4	I will not switch to another brand next time.
BL5	I will still be satisfied with this brand after every visit to the dealership.

Appendix C: ETHICAL CLEARANCE APPROVAL LETTER

Gordon Institute of Business Science
University of Pretoria

19 July 2018

Bankole Oluwafunmilayo

Dear Oluwafunmilayo

Please be advised that your application for Ethical Clearance has been approved.

You are therefore allowed to continue collecting your data.

Please note that approval is granted based on the methodology and research instruments provided in the application. If there is any deviation change or addition to the research method or tools, a supplementary application for approval must be obtained

We wish you everything of the best for the rest of the project.

Kind Regards

GIBS MBA Research Ethical Clearance Committee

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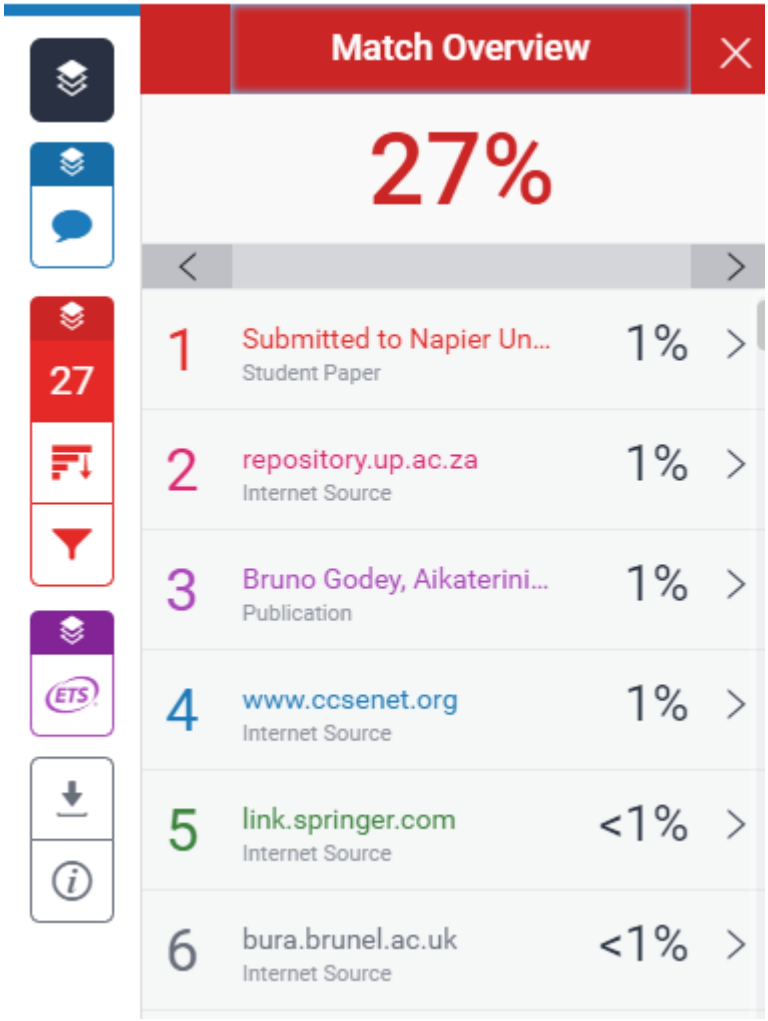
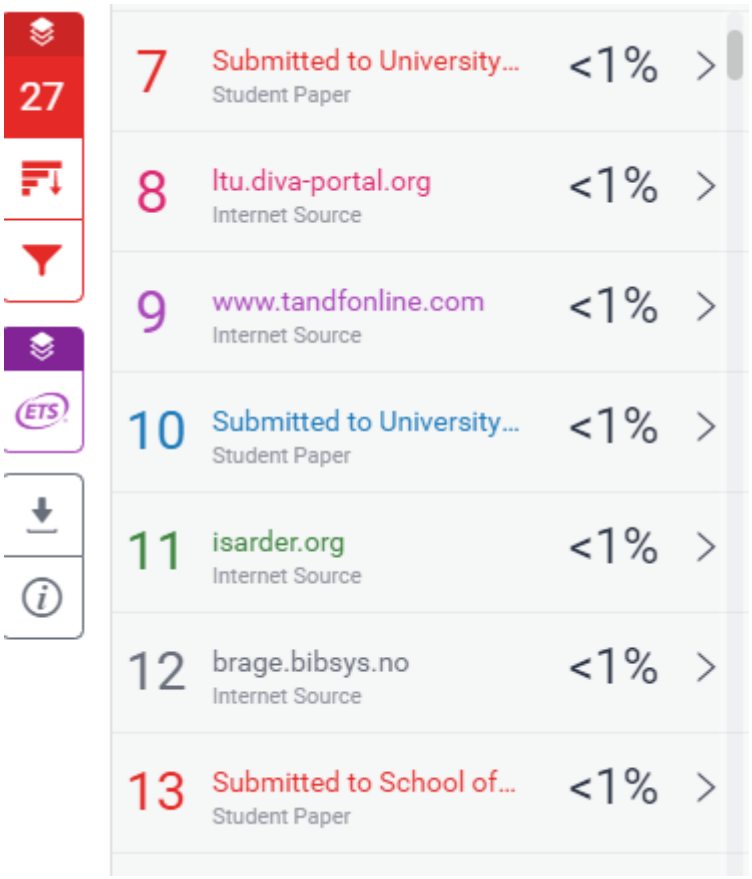
Appendix D: TURNITIN SUBMISSION REPORT

A 27% similarity was reported without references.




27
ETS
7 Submitted to University... Student Paper <1%
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