SELECTED FACTORS INFLUENCING MAVEN TENDENCY
AND COSMETIC PRODUCTS’ TRIAL BY FEMALE
CONSUMERS IN SOUTHERN GAUTENG

by

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I would like to dedicate this dissertation to the enduring love of my life Lisakhanya Barnes with a reminder of the quote from the film *Collateral Beauty*:

> “Just be sure to notice the collateral beauty, it’s the profound connection to everything”
DECLARATION

This work has not previously been accepted in substance for any degree and is not being concurrently submitted in candidature for any degree.

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The dissertation is the result of my own independent work/ investigation, except otherwise stated. Other sources are acknowledged by giving explicit references. A bibliography is appended.

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To whom it may concern

This is to confirm that I, the undersigned, have language edited the dissertation of

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Selected factors influencing maven tendency and cosmetic products’ trial by female consumers in southern Gauteng

The responsibility of implementing the recommended language changes rests with the author of the dissertation.

Yours truly,

Linda Scott
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ABSTRACT

In the case of cosmetic products, which convey both psychological and symbolic benefits to consumers, it is imperative for marketers to expand the scope of product trial as it presents a novel strategy for signalling the success of new products. In lieu of this, considerable attention should be accorded to the ubiquitous role of influential consumers who are instrumental in influencing the behaviour of other consumers through exemplary conduct and/or interpersonal word-of-mouth (WOM) communication. In this vein, this study sought to examine the influence of selected factors on market maven tendency and the ultimate trial of new cosmetic products by female consumers in the southern Gauteng. This presents the need to examine empirically the role of market mavens who play an indispensable role in filling the omitted information gaps existing within the market. Particularly, this research is in response to calls for unremitting replications of the work seeking to establish the nomological variables that are antecedent to the market mavenism construct. The study drew from the confluence of the Two-step flow theory and the Stimulus Organism Response (SOR) theory, which provided theoretical lenses in understanding how various stimuli could possibly influence the maven tendency (organism) and the ultimate trial of new cosmetic products (response) by those mavens situated in the southern Gauteng region of South Africa.

In view of achieving the overarching objective of this study, a sample survey was conducted in 2018 using a sample of female market mavens that were selected on referral basis, after applying the snowball sampling technique. In the cross-sectional based sample survey, a self-administered questionnaire was utilised. Drawing from the responses, a trichotomisation was developed, enabling the researcher to categorise the participants by including those individuals reporting either low (n=86), moderate (n=141) or high (n=248) maven tendency scores. Resultantly, the findings from a cross-section of 475 female mavens were admissible for statistical analysis.

Drawing from the statistical analysis, the exploratory factor analysis (EFA) procedure steered the extraction of six components that are salient towards calibrating the tendency towards market mavenship among female consumers of cosmetic products. The scale items along these six components yielded acceptable internal consistency reliability (Cronbach’s alpha coefficients ranged between 0.792 and 0.876), whereas the results of the descriptive statistics revealed mean score rankings above 4.0 across the six components, thereby signalling agreeability among the participants with regard to the determinants of market maven tendency. Likewise, weak to moderate correlation coefficients that were positive and statistically significant ($p < 0.01$) were also established in this work (ranging between $+0.297$ and $+0.639$). This inferred the existence of
linear and direct relationships among the variables examined in this work. Based on this, it was possible to conduct a structural equation modelling procedure.

Prior to testing the hypothesised relationships, model fit of the measurement model was evaluated. Moreover, analysis of the statistical accuracy measures in terms of the reliability and validity of the measurement model pointed to the existence of a six-variable structure of new product trial, comprising consumer innovativeness, aspirational attractiveness, social norms influence, advertising efficacy, market maven tendency and new cosmetic products’ trial. Correspondingly, the direction and prediction among these constructs was tested by specifying a structural model. The structural model yielded adequate fit indices. In terms of prediction, the four constructs, namely consumer innovativeness ($\beta=+0.441; \ Z=9.292; \ p<0.01$), social norms influence ($\beta=+0.339; \ Z=7.272; \ p<0.01$), advertising efficacy ($\beta=+0.293; \ Z=6.607; \ p<0.01$) and aspirational attractiveness ($\beta=+0.182; \ Z=4.099; \ p<0.01$) were proven to have positive and statistically significant predictive influence on market maven tendency, in that order. Together, the four stimuli are presumed to explain approximately 43 percent of the variance in the tendency towards market mavenship among the responding female consumers.

Market maven tendency was confirmed as a predictor of new product trial in this research ($\beta=+0.478; \ Z=8.448; \ p<0.01$). This latter path proved that the tendency towards market maven behaviour explains approximately 23 percent on the variance in new product trial among female mavens. These maiden findings suggest that it is possible to anchor the construct of market maven tendency along a broader behavioural science theory, comprising selected stimulus elements. In particular, the results derived in this study demonstrate the three-fold orientation of the female maven in terms of innate (consumer innovativeness), context-based (social norms influence and advertising efficacy) as well as the desired or sought-after (aspirational attractiveness) stimuli that influence market maven tendency. In addition, the study confirmed that new product trial could act as an invaluable tool for raising awareness about the features and benefits of new cosmetic products. Based on these results, it is recommended that marketing managers capitalise on the contribution of market mavens as auxiliary dispensers of new beauty product information.

**Keywords:** Consumer innovativeness, aspirational attractiveness, social norms influence, advertising efficacy, market mavens, new product trial.
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1.1 INTRODUCTION

The global cosmetics industry has evolved owing to the concerted efforts by marketing managers in allowing business growth in response to customer trends and the pursuit of healthy lifestyles (Dimitrova, Kaneva & Gallucci 2009:1156). According to a report by the Research and Markets group (2016:1), the global cosmetics market was worth US$460 billion in 2014 while the same is estimated to reach US$675 Billion by 2020, thereby growing at an annual rate of approximately 6.4 percent. Specifically, the cosmetics market contributes 21 percent of the global beauty industry revenue, while representing 25 percent value in market share between 2012 and 2015 (Lopaciuk & Loboda 2013:1080). According to the Department of Trade and Industry (DTI 2016:124), the retail value of cosmetics and personal care products in Africa accounted for approximately R25 Billion in 2014. While this is so, the amalgamation of emerging markets as trading partners, namely Brazil, Russia, India, China and South Africa (BRICS) generated a value of 54 percent towards the global cosmetics market growth in 2014 (Oliveira 2016:5).

In South Africa, the cosmetics industry sales account for R20 016 Million, thereby contributing a value of 0.7 percent to the entire retail level sales in the country, after food and beverages (Statistics South Africa 2017:4). While this contribution seems minuscule, it is noteworthy that African women continue to use cosmetic and beauty products since they convey intangible benefits to consumers such as status, beauty and positive psychological and symbolic dispositions (Korai 2017:251). In essence, the cosmetics industry contributed 0.14 percent towards the gross domestic product (GDP) of the country in 2014. Notably, Lopaciuk and Loboda (2013:1080) attribute the exponential growth of the cosmetics industry to the fact that customers are relatively beauty conscious. Moreover, the rise in consumer disposable incomes as well as new product innovations have also been cited as key enablers of this sector (DTI 2016:124). Specifically, the growth of small and medium businesses has led to the development of new cosmetic products ideas, which has channelled the expansion of the cosmetics industry in the country.

Owing to the continued development of new cosmetic products and product ideas, a majority of the consumers are committed towards trying out new products. Soscia, Arbore and Hofacker (2011:227-228) highlight that new product trial is presented as a tactical instrument that encourages the adoption of cosmetics innovations. From a marketing perspective, product trial
sanctions consumers to use new products on a limited basis (Hoyer, MacLnnis & Pieters 2018:419). Consequently, the standardisation of any new product can be enhanced by trial probability feasibility. Nevertheless, marketers are able to foster product trial and thereby enhance consumer cognition and product evaluation opportunities, to the extent of the effectiveness of their mass communication messages (Schiffman et al. 2014:377). Relatedly, Brancalione and Gountas (2007:522) impress upon the priceless value of influential consumer cohorts to marketers, which commences with the sharing of marketplace knowledge, products and services. Put simply, individuals who disseminate product knowledge to others can influence the subsequent growth of relatively new products. Specifically, Coutler, Feick and Price (2002:1293-1295) posit that market mavens and opinion leaders acquire expertise about new cosmetic products by gathering information from diverse marketing communication sources.

The concept of market mavenism was devised by Feick and Price (1987:85) who singled them out as “individuals who have information about many kinds of products, places to shop, and other facets of markets and initiate discussions with consumers and respond to requests from consumers for market information”. Interestingly, market mavens voluntarily pledge dialogue with other consumers and respond to consumer appeals in order to generate and disseminate market information (Brancalione & Gountas 2007:522). As such, market mavens can be viewed as fundamental agents of change owing to their ability to influence other individuals at an interpersonal level. Specifically, market mavens are renowned for stimulating product awareness and trial, thereby lending them to be purveyors of word-of-mouth (WOM) recommendations about numerous products (Vazifehdoost, Akbari & Charsted 2012:243). In light of this, the current study attempts to examine the influential power of female consumers, in view of their capacity as market mavens responsible for transmitting cosmetics-related product information.

1.2 BACKGROUND TO THE STUDY

The seminal work by Feick and Price (1987:85) added cumulatively to the understanding of interpersonal influence by introducing the concept of market mavens. The role of mavens includes the ability to initiate discussions with consumers and respond to requests for market information from other consumers. Grounded in the Two-step flow theory of interpersonal communication (Lazarsfeld, Berelson & Gaudet 1948:191), this study asserts that at the primary level, marketing information spreads from the sender or organisation to some active and highly involved consumer segments who pay close attention to mass media messages. In this regard, the Two-step flow theory refers to the primary role of market mavens in spreading WOM communication to potential customers (Maurice 2010:13). At the secondary level, the active and highly involved consumer
segments pass on their own interpretations in addition to the actual media content to the more passive group of opinion followers.

Most profoundly, Feick and Price (1987:85) highlight that the influence of mavens is based not only on knowledge and expertise, but also on their ability to exert interpersonal influence on other consumers through social interactions. This study asserts that interpersonal WOM communication delivers the greatest influence on consumer behaviour, owing to its perceived credibility (Sweeney, Soutar & Mazzarol 2014: 336; Asada & Ko 2016:193). This is because market mavens draw their influential power from both knowledge and actual experience with products and product categories. Therefore, marketers can reach their intended audiences through market mavens.

Consumer behavioural outcomes that emanate from the Two-step flow of communication and market maven behaviour are best encapsulated within the stimulus organism response (SOR) theory proposed by Mehrabian and Russell (1974:68). In light of adapting the three components of the SOR, it is assumed that market maven tendency could be stimulated by both internal, psychographic factors as well as external factors termed the stimulus, which influence consumers’ market maven tendency.

### 1.2.1 Market maven stimulus (internal factors)

After reviewing the SOR theory (refer to Section 3.7 of this study), this study identified consumer innovativeness and aspirational attractiveness as the two internal stimulants of market maven tendency, albeit as they are unique to the context of the cosmetic products category. In this regard, Goldsmith, Clark and Goldsmith (2006:415) established that general consumer innovativeness is positively associated with market maven tendency. In other words, the personality of consumers, which is espoused through the general inclination towards innovative behaviour tends to have a significant influence on information dissemination propensity among individuals (Bartels & Reinders 2010:608). This is because innovative consumers seek to convey information to others about their experiences with using novel products or services. As such, in light of their high media exposure and the inherent ability to diffuse product information rapidly, market mavens are likely to be innovative (Goldsmith, Flynn & Goldsmith 2003:62; Ruvio & Shoham 2007:706).

The concept of attractiveness has been studied as a predictor of socio-economic success in previous research (Diener & Suh 1997:190; Anderson, John, Ketlner and Kring 2001:119-120; Bissell & Chung 2009:229), while a study by Jæger (2011:986) linked attractiveness to various psychological characteristics over the life course of an individual, including socio-economic and marital outcomes. Relatedly, the desire to be attractive has been validated as a salient attribute of
materialism (Kasser 2002:59), alongside financial success and social recognition. Nevertheless, the positive connection validated by Goodey and East (2008:273) has culminated in the inference that attractiveness could culminate in market maven behaviour and traits. Drawing from this, a direct effect is postulated between aspirational attractiveness and market maven tendency among various consumers. This is because mavenism heightens consumers’ sensibility towards the acquisition of products that enhance personal appearance, of which cosmetics and fashion merchandise are a part.

1.2.2 Market maven stimulus (external factors)

This study considered the salience of social norms influence and advertising efficacy in terms of the external factors that inspire the tendency towards market mavenship among consumers. In this vein, the study by Yang (2013:106) found that Chinese consumers’ perceive social norms to be a salient predictor of their market maven tendency. Furthermore, Steenkamp and Maydeu-Olivares (2015:304) conducted a 12-year longitudinal study in the Netherlands, which highlighted the existence of a direct effect between susceptibility to normative influence and market maven tendency. Contrastingly, findings by Steenkamp and Gielens (2003:377) established a negative effect between normative influence and market mavenism. However, a consideration of varied categories of both weak and strong household brands could be a possible explanation for their unique result. Such inconclusive results have steered the need for further investigation into this path relationship.

Steenkamp and Gielens (2003:377) found that market maven tendency has a stronger predictive effect on product trial probability in cases when an exorbitant budget is placed on advertising expenditure. Put simply, the intensity of advertising and marketing communication drives the information-sharing activities of market mavens, thereby encouraging product trial. Within this ambit, products that enjoy sustained and intensive mass media advertising reinforce the intended outcomes of market mavenism (Maurice 2010:18).

1.2.3 Organism and response variables

The aforementioned stimulus elements are asserted to have a direct impact on consumers’ market maven tendency (organism), while the latter affects a predicated response, namely new cosmetic products trial. Arguably, the ability to convince consumers to try out new products as opposed to familiar ones is a challenge for marketers. This presents ample reason to re-direct marketing focus towards reaching the market maven as a first point of contact towards inducing the trial of new cosmetic products (Soscia et al. 2011:229). Specifically, market mavens are able to prompt trial
probability of new products in two complimentary ways. First, market mavens have general
marketplace expertise, which lends them to being the first individuals to learn about new products
(Steenkamp & Gielens 2003:15). Secondly, market mavens make concerted efforts to purchase
and consume new products through direct product involvement and thereafter transfer newly
obtained consumption experiences to other consumers (Molitor, Hinz & Wegmann 2010:37). In
this interactive and personal manner, market mavens are perceived as disseminators of information
about new products, which they have had direct experience with.

1.3 PROBLEM STATEMENT

The cosmetic industry has been considerably enriched due to the changes caused by the fast
growing development of new products, thereby provoking a need for consumers to qualify product
quality through limited trial efforts (Kapoor 2016:2). In this vein, companies appeal to influential
consumers to enhance product trial and maximise product knowledge (Gauri, Harmon-Kizer &
Talukdar 2015:1053). Feick and Price (1987:85) point to the invaluable contribution of market
mavens as dispensers of new product information and expertise. Similarly, O'Sullivan (2015:290)
emphasises that mavens should exist in principle, in order to ‘‘fill the omitted information gaps
existing within the market’’.

With regard to the expansiveness of the literature in this field, the sphere of market maven research
within the developed nations is broad, having been extended across business to consumer
as well as business-to-business contexts (Feick & Price 1987:95). Moreover, a proliferation of
both mature and more recent research have been conducted aiming to identify and classify market
mavens across the continents. For example, market maven related research has been conducted in
Asia (Ruvio & Shoham 2007:703-722; Yang 2013:102-124; Young-Sung & Hae 2015:43-54),
Australia (Brancaleone & Gountas 2007:522-527), Europe (Chelminski & Coutler 2002:77-90;
Steenkamp & Gielens 2003:368-384; Langner, Hennigs & Wiedmann 2013:31-49; Rubio,
Villasenor & Oubina 2014:111-126; O'Sullivan 2015:285-302) and North America (Walsh,
Gwinner & Swanson 2004:109-122; Clark & Goldsmith 2005:289-312; Goldsmith, Flynn and
Clark 2012:390-397; Kiani, Laroche & Paulin 2015:1120-1129; Steenkamp & Maydeu-Olivares

In terms of published works within the African continent, Mailu, Rutto and Njunga (2011:1-15)
as well as Williams (2004:1-24) conducted studies on the role of market mavens as influential
consumer segments within the agriculture sectors of Kenya and Lesotho, respectively. Likewise,
a paucity of studies exists within a South African context, with the few identifiable studies being
in the form of postgraduate theses on innovative consumers and opinion leadership in fashion clothing (Tshabalala 2014:1-91) as well as the publication by Deon (2011:5424-5434), which mentions the role of market mavens in retail shopping success.

Abratt, Nel and Nezer (1995:32) pointed to the need for continued replication of the work started by Feick and Price (1987:83-97) within emerging countries such as South Africa since consumer behaviour and the resultant marketing challenges could be different from those experienced in developed countries. While their research is mature, so far, Abratt et al. (1995:31-55) remain the only scholars who have endeavoured to publish their research on market mavens within a South African retailing context. Nevertheless, Goldsmith et al. (2012:390) underscore the need for more empirical research to formulate different versions of the network of nomological variables that are antecedents and consequences of market maven tendency. In response to this call, this study replicates previous research by identifying the factors that augment market maven tendency. Specifically, this research sought to examine the effects of both internal (consumer innovativeness and aspirational attractiveness) and external (social norm influence and advertising efficacy) factors on product trial probability. In this case, market maven tendency did indeed influence the successful trial of new cosmetic products among female consumers.

1.4 RESEARCH OBJECTIVES

The following research objectives were formulated for the study:

1.4.1 Primary objective

The primary objective for this study was to examine the influence of selected factors on market maven tendency and the ultimate trial of new cosmetic products by female consumers in the southern Gauteng region of South Africa.

1.4.2 Theoretical objectives

- To appraise the literature on cosmetic products
- To provide a comprehensive overview of the cosmetics industry
- To review the literature on new product trial behaviour
- To conduct a review of the literature on the marketing of cosmetic products
- To review the literature on the Two-step flow theory of interpersonal influence
- To conduct a literature review on the role of marketplace influencers
• To theoretically review the SOR theory in view of establishing the factors that influence market maven tendency among consumers.

1.4.3 Empirical objectives

• To ascertain the underlying determinants of market maven tendency among female consumers in southern Gauteng
• To determine the predictive influence of the market maven stimuli
• To ascertain the inclinations of female market mavens towards the trial of new cosmetic products
• To test empirically a model of consumer innovativeness, aspirational attractiveness, social norms influence, advertising efficacy, market maven tendency and new cosmetic products trial among female mavens.

1.5 HYPOTHESES FOR THE STUDY

Based on the aforementioned empirical objectives and the undertones of the Two step theory of interpersonal influence albeit as it is extrapolated within the SOR theory, the following two-tailed hypotheses were formulated and tested, empirically:

\[ H_{01} \quad \text{Consumer innovativeness does not have a positive and significant influence on consumers’ market maven tendency.} \]

\[ H_{a1} \quad \text{Consumer innovativeness has a positive and significant influence on consumers’ market maven tendency.} \]

\[ H_{02} \quad \text{Aspirational attractiveness does not have a positive and significant influence on consumers’ market maven tendency.} \]

\[ H_{a2} \quad \text{Aspirational attractiveness has a positive and significant influence on consumers’ market maven tendency.} \]

\[ H_{03} \quad \text{Social norms influence does not have a positive and significant influence on consumers’ market maven tendency.} \]

\[ H_{a3} \quad \text{Social norms influence has a positive and significant influence on consumers’ market maven tendency.} \]
Chapter 1: Introduction and background to the study

**Hₐ₄** Advertising efficacy does not have a positive and significant influence on consumers’ market maven tendency.

**Hₐ₅** Advertising efficacy has a positive and significant influence on consumers’ market maven tendency.

**H₀₅** Consumers’ market maven tendency does not have a positive and significant influence on new cosmetic products’ trial.

**Hₐ₅** Consumers’ market maven tendency has a positive and significant influence on new cosmetic products’ trial.

Section 3.9 provides a detailed description of how the hypotheses were formulated culminating in the development and subsequent testing of a conceptual model. Regarding the stated hypotheses, the alternative hypotheses \( H_{a1}, H_{a2}, H_{a3}, H_{a4}, \) and \( H_{a5} \) were concluded and supported by the empirical data. These results are discussed in Section 5.11.8 of this study.

### 1.6 RESEARCH DESIGN AND METHODOLOGY

A research design is a framework or blueprint for conducting a marketing research task that incorporates the procedural steps of obtaining and retrieving relevant information in order to address specific research objectives (McDaniel & Gates 2013:42). In this vein, a descriptive research design was applied in this study. Specifically, a single cross-sectional research design was applicable since data were gathered only once from one sample group participants in view of understanding and describing the broad characteristics of the female consumer market. Upon following this design, a two-step approach was applied, namely gathering secondary and primary data by conducting a review of the existing literature as well as an empirical investigation, respectively.

#### 1.6.1 Literature review

Initially, a comprehensive review of the cosmetic products as well as the cosmetics industry was conducted. In the same vein, various secondary data sources were consulted on new product trial, the marketing of new cosmetic products as well as the interpersonal and social influence of market mavens. The sources comprised textbooks, peer-reviewed journal articles and media reports that were accessed through electronic databases and university library portals.
1.6.2 The empirical study

A quantitative research approach was adhered to in the empirical component of this study. The justification for following a quantitative research approach lies in the assertion by Mourad, Serag and Ahmed (2012:522), who indicated that quantitative research yields a profound connection between variables by using hypotheses testing. Since this study was concerned with testing hypotheses, quantitative research was considered useful in that it permitted the use of statistics, which served to enhance the coherence and accuracy of the empirical results. Upon following the quantitative research approach, the following sampling design steps were applied as recommended by Brown, Suter and Churchill (2018:205).

1.6.2.1 Target population

In keeping with Feick and Price (1987:92) who assert that market mavens are likely to be female, this study utilised a sample of female consumers. The nominated sample were based in the southern Gauteng region of South Africa.

1.6.2.2 Sampling frame

According to Saunders, Lewis and Thornhill (2016:277), a sampling frame is a complete list of all the eligible sampling elements from which a sample can be drawn. No sampling frame could be identified for this research owing to the absence of an established list of the entire population of female consumers who demonstrate a tendency towards market mavenship and further try out new cosmetic products that enter the market.

1.6.2.3 Sampling procedure

In the absence of a suitable sampling frame, this study was confined to a non-probability sampling technique, specifically snowball sampling.

1.6.2.4 Sample size

A sample size refers to the number of sample elements for inclusion in a study (McDaniel & Gates 2013:284). In this study, the sample size was pegged at 600 participants, guided by various rule of thumbs put forward by methodology scholars as well as the historical evidence approach.

1.6.2.5 Method of data collection and measuring instrument

In this study, data were collected between 1 March 2018 and 31 July 2018 by means of a self-administered survey in which a structured questionnaire comprising five sections was utilised. To
avoid unnecessary redundancy, details about the questionnaire structure, format and content are explained in Section 4.8 of this study.

1.7 STATISTICAL ANALYSIS

After completion of the fieldwork, the data were captured on a Microsoft Excel spreadsheet. This process allowed for preliminary data preparation through editing checks, cleaning and coding (McDaniel & Gates 2013:326-335). Thereafter, data were analysed using the Statistical Package of Social Science (SPSS), version 25.0. Initially, descriptive statistics were used to summate the composition of the sample, including location measures (mean, mode and median) and measures of dispersion (skewness and kurtosis). Exploratory factor analysis (EFA) was used to extract the components that could potentially be established as the underlying factors influencing the market maven tendency of the participants. Pearson’s correlation co-efficient ($r$) was also computed with a view to establish the strength and direction of relationships among the variables identified in this study. Furthermore, for hypotheses testing, Structural Equation Modelling (SEM) was applied using the Analysis of Moment Structures (AMOS) (Version 25.0) software tool, comprising model fit assessment, confirmatory factor analysis (CFA) and accuracy analysis of the Measurement model as well as Structural model analysis.

1.8 RELIABILITY AND VALIDITY OF THE STUDY

In this study, the Cronbach’s Alpha coefficient was used to determine the internal consistency among the scale items, whereby a threshold of coefficients above 0.70 were upheld in this research, consistent with Nunnally (1978:245). Furthermore, to produce constant results during the measurement model analysis stage in the SEM procedure, a second statistic called composite reliability (CR) was also computed in lieu of ascertaining the reliability of the measurement model. In this vein, a benchmark level of 0.70 and greater was also considered evidence of acceptable internal consistency reliability.

This study evaluated both face and content validity. Face validity was assessed through a de-brief session with the study leaders, one language expert and two disciplinary experts. Following on, a pilot survey with 53 female students entailed the content validity assessment procedure. The results of the pilot survey are presented in Section 5.2 of this study. On the other hand, criterion validity was assessed by observing the corrected item-to-total correlations as well as the average inter-item correlation coefficients.

Upon assessing the measurement model during the SEM procedure, construct validity was assessed by evaluating convergent, discriminant and nomological validity (Malhotra, Nunn &
To measure convergent validity, the factor loadings and the average variance extracted (AVE) values were observed, wherein values greater than 0.50 were considered acceptable indicators on both statistics (McDaniel & Gates 2013:378). Moreover, Fornell and Larcker’s (1981:44) criterion was considered wherein discriminant validity was inferred after reporting square root of AVE values (ranging between 0.725 and 0.792) that were higher than the highest computed correlation coefficient value in the matrix (r=0.642; p<0.01) shown in Section 5.10 of this study. On the other hand, nomological validity was evaluated by constructing a correlation matrix. Anderson and Gerbing (1988:411) suggest that if the predictor variables correlate too highly (r≥0.70), this could be evidence of collinearity problems and absence of nomological validity in a study.

1.9 ETHICAL CONSIDERATIONS

McDaniel and Gates (2013:22) as well as Iacobucci and Churchill (2010:587) describe ethics as moral ideologies that guide human conduct hence making a positive contribution towards the successful execution of marketing research projects. In this research, ethical considerations were upheld at different phases of the study as explained in Section 4.9 of this research.

1.10 CLARIFICATION OF TERMINOLOGY

The following key concepts are clarified in terms of how they have been used within the context of this research:

- **Market mavens** are individuals who possess information about places to shop, numerous kinds of products and other facets of the market (Feick & Price 1987:85).

- **Market mavenism** refers to the degree to which a consumer has a tendency to become a market maven (Zhang & Lee 2013:535). In this study, individuals scoring between 19 and 42 on the market maven scale were considered eligible to take part in this study as they revealed low (19 to 24), moderate (25 to 30) and high (31 to 42) market mavenism tendency.

- **Consumer innovativeness** refers to the extent to which an individual is receptive to new experiences (Schiffman *et al.* 2014:105). This attribute measures the general inclination of female mavens towards seeking new information, new buying situations and new cosmetic products in the market.

- **Aspirational attractiveness** is a dimension of materialism, which explains the extent to which individuals feel that there will be successful if they achieve an attractive countenance (Goldsmith *et al.* 2012:392). In this study, aspirational attractiveness implies the conscious
desire by female mavens to enhance physical beauty by trying out various new cosmetic products that are available in the market.

- **Social norms influence** refers to the process of identifying and augmenting an individual’s image with momentous others by adapting to the expectations of others regarding buying decisions (Bearden, Netemeyer & Teel 1989:474) This is in respect of conforming to the expectations of others regarding product trial efforts towards new cosmetic products.

- **Advertising efficacy** refers to the effectiveness of various paid promotional efforts of various marketing organisations, aimed at creating awareness, informing and persuading consumers to buy or to be favourably disposed towards specific products and/or services (Koekemoer 2014:123). This is in line with inducing the consumer to accept marketing messages as well as evoking positive images in the minds of consumers relating to new cosmetic products.

- **New product trial** refers to consumers’ first usage experience with a product or a brand (Kempf & Smith 1998:325). In this study, product trial infers the behaviour of consumers in testing and trying out latest releases of cosmetic products on a short-term basis without necessarily completing a purchase.

### 1.11 GENERAL

- The referencing style is based on the Vaal University of Technology referencing guide, adapted Harvard style.

- Tables and figures are placed on the relevant pages, as indicated in the Table of Contents section of this dissertation.

- Annexures are placed at the end of this dissertation.

### 1.12 DISSERTATION OUTLINE

This report is divided into six chapters with content structured as follows:

Chapter 1 outlines the background and problem under investigation. The chapter highlighted the research objectives and accompanying hypotheses statements, as they were derived from the literature. An overview of the research design and methodological procedures that were followed was also outlined in the chapter.

Chapter 2 provides an overview of the fashion industry, wherein lies the concept of cosmetic products. It is in this chapter that the respective categories of cosmetic products are discussed. Furthermore, the chapter examines the cosmetic industry by alluding to the various industry
players as well as the cosmetics industry regulatory environment. The drivers as well as the contribution of the cosmetics industry at both national and global levels are also deliberated on in this chapter.

Chapter 3 examines the factors influencing the trial of new cosmetic products by female market mavens. The chapter elaborates on the concept of new product trial in consumer behaviour by stressing the prominence of various formal and informal strategies for marketing new cosmetic products. In this chapter, the theories of interpersonal influence as well as the sources of interpersonal influence are scrutinised. This deliberation leads to the integration of the SOR theory, in light of understanding how the various elements of the theory could possibly influence the new cosmetic product trial probability among female market mavens. The chapter culminates in identifying selected factors influencing market maven behaviour, thereby leading to the extensive theoretic review of the literature. As a result, hypotheses for the study are formulated and pictorially presented in the form of a conceptual model for testing.

Chapter 4 sheds light on the research design and methodology that was followed in this study. The methods for assessing the reliability and validity of this study are also highlighted in this chapter. In addition, the nominated data analysis methods are elaborated on. The chapter climaxes with a discussion of the SEM procedure and its applicability in this research.

Chapter 5 presents the empirical data in the order of extrapolated statistical analysis, comprising a presentation of the pilot results, the frequency distributions and charts for the main study, inferential statistics, followed by the SEM analysis. In addition, the empirical results are interpreted in the same chapter in light of the existing literature in the field.

Chapter 6 provides an overview of the main research findings vis-a-vis the achievement of both the theoretical and empirical objectives. In this chapter, conclusions for the study are drawn based on the empirical findings and the supporting primary data. Limitations of the study are pinpointed, whereas recommendations for marketing managers and scholars are advanced. In addition, the contribution made by this research to the knowledge body is highlighted while the concluding remarks for this work are stated at the end of this chapter.

1.13 CONCLUSION

This chapter presents a clear-cut picture that trial probability is a calculated technique used by marketers to signal the success of new products. Interestingly, one of the most effective ways for stimulating new product trial and prompting increased attention towards new cosmetics is to engage the services of influential consumers. Particularly, market mavens exhibit broad market
expertise in gathering information about various products in the marketplace. In addition, market mavens are able to exhibit interpersonal influence over other consumers, thereby creating a ripple effect in terms of sustaining marketing messages.

The female market maven is considered to be the most active with regard to disseminating market-related information as well as encouraging new cosmetic products trial behaviour. This discourse has directed the need for this research. In this regard, the primary objective for this study was to examine the influence of selected factors influencing maven tendency and cosmetic products trial by female consumers in the southern Gauteng region of South Africa. In view of achieving this overarching objective, a single cross-sectional descriptive research design was followed. A decision was also taken to collect data by means of a self-administered survey, whereby a multi-item questionnaire was nominated as the instrument of choice for use in this study.

Chapter 2 provides a review of cosmetic products and related product categories. In addition, the chapter spans to examine the character elements of the cosmetics industry by delving into the industry players, regulatory environment as well as the drivers of the industry, both locally and internationally. Moreover, the contribution of the cosmetics industry is evaluated based on three levels, namely economic, environmental and social.
CHAPTER 2
COSMETIC PRODUCTS AND THE COSMETICS INDUSTRY

2.1 INTRODUCTION

The consumer market is awash with a plethora of cosmetic products of different quality and from different manufacturers (Kalicanin & Velimirovic 2016:476). While vast amounts of products exist to choose from in the marketplace, manufacturers have not lagged behind in terms of capturing the share of demand within the consumer market for cosmetic products. In the same vein, Van Parys et al. (2012:111) mention that the development of new products requires cosmetic companies to assess the level of environmental and consumer safety across markets. This is because the manufacture of cosmetic products utilises chemicals, which interact with the biological system and could result either in destroying or promoting the physique of a human being, when consumed (Uckaya, Uckaya, Demir & Demir 2016:295).

Chapter 2 is structured as a documentary comprising two components pertaining to a theoretical review of cosmetic products themselves, as well as the specific industry wherein they are produced. As a primer to this work, an overview of the fashion industry is provided in Section 2.2 as it is considered to be the principal domain wherein lies the understanding of cosmetic products per se. In the same vein, a review is made on the origin of cosmetic products in Section 2.3, while the five broad cosmetic categories are elaborated on in Section 2.4 of this study. The second section of this theoretical chapter comprises a review of the cosmetics industry as a whole. This includes an examination of the pre-eminent players in the cosmetics industry albeit local and/or international in Section 2.5. In addition, the industry regulatory environment is discussed in Section 2.6, while the drivers as well as the contribution of the cosmetics industry to the triple bottom line are examined in Sections 2.7 and 2.8 of this dissertation, respectively. Finally, Section 2.9 concludes the chapter.

2.2 FASHION OVERVIEW

Fashion has undergone profound transformations due to various changes that have emerged in the market environment around the world (Bhardwaj & Fairhurst 2010:166). According to Kawamura (2005:5), fashion is a concept. It is a socio-cultural phenomenon where preference is shared amongst consumers for a particular style that lasts for a relatively short period (Workman & Freeburg 2009:67), while portraying symbolic elements that signify additional and alluring various cultures and societal values infused in clothing (Craik 2009:2).
The term fashion in English, or *la mode* in French, separates itself from other words that are interchangeably used as synonyms of fashion such as clothing, apparel, costume, attire, garment and garb (Kawamura 2005:3). Fashion is the display of a popular style of clothing that is prevailing at a given time (Frings 1991:52). Relatedly, Christopher, Lowson and Peck (2004:367) underscore that fashion encompasses elements of dress and style that are likely to be short-lived. This implies that fashion propels consumers to adopt different modes of dress that are relatively trending in the market. Nonetheless, earlier scholars aver that fashion and dress are compatible (Kawamura 2005:4; Eicher, Evenson & Lutz 2008:53). In the same vein, a more recent study by Fowler, Reisenwitz and Carlson (2015:195) denotes that fashion correlates with a number of product lines such as clothing, accessories and cosmetics. In this regard, the terminology is applied as it encompasses all the products that are used to adorn the human body (Ribeiro *et al.* 2015:250). Cosmetics, just like any other type of clothing or dress, assist to equip consumers while they engage in diverse roles in their daily lives (Craik 2009:131). Therefore, the specific focus of this study is on cosmetic products, as they form part of an individual’s day-to-day routine.

While the aforementioned discussion has provided an overview of fashion, it is clear that both fashion and cosmetics are related fields that embody the lives of consumers and individuals, in general. Largely, researchers concur that fashion and cosmetics possess fundamental elements that centre on adorning the human body (Guthrie, Kim & Jung 2008:164; Twigg & Majima 2014:25; Fowler *et al.* 2015:195). As the main product category chosen for this study, the next section discusses the origin of cosmetic products.

### 2.3 THE ORIGIN OF COSMETIC PRODUCTS

Since the dawn of human civilisation, cosmetics are used to protect the body despite the social class hierarchy into which the individual is classified (Kalicanin & Velimirovic 2016:476). Specifically, Hunt, Fate and Dodds (2011:2) pinpoint that individuals from Egypt were the first to use cosmetics as a way of accentuating certain parts of the body. Relatedly, Kumar (2004:1263) denotes that the first production centres for cosmetic products date back to ancient Egyptian, Hindu, Greek, Roman and Ottoman eras. Furthermore, the use of cosmetics spans as far back as 4000 BC (Diamond & Diamond 2007:253; McDowell 2013:237) where people painted their bodies for religious ceremonies, war and mating rituals (Kumar, Massie & Dumonceaux 2006:285). To this end, Craik (2009:130) determines that cosmetic products have constituted the basic element whereby consumers decorate the body since time immemorial.

McDowell (2013:65) asserts that the realm of cosmetics, or *kosmetike* in Greek, encompasses the ability to decorate one’s body in an expert manner. However, a global definition of cosmetics that
has gained universal acceptance is that provided by the United States Food and Drug Act (2007) cited by Nohynek, Antignac, Re and Toutain (2010:241), delimiting cosmetics as “any products applied to the body in the form of sprays or lotions that help in enhancing appearance and maintaining clearness of the skin”. Numerous consumer behaviour scholars (Guthrie et al. 2008:164; Khraim 2011:123; Dehghani et al. 2016:695; Kalicanin & Velimirovic 2016:476) have adopted this broad definition. On the other hand, a more technical definition was promulgated in the amended Foodstuffs, Cosmetics and Disinfectants Act 39 of the Republic of South Africa (RSA 2007:2) whereby cosmetics are defined as:

“any article, preparation or substance (except a drug) intended to be rubbed, poured, sprinkled or sprayed on or otherwise applied to the human body, including the epidermis, hair, teeth, mucous membranes of the oral cavity, lips and external genital organs, for purposes of cleansing, perfuming, correcting body odours, conditioning, beautifying, protecting, promoting attractiveness or improving or altering the appearance and includes any part or ingredient of any such article or substance”.

This definition is an adaptation of the conceptualisation used in the Regulation report of the European Union Commission (2009:64), albeit adding a pharmaceutical point of view by alluding that cosmetics help to keep parts of the human body in good condition while correcting body odour. These definitions contend that the human body comprises external areas such as the epidermis, hair system, nails, lips and external genital organs, which could be improved or beautified. Therefore, one can conclude that cosmetics are products that enable consumers to form an adaptive function in embellishing the exposed regions of the body.

Drawing from the aforementioned definitions, cosmetic products are a mixture of chemical ingredients that are readily available for corporeal application. Specifically, the stated definitions concur that cosmetic products serve body-related functions in view of altering a person’s physical appearance. Nonetheless, cosmetic products come in different forms, implying the need for their complimentary usage (Diamond & Diamond 2007:253). By implication, cosmetic products form part of the everyday consumption culture of a majority of the consumers as they adorn different parts of the body (Chaudhri & Jain 2009:164). As a result, Lopaciuk and Loboda (2013:1080) as well as Taslidza and Weib (2016:2) indicate that consumers’ needs and wants are satisfied through the diversity of the cosmetic product categories.

Considering that cosmetic products form part of consumers’ daily routines, over and above adorning the physical body, it becomes integral to develop an understanding of the precise
embodiment of all the categories that exist in the cosmetics market. In particular, the next section provides an understanding of the five broad categories of cosmetic products.

### 2.4 CATEGORIES OF COSMETIC PRODUCTS

Earlier delimitations of cosmetic products incorporate make-up and perfume products only. This is because throughout millennia, cosmetic products are stereotyped as products affiliated with women, exclusively (Kumar et al. 2006:285). However, the rise of the metrosexual consumer has demonstrated that cosmetic products are not gender-based, as they come in different forms as well as cater for all individuals of all ages (Ramli 2015:114). While cosmetics are classified in a variety of ways across countries, the cosmetic products manufactured in South Africa follow European regulations and standards (Imrie 2014:3). As such, this study follows the categorisation applied by the European Cosmetic, Toiletry and Perfumery Authority (COLIPA cited by Dhanirama, Gronouw & Voulvoulis 2012:1598). The specification used by COLIPA and later revised in the subsequent reports of Imrie (2014:5) and STATISTA (2017:1a) is shown in Table 2.1.

**Table 2.1: Categories of cosmetic products**

<table>
<thead>
<tr>
<th>Product category</th>
<th>Product groups</th>
<th>Product examples</th>
<th>Product Sales (%)</th>
<th>Revenue (US$ Dollars)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Skincare</td>
<td>• Face cleaners and toners</td>
<td>• Liquid gel, creams and bar cleansers as well as toners</td>
<td>27</td>
<td>21.735 million</td>
</tr>
<tr>
<td></td>
<td>• Body creams and lotions</td>
<td>• Hand lotion, anti-cellulite body care, baby care creams</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Sun care products</td>
<td>• Sun block, sun tanning</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Haircare</td>
<td>• Shampoos and conditioners</td>
<td>• Hair shampoo and conditioner</td>
<td>20</td>
<td>3.768 million</td>
</tr>
<tr>
<td></td>
<td>• Hair styling agents</td>
<td>• Hair spray, hair cream, hair gel</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Hair treatment agents</td>
<td>• Hair dyes, relaxers</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Fragrances</td>
<td>• Perfume, water based perfumes, eau de cologne</td>
<td>• Extracts, perfume, eau de toilette</td>
<td>10</td>
<td>12.466 million</td>
</tr>
</tbody>
</table>
Table 2.1: Categories of cosmetic products (continued …)

<table>
<thead>
<tr>
<th>Product category</th>
<th>Product groups</th>
<th>Product examples</th>
<th>Product Sales (%)</th>
<th>Revenue (US$ Dollars)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Toiletries</td>
<td>• Shaving products</td>
<td>• Foams, creams, gels</td>
<td>23</td>
<td>21.465 million</td>
</tr>
<tr>
<td></td>
<td>• Deodorants and antiperspirants</td>
<td>• Roll on, body sprays</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Oral care products</td>
<td>• Toothpaste, mouthwash</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Depilatories</td>
<td>• Waxes for hair removal</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Bath and shower products</td>
<td>• Bath oils, foams, salts, bath and shower gels</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Talcum powders</td>
<td>• After bath powder and baby powder</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Decorative</td>
<td>• Facial make-up products</td>
<td>• Foundation/concealer, blusher and powder</td>
<td>20</td>
<td>11.043 million</td>
</tr>
<tr>
<td></td>
<td>• Lip products</td>
<td>• Lipstick, lip gloss and lip pencil</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Nail products</td>
<td>• Nail polish and nail polish remover</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Eye products</td>
<td>• Mascara, eyeliner and eye shadow</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Face care products</td>
<td>• Anti-aging creams, masks, day and night creams</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Source: Dhanirama et al. (2012:1598)

The categories of cosmetic products are discussed in-depth in the following sections.

2.4.1 Skin care products

Loretz et al. (2008:1516) indicate that the skin is the protective barrier of the human body. As such, skin care products are products designed to care and protect the skin (STATISTA 2017:1a). A plethora of cosmetic products with innovative natural ingredients and formulations induce consumers to have a better understanding of the skin physiology (Dorni et al. 2017:1). Moreover, skincare products help in improving the health of consumers (Newburger 2009:446). This is because consumers are able to find the best combination of skin care products with active medicinal properties. For example, exposure to sunlight and physical environmental conditions can affect the skin (Tripathi 2012:9); hence, applying skin care products can help in diminishing sun effects. In addition, Assawavichairoj and Taghian (2017:30) posit that applying skincare products can help to both counter the aging effect while refining symptomatic health conditions such as dark spots, scars, acne and unwanted blemishes.
Skin care products consist of facial cleansers and toners, sunblocks, sun tanning creams, bronzing powders, body creams and lotions as well as moisturisers, which assist in maintaining a long lasting healthy looking skin (Diamond & Diamond 2007:259; Dhanirama et al. 2012:1599). In addition to maintaining a vibrant skin tone, it is notable that consumers apply skin care products in order to achieve a desired look. Relatedly, Imrie (2014:5) states that the skin care category comprises approximately 27 percent of the cosmetic market in terms of global sales. With this in mind, the skin care category shows to be the largest growing category in the cosmetic products range by reporting a global market revenue of US$21.735 million in 2017, while it is estimated to have revenue growth of over 2.3 percent between 2017 and 2021 (STATISTA 2017:1a).

2.4.2 Hair care products

Hair products are cosmetic products used to clean, treat, condition and style the hair (Dhanirama et al. 2012:1599). Hair care products come in the form of shampoos, conditioners, hair treatment agents (Weber & De Villebonne 2002:400) as well as hair sprays, hair gels and hair dyes (STATISTA 2017:1a). Nonetheless, hair dyes and anti-dandruff formulae have also been developed in this category to treat the human scalp and protect hair follicles. While this is so, it is noteworthy that the Registrar for Medicine at the South African Department of Health (DOH) made a media pronouncement on the illegality of some hair dyes owing to the ingredients used during product manufacture (Pillay 2016:1).

According to a market research report by STATISTA (2017:1a), the hair care category is the second largest in the world, after skin care, reporting US$13.768 million in 2017 in terms of the cosmetic market revenue. Moreover, the hair care category accounts for nearly 20 percent of the international cosmetic product sales.

2.4.3 Fragrances

Fragrances refer to a mixture of perfumed volatile molecules or aromatic composites that give the body a pleasant smell (Vigan & Castelain 2014:310). Diamond and Diamond (2007:253) assert that the genesis of fragrances as personal care products emerges from the burning of essence throughout centuries in China and Egypt. In the contemporary marketing environment, fragrances refer to perfume and eau de toilette products, excluding room scents (STATISTA 2017:1a). According to Craik (2009:131), the primary objective for using fragrances is to conceal natural body odours. The scholar acknowledges the role played by internationally acclaimed celebrities such as Elizabeth Taylor, Britney Spears, Paris Hilton, David Beckham and Victoria Beckham in diversifying into producing their own fragrance lines. Notably, the fragrance category accounts
for 10 percent of the global cosmetic market sales (Imrie 2014:5), while accumulating US$12.466 million in terms of global market revenue, with the largest contributing market being the United States of America (USA), by generating nearly a third of the global revenue, pegged at US$4.672 million in 2017.

2.4.4 Toiletries

According to a market research report by STATISTA (2017:1), toiletries are products that are intended for personal cleansing of the body. Interestingly, the report states that of all five cosmetic product categories, the toiletries category is the one that is largely driven by price, rather than brand awareness. Craik (2009:131) highlights that the primary role of toiletries is to control body excretions. Components of this cosmetic product category include among others, shaving products, talcum powders, bath and shower products, deodorants, anti-perspirants, oral care products as well as depilatories (Dhanirama et al. 2012:1599). Imrie (2014:5) denotes that toiletries account for 23 percent of the global cosmetic market sales, while generating US$21.465 million of the global revenue in the industry.

2.4.5 Decorative products

Decorative products are products that are intended for accentuating the face, thereby conferring bodily beauty (Dhanirama et al. 2012:1599). According to McDowell (2013:49-50), the face has been a feature of civilised life for generations whereby people apply make-up to colour their faces and other parts of the body. Craik (2009:130) underscores that the act of applying make-up is a routine and unconscious part of getting dressed. Therefore, it complements the act of clothing oneself by developing and completing a particular look (Guthrie et al. 2008:165). In this vein, the scholars’ stress that make-up enables consumers to express their personality attributes through the social body by conveying a positive declaration of the self. Therefore, consumers assimilate make-up products to create and express a distinct self-image. Moreover, Twigg and Majima (2014:25) posit that applying make-up assists a consumer to achieve beauty in relation to the norms of the social group he/she identifies with.

The terms decorative products and make-up are often used interchangeably in both practise and contemporary consumer culture. Nevertheless, Diamond and Diamond (2007:254) enumerate foundations, face powders, lipsticks, blushes, mascara, eye shadow, eyeliners, eye pencils as well as lip enhancers as key components of this cosmetic product category. In terms of the size of this category, Imrie (2014:5) reveals that decorative products comprise 20 percent of the global
cosmetic market, while generating US$11.043 million in terms of the global revenue in the industry (STATISTA 2017:1).

Upon considering the nature of colour and make-up products, it is noteworthy that a majority of brands target female consumers (Ramli 2015:114). This is because Western culture asserts make-up as having domineering significance among female consumers (McDowell 2013:49-50). This affirmation is emphasised in the media and tabloids, whereby women are depicted as necessarily placing extra effort in accentuating the facial features by using colour and make-up products (Coutler et al. 2002:1290; Dehghani et al. 2016:695). Likewise, celebrity culture has introduced global parameters of beauty by producing personalised cosmetic lines of colour and make-up products (Tripathi 2012:16). For example, Kevin Aucoin, a make-up artist in the USA diversified into producing his own make-up line (Craik 2009:134). Recently, the cult of famous celebrities in the entertainment industry such as Robyn Fenty known as Rihanna, Kylie Jenner and Kimberly Kardashian have also produced their own make-up lines (Rosenstein 2017:1).

The next section examines the different players in the cosmetics industry.

### 2.5 BRANDS IN THE COSMETICS INDUSTRY

While the global beauty market is filled with diverse cosmetic products (Oliveira 2016:4), marketers often promote the use of brands to distinguish one brand from another. In agreement, Korai (2017:250) pinpoints that the buying process of cosmetic products stems from branding. Notably, this has led to the proliferation of a broad array of local and international brands in the cosmetics market (Winit, Gregory, Cleveland & Verlegh 2014:102). As a result, local and international brand owners spend significant sums of money to ensure that their brands stand out from the rest, while being directly exposed to a designated target market (Imrie 2014:7). Table 2.2 summarises the notable differences between local and international cosmetic brands.

**Table 2.2: International versus local cosmetic brands**

<table>
<thead>
<tr>
<th>Attribute</th>
<th>International</th>
<th>Local</th>
</tr>
</thead>
<tbody>
<tr>
<td>Manufacturer</td>
<td>Multinational corporations (MNCs)</td>
<td>Small and medium enterprises (SMEs) as well as third party manufacturers (TPMs)</td>
</tr>
<tr>
<td>Testing standards</td>
<td>Global standards e.g. International Standards Organisation (ISO)</td>
<td>Often not tested</td>
</tr>
<tr>
<td>Marketing communication strategy</td>
<td>Marketed internationally through commercial advertisements, celebrity endorsers as well as online</td>
<td>Direct marketing</td>
</tr>
</tbody>
</table>
Table 2.2: International versus local cosmetic brands (continued …)

<table>
<thead>
<tr>
<th>Attribute</th>
<th>International</th>
<th>Local</th>
</tr>
</thead>
<tbody>
<tr>
<td>Distribution strategy</td>
<td>Easily accessible from retail channels</td>
<td>Not easily accessible, except through personal selling</td>
</tr>
<tr>
<td>Pricing strategy</td>
<td>Expensive</td>
<td>Cheaper</td>
</tr>
<tr>
<td>Geographic reach</td>
<td>Known</td>
<td>Unknown outside their local region</td>
</tr>
<tr>
<td>Product depth/width</td>
<td>Large/Broad</td>
<td>Small/Narrow</td>
</tr>
<tr>
<td>Market leaders</td>
<td>Pfizer™, Unilever™, Johnson and Johnson™, Procter and Gamble™ as well as Colgate Palmolive™</td>
<td>Annique™, African Extracts™, Avid Brands™ and Amka Products™</td>
</tr>
</tbody>
</table>

Source: Author compilation (2018)

The sections that follow elaborate on the cosmetic brands that are available in South Africa.

2.5.1 International cosmetic brands

According to Chan, Cui and Zhou (2009:182), multinational corporations (MNCs) are responsible for flourishing cosmetic brands in the international arena. This is because their aim is to capture substantial investments and growth in emerging markets. Additionally, MNCs have significant global brand power and marketing expertise hence, they outsource 90 percent of global cosmetic sales due to their international significance (Imrie 2014:1). Notably, the global market leaders in the cosmetics industry include MNCs such as Pfizer™, Unilever™, Johnson and Johnson™, Procter and Gamble™ as well as Colgate Palmolive™, which account for a significant proportion of cosmetic sales, respectively. According to STATISTA (2017:1), Pfizer™ accounted for US$53 billion, Unilever™ EU20.17 billion, Johnson and Johnson™ accumulated US$13.31 billion of market revenue in 2016. In the same report, Procter and Gamble™ generated market revenue of US$69.4 billion with its leading brand Gillette, which led the brand to accumulate a market value of US$16.4 billion in 2016 alone. However, Colgate Palmolive™ accumulated more than US$15 billion revenue in 2016. Nevertheless, the international market is still dominated by leading brands such as L’Oréal™, Elizabeth Arden™, Max Factor™, Revlon™ and Estee Lauder™ (Khraim 2011:123).

Pillay (2016:1) pinpoints that global brands abide by international standards and requirements for quality hence they are expected to indicate the ingredients and chemical composition of products on the product labels. This means that international brands adapt to the industry’s legislation in
order to be at the forefront of a very competitive cosmetic market (Daly & Moran 2015:21). Generally, international brands are numerous, comprising both wide and deep product lines, thereby proving that they have impressed a positive footprint across the global consumer market for cosmetics (Korai 2017:250). To this end, international brands are marketed internationally and online through commercials advertisements, while global brand owners complement their marketing communication tools with the use of celebrities to market their cosmetic brands (Imrie 2014:7). Therefore, in an attempt to gain the mind share of consumers, both local and international brand owners utilise the services of celebrities as product endorsers in view of promoting their brands to a broader audience.

With regard to meeting global demand, international brands are renowned for their premium pricing structure, of which Khraim (2011:124) attests that this attribute has ceased to be a deterrent for quality-conscious consumers across the global market. Furthermore, international cosmetic brands occupy a significant proportion of the retail space, speaking to their easy access and wide distribution in retail stores such as hypermarkets, pharmacies and supermarkets (Tournois 2014:5).

2.5.2 Local cosmetic brands

Chan et al. (2009:182) stress that while foreign brands continue to accrue a number of product categories, domestic brands have not lagged behind in the battle for the mind share of consumers. According to Imrie (2014:1), the South African cosmetic market is enveloped by small, medium and large enterprises (SMEs) that either manufacture their own brands, manufacture international brands under a licence or manufacture cosmetics as third party manufacturers (TPMs) who are contracted by brand owners. In this vein, the local brands only account for approximately 10 percent of global cosmetic sales, implying that they are infinitesimal towards making a footprint in the global cosmetic market. In particular, leading brands in the local market and the rest of Africa include Annique Products™, African Extracts™, Avid Brands™ as well as Amka Products™ (Imrie 2014:4; DTI 2016:124).

In terms of regulation, the local brands are informed by the European standards for ensuring safety of cosmetic products (Imrie 2014:3). However, Pillay (2016:1) pinpoints that the failure of a majority of local brands is exacerbated by the inability to compete with international brands in terms of standards as they still lack in portraying labelling requirements of the ingredients used to manufacture their product. Moreover, some local cosmetics brands fail owing to being relatively niche and unknown. Nonetheless, the researcher avers that local brands are still able to offer limited product lines at affordable prices to the consumer. Local brands rely heavily on direct marketing to promote their products. In particular, they either make use of agents or focus on niche
sales to hair salons and spas or through informal environments such as trading stalls and taxi ranks to distribute and sell their products to the consumer (Imrie 2014:1). More recently, local cosmetics brand owners have taken strides to enhance their visibility by utilising celebrities as ambassadors for their products. For example, Avroy Shlain™ associate their products with Noeleen Maholwana-Sangqu, a television personality on the 3Talk™ television show on the South African Broadcasting Corporation (SABC) network service. Similarly, a South African actress Khanya Mkangisa, is contracted to endorse Iman Cosmetics™ (Imrie 2014:7).

2.5.3 Dominant cosmetic brands in the South African market

Figure 2.1 reveals the dominant brands in the South African cosmetic market.

![Leading cosmetic brands](image)

**Figure 2.1: Leading cosmetic brands in South Africa**

**Source:** Imrie (2014:2)

The South African market is dominated by foreign or international cosmetic brands. According to Imrie (2014:2), the top three brands comprise approximately 62 percent of the total cosmetic sectoring the country with Revlon™ being the market leader, accounting for 33 percent of industry sales owing to its various lines such as Charlie™ and Almay for toiletries, skincare and fragrances as well as Cutex™ nail polishes. Following on, Avon™ and L’Oreal™ follow closely in second and third position, while accounting for 15 percent and 14 percent of the country’s cosmetics industry, respectively. Nevertheless, other industry players such as Indigo™, Clinique™, Estee Lauder™, Cosmetix™, Avroy Shlain™ as well as other smaller cosmetics brands contribute a cumulative sum of 39.7 percent industry sales in the country.
While the aforementioned discussion make reference to the structure and operations of both local and international manufacturers of cosmetic brands, this study deemed it necessary to consider sacrosanct elements that determine the manner in which cosmetics companies are regulated. As such, the next section provides a review of the regulatory environment wherein global cosmetics companies operate.

2.5.4 The informal sector cosmetics brands

Despite the government’s efforts to enact controls that restrict the sale of illegal cosmetic products, the informal cosmetic market continues to thrive in South Africa. This sector comprises street vendors, beauty salon operators and tuck-shops among other small-scale business entities (Fourie 2018:1). Notably, the Chinese and Indian traders contribute large volumes of informal trade in the cosmetics market. These marketers stock an array of imitation cosmetic brands that seem to mimic a majority of international cosmetic brands (Ahmed, Suleri, Wahab & Javed 2015:47). For example, under the decorative cosmetic products category, designer cosmetic brands such as Kylie Lip Kit™, Black Opal™ and Revlon™ imitations are sold in informal markets at cheaper prices (Tshabalala 2018:1). Nonetheless, the informal sector is an impediment towards progress in that the government loses excessive proportions of revenue as these products are not subjected to traditional custom procedures. As a result, some of the products are not tested implying that they might pose a significant health and safety risk to consumers.

While the aforementioned discussion make reference to the structure and operations of both local and international manufacturers as well as the informal trading of cosmetic brands, the next section provides a review of the regulatory environment wherein global cosmetics companies operate.

2.6 THE REGULATORY ENVIRONMENT OF THE COSMETICS INDUSTRY

Fowler et al. (2015:197) validate that the existence of cosmetic authorities is to set regulatory infrastructure based on prevailing knowledge in the market about cosmetic products. Specifically, Lintner (2009:17) highlights that regulation of the cosmetics industry is necessary in view of safeguarding both human health and the environment. This is because cosmetics are by nature manufactured from various chemicals and pharmaceutical substances hence it may be necessary to find organised bodies to govern the production, testing and circulation of such products in the market. In particular, the governing bodies that regulate cosmetics products both locally and internationally control products placed in the market and their ingredients, while prioritising consumer safety (Lores et al. 2016:2). In this regard, there is evidence of the synchronisation of cosmetic products’ regulation across the globe, which symbolises that cosmetic companies in a
majority of countries are eager to improve their legislation (Zakaria 2014:39). Upon evaluating the regulation of cosmetic products, this section takes a dual-pronged approach. Primarily, the entities that regulate cosmetic products across major continents are reviewed to acquire a global perspective on cosmetic controls. At the secondary level, the country-specific authorities are discussed in view of providing a contained understanding of the regulatory aspects pertaining to the cosmetics industry of South Africa.

At a global level, reinforcing authorities comprise the USA Food and Drug Act of 1938, the European Union (EU) and the Association of South East Asian Nations (ASEAN) countries (Zakaria 2014:21). The aforementioned authorities are responsible for regulating the chemical compositions used in the manufacture of cosmetic products, while ensuring consumer safety. This has been achieved through supporting structures such as the Registration, Evaluation, Authorisation and Restriction of Chemical substances (REACH), as well as European bodies such as the Classification Labelling and Packaging Regulator (CLP) and the Cosmetic Product Regulator (CPR) (Rasmussen & Mech 2014:322). The ASEAN Harmonised Cosmetic Regulatory Scheme (AHCRS) also follows suit in maintaining consumer safety standards in Asia (Zakaria 2014:43). Broadly speaking, these initiatives seek to maintain consumer safety and preserve the long-term environmental impact of ingredients used in the manufacture and packaging of cosmetic products (Pervin & Wilman 2014:60). Thus, the safety mechanisms of cosmetic products is certified under experimental conditions when the products are consumed by observing the frequency of application of the cosmetic products, thereby evoking a barometer of safety, while simultaneously conducting an adequate risk assessment of product usage (Chevillotte, Ficheux, Morisset & Roudot 2014:108).

In terms of cosmetics regulation, companies in South Africa comply with the generic guidelines provided by the EU regulatory legislature. Nevertheless, various bodies and authorities exist within local structures to govern the manufacture, sale and distribution of cosmetic products in the country. Figure 2.2 provides a diagrammatic representation of the local regulation structure for cosmetic products manufacturers.
Figure 2.2: The South African cosmetics industry regulatory structure

Source: Author compilation (2018)

The South African Department of Health (DOH) in relation to the manufacture of cosmetic products has made considerable attempts to bring better regulation standards in the cosmetics industry in the past four decades (Pillay 2016:1). In particular, government regulation through the Foodstuffs, Cosmetics and Disinfectants Act (No. 39 of 2007) seeks to control the manufacture, sale and trade of safe cosmetic products (RSA 2007:1-12). The national Act promulgates a requirement for manufacturers of cosmetic products claiming medicinal ingredients to be registered with the South African Medicines Control Council. Furthermore, government also imposes the Consumer Protection Act No. 68 of 2008 (RSA 2009:1-186) on all product manufacturers. This Act deals with ensuring that the right quality of cosmetic products are introduced into the market as well as the development of ethical marketing communication practises by manufacturers of cosmetic products through labelling, advertising and promotion (Imrie 2014:3).
The DOH is closely allied with the Cosmetic Toiletry and Fragrance Association (CTFA) in terms of regulating cosmetic products in the local market. In particular, the CFTA was established as an arm of the DOH to stimulate the actions of industry players while contributing towards the growth and progress of the cosmetics industry (CTFA 2016:1-3). According to the specified vision and mission of the CTFA, the association consists of member firms, responsible for promoting consumer safety and developing a sustainable market for cosmetic products. Within the same report, vein, the CTFA is self-regulated, implying that the association provides guidance and direction to its members regarding the self-regulatory codes of practice and standards. Nevertheless, cosmetic companies induce consumer safety by relying on two notable institutions. First, domestic manufacturers adhere to the codes of practise set by the South African Bureau of Standards (SABS) to ensure consumer safety (Imrie 2014:3). Secondly, industry players liaise with the Advertising Standards Authority of South Africa (ASA) to identify fellow competitors that make uncorroborated claims regarding cosmetic products in the market. Broadly speaking, the ASA is responsible for prohibiting deceptive or misleading advertising across industries.

In terms of the South African cosmetic products value chain, members of the Chemical and Allied Industries Association (CAIA) provide the raw chemical products that meet the production requirements of the various players in the cosmetics industry. In view of empowering the mandate of this association, the South African government formulated the Industrial Policy Action Plan (IPAP) to its new growth path to enable the chemicals sector to advance the needs of various members in the cosmetics industry. As a result, government investments into the CAIA as part of the IPAP amounted to R496 million in 2013, of which the cosmetics industry received R22 million of that financial injection (Imrie 2014:2).

With regard to retailing of cosmetic products, the CTFA works closely with the DTI, whereby one of the fruitful benefits of this collaboration has been the elimination of Ad Valorem Tax on imported ingredients since there already exists excise duties on imported goods (Imrie 2014:2). Resultantly, the partnership between the CTFA and DTI has enhanced satisfaction among industry players thereby leading to the Consumer Goods and Services Ombudsmen (CGSO) receiving minimal complaints, thus attesting to the high level of standards in the industry.

Based on the aforementioned discussion, it is apparent that the cosmetics industry abides by the legislation set by the country’ governing entities. The next section discusses the drivers that sustain the cosmetics industry.
2.7 DRIVERS OF THE COSMETICS INDUSTRY

While the structure of the cosmetics industry varies widely across countries, the growth and development of this sector is influenced by numerous factors. In this study, the researcher identified a dual-set of drivers that influence the cosmetics industry. Primary-level drivers of the cosmetics industry encapsulate micro-environmental elements that are controllable by individual cosmetics companies including advertising and promotions and product packaging, while secondary-level drivers comprise macro-environmental elements that are beyond the organisation’s control, including changes in demographics, globalisation, innovation and sustainable business practices. These drivers are explained next.

2.7.1 Micro-level drivers of the cosmetics industry

The following drivers are internally controlled by individual cosmetics companies and, therefore, can be manipulated to foster growth of the industry:

2.7.1.1 Advertising and promotion

According to Duffett (2015:243), marketing communication plays an integral role for companies in the global landscape. As such, the route of cosmetic marketing is propelled by marketing communication efforts that seek to immerse consumers in different marketing messages. One of the marketing platforms cosmetic companies use is paid-for advertising (Tripathi 2012:4). Ramli (2015:120) affirms that the reason cosmetic companies use advertising is to encourage consumers to buy specific cosmetic products across different lines that exist in the market. Relatedly, Schiffman et al. (2014:233) espouse that advertising helps create favourable images in the minds of consumers. This can include both mass advertising such as print, television and radio advertisements as well as personalised promotions such as direct mails and catalogues (Meng & Pan 2012:251-252). For example, Nelson and Paek (2007:65) attest that global cosmetic brands such as Clinique™, L’Oreal™ and Lancôme™ use a global magazine termed the Cosmopolitan™, as a primary advertising conduit to convey messages to female consumers across the globe, as the primary target audience. Nonetheless, in the case of marketing cosmetic products to African women, Imrie (2014:1-2) refers to companies such as Avon™, Avroy Shlain™, Annique™, Sh’zen™ and Jean Guthrie™ that emphasise a personalised touch by relying mostly on direct selling practises. Moreover easier access to information and the celebrity culture presented in the media has provided additional standards of beauty, definitions of attractiveness and encouragement to consume cosmetic products (Assawavichairoj & Taghian 2017:29). These changes are expected to continue in the future.
2.7.1.2 Price

Price is a decisive element that contributes to consumers’ judgements about the value of a product (Khraim 2011:125). In other words, it is through the price of a product that a company communicates its intended value positioning to the market. As a result, customer satisfaction is built by comparing and evaluating product price with perceived costs and values of alternative brands. In the cosmetics sector, customers who are loyal to a certain brand are willing and able to pay a premium price. Based on this, a majority of cosmetic companies retain loyal customers as they bring in profitable returns into the business.

2.7.1.3 Product packaging and distribution

At the elementary level, the cosmetics industry specifies that the packaging that is used for cosmetic products should effectively preserve product quality and increase the life expectancy of cosmetic products (Topoyan & Bulut 2008:184). Nevertheless, as an extension of the traditional marketing communication mix, Koekemoer (2014:48) pinpoints that packaging can also be a powerful promotional tool for various products. In the case of cosmetic products, their aesthetic packaging presentation has an indelible effect on consumers’ choices and purchase behaviour (Clement 2007:918). Therefore, marketers utilise noticeable packaging designs to intrigue consumers into purchasing cosmetic products.

In terms of physical distribution of cosmetics, the proposition of marketers and cosmetics companies is to ensure that products are accessible to all possible counters such as perfumeries, departmental stores, supermarkets, convenient stores and the Internet in order to increase consumption quantities.

2.7.2 Macro-level drivers of the cosmetics industry

The following drivers are external to the cosmetics industry and yet influence the industry significantly:

2.7.2.1 Globalisation

Jones (2011:889) pinpoints that the cosmetics industry is connected with the waves of globalisation. In agreement, Ramli (2015:121) avers that globalisation is the sole engine that drives the global cosmetics industry. According to Assawavichairoj and Taghian (2017:28), the effects of globalisation have increased personal mobility and thereby eradicated the overlapping barriers between disparate cultures. Consequently, the shift in cultural values and media information sharing about various cosmetics products impacts on marketing practises, leading to the
development of new terms and standards of reference in the industry (Strizhakova, Coutler & Price 2008:58). This is because international markets revolve around change and marketers engage in diverse ways to gain substantial cost advantages in relation to the production and retailing of cosmetic products (Nenni, Giustiniano & Pirolo 2013:2). Furthermore, Nelson and Paek (2007:65) assert that the media is a major force that sustains globalisation. Through personal interactions, consumers disseminate product knowledge through various media platforms, thus transversely assisting marketers to create a global target audience of consumers who share similar values, attitudes and brands.

2.7.2.2 New product innovations

The cosmetics industry is a lucrative and innovative fast-paced industry (Kumar et al. 2006:286). In particular, innovation is solely at the heart of the cosmetics industry owing to the introduction of new cosmetic products in the market. According to Kumar (2004:1270), players in the cosmetics industry make considerable attempts to cater for the ever-changing needs of the sophisticated consumer cohorts by continuously developing and testing new product concepts to suit individuals from different backgrounds, with different skin and genetic characteristics. In this vein, Ramli (2015:121) attests that innovation enables cosmetic companies to engage in manufacturing safe and appealing products that consumers can use in their everyday life.

2.7.2.3 Demographics

The growth of the cosmetics market is in part, attributed to changing demographics, globally thereby influencing the demand side of cosmetic product consumption. For example, Assawavichairoj and Taghian (2017:28) mention that aging populations in Western countries, lead to an increasing demand for anti-aging skin care products. In the same vein, increasing participation of women in the labour force (Bechan & Ehsanul 2016:42), increasing disposable incomes (Chaudhri & Jain 2009:167; Imrie 2014:4) and the rise of the middle-class in a majority of the African countries (Korai 2017:250) have also been cited as contributing drivers towards the successful development of the cosmetics industry. In addition, the developing countries are experiencing a growing number of wealthy people and educated middle-class consumers who are both knowledgeable and quality-conscious (Moschis & Bovell 2013:358).

2.7.2.4 Sustainable business practises

Akin to innovative manufacture of cosmetic products, Ramli (2015:121) upholds that global demands for sustainable business practises drives players in the cosmetics industry. To this end, manufacturers of cosmetic products espouse a holistic approach by eliminating the carbon
footprint presented by cosmetic products towards the environment, in general. For example, companies are increasingly demonstrating awareness of the environmental impact of cosmetic products and hence are increasingly adopting greener formulations during manufacturing, which conserve waste, water and energy alike (Kumar 2004:1268). Likewise, Pervin and Wilman (2014:60) highlight that the cosmetics industry attempts to contribute towards sustainability by using recycled materials in production processes. On the other hand, contemporary production processes have made concerted efforts to produce organic cosmetic products, which augment sustainable lifestyles since the consumption of natural cosmetic products is believed to decrease health risks among consumers. Relatedly, Marcus (2012:678) advocates that the actions cosmetic companies take during manufacture contribute towards societal welfare. This means cosmetic companies are responsible for producing better products that do not cause environmental deterioration. For example, Thomas (1995:105) indicates that the Body Shop™ cosmetic company is the only international company that uses vegetable-based materials as ingredients for their products. Therefore, marketers need to enforce the concept of societal marketing in their strategies in order to retain the environment for the preservation of life.

While the drivers of the cosmetics industry are described explicitly in this section, it remains imperative to hint at the precise contribution of the cosmetics industry across markets. Therefore, the next section examines the contribution of the cosmetics industry to the global, African and local market, alike.

2.8 CONTRIBUTION OF THE COSMETICS INDUSTRY

This section evaluates the contribution of the cosmetics industry in light of the triple bottom line (TBL) framework. According to Jamali (2006:811), the TBL enumerates industry performance and business sustainability by focusing on the economic, environmental and social contribution of organisations. Since the cosmetics industry is internationally integrated, as explained in sections 2.5 and 2.6 of this study, cosmetic companies are fully dependent on open markets to sustain the industry. In this regard, this section reviews the contribution of the cosmetics industry by considering the triple-set elements of the TBL across local and international markets.

2.8.1 Economic contribution of the cosmetics industry

Cosmetic companies contribute to the growth of the global economy through trading, at both national and international levels. For example, the North American Free Trade Agreement (NAFTA) and the European Free Trade Association (EFTA) are responsible for removing trade barriers imposed on the exchange of goods and services across American and European borders,
respectively (STATISTA 2017:1b). The same report indicates that both these associations contribute to the success of the industry by increasing and strengthening the competitiveness between member countries across the global cosmetic market. The Cosmetic Europe report (2018:7) underlines Europe as the global flagship producer of cosmetic products as it has the largest cosmetic market across the globe with a value of over €77 billion worth of cosmetics production, while 50 percent of total global exports of cosmetic products are from France and Germany. Following closely, the USA is in second place, producing approximately €67 billion worth of cosmetic products. Nonetheless, the same report pinpoints China (€43.4 billion), Brazil (€25.4 billion), Japan (€29.9 billion), India (€10.9 billion) and South Korea (€9.7 billion) in third, fourth, fifth, sixth and seventh places respectively, in terms of the production worth of cosmetic products. It is interesting to note that among the countries that manufacture a significant proportion of cosmetic products, BRICS member countries contribute more than 50 percent towards the global market growth of the cosmetics industry (Oliveira 2016:5). Together, BRICS contributed 21 percent towards the beauty revenue thus accumulating a share of 25 percent of the global retail market between 2012 and 2015 (Lopaciuk & Loboda 2013:1080).

At the continental level, Africa is the second fastest growing consumer market for cosmetic products in the world, following closely after the Asia-Pacific territories (Korai 2017:250). As cited in Section 2.7.2.3 of this study, the rise of the middle class in Africa suggests that there remains a significant outlook for cosmetic companies within the continent to yield positive returns (DTI 2016:124). Moreover, growth potential of the cosmetics industry is augmented by consumer demand for premium cosmetic products, captured by the increasing need for consumers to maintain a high profile lifestyle (Imrie 2014:5).

In South Africa, companies are taking advantage of the benefits gained from being part of the Southern African Customs Union (SACU), which allows for the free trade of goods among member states (Imrie 2014:4). The scholar highlights that local companies that include Avroy Shlain™ and Vanda™ trade cosmetic products with Lesotho, Swaziland and Botswana while Sh’zen™ company trades with Namibia, Uganda, Kenya, Botswana and Zambia and Jean Guthrie™ company operates in Zimbabwe and Namibia. Nonetheless, in terms of the actual monetary value of international trade, Figure 2.3 presents the cosmetic products trade statistics between South Africa and other world countries.
According to the DTI (2016:124), the South African cosmetic market reported a positive trajectory within the past three decades. In particular, the total trade for cosmetic products with the world reached optimum value of more than R12.7 billion in 2014. On the other hand, South Africa continues to contribute to the overall growth of the global cosmetics industry, even though it imports more cosmetic products R7.2 billion when compared to actual exports reported at R5.5 billion in 2014. Nonetheless, the local market incurred a trade deficit balance of R1.7 billion in 2014 owing to a decline of exports by 16.9 percent in the same year (Bosiu et al. 2016:15). In addition to the import and export figures, Table 2.3 summarises other relevant economic data about the South African cosmetics industry.

### Table 2.3: Economic data for the South African cosmetics industry

<table>
<thead>
<tr>
<th>Variable</th>
<th>Contribution</th>
</tr>
</thead>
<tbody>
<tr>
<td>Contribution to manufacturing activity</td>
<td>R5.2 billion</td>
</tr>
<tr>
<td>Cosmetic retail value</td>
<td>R25 billion</td>
</tr>
<tr>
<td>Contribution to GDP</td>
<td>0.4 %</td>
</tr>
<tr>
<td>Employment</td>
<td>53 000</td>
</tr>
</tbody>
</table>

**Source:** DTI (2016:124)
According to the DTI (2016:124), the South African cosmetic manufacturing activity amounted to R5.2 billion with cosmetic market value of R25 billion in 2014, thus contributing 0.4 percent towards gross domestic product (GDP) of the country. In terms of employment, the local cosmetics industry places more emphasis on developing the economy, thereby creating 53 000 jobs for South Africans since 2014.

2.8.2 Environmental contribution of the cosmetics industry

In terms of the environmental contribution of the cosmetics industry, Section 2.7.2 of this study referred to a number of activities that companies engage in, in lieu of preserving the natural ecosystem. In particular, actions incorporating the use of organic raw materials in the manufacture of cosmetic products (Puraduth, Juwaheer & Seewoo 2015:180), recycling materials for cosmetic products packaging (Pervin & Wilman 2014:60) as well as policies against animal testing (Kumar 2004:1269) are among the most viable initiatives taken to retain a green status in the cosmetics industry. In addition, there has been a general drive towards raising consumer awareness towards organic cosmetic products that are safe and environmentally friendly (Ghazalli, Soon, Mutum & Nguyen 2017:156). This is evidenced by the trajectory in consumer research into the harmful effects of skin whitening creams (Burger et al. 2016:2) and hair dyes (Nohynek et al. 2010:242) across the world. Moreover, South African cosmetics companies in particular are opting for products that do not contain substances like parabens, sulphates, synthetic preservatives, animal by-products, phthalates and petro-chemicals (Imrie 2014:8). The scholar cites JOM Cosmetics™, a South African company that manufactures natural chemical-free products. It is the first cosmetic company that received the EU Ecolabel accolade for meeting high environmental standards and excellence throughout its lifecycle.

2.8.3 Social contribution of the cosmetics industry

The social contribution of the cosmetics industry is witnessed in the numerous efforts in job creation and social development. For example, Amka Products™ is a medium-sized South African cosmetics company that contributes significantly to the growth of the labour force by employing 1 000 employees across their 35 distribution points in Africa, whereas 65 percent of the company is owned by black women (Imrie 2014:3). Obviously, the staff complement and management structure speaks to the emancipation of women leading to social and economic development effects. On the other hand, the cosmetics industry is renowned for spiralling the rise of a celebrity cult (Tripathi 2012:16). This is because celebrities echo symbolic meanings of a myriad of products and brands in the eyes of consumers (Biswas, Hussain & O’Donnell 2009:122). Therefore, fundamental to the use of cosmetic products is the belief that celebrity culture draws
attention and manifests influence on consumers, in view of countering the succinct definition of physical beauty (Assawavichairoj & Taghian 2017:29). Relatedly, the innovative talent of business owners is tested and augmented in the cosmetics industry, as evidenced by the constant proliferation of new product lines (Korai 2017:250). Thus, decisions concerning whether or not to try out new products in the market constitute an important component of consumer behaviour (Steenkamp & Gielens 2003:368). In the same vein, while marketers utilise marketing communication platforms to induce product trial (Southworth & Ha-Brookshire 2016:730); it is product innovation that initiates new product trial among consumers (Schiffman et al. 2014:377).

2.9 CONCLUSION

This study appreciates the notion that cosmetic products have been used since time immemorial as an indispensable aid in protecting various body organs, while working simultaneously to accentuate physical beauty. As such, the universal relevance of this product domain has motivated this research. In this vein, five broad categories of cosmetic products were identified from the literature, namely skin care, hair care, toiletries, fragrances and decorative products. While each product category is needed to fulfil different functions, this research only considers the holistic application of cosmetic products by female consumers. While this is so, it is noted that the producers of cosmetic products are fully dependent on open markets to sustain the industry wherein they operate. Hence, the contribution of the cosmetics industry is measured in light of economic, environmental and social dimensions, which enumerate industry performance and sustainable business practises. With this in mind, this chapter revealed that cosmetic companies contribute significantly to the global economic growth through import and export trading, new product development as well as various efforts to conserve the environment such as through the production of organic cosmetic products. Moreover, the cosmetics industry contributes towards socio-cultural development of the global economy by expanding the labour force base.

The regulation of the cosmetics industry in terms of manufacturing and testing standards as well as product depth is acknowledged in this work. Specifically, the South African DOH promulgates the overarching policies to govern this sector while ASA is responsible for regulating sustainable and competitive practises and ethical advertising among industry players. However, the absence of literature directed at understanding the influential role of both commercial and non-commercial sources when used as promotional vehicles for new cosmetic products signals the need for this research. Therefore, Chapter 3 delivers a theoretical review of interpersonal influence, as it is contingent upon the influential role of female market mavens in terms of inducing new cosmetic products’ trial among consumers.
3.1 INTRODUCTION

Cosmetic products form part of consumers’ everyday consumption culture; hence, they are produced with the sole intention of satisfying consumer needs and wants. While this is so, consumers utilise various information sources during the pre-purchase phase, in view of making the ultimate purchase decision. In this vein, marketers identify and engage with influential consumers to help conclude marketplace consumption choices and evaluations (Kaufmann, Loureiro, Basile & Vrontis 2012:406). Most profoundly, Feick and Price (1987:85) attest that market mavens are the most vociferous individuals concerning the extent to which they deploy interpersonal WOM influence on other consumers. Therefore, marketers tend to target market mavens as information disseminators since they interact with other consumers on a frequent basis (Maurice 2010:12). To this end, a comprehensive review of the literature on market mavens and their role in inducing product trial of cosmetic products is conducted in this chapter. In particular, the chapter follows the underlying tenets of the Two-step theory of interpersonal influence as well as the SOR view of establishing the last four theoretical objectives set out in Section 1.4.2 of this study.

In view of addressing the primary objective of this study, which sought to examine the factors that influence maven tendency and cosmetic products trial, this chapter elucidates on key consumer behaviour elements of new product trial in Section 3.2 as well as the marketing of new cosmetic products in Section 3.3 of this study. Moreover, Section 3.4 entails a discourse on the theories used to expound on social influence in organisational and consumer behaviour terms while Section 3.5 spans to deliver a dialogue on the pre-eminent sources of social influence. Section 3.6 of this study elaborates on the trial of cosmetic products by a specific consumer cohort, namely the female market maven. Section 3.7 positions Mehrabian and Russell’s (1974) SOR of environmental influence as the overarching theory guiding this work. Drawing from the central assumptions posited in the SOR theory, the chapter goes further to extrapolate selected determinants of market maven behaviour in Section 3.8. Section 3.9 culminates in the development of a conceptual model for testing with specific hypotheses being proposed. Finally, Section 3.10 ends the chapter and outlines the next chapter.
3.2 NEW PRODUCT TRIAL

Kempf and Smith (1998:325) define product trial as consumers’ first usage experience with a product or a brand. It forms an important component in consumer behaviour as it provides evidence that shapes and integrates consumer beliefs about product performance (Srinivasan & Till 2002:419). As consumers acquire product-related information from different marketing communication platforms, they move through a series of stages that induce them to adopt a particular product (Smith 1993:204). These stages infer the cognitive, affective and conative stages of attitude development. Notably, Smith and Swinyard (1983:259) uphold that as numerous products exist in the marketplace, consumers tend to form tentative beliefs (cognitive stage) about a product or brand that lead a consumer to develop feelings of uncertainty towards that product (affective stage), especially when it is new. In this vein, marketers provide an opportunity for product trial (conative stage) in an attempt to bridge uncertainty in the eyes of consumers. Figure 3.1 depicts the sequential process spanning from product awareness, trial and subsequent re-purchase, labelled the ATR framework (Narasimhan & Sen 1983:13). Generally, this framework infers consumers’ eagerness to try out new products as they are presented to the market.

![ATR framework diagram]

**Figure 3.1:** ATR framework

**Source:** Narasimhan and Sen (1983:13)

According to the ART framework, a consumer first becomes aware of the product placed in the market through marketing communication platforms especially advertising, which exposes the consumer to different marketing messages (Duffett 2015:243). Relatedly, WOM enhances several opportunities for information dissemination among consumers at an inter-personal level thereby spreading knowledge about the new product (Steenkamp & Gielens 2003:369). Once the consumer perceives the new product to match his/her requirements, motivation to try out that product increases. A majority of cosmetic companies dedicate space within their stores to offer consumers the opportunity to walk in and try out new products (Tripathi 2012:20). For example, Amka Products™ uses in-store promotions to let consumers try out their new products by offering free...
product samples (Imrie 2014:7). In so doing, the consumer gets to be in physical contact with the new product and thereby observe its performance. Specifically, when the consumer uses the product, an opportunity is presented for them to evaluate whether the actual product performance meets the expected requirements. After this trial exercise, consumers might be convinced to adopt the product leading to a series of purchases and further re-purchase behaviour. Notably, poor distribution coverage can lead to ineffective product trial inducement since the new products are not easily accessible.

3.2.1 Cosmetic products trial among female consumers

The aspects of demographics in consumer behaviour are important in helping marketers to segment the market accordingly (Stols 2016:27). With regard to the cosmetics sector, it is apparent that female consumers are key agents for contemporary cosmetic products’ trial since cosmetics play a significant role in female consumption culture, including their social and economic structures from which cosmetic companies acquire most of its meanings (Nchimbi 2005:14). This is because scholars admit that female consumers are more open in terms of experimenting with new products (Ruane & Wallace 2013:318). To underlie female consumers’ products trial, a study by Soscia et al. (2011:233) reveals that cosmetic products’ trial probability is relatively higher among women, compared to male consumers. The willingness to try out new cosmetic products is ascribed to the increasing financial power of women and their emancipation, globally, to purchase commodities that promote the associations of beauty. In addition, empirical findings tally that female consumers view cosmetic products as a form of investment (Korai 2017:251), thus cosmetic products are seen as a fundamental constituent of women’s culture (Souiden & Diagne 2009:98).

According to a survey conducted by Clarins™, approximately 70.1 percent of female consumers in South Africa try out a new skincare product when they feel the need to treat a particular skin condition, while 7.7 percent of female consumers are only keen to experiment with new make-up products introduced into the market (Jadezweni 2017:1). The remaining 22.1 percent consist of female consumers who only try out new products because a friend or family member has recommended it. In this regard, global retailers such as Target™ and Nordstrom™ have created a concierge service labelled the ‘beauty trial box’ for consumers to try out new beauty products (Shapouri 2016:1). In South Africa, Clicks™, Edgars™ and Foschini™ are among the leading retailers with store representatives that offer potential female customers the opportunity to try fragrances and decorative products in-store.
Recently, female consumers have been able to garner information about new cosmetic products through online beauty bloggers. These bloggers are usually influential consumers in that they possess vast amounts of information about different cosmetic products, which they distribute using various channels, both offline and online. As a result, the beauty industry targets such individuals in order for them to influence and prompt consumers to keep up with the latest trends, as they review the latest ‘must-have’ cosmetic products (Legoale 2017:1). The same magazine article cites Mihlali Ndamase, Cynthia Gwebu, Brett Robson and Naledi Mallela as the leading South African bloggers on YouTube™ who display artistry in the usage of beauty products. Therefore, female consumers who are enthusiastic about decorative and beauty products rely on these bloggers and influencers for information relating to new products.

3.2.2 Consumer motivations towards cosmetic products trial

Hawkins and Mothersbaugh (2013:358) attest that consumers do not buy products; rather they purchase the satisfaction of their motives, or problem solutions. In the same vein, Solomon (2004:114) submits that consumer motivation occurs when a need is aroused. Relatedly, Schiffman et al. (2014:411) distinguishes between utilitarian motives, which are instrumental and provide functional value of products and hedonic motives that rely mostly on the emotional state, rather than cognitive processing. Therefore, when a consumer feels a gap between his/her desired or actual state, it denotes that a need is recognised, of which that need can be satisfied either instrumentally or hedonistically. Henceforth, the study delves into the utilitarian and hedonic motives behind the consumption of cosmetic products by consumers.

3.2.2.1 Utilitarian motives

Consumers are motivated by a desire to attain a useful function in the consumption of various products or brands. In the domain of cosmetic products, the following utilitarian motives enable consumers to accomplish tangible outcomes with regard to their health status.

- **Counter the aging effect**

Both marketers (Ramos-e-Silva, Celem, Ramos-e-Silva & Fucci-da-Costa 2013:750) and researchers (Assawavichairoj & Taghian 2017:28) are attempting to contribute towards fulfilling the inert desire for consumers to counter the effects of aging by researching the development of anti-aging cosmetic products. Similarly, Perry and Wolburg (2011:367) note marketers’ decisiveness in advocating the cognitive associations in relation to aging through advertising, thereby evoking consumers to purchase anti-aging products. Consequently, marketers use media platforms to create and thrill the consumer into being apprehensive about purchasing cosmetic
products that can reverse the signs of aging, while simultaneously pointing to contemporary standards of beauty (Ramli 2015:120). Specifically, a trend exists whereby female consumers perceive a youthful appearance as part of a universal culture that everyone must adopt to preserve the self (Coupland 2007:38).

- **Improve state of health and wellness**

Apaolaza-Ibanez, Hartmann, Diehl and Terlutter (2011:793) uphold that the human body is a personal resource as well as a social symbol that portrays one’s physical well-being. As such, consumers use cosmetic products in an attempt to improve both their physical and mental health. In this regard, consumers raise their personal hygiene levels by using cosmetic products (Ramli 2015:114). In particular, skincare products assist to preserve the condition of the human skin covering. For example, applying sunscreen to the body in the case of sunlight exposure can help in evading severe skin damage and allergies (Tripathi 2012:9). On the other hand, hair care products and toiletries add to one’s overall hygiene and personal cleanliness whereas fragrances and decorative make-up products are used to eliminate bacteria associated with body odours as well as accentuating facial beauty, respectively. Therefore, the health aspect infused in cosmetic products enable a consumer to maintain a conscious lifestyle (Dimitrova et al. 2009:1156).

### 3.2.2.2 Hedonic motives

Klein and Melnyk (2016:131) affirm that consumers engage in affective information processing when displaying hedonic motives. This means that a consumer develops affinities with a product or brand, which later translate into sensorial stimuli and deploy emotional dispositions in the consumer (Song, Bae & Lee 2017:1). The following benefits are discussed to underline the hedonism experiences motivating the consumption of cosmetic products.

- **Enhance self-image**

Self-image is the mental view of who one is (Hoyer et al. 2018:439). Souiden and Diagne (2009:98-99) emphasise that self-image is conceptualised as an outcome in a social environment only, where consumers create and adopt the self through product usage. In other words, consumers use cosmetic products to acquire self-perceptions (Robertson, Fieldman & Hussey 2008:38-39). Interestingly, the scholars acknowledge that both men and women demonstrate interest towards their self-image alike, owing to the overemphasis placed on beauty in the mass media. Specifically, women consume cosmetic products in view of transforming their self-image, thus enhancing their psychological profile (Guthrie et al. 2008:168). In the same vein, maintaining a prestigious self-
image and appearance tend to be major elements that assist consumers to form social interactions within socio-cultural environments (Der Pan et al. 2014:177).

- **Enhance physical appearance**

Both men and women use cosmetic products to enhance their appearance (Ramli 2015:114). Notably, both beauty and physical attractiveness are desirable traits that consumers manipulate to regulate their physical appearance (Apaolaza-Ibanez et al. 2011:792). Thus, physical appearance is conceptualised as a major component of contemporary consumer culture (Yin & Pryor 2012:119). Nevertheless, it appears that the desire for physical appeal has spiralled an increase in the consumption of various cosmetic products in the broader consumer community (Assawavichairoj & Taghian 2017:28).

Having evaluated the salient motivations behind consumers’ trial of cosmetic products, the next section extends the discussion to encapsulate the actual marketing of cosmetic products.

### 3.3 THE MARKETING OF NEW COSMETIC PRODUCTS

Marketers utilise marketing communication mix elements as strategies that provide comprehensive ways of creating value, clarity and maximum message effect on consumers (Koekemoer 2014:4). These strategies determine the kinds of promotional appeals to be used on the target audience. As such, cosmetic companies utilise a combination of formal and informal strategies as part of their marketing program. The most prominent marketing strategies are discussed next.

#### 3.3.1 Formal strategies for marketing new cosmetic products

Out of all the strategies that exist in the marketing literature, formal strategies serve as the backbone for launching new products in the market. Particularly, these strategies aid in creating awareness (Schiffman et al. 2014:233) and conveying new product information to the targeted audience (Steenkamp & Gielens 2003:370-371). Nevertheless, the marketing of new cosmetic products in an inundated marketplace tends to push cosmetic companies to find ways to set their products apart from those of competitors. In particular, marketers utilise advertising, shopper marketing, sampling, product packaging and displays as well as brand activations.

Puth Mostert and Ewing (1999:39) assert that marketers utilise advertising as a strategy to promote new products in order to influence consumers’ evaluation of alternatives. The objective is to feature the product’s salient attributes and make it distinct from competing brands. Therefore, cosmetic companies use advertising to penetrate markets and thrill the consumer into the realms
of beauty (Tripathi 2012:4). This advertising can be in the form of media promotions, whereby the power of either famous personalities or ordinary consumers is harnessed into the cosmetic products’ advertisement. For example, in the earlier years of celebrity advertising, the late British actress Audrey Hepburn, endorsed Revlon™ products (Graeff 1996:4). However, during those days, their advertising campaigns were not consistent with the younger consumer market since the company utilised mature celebrities as product endorsers. In the ensuing years, the company redirected its advertising campaigns by targeting younger, female models who were considered more appealing, physically. As a result, Revlon™ has recently signed a contract deal with the Israeli actress, Gal Gadot, to promote its range of cosmetic products in the international market (Sweeney 2018:1). In South Africa, the Elle™ magazine reported the advent of Bonang Matheba, a South African television personality, as a brand ambassador for the advertising campaigns developed by Revlon™ (Buso 2016:1). With regard to the latter, Imrie (2014:2) cites Revlon™ as the dominating market leader, comprising 33 percent of the South African cosmetic market as discussed in Section 2.5.3 of this study. However, Dove™ a Unilever™ brand recently was caught in bad publicity regarding an advertisement of a body wash product (Seeth 2017:1). The general connotation about the advertisement was that after using the product, dark skin becomes whiter. Such advertising is prejudiced and unethical, leading to the company having to issue an apologetic statement to the public.

Koekemoer (2014:6) mentions that marketers use shopper marketing to influence and arouse affect to consumers in a retail setting. Notably, (Lobova 2015:8) stress that shopper marketing is an interactive shopping approach that permits consumers to engage and share their experiences with others within a store. It involves collecting shopper intelligence by evoking store layout designs, scents and various soundtracks at the point of purchase. Therefore, marketers utilise shopper marketing as a strategy to expose consumers to a plethora of new products in return for driving company growth.

Koekemoer (2014:10) attests that sampling is a promotional inducement tool that marketers use to introduce products or brands to consumers. Such action comes in offering free samples, product trial or giving customers extra products at the same price range. According to Euromonitor report (2015:1), the USA and the United Kingdom (UK) markets make substantial contributions towards sampling products. In essence, the report further states that try-on applications contribute towards the success of product sampling. For example, L’Oreal™ introduced the Make-Up Genius App in 2014, where consumers could upload their pictures while trying out various products, thereby assisting them to choose their most preferred products. On the other hand, local cosmetic companies such as Amka Products™ utilise sampling as a way of engaging with consumers at
retail outlets by offering free product samples as discussed in Section 3.2. Therefore, it is no surprise that sampling is a strategic marketing tool that enables consumers to determine what is worthy of being adopted.

Creative packaging forms an important component in marketing communication, for both consumers and marketers alike. To the consumer, product packaging presents the overall impression of the product through design parameters, such as colour, typography and shape (Clement 2007:918). This is because the packaging used on cosmetic products presents visual properties that contribute towards thrilling the consumer, significantly (Topoyan & Bulut 2008:183). In this vein, product value is achieved when the packaging is designed to impact aesthetics and favourable images in the minds of consumers. Conversely, to the marketer, consumers’ perceptions about product attributes matter the most (Puth et al. 1999:38). As such, Laplume and Srivastava (2014:1952) affirm that visual stimuli have a profound impact on the ultimate success or failure of new products. For example, Dove™ body wash packaging developed in 2017 presents a failure story in that the product package, which was shaped in the form of different sized female bodies unintentionally yielded diverse images in consumers’ minds, thereby leading to a backlash in terms of reduced sales and negative WOM (Adams 2017:1). The backlash emanated from consumers perceptions that the message being conveyed by the packaging compared women in terms of their body size, which ultimately delivered an unintended message.

Pijak (2017:1) avows that brand activations enable customers to access premium and personalised product ranges. Brand activations refer to a process of delivering a series of brand benefits and/or experiences to customers (Ghatge 2010:1). Brand activations act as a catalyst for experiential marketing. Marketers are able to entice the consumer into forming long-term relationships with a particular brand and thereby increase the chance of trial behaviour as well as post-trial purchase. For example, Dove™ used brand activations in eight major malls across South Africa in 2016 in an attempt to stimulate product trial and impact sales, simultaneously. The campaign allowed consumers to have first-hand experience by taking the ‘Dove™ seven-day trial test. Through this strategy, the brand reached over one million consumers through mall engagement as well as social media activity. In this way, brand activations enable marketers to leverage high physical immersion with new cosmetic products.

### 3.3.2 Informal strategies for marketing new cosmetic products

To the same degree as in formal marketing communications, the social phenomenon that allows consumers to create dialogue with others about new products, brands or services is significantly important in consumer behaviour. In fact, Buttle (1998:242) contends that WOM poses the most
significant influence on consumer behaviour, when compared with other marketer-controlled sources. This is because consumers rely on informal or social sources to seek information, as they are readily accessible (Goldsmith & Clark 2008:308). Of relevance to this work, Schiffman et al. (2014:382) affirm that product trial and acquisition are attained through WOM efforts, albeit in the traditional oral format and/or as it is proffered along digital spaces. This is because interpersonal influence helps to reduce the perceived risks and costs associated with adopting new products. To this end, interpersonal influence affects the attitude and buying behaviour of consumers in a significant way (Feick & Price 1987:83; Engelland, Hopkins & Larson 2001:16). Therefore, to supplement the formal strategies used in disseminating information about products and services, marketers often rely on interpersonal communication sources (Wiedmann et al. 2001:195; Walsh et al. 2004:109).

Schiffman et al. (2014:224) assert that consumers often rely on WOM communication, operating through interpersonal influence to garner new product information. WOM refers to communication between non-commercial entities who share information with others regarding a product, service or a brand (Hawkins & Mothersburgh 2013:230). Notably, Walsh and Elsner (2011:75) submit that WOM communication facilitates advocacy for product innovations by diffusing new information, thereby proving substantial impact on consumers’ product choices. In agreement, Meuter, McCabe and Curran (2013:241) emphasise that interpersonal WOM is a strong force that influences the adoption of new products and services.

The significance of interpersonal WOM communication is motivated by social interactions within a group. Put simply, social interactions avail a barometer for consumers to understand the salience of interpersonal WOM communication within a social setting. In this regard, the transmission of information between consumers deploys social influence (Kim, Kwon & Lee 2017:730), whereas social influence refers to the information received by implicit or explicit forces from individuals, groups and the mass media that affect the decision making process (Hoyer et al. 2018:292). This means during the pre-purchase information search, a consumer engages with different mediums for information acquisition and in return develops strong ties with them. Thereafter, the strength of the social tie influences the decisions of a consumer. By implication, social influence works as a cornerstone tool that affects consumers’ purchase decisions and general consumption behaviour in a social system (Thomas, Jewell & Johnson 2015:513).

Blythe (2013:226) underscores that the ulterior motive for employing WOM communication is to profile selected consumers to assist marketers by influencing the consumption behaviour of the general populous. In fact, Duetsch and Gerard (1955:628-629) postulate that behaviourist
practitioners employ different sources of social influence through WOM communication since they exert both informational and normative influence. The scholars suggest that informational social influence is the instrumental facet that enables individuals to accept salient information from others, as a signal to enhance one’s knowledge about the environment. In the case of consumer behaviour, informational influence implies making cognisant decisions in situations where there exists high levels of uncertainty (Bearden & Etzel 1982:184). For example, high involvement purchases require a consumer to gather more information during the pre-purchase search (Lawler 2001:322). Primarily, informational social influence is based on the expertise that an individual has, in terms of influencing social group members (Hawkins & Mothersburgh 2013:225). Put simply, informational social influence is underpinned by the subjective knowledge and assumptions that influential consumers possess, regarding a particular product or brand. Conversely, Burnkrant and Cousineau (1975:207) define normative social influence as the inclination to “identify, comply and conform to the expectations of others”. This refers to the need to be accepted within a group. For example, normative social influence helps a consumer to resolve uncertainty and to overcome the resistance that comes with adopting new products (Muller & Peres 2017:8). Therefore, in order to cultivate positive relationships and induce consumers to switch to the favoured products, marketers identify consumers who form the centrepiece in influencing the social system through spreading WOM communications. Such influential consumers serve as a conduit to aid the transmission of product information in the marketplace (Clark & Goldsmith 2005:290; Engelland et al. 2001:16). Resultantly, marketers are keen to identify and engage with these social entities in order to counteract the social influence on others (Hoyer et al. 2018:292).

The next section examines the different theories of interpersonal influence that seek to explain the extent of social influence in the consumer behaviour literature.

3.4 THEORETICAL PERSPECTIVES ON INTERPERSONAL INFLUENCE

The term interpersonal influence refers to a trait that varies amongst individuals within a social setting (Bearden et al. 1989:473) thereby providing an indication of the systemic stimulus effect of influential consumers. Therefore, this section discusses the Social exchange theory (SET), the Trickle-down theory, the Magic bullet theory, the Multi-step flow theory and the Two-step flow theory as the overarching theories to explain interpersonal influence in both generic terms as well as within consumer behaviour contexts. This review is important in lieu of elucidating on the interactive processes demonstrating how consumers influence each other unequivocally so, within the marketplace.
3.4.1 The Social exchange theory (SET)

The Social exchange theory (SET) was initially established by Homans (1958:597-606) as an underpinning theory to analyse interpersonal exchanges amongst individuals in a social system (Das & Teng 2002:447). Initially, the reasoning behind the SET is to analyse human behavioural relationships in order to determine the complexities that emerge in a social system (Shiau & Luo 2012:2432).

The SET delivers as a systematic approach that bases human relationships on rewards and costs. In essence, the SET has been applied based on the notion that exchange is a dual process that is interdependent and mutually liable to a reciprocal course. Therefore, the SET elucidates that if rewards offset costs in a relationship between social entities, the relationship evolves, but, if costs are higher than the rewards gained, then the relationship is likely to be terminated. Notably, costs are the negative consequences of a relational decision, such as time, money and effort invested (Emerson 1976:349) while rewards are the positive results gained from socially exchanging information with others. Thus, the generally accepted notion about the SET is that in any social interaction, individuals aim to capitalise on the rewards to be gained, while opting to minimise the associative costs to be incurred (Wright 2006:379). Therefore, individuals make decisions based on outcomes that yield long-term benefits, such as security, personal affection, trust independence as well as social approval (Shiau & Luo 2012:2432).

In view of applying the SET within consumer behaviour contexts and marketing scenarios, the assertion by Wright (2006:379) that marketing is an exchange process is acknowledged. In other words, consumers engage at a social level in the exchange of information with other consumers to obtain valuable inputs during pre-purchase product search (Lawler 2001:322). This means that both buyers and sellers are regarded as information exchange agents while the process of exchange depicts social behaviour within consumer markets (Wu & Lee 2017:477). In this vein, the relative cost and reward comparisons in buying situations are outlined within the scope of interpersonal influence that is operational within a social system (Das & Teng 2002:447). For example, consumers purchase products and services solely to gain financial or instrumental benefits, such as product quality, price and value. On the other hand, consumers purchase products that possess intrinsic rewards, such as love, affection and respect as well as extrinsic rewards, such as product value (Paraskevaidis & Andriotis 2016:29). Costs incurred refer to the risks that hinder consumers from buying, such as time and effort expended.
3.4.2 The Trickle-down theory

The Trickle-down theory, which is grounded on the notion of the social class hierarchy was devised by Veblen (1899) cited by Blythe (2013:226) and Simmel (1904) cited by (Soeteman 2010:20). Figure 3.2 depicts the trickle-down pyramid.

![Trickle-down pyramid]

**Figure 3.2: Trickle-down theory**

**Source:** Benjamin (2014:13)

In the Trickle-down theory, it is assumed that the perceptions, attitude and/or behaviour of one individual, usually a supervisor influences the behaviour of a third party, usually a subordinate (Wo, Ambrose & Schminke 2015:1848). This top-down sphere of interpersonal influence is typical of organisational contexts. However, with respect to consumer behaviour scenarios, proponents of the Trickle-down theory posit that innovations are first adopted by the upper class in the consumer market, before being embraced by lower socio-economic groups (Blythe 2013:226). According to the scholars, the influential power of celebrities, public figures and other referent groups that are imitated by the general consumer groups substantiates the likely effects of the Trickle-down theory.

Soeteman (2010:21) affirms that the significance of the Trickle-down theory rests on how trends in the market flow from affluent consumers to other members of the society. These affluent consumers serve as innovators of trends. Thus, consumers in the top strata of the hierarchy adopt other innovative trends in the market with the sole intention to maintain their exclusivity and high status within a society. Therefore, it is clear that the upper class influences the behaviour and consumption patterns of consumers in a society.
While the Trickle-down theory seems to be at the point of interest in some researches (Benjamin 2014:1-24; Wo et al. 2015:1848-1868), there exist a number of deficiencies on why the theory is not prevalent. First, the theory assumes that only two socio-economic classes, the upper and the lower class exist in the social system (Soeteman 2010:21). However, Benjamin (2014:14) distresses that the views of the society has changed, meaning it is easier to identify an affluent consumer today than it was before due to the additional layers of different social classes within a social system. This means the upper class not only influence the behaviour of other consumers, but a series of other social classes simultaneously prompt the adoption of innovations. Secondly, the theory ignores that there exists other influential consumers in the social system who gain dominance and popularity through information dissemination on social media and other digital platforms. As a result, the Trickle-down theory seems void when applied in social science research.

3.4.3 The Magic bullet theory

Figure 3.3 postulates the Hypodermic and/or Magic bullet theory of mass communication.

Figure 3.3: Magic bullet theory

Source: Adapted from McQuail and Windahl (1983)

According to Esser (2008:4837), the Magic bullet theory was developed by Lasswell (1927), known as the father of mass communication. The theory holds that individuals are influenced in a direct and decisive manner by the mass media. The theory posits that the mass media shoots or inoculates individuals with appropriate messages, whereas appropriate responses are elicited from
the target audience, in turn (Kumar 2015:68). According to Wood (1983:16), the Magic bullet theory assumes that marketing messages are designed such that each member of the audience perceives and reacts to stimuli in the same way as every other consumer. In addition, the theory ignores the fact that individuals have the liberty to expose themselves to different communication platforms that are consistent with their interests and beliefs (Tesunbi & Nwoye 2014:11). The linearity posture assumed by the theory limits consumers to a homogeneous entity, thereby ignoring the dynamic nature of consumer attitude (Sahoo 2017:11). Resultantly, the Magic bullet theory is hardly applied in consumer behaviour studies since it overlooks the fact that mass media affects each individual in a unique way.

3.4.3.1 The Multi-step flow theory

The Multi-step flow theory posits that information goes through several channels of interpretation before it reaches the intended audience. Katz and Lazarsfeld (1955:1-400) developed the Multi-step flow theory. Figure 3.4 illustrates the Multi-step flow theory of communication.

![Multi-step flow theory diagram]

**Figure 3.4:** Multi-step flow theory

**Source:** Sahoo (2017:13)

Weimann (1982:765) upholds that the Multi-step flow theory extends the direct flow of information in all possible directions, which thereby accounts for longer chains in the communication process. Put simply, the Multi-step flow theory states that once stimuli about a particular product or brand is released through the media, consumers easily receive such information. The theory demonstrates how opinion leaders actively acquire information from mass media as well as other sources (Step 1a). Thereafter, opinion leaders are responsible for processing the information and further transmitting the messages to others within a social grouping, either in the original state or with their own interpretations added (Step 2) (Hawkins & Mothersbaugh
2013:233). On the other hand, information receivers acquire mass media information (Step 1b). Information receivers are individuals that neither influence nor are influenced by others (Sahoo 2017:13). Subsequently, Step 3 shows how opinion receivers and/or seekers initiate requests for information and supply feedback back to opinion leaders. Nevertheless, a shortcoming of the theory is that the initial message can be disrupted owing to the fact that opinion leaders interpret and contextualise mass media information by forming their own opinions.

### 3.4.4 The Two-step flow theory

Figure 3.5 posits the Two-step flow theory of interpersonal influence put forward by Lazarsfeld et al. (1948:191).

According to Lazarsfeld (1940) cited by (Balnaves, Donald & Shoesmith 2009:59), during any form of interpersonal communication, there exist intermediaries between the mass media and the target audience. At the primary level, the communication message is transferred from the message source to selected intermediaries, who are considered influential in the society.
In this regard, the communication lexicon states that “intermediaries are responsible for exerting an indirect form of media influence” (Hodkinson 2011:88). Secondarily, the influential consumers are then responsible for transferring the messages together with their personal opinions to the public at large (Katz & Lazarsfeld 1955:32).

While the Two-step flow theory was developed within the confines of a study on politics and public affairs (Katz 1957:61), the theory has been found useful in its application in the social sciences. For example, a study by Li (2013:8) examined the usefulness of the Two-step flow theory in the age of digital media in the USA during the 2012 presidential election. The scholar established that interpersonal sources, such as opinion leaders, influence voters in their role as conduits for the supply of political information even in the advent of new media. On the other hand, a study by Lawry (2013:81) applied the Two-step flow theory to understand the role of interpersonal influence in the diffusion of fashion-related information in the USA using social media and electronic word of mouth (eWOM). The scholar established the value of opinion leaders in terms of exerting supplementary interpersonal influence on other members of a social system. Relatedly, a study by Choi (2015:700) determined the explanatory power of the Two-step flow theory among South Korean users of online public forums such as Twitter. Notwithstanding this, Maurice (2010:12) was able to typify the relevance of the Two-step flow theory within a marketing context as depicted in Figure 3.6.

![Figure 3.6: Adaptation of the Two-step flow theory within a marketing context](image)

**Source:** Maurice (2010:12)

According to Maurice’s (2010:13) adaptation of the Two-step flow theory, the first step would be for marketers to identify a relatively small group of influential consumers who are active and highly involved consumer segments. These individuals are given the responsibility to convey expensive marketing communication messages on behalf of companies, owing to them being renowned for paying close attention to mass media and its messages (Lazarsfeld *et al.*1948:191).
In the second step, the primary message communicators comprising the active and highly involved consumer segments then pass on the media content to a more passive group of opinion followers (Hawkins & Mothersbaugh 2013:233). This information dissemination is accomplished through frequent interactions with other consumers, including their enthusiasm in speaking about brands, stores and buying options (Goldsmith et al. 2012:391). While the latter cohort generally comprises the intended target audience, the rapid dissemination of mass media communication has been found to be effective only through influential consumer cohorts, based on their credibility as WOM communicators (Feick & Price 1987:85). Influential consumers exert influence on other consumers (Robinson 1976:305-306; Gatignon & Robertson 1985:855) who are passively waiting to receive market-related information. In this way, the second flow of communication is WOM-based, thereby inferring minimal costs to marketers.

Based on the aforementioned discussion, it is clear that the Two-step flow theory remains one of the prevailing theories in explaining how mass media information is transmitted to consumers. Likewise, it is clear that the theory centres on persuasion and the formation of opinions, thereby engulbing the concept of interpersonal influence. Thus, conventional approaches on interpersonal influence hold that it is effective to reach out to opinion leaders, early product adopters and market mavens as the typical marketplace influencers (Rosen 2009:26). With this in mind, the next section expounds on these influential consumers as significant sources of interpersonal and social influence.

3.5 SOURCES OF INTERPERSONAL INFLUENCE

Symbiotic social systems as well as fragmented markets create scenarios, which are difficult to penetrate through traditional mass media. As a result, marketers advocate marketing messages by identifying and engaging with influential consumers, who act as agents of change in the society (Smith & Fink 2015:2). According to Probst, Grosswiele and Pfleger (2013:179), marketers actively initiate and control the diffusion process by targeting specific sources of influence in order to leverage the desired effects on new product adoption. Also termed special influences (Hoyer et al. 2018:304) and/or influential consumers (Blythe 2013:229), this category of consumers comprises individuals that spread effective WOM communication, without any commercial drive.

Gladwell (2000:14) defines influential consumers as “information specialists or people that other individuals can rely upon for new information”. Relatedly, Keller and Berry (2003:169) define influential consumers as “a range of third parties who exercise influence over the organisation and its potential customers”. These scholars concede that influencers are market activists who are socially connected and are trendsetters in specific consumer markets. In addition, they have the
ability to cause measurable actions and outcomes. With their general marketplace expertise and communication skills, influential consumers are those individuals that can start WOM epidemics. As such, the quality of both the messengers, as well as the content of the message, matters upon spreading the information.

Figure 3.7 illustrates the forces that drive influential consumers.

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**Figure 3.7:** Driving forces behind the behaviour of influential consumers

**Source:** Blythe (2013:229)

Blythe (2013:228-229) posits that special influences strive to appear as connoisseurs in two ways. Primarily, influential consumers are driven by an altruistic motive in that they have an innate desire to tell other consumers about new products and/or services. Consequently, they acquire a pleasurable feeling after sharing the experiential knowledge they have with others (Goldsmith et al. 2006:412; Maurice 2010:9). On the other hand, influential consumers demonstrate concern for others, which motivates them to share information by initiating conversations and taking delight in responding to requests for market information (Walsh et al. 2004:113). Relatedly, influential consumers demonstrate a high degree of personal interest and involvement in products, media messages and different aspects of the consumption process (Eastman et al. 2014:457).

At the secondary level, influential consumers are motivated by a desire to reduce cognitive dissonance among other consumers during product evaluation and pre-purchase search. Cognitive
dissonance arises when outcomes are higher than expectations (Schiffman et al. 2014:215), which increases consumer uncertainty towards new products, brands and/or buying situations (Smith & Swinyard 1983:259). Such dissension is fuelled by the inability to have direct experience with the product or brand; hence, special influences exist to bridge the gap.

Blythe (2013:229) asserts that the drive by influential consumers to reduce cognitive dissonance is fulfilled in two ways. First, special influences are actively involved in arousing interest among consumers by emphasising message intrigue. This infers to possessing information that has both entertainment and social value (Price et al. 1987:333). For example, influential consumers take extreme pleasure from shopping by browsing different product ranges and actively pursuing evidence of quality and innovative trends (Sudbury-Riley 2016:718). Secondly, the scholar endorses that influential consumers aim to deliver marketing messages that enhance self-image, thereby demonstrating high levels of self-consciousness. Given their high level of self-efficacy, it is clear that special influences strive to make people feel good about themselves (Blythe 2013:229). Put in context, influential consumers tend to spread information about how new cosmetic products enhance the physical beauty and overall confidence of other consumers, thus serving to enhance the self.

According to Hawkins and Mothersbaugh (2013:236), influential consumers represent 10 percent of the consumer universe, while operating within broad social networks that enable them to influence the rest of the 90 percent consumer market. Notwithstanding this, Clark and Goldsmith (2005:290), Ruvio and Shoham (2007:704) as well as Hoyer et al. (2018:298) concur that innovators, opinion leaders and market mavens comprise the three categories of influential consumers that amplify the transmission of product information in the marketplace. The following section deliberates on these fundamental cohorts of influential consumers.

### 3.5.1 Product innovators and early adopters

Innovators refer to the first cohort of consumers who adopt an innovation relatively early in the diffusion process (Clark & Goldsmith 2005:290). Particularly, innovators provide initial physical visibility and functional application of a new product to the general consumer market, prior to its diffusion throughout the social system (Abratt et al. 1995:32). On the other hand, early adopters provide new product information and assistance to other consumers within their environment, with or without actual experience with the products (Schiffman et al. 2014:385). In general terms, both product innovators and early adopters gain their knowledge and expertise through early product purchase, usage and actual product experience (Wiedmann et al. 2001:198). According to Rogers’s (1983:247) bell-shaped diffusion curve of adoption, innovators constitute the first 2.5
percent of the curve while early adopters comprise 13.5 percent of the consumer market. This means that according to the adopter curve, both innovators and early adopters adopt new products offered in the market faster than 84 percent of the consumers market.

In general, innovators and early adopters comprise celebrities and members of the elite groups in society. With regard to market or product-orientated knowledge, innovators and opinion leaders are product specific (O’Sullivan 2015:287). This means that they tend to be specialists in terms of acquiring new product information, to an extent that they remain knowledgeable about specific product lines within a product category at a given time (Maurice 2010:11). According to Fitzmaurice (2011:71), both innovators and early adopters are active consumers who presume a risk-taking propensity in terms of trying new products. This is because innovators are able to cope with uncertainty associated with new products than other consumers, which then infers that innovators do not depend upon the subjective evaluations other members have within a social system (Rogers 1983:249). However, innovators tend to have a high level of switching cost, which means they are less brand loyal. The lack of brand loyalty hinders the extent of their influential capacity and thereby deters the willingness to try out new products by other consumers (Schiffman et al. 2014:395). Consequent to this limited capacity to influence and their focus on limited product lines, both innovators and early adopters were excluded in this study as they lack comprehensive knowledge about numerous products and the market in general.

3.5.2 Opinion leaders

Schiffman et al. (2014:225) referred to opinion leaders as “a series of individuals who influence the actions of others in an informal manner”. In simple terms, opinion leaders are the mediating consumers who influence the buying behaviour of other consumers within a specific product category (Zhang & Lee 2013:535). Therefore, opinion leaders comprise a consumer segment that is able to shape consumer preferences and alter behaviour. On the other hand, Lazarsfeld et al. (1948:178) labelled opinion leaders “information brokers that intervene between the mass media and the opinions of their cohorts”. Similarly, in their seminal work on personal influence, Katz and Lazarsfeld (1955:32) argue more for opinion leaders as ‘information sharers’ rather than just information providers. Arndt (1968:463) acknowledges that the influence of opinion leaders stems from the media as well as other opinion leaders. As such, opinion leaders act either as links between groups or opinion advisers who connect individuals to other individuals and groups.

The defining characteristics of opinion leaders are that opinion leaders gain knowledge and expertise through personal experience and enduring involvement with a broad product category (Abratt et al. 1995:32; Maurice 2010:11). Included in this consumer cohort are politicians,
community leaders, celebrities, journalists, business leaders and educators. Slama and Williams (1990:48) as well as Fitzmaurice (2011:79) assert that opinion leaders have profound interest in new products within a specific product category. As such, Langner et al. (2013:36) uphold that when a consumer is in need of acquiring product information about a particular product category, they often rely on opinion leaders to provide them with a solid foundation of product information. Opinion leaders are specialist (Mailu et al. 2011:2). This means they have enhanced knowledge and experience about a product category (Feick, Coutler & Price 1995:20; O’Sullivan 2015:287). Clark and Goldsmith (2005:290) while Ruvio and Shoham (2007:706) mention that the influence of opinion leaders is only limited to specific purchase situations. Notably, these consumers are technically competent (Hoyer et al. 2018:297), which means they obtain product information from various public sources of mass media (Katz 1957:61; Rogers 1983:27). Once gathered, they insinuate their own personal opinions about a particular product category. Therefore, opinion leaders lead the market by forming their personal opinions regarding a broad product category.

While opinion leaders form a unique dimension of personality, this cohort of consumers was excluded in this research due to a number of reasons. First, Zhang and Lee (2013:538) attest that the scope of opinion leaders is limited, owing to the variation of the marketing mix elements. For example, opinion leaders are prevalent only in high involvement products or services while the influence of other consumer cohorts, such as market mavens, spans across a variety of products, ranging from durables to non-durables (Geissler & Edison 2005:77). Secondly, opinion leaders form their own opinions and interpretations about a product. Such behaviour may disrupt the initial product or brand meaning as consumers may be reluctant to try out new products or brands owing to deleterious views presented by opinion leaders.

3.5.3 Market mavens

Fitzmaurice (2011:71) defines market mavens as “individuals who are abreast about the marketplace and who proactively engage with other consumers in disseminating knowledge about different products and the marketplace in general”. Essentially, market mavens describe a unique pattern of consumer behaviour whereby a minority of consumers inexplicably influences the behaviour of other consumers (Goldsmith et al. 2012:390). Specifically, marketers engage mavens in the dissemination of cosmetic product information, as they are consequential vehicles of interpersonal influence (Walsh et al. 2004:109). In this regard, Blythe (2013:226) asserts that homophily plays a crucial role in transmitting new product information from market mavens to other consumers who exhibit similar purchase patterns and characteristics. Through WOM engagement, market mavens are able to gain new customers and guide them through the buying
process (Puspa 2014:3). To this end, marketers target these consumers as promotional agents to convey and leverage information to the public about a myriad of product offerings in the marketplace (Slama & Williams 1990:48; Yang 2013:105).

In terms of demographics, earlier researchers concurred that the typical market maven is likely to be young, less-educated and female, emanating from the black ethnic group (Feick & Price 1987:87; Price et al. 1987:333; Williams & Slama 1995:5; Ruvio & Shoham 2007:705). Contrastingly, Abratt et al. (1995:46) found no significant differences between male and female market mavens, while Wiedmann et al. (2001:199) found that German male consumers are more likely to be opinion leaders than mavens are. On the other hand, Brancaleone and Gountas (2007:526) established that market mavens are professionals earning above average disposable incomes, which means they are well-educated consumers who hold a college or university degree.

The principal characteristic of market mavens is that they are generalist in the kind of information they possess and disseminate (Mailu et al. 2011:2). Unlike product innovators, early adopters and opinion leaders who emphasise specific product attributes only, market mavens are both product and market oriented consumers who have vast knowledge about places to shop, new product options as well as pricing options (Price et al. 1987:332). This means their knowledge spans across a variety of products and market-related elements (Clark & Goldsmith 2005:290; Ruvio & Shoham 2007:706). In this vein, Abratt et al. (1995:33) labelled market mavens ‘neighbourhood experts’, while Maurice (2010:12) referred to them as ‘information freaks’. These epithets supplant the notion that market mavens are both information seekers and diffusers of market-related information.

Fitzmaurice (2011:72) and Sudbury-Riley (2016:717) mention that market mavens can be referred to as ‘smart shoppers’ while Zhang and Lee (2013:538) suggest that market mavens are value for money shoppers and/or budget shoppers. This is because they make use of shopping lists and engage in comparison-shopping for the best available deals. Of note, market mavens rely on coupons for discounted pricing, demonstrating the highest rate of coupon redemption and coupon sharing, when compared to other consumer groups (Goldsmith et al. 2012:392). On the other hand, market mavens have a great affinity for technology, when compared with non-mavens. Notably, market mavens are renowned for using social media and other electronic technology as a way of communicating with other consumers including YouTube™, blogs, emails, chat rooms and text messaging (Geissler & Edison 2005:77).

Price et al. (1987:333) uphold that market mavens are motivated differently from other consumers in that the information they possess has both entertainment and social value. This means that they
disseminate market-related knowledge because of their enjoyment of the shopping thrill as well as the desire to share and interact with other consumers in the marketplace. In terms of the Big five taxonomy of personality, market mavens report high levels of extraversion and openness, which wires the notion that these consumers have the desire to engage and form dialogue with other consumers (Maurice 2010:9). Relatedly, Edison and Geissler (2005:5) uphold that market mavens are ‘variety seekers’. This means they like experiencing new things and different styles, thereby speaking to their high level of open-minded. In addition, the experiential behaviour of market mavens is described by their large evoked sets (Williams & Slama 1995:5), signifying their ability to recall numerous brand options across a wide spectrum of products (Sudbury-Riley 2016:717). This enhanced product awareness and recall establishes market mavens as having the most effective market information, among other groups of influential consumers. On the other hand, Clark and Goldsmith (2005:291-292) pinpoint that market mavens relatively demonstrate a strong tendency to conform to social norms, high degree of self-esteem and report high levels of uniqueness.

While the aforementioned discussion discussed the influential role of various influential consumers, Fitzmaurice (2011:71) pinpoints that the expertise and behavioural response of the identified consumer cohorts differs significantly across various elements. As such, Table 3.1 illustrates the main similarities and differences among influential consumers, across specified elements.

**Table 3.1: Comparison of influential consumers**

<table>
<thead>
<tr>
<th>Element</th>
<th>Influential consumers</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Innovators and early adopters</td>
</tr>
<tr>
<td>Product usage</td>
<td>Yes</td>
</tr>
<tr>
<td>Product knowledge</td>
<td>Product specific</td>
</tr>
<tr>
<td>General market knowledge</td>
<td>No</td>
</tr>
<tr>
<td>Communication style</td>
<td>Mainly active</td>
</tr>
<tr>
<td>Product life cycle (PLC) stage of interest in marketing</td>
<td>Introduction</td>
</tr>
</tbody>
</table>

**Source:** Wiedmann *et al.* (2001:198)
In terms of product usage, Feick and Price (1987:84) indicate that the consumption role of innovators and opinion leaders has been felt extensively in the domain of fashion, movies and public affairs. While actual product purchases are not always noticeable among market mavens, this cohort of influential consumers are renowned for trying out new products and thereby encouraging other consumers to engage in similar trial behaviour (Fitzmaurice 2011:71). In support, Geissler and Edison (2005:77) mention that the experiential behaviour of market mavens lies in trying out new products.

With regard to product knowledge, innovators and opinion leaders are product-specific (Clark & Goldsmith 2005:290). This means that innovators and opinion leaders acquire and disseminate information relating to a specific product category (Price et al. 1987:331; Slama & Williams 1990:48). This confines their knowledge within specific situations, thereby revealing limited dispositional characteristics and domain specific components (O’Sullivan 2015:287). As such, they are not oriented to cover all aspects about various product categories and the broad-spectrum of the marketplace. In parallel, market maven behaviour includes general market knowledge and potential influence on other consumers (Ruvio & Shoham 2007:715). Therefore, market mavens possess and further disseminate broad knowledge across multiple product categories, rendering them a unique cohort of influential consumers since they possess a panoramic view of the marketplace.

Market mavens are the only cohort of influential consumers with general marketplace knowledge. This is because market mavens are proactive information providers (Edison & Geissler 2005:1) who collect and own large amounts of information from different media platforms in order to inform other consumers about new trends in the market. In addition, Feick and Price (1987:85) concurred with Slama and Williams (1990:50) that mavens are the most active consumer cohort with regard to finding and disseminating information about new products and brands, retail store prices, retail sales and product quality. Williams and Slama (1995:5) as well as Hoyer et al. (2018:298) also refer to market mavens as being highly knowledgeable consumers, with information about retail stores to shop from as well as consumer preferences and tastes. Owing to their marketplace orientation, market mavens gather information from consumer reports (Feick & Price 1987:86), local classified newspapers and direct mail (Abratt et al. 1995:36), advertisements and promotional materials for shopping deals (Engelland et al. 2001:16). Summative, this behaviour lends to their heavy involvement with different product categories and market-related behaviour.
The communication style of market mavens is intertwined with the breadth of their extensive market knowledge (Gauri et al. 2015:1053). The findings of Higie et al. (1987:273-274) reveal that female market mavens in particular are avid readers of magazines and direct mail advertisement. In other words, market mavens are heavy users of print media, especially female magazines like Cosmopolitan™, thereby rendering them active consumers in terms of disseminating both product and market-related information. Relatedly, Rogers (1983:22-23) notes that the mass media exposure of product innovators extends beyond their local system thereby rendering them as active communicators of product-related information. However, Wiedmann et al. (2001:198) state that opinion leaders possess the elements of being either active or passive owing to their limited exposure to media and other communication channels.

With regard to the PLC stage of interest in marketing, Fitzmaurice (2011:71) states that innovators and opinion leaders are mainly interested in the product during the introduction stage. Their marketing interest diminishes as the product moves further down the different stages of the PLC, implying that any modifications and re-inventions of the products denote limited interest to both these consumer cohorts in terms of disseminating product knowledge. However, the influence of market mavens spans throughout the different stages of the PLC since they possess comprehensive and in-depth knowledge about the marketplace (Sudbury-Riley 2016:717).

Based on the aforementioned discussion, it is apparent that influential consumers form universal targets that transmit new product information to other members of a social system. Nevertheless, Feick and Price (1987:84) point out that marketplace involvement could not be restricted to one specific product class, thereby providing the bedrock support for nominating market mavens, specifically female market mavens as the core units of analysis in this research. The next section reviews the affinity for cosmetic products trial among female market mavens.

### 3.6 THE TRIAL OF COSMETIC PRODUCTS BY FEMALE MARKET MAVENS

According to Coutler et al. (2002:1294), research in the USA has documented the importance of influential sources in consumer decision making particularly with regard to products that have symbolic or communicative value, such as cosmetics (Bloch, Sherrell & Ridgway 1986:119-126; Feick & Price 1987:83-97; Bearden et al. 1989:473-481). In particular, the adoption of new products or brands requires strong exploratory components, which are evidentiary among female market mavens. In fact, Ruvio and Shoham (2007:714) found that for individuals to be mavens, they should be users of new products and brands, while demonstrating risk-taking behaviours through product trial. As a result, market mavens have been found to be predominantly female consumers (Price et al. 1987:333; Abratt et al. 1995:35-36).
The indispensable role of female consumers in shopping is noted in the literature (Korai 2017:251; Goldsmith, Flynn & Clarke 2011:280). In addition, this study concurs with Ruane and Wallace’s (2013:318) view that female mavens are the most relevant cohort when marketers wish to incite cosmetic products trial, owing to their affinity for experimenting with various beauty products. In addition, Slama and Williams (1990:50) provide empirical evidence to the effect that female market mavens provide more information on food products, clothing, furniture and personal grooming products, of which cosmetic products are a part. In the same vein, Williams and Slama (1995:8) prove that female market mavens provide more information about food products, furniture and household products than non-mavens. These validated findings steered the discourse in this research, which is to extend the notion of the female market maven as a provider of general information about multiple categories of cosmetic products and brands introduced to the South African consumer market.

While female market mavens are orientated as general information gatherers, their power is based on creating dialogue with other consumers (Steenkamp & Gielens 2003:370). Feick and Price (1987:86) assert that by initiating dialogue with consumers and responding to their requests about marketplace information, female mavens demonstrate high levels of information provision to other consumers across, spanning across multiple product categories. In so doing, new product trial probability is enhanced (Maurice 2010:15). This transpires because female market mavens exert interpersonal influence on other consumers in a social system pertaining to new cosmetic products (Sweeney et al. 2014:336). In the same vein, female market mavens demonstrate high levels of shopping behaviour and are highly responsive to marketing communication mix elements (Clark & Goldsmith 2005:293). Notably, female market mavens actively engage in broadcast, print and social media for information as discussed in Section 3.5.3 of this study.

3.6.1 New cosmetics product trial as an outcome of this study

In light of the aforementioned discussion, it is apparent that female market mavens convey market-related information, particularly about cosmetics. It is also clear that female market mavens generate awareness in an attempt to induce consumers to try out new cosmetic products, before actual adoption by the greater masses. In this vein, this study upholds that the willingness to try out new cosmetic products is an effective way to assist consumers to reduce the perceived risks associated with purchasing new cosmetic products. This is because product trial allows first time usage of products on a short-term basis, while subliminally inducing the consumer into purchasing new cosmetic products. This is consistent with the submission by Van Trijp, Hoyer and Inman (1996:283) who pointed out that the exploratory acquisition of products “begins by first seeking
products prior to engaging in actual purchase behaviour”. In this case, product trial was nominated as the outcome for this research owing to the fact that it serves as a direct indicator of observable behaviour for both the consumer and the marketer since cosmetic products contain a myriad of experience attributes.

From a marketer’s perspective, trial probability is an efficient and effective diagnostic method used to proffer tangible and sound proof of the product and its related features (Soscia et al. 2011:228). Thus, marketers stimulate product adoption through trial inducements (Schiffman et al. 2014:377). On the other hand, consumers view product trial as an opportunity to attain unambiguous evidence about a product or a brand during pre-purchase search, in view of evaluating its performance. According to Smith and Swinyard (1983:259), product trial enables consumers to observe product benefits and performance, directly. Thus, product trial generates high levels of product knowledge through direct experience. Having conceded this, the chapter spans to consider the environmental influences that induce the cosmetic products trial inclinations of market mavens by exploring the Stimulus organism theory.

3.7 THE STIMULUS-ORGANISM RESPONSE (SOR) THEORY

Figure 3.8 depicts Mehrabian-Russell’s (1974:68) theory of environmental influence.

![Mehrabian-Russell’s model of environmental influence](image)

**Figure 3.8:** Mehrabian-Russell’s model of environmental influence

**Source:** Donovan and Rossiter (1982:42)

The components of the SOR theory are explained next.

3.7.1 Stimulus

The SOR impresses that consumers react heavily to external stimuli in different buying situations (Schiffman et al. 2014:137). According to Lantos (2010:314), stimuli are the antecedents
preceding the actual buying behaviour process. The scholar infers to a combination of both controllable and uncontrollable stimuli that influence the effectiveness of marketing decisions including marketing mix elements, situational elements and the marketing environment. Lantos (2010:311) concurs with Schiffman et al. (2014:483) by stating that consumer psychology and buying decisions are best explained within two frames of reference. First, consumer buying behaviour is considered an outcome of internal, state-of-mind variables that comprise psychological factors, perceptions and personality traits. Secondly, consumers are constrained by socio-cultural forces that are external to them. Therefore, marketers could easily target the desired markets by manipulating external factors, such as reference groups and commercial marketing stimuli.

3.7.2 Organism

Lantos (2010:315) pinpoints that consumers themselves are organisms based on how they translate and process stimuli and decide whether or not and how to act on those cues presented by the market or environment. Nonetheless, the environmental cues presented in any consumption situation trigger an emotional response among consumers. Put simply, the set of stimuli can cause consumers to have an emotional reaction, which in turn lead to a behavioural response (Graa & Dani-Elkebir 2011:56). According to the SOR theory, the universe of all possible emotional responses is best encapsulated in three emotional dimensions of the organism, namely pleasure, arousal and dominance, termed PAD (Donovan & Rossiter 1982:38).

Pleasure refers to a consumer’s positive evaluation feeling or emotion (Fiore 2010:34). In the context of cosmetic products, consumers develop pleasurable feelings when products enhance appearance (Apaolaza-Ibanez et al. 2011:792), transform self-image and further enhance their psychological profiles (Guthrie et al. 2008:168). On the other hand, Graa and Dani-Elkebir (2011:56) define arousal as an emotive activity orientation that depicts the degree to which an organism is wide-awake. In consumer behaviour contexts, arousal infers the feeling of readiness to perform a specific action. In light of this, marketers manipulate advertisement cues as well as the power of influential consumers to arouse consumers’ emotions such that they become apprehensive about the signs of aging (Perry & Wolburg 2011:367), personal hygiene levels (Ramli 2015:114) and the prevailing standards of beauty (Assawavichairoj & Taghian 2017:29). This in turn can induce new cosmetic products’ trial, which consumers become ready to perform. The third component of the organismic state is dominance, which reflects the extent to which a consumer is in control of a buying situation (Fiore 2010:34). Dominance is exhibited when a consumer feels that he/she has power and influence over others and the environment itself (Ko,
Norum & Hawley 2010:458). However, Donovan and Rossiter (1982:38) advocate that dominance require cognitive interpretations by an individual, whereas it is rarely used to arouse affective responses.

The three PAD dimensions denote affective, emotional and cognitive states that mediate the relationship between the stimulus environment and consumers behavioural responses towards a particular product or brand (Kim & Lennon 2013:39). As a result, products that perpetuate specific feelings provide emotional value to the consumer as affective states are aroused (Ko et al. 2010:454).

### 3.7.3 Response

Generally, environmental cues predict market behaviour, thereby culminating in consumer decision-making (Graa & Dani-Elkebir 2011:56). Relatedly, the consumer response within the SOR theory involves the buyer’s reaction to stimuli based on personal decision-making processes (Enneking, Neumann & Henneberg 2007:133). In this case, response in the SOR pertains to all output aspects of consumer behaviour including decisions about product trial, brand choices, store choices, purchases and actual product usage (Buxbaum 2016:7). Notably, consumer responses span from negative reactions, termed avoidance behaviour to positive reactions, labelled approach behaviour. Avoidance behaviour entails negative actions consumers respond in towards environmental stimuli (Bloomfield 2014:29). For example, avoidance behaviour incorporates the refusal to patronise a store, engaging in complaining behaviour as well as spreading negative WOM (Knittel, Beurer & Berndt 2016:28). On the other hand, approach behaviour entails generating high levels of positive effect towards stimulus (Guo & Main 2017:1580). The scholars mention that consumers who exhibit approach behaviour tend to deepen their relationships with the product, brand or manufacturing organisation. In the same vein, intention to buy a product or service, trying out new products or making an actual purchase denotes approach behaviour (Chang, Eckman & Yan 2011:236). In this study, the outcome variable is a type of approach behaviour, namely new cosmetic products trial by female market mavens.

The elements proposed within the SOR theory are important, as they have helped to ring-fence the parameters to be studied in this research. For instance, in terms of stimuli, this study admits that consumers are motivated by a plethora of internal and external influences as explained in Section 3.7.1 of this study. In agreement, McQuail (2010:468) emphasises that numerous media inputs commence with individuals being exposed to different media from various marketing communication channels. Similarly, non-commercial sources of influence can also act as effective stimuli to enhance buying behaviour (Sweeney, Soutar & Mazzarol 2008:344).
To answer the question regarding the mediating variable, this study locates the organism state of the female market maven as a broker between the stimulus and the response element (Buxbaum 2016:7). Therefore, the tendency towards market mavenhood is labelled as the organismic mediator between the internally and externally motivated stimulus and response variables. Finally, cosmetic products’ trial forms the third component, which is the anticipated response behaviour in this research. The main consideration in placing trial probability as an outcome variable is based on the notion that cosmetic companies strive to develop new products that may evoke positive or negative emotions or associations of beauty among consumers.

Having reviewed the SOR theory in light of the impact of interpersonal influence in motivating consumer response, this study spans further to consider the significance of the theory in understanding the determinants of market maven behaviour. Specifically, the next section draws parallels from the literature to provide an outline of specific environmental stimuli that contribute towards the behaviour of market mavens.

3.8 DETERMINANTS OF MARKET MAVEN BEHAVIOUR (A PERSPECTIVE FROM THE SOR THEORY)

This research draws from undertones of the Two-step flow theory of interpersonal influence (Lazarsfeld et al. 1948:191) as well as the SOR theory (Mehrabian & Russell 1974:26), discussed in Sections 3.4.5 and 3.7 of this study, respectively. The Two-step flow theory describes how market mavens receive marketing communications concerning different marketing mix variables and then disseminate that information to other consumers, thereby exerting influence on them. However, the theory does not specify the variety of factors that influence the activities of market mavens, as special influences. In this regard, the SOR is adapted to incorporate the following derivative assumptions. First, based on the SOR, this study assumes that a combination of factors (environmental stimuli) influence market maven behaviour. Secondly, in concert with Chang et al. (2011:235), this study deduces that the determining factors can be extrapolated from the broader marketing environment, comprising a mix of both internally controlled variables, that are psychographic and unique to the consumer as well as input variables that are external to the consumer.

In this study, both consumer innovativeness and aspirational attractiveness are considered internal factors because they are an indicator of an individual’s state-of-mind. This means an individual has a desire to be innovative (Eastman et al. 2014:459), while simultaneously aspiring to project an outward image that is appealing and favourable (Schiffman et al. 2014:120). Conversely, social norms influence and advertising efficacy are regarded as external factors because they occur...
outside of the immediate control of individuals, whereas marketing forces and social surroundings shape these stimuli. These factors are elaborated on next.

### 3.8.1 Consumer innovativeness

Schiffman *et al.* (2014:105) conceptualise consumer innovativeness as “the extent to which an individual is receptive to new experiences”. Put simply, the consumer innovativeness construct is important in research as it provides insights into the nature and boundaries of a consumer’s willingness to innovate. According to Vandecasteele and Geuens (2010:309), consumer innovativeness drives consumers to purchase new products instantly, of which the behaviour is viewed as preceding that of other consumers within the same market. In this vein, consumers with a high degree of innovativeness are risk-takers, often willing to change familiar practices for the adoption of newer ones (Sahin 2006:19).

Consumer innovativeness has been studied from two perspectives, namely domain-specific innovativeness and general innovativeness (Citrin, Sprott, Silverman & Stem 2000:295). Domain-specific innovativeness reflects consumers’ propensity to adopt new products within a specific product category (Goldsmith & Hofacker 1991:211). This behavioural trait is linked with high product involvement and opinion leadership (Hoffman & Soyez 2009:780).

Goldsmith and Hofacker (1991:209) developed and validated the unidimensional domain specific innovativeness scale, termed the DSI scale. Following on, Ruvio and Shoham (2007:707) found significant, positive influence of Israeli consumer innovativeness on opinion leadership in the context of fashion shopping in community centres. Flynn, Goldsmith and Eastman (1996:143) report a positive relationship between innovativeness and opinion leadership within the context of fashion clothing diffusion in the marketplace. Similarly, a study by Hoffman and Soyez (2009:783) reveal that domain-specific innovativeness has a positive effect on specific media usage, frequency of use and need for cognition for a utilitarian product, such as durable goods. Relatedly, Eastman *et al.* (2014:465) assert that this trait is related positively, to the consumption of mobile technology amongst the millennial consumer market. Nevertheless, since market maven behaviour scantly occurs within the purview of a specific product domain, following the domain-specific stream seems somewhat less befitting. Moreover, Kim *et al.* (2010:136) emphasise that innate innovativeness is a global trait that is not product category specific but simply draws consumers to be predisposed towards being innovative across a broad spectrum of other innovations and experiences. Thus, contrary to Goldsmith and Flynn (1992:44) who upheld some level of specificity, innovativeness was measured in this study by following an abstract general innovativeness trait.
Citrin et al. (2000:295) contend that the general innovativeness trait influences individuals’ behaviour towards opening up to new experiences within an environment. Thus, the global characteristic of innovativeness is described as the overall willingness to change (Goldsmith 1991:89-97). This attribute has been reliably measured using Hurt, Joseph and Cook’s (1977:58-65) innovativeness scale and later framed within the confines of a consumer behaviour context by contemporary scholars, such as Kim et al. (2010:137). The scale is analogous to innate innovativeness as well as novelty seeking behaviour. Bartels and Reinders (2010:603) assert that general innovativeness is multi-dimensional, albeit the concept is used interchangeably with attributes such as innate innovativeness, open processing (Citrin et al. 2000:295), global innovativeness (Goldsmith et al. 2006:413) and dispositional innovativeness (Steenkamp & Gielens 2003:369) in the literature. Nevertheless, the trait infers a direct connection with dogmatism, risk taking and impulsive purchase behaviour.

A study by Steenkamp and Gielens (2003:369) evaluated dispositional innovativeness for new consumer packaged goods. The scholars found that general innovativeness has strong positive effects on the trial of new products across various product categories for consumer goods in Netherlands. Relatedly, a study by Vandecasteele and Geuens (2010:308) evaluated general innovativeness to understand the relationship between consumer and product motivations. The scholars found that consumer innovativeness predicts innovative purchase intentions towards products that possess functional, hedonic, social and cognitive effects. Relatedly, a study by Kim et al. (2010:147) reviewed general consumer innovativeness towards pop-up retail stores in the USA. Their findings reveal that pop-up retail is an effective format for advertising to consumers who, subsequently, demonstrate general innovativeness while upholding shopping as an enjoyable activity.

Persaud and Schillo (2017:133) mention that domain-specific innovativeness entails consumers who adopt new products earlier that other consumers only if these products are in the domain of their interest. This means that should consumers not be interested in a product category, it is likely that they could be laggards in other domains hence restricting the level of innovativeness. Such a conceptualisation of the domain-specific trait contrasts with the innate pre-disposition of market mavens. Notably, Eastman et al. (2014:359) note that market maven behaviour is strongly determined by innovative individuals since they are propelled by an inner desire to stay ahead of others in terms of product and market knowledge. In support, Steenkamp and Gielens (2003:380) concur that if a consumer purchases new products across a broad array of categories, that consumer is entitled to have high levels of dispositional innovativeness. As a result, companies rely on consumers’ general innovativeness inclinations to foster growth and profitability (Steenkamp,
Hofstede & Wedel 1999:55). In view of this, this study considers innovativeness in light of general consumer innovativeness, as it is consistent with the market orientation of market mavens who are generalists with regard to marketplace activities.

### 3.8.2 Aspirational attractiveness

While some scholars measure attractiveness using variables such as familiarity, likeability and similarity (Friedman & Friedman 1979:64), their research pertains to attractiveness as a measure of the credibility of message sources. Nevertheless, in general terms, consumers that are interested in the marketplace tend to possess materialistic values (Goodey & East 2008:269). One of these includes the desire to be physically beautiful, termed aspirational attractiveness. According to the Oxford Dictionary (2015:82) definition of both words, aspirational attractiveness would infer the uncontainable want or strong desire to achieve a pleasant look. Each individual has a different image from the next fellow that depicts uniqueness of physical traits as well as dissimilar behavioural patterns from others (Schiffman et al. 2014:120). However, in view of enhancing the desired self-image, consumers engage in various overt behaviours, in pursuit of the symbolic and hedonic benefits of products and brands (Kaufmann et al. 2012:405). At that juncture, aspirational attractiveness recounts an individual’s ideal self-image, which relates to how consumers would like to see themselves in superlative terms.

O’Donnell, Strebel and Morimer (2015:242) assert that attractiveness affects the social and economic prospects of consumers and leads them to exhibit their aspirational-self in various ways. Interestingly, Goldsmith et al. (2012:392) mention that if attractiveness leads one to be successful, consumers might strive to attain an attractive countenance by perpetuating the traits towards market mavenship. In essence, Sudbury-Riley (2016:717-718) concurs that the tendency towards market mavenship enable consumers to express self-concept and self-identity, significantly. This occurs through using products and/or brands that communicate one’s sense of identity, perhaps analogous to the manner in which other individuals use consumption related information as a way of expressing themselves. For example, the desired self-image can be realised through engaging in social interactions with others (Schiffman et al. 2014:120). The concept of self-image has strategic implications for this study because marketers of cosmetic products position their products as symbols of the desired self-image. Such a marketing strategy is fully consistent with the marketing concept in that the marketer first assesses the needs of the target market, in respect of the product category and the ability to act as an acceptable symbol of self-image. Thereafter, the marketer proceeds to develop cosmetic products that meet the desired criteria.
While aspirational attractiveness has been understudied in the literature, some scholars have opted to incorporate it as a dimension of materialism. For example, a study by Goldsmith et al. (2012:398) evaluated aspirational attractiveness by measuring status consumption and brand engagement and found that consumers are motivated by a desire to have status and materialistic goods hence aspirational attractiveness seems to be a motivating aspect. Relatedly, a study by Goodey and East (2008:270) reveals that male market mavens are likely to be more materialistic than non-mavens are. Contrastingly, the research by Hourigan and Bougoure (2011:132) prove that materialistic values are a significant determinant of high fashion clothing involvement in Australia, whereas women tend to display higher materialism than men do.

Contrary to earlier research that subsumed attractiveness as a second-level dimension of materialism (Kasser 2002:59; Goodey & East 2008:270; Fitzmaurice 2011:75; Hourigan & Bougoure 2011:128; Goldsmith et al. 2012:392), this study aims to fill this theoretic void by introducing aspirational attractiveness as an isolated and independent construct comprising multiple indicators. First, aspirational attractiveness is an invaluable construct in this research because it is widely acknowledged that consumers strive to be physically beautiful by using cosmetic products (Ramli 2015:114). Thus, Jaeger (2011:985-986) declares that humans hold a psychological view that an attractive face and body are symbols of health and productivity. Secondly, consistent with Apaolaza-Ibanez et al. (2011:792), this study upholds that female consumers and beauty are inseparable because they form identical persona that intensifies the elements of attractiveness as discussed in Section 3.2.2.2. As a result, marketers develop products that signify the aspirational value in consumers in view of attributing the ideal self-image.

3.8.3 Social norms influence

Social norms refer to the accustomed rules that govern the standards and evaluations of individuals within a group (Manning 2013:312). The scholar advocates that the behaviour of individuals within a social system presents a sense of obligation that allows them to abide by the norms of that group. In this way, market behaviour is determined in part by social norms influence. In the consumer behaviour literature, social norms influence has been studied in light of social self-image and external referent groups in the decision making process. For example, Schiffman et al. (2014:122) attest that social self-image reflects how consumers feel they are viewed by others. The scholars add that it is possible for consumers to enhance their self-image by selecting products or brands with images that reflect what the norms espoused by their immediate reference groups. In turn, this yields elements of social comparison, whereby an individual compares his/her social status with that of others. According to Hoyer et al. (2018:298), reference groups reflect a series
of individuals with whom consumers compare themselves. They form an influential force that drives social norms (Clark & Goldsmith 2005:293).

While considering the notion that market mavens have an innate desire to find and share product-related information, such altruistic behaviour lends them to be pre-disposed towards acquiring information that is likely to be of interest to their peers and the broader social circle (Barnes & Pressey 2012:168). Moschis (1976:239) highlights that innovations shared by market mavens are likely to diffuse faster when there is similarity within a social group, thereby encouraging interpersonal communication and influence. In this way, individuals attain the ideal social-self-image from their reference groups. As such, marketers associate their products with aspirational reference groups such as celebrities and other opinionated members of the society to instigate consumers to follow those (Hoyer et al. 2018:298). For example, admirers of Cynthia Gwebu might be compelled to try out various new cosmetics product ranges under the Woolworths™ and Clinique™ brands in an attempt to live up to the expectations of their influential cosmetics blogger, who pinpoints the desired social-self-image. Thus, reference groups undeniably influence a product’s success or failure in that the information they have affects consumers’ brand preferences and ultimate product trial.

Bearden et al. (1989:474) analysed a relative construct termed susceptibility to normative influence, which they described as the “process of identifying and augmenting an individual’s image with momentous others by adapting to the expectations of others regarding buying decisions”. Notably, the scholars highlighted that by observing and seeking information, a consumer conforms to the expectations of others regarding purchase decisions about new products and services. In this way, social norms play a key role in influencing the behaviour of consumers, including the activities of market mavens (Fitzmaurice 2011:73).

### 3.8.4 Advertising efficacy

According to Koekemoer (2014:123), advertising is a marketing tool that aims to influence the buying behaviour of selected target audiences with the aim of creating awareness, informing and persuading consumers to buy or to be favourably disposed to the products or services of a specific organisation. Relatedly, Lazarsfeld et al. (1948:158) opine that influential consumers act as information brokers, intervening between mass media sources of advertising communication and individuals’ consumption choices. For example, market mavens use collective mass media platforms as sources of information to provide re-assurance in instances of cognitive dissonance and reinforcement (Ruane & Wallace 2013:321). Moreover, the proliferation of effective advertising material enables this influential cohort of consumers to distribute a wide range of
information by sharing content across a diversity of media platforms (Hocevar, Flanagin & Metzger 2014:254). As a result, market mavens are motivated to communicate product information based on their involvement with profuse mass media advertisements as well as through direct involvement with products, *per se*.

Advertising has been used in various researches as either an independent or a dependent variable. For example, a study by Steenkamp and Gielens (2003:377) evaluated advertising, feature displays and competitive advertising as marketing communication covariates that affect consumers’ trial probability. Their findings pointed to the positive effects of increasing expenditure on feature displays and competitive advertising on trial probability of new consumer packaged goods. The same scholars also asserted that market mavenism is a dispositional characteristic that leads to trial probability. On the other hand, Petty, Cacioppo and Schumann (1983:143) focused on involvement and attitude change as independent variables that affect advertising effectiveness. The scholars found that low-involvement products deliver stronger explanatory power over the information content of an advertisement, than high involvement products do. Sachdeva (2015:15) states that the efficacy of advertising effectiveness enables marketers to trace their advertising objectives through targeted audiences. In the latter, advertising effectiveness and advertising efficacy are used synonymously owing to their intensity in evoking positive images in the minds of consumers, which enables consumers to share media content with others across platforms. Furthermore, this study reiterates that advertising efficacy is one of the most useful formal strategies employed by marketers to thrill the consumer into accepting their communication messages.

The next section presents the conceptual model and hypotheses that were developed and later tested empirically, in this study.

### 3.9 CONCEPTUAL MODEL AND HYPOTHESES FOR THE STUDY

Following the primary objective posited in Section 1.4.1 of this dissertation, a diagrammatic representation of the conceptual model that was tested in this study is shown in Figure 3.9.
According to the conceptual model, market maven tendency is a mediating variable, depicting the organism state extrapolated from the SOR theory. Primarily, the inclination towards market mavenship is determined by both internal (consumer innovativeness and aspirational attractiveness) and external (social norms influence and advertising efficacy) stimuli. At the secondary level, market maven tendency positively influences new cosmetic products trial among female consumers in the southern Gauteng province of South Africa. Consistent with the empirical objectives stated in Section 1.4.3, the study developed five one-tailed hypotheses to support the
propositions made on Figure 3.9. The subsequent linkages among the variables were informed by the scholarly literature as explained next.

### 3.9.1 Consumer innovativeness and market maven tendency

Previous work by Goldsmith and Hofacker (1991:210) established that consumer innovativeness is positively associated with both market maven tendency and opinion leadership. Relatedly, Bartels and Reinders (2010:605) established the predictive validity of the innovativeness trait on information seeking behaviour and ultimate new product trial by consumers. In their study on new consumer-packaged goods, Steenkamp and Maydeu-Olivares (2015:304) found a positive effect of consumer innovativeness on market maven tendency. Notably, the findings of these scholars endorse the prominent role of consumer innovators in the marketplace.

This study concurs with Ruvio and Shoham (2007:708), who state that innovativeness is a behavioural predisposition yet market mavenism depicts the actual behaviour of consumers. Akin to this notion, the scholars asserted that individuals with high consumer innovativeness enjoy sharing general product information and are usually the first to try out new products in any product category. In view of this, it may be interesting to establish if the influential effect of consumer innovativeness can be proven within the context of a specific product domain, namely cosmetics. Therefore, the following hypotheses were formulated and tested in this study:

\[ H_{01} \quad \text{Consumer innovativeness does not have a positive and significant influence on consumers’ market maven tendency.} \]

\[ H_{a1} \quad \text{Consumer innovativeness has a positive and significant influence on consumers’ market maven tendency.} \]

### 3.9.2 Aspirational attractiveness and market maven tendency

There is a dearth of literature that directly links aspirational attractiveness with market maven tendency. This scholarly caveat presents ample justification for introducing the variable as a driver of female maven behaviour in this research. A case in point is the research by Goldsmith *et al.* (2012:394), which provides empirical validation for the existence of a positive effect of aspirational attractiveness on market maven tendency. This implies that individuals who place value on physical attractiveness are likely to demonstrate a strong tendency towards market mavenship. Therefore, considering that this path relationship is rarely tested and/or validated across cultures, this study sought to add cumulatively to the scholarship of market mavens by testing the following hypotheses:
3.9.3 Social norms influence and market maven tendency

Numerous scholars have investigating the explanatory power of social norms across various interpersonal influence scenarios. For example, a study by Yang (2013:102) found that subjective norms relate positively with market maven behaviour in online public markets in the USA and Chinese markets. On the other hand, a study by Clark and Goldsmith (2005:305) validate a positive relationship between social norms influence and maven tendency. Therefore, this study posits that the effectiveness of female consumers as market mavens is determined by the views of the social system within which they operate, usually comprising family and friends. In light of this, the following hypotheses were tested in this research:

\[ H_{o3} \] Social norms influence does not have a positive and significant influence on consumers’ market maven tendency.

\[ H_{a3} \] Social norms influence has a positive and significant influence on consumers’ market maven tendency.

3.9.4 Advertising efficacy and market maven tendency

Advertising serves as an information disseminator that grasps the attention of prospective consumers (Koekemoer 2014:5). The objective is to feature the product’s salient attributes and distinguish it from competing brands (Puth et al. 1999:39). Nonetheless, the intensity of advertising and promotion displays plays a vital role in the trial probability of new products (Maurice 2010:15). This is because advertising transfers information through diverse media platforms, which might arouse an affinity for product trial among consumers. In this vein, a study by Chelmsinski and Coutler (2002:83) found a significant association between market maven behaviour and positive attitudes towards advertising, albeit amongst Poland consumers. Relatedly, Walsh et al. (2004:110) postulate that advertising products in mass media platforms leads to direct and observable effects on market maven behaviour. Nevertheless, this path relationship has not been tested before in the domain of cosmetics, thereby stirring the following propositions in this research:
Advertising efficacy does not have a positive and significant influence on consumers’ market maven tendency.

Advertising efficacy has a positive and significant influence on consumers’ market maven tendency.

3.9.5 Market maven tendency and new cosmetic products trial

Maurice (2010:20) conclude that trial processing and product response tends to be higher among consumers after attaining valuable product information from market mavens. The scholar found predictive validity for the path relationship between market maven tendency and new product trial. Similarly, a study by Southworth and Ha-Brookshire (2016:724) demonstrate that consumers’ willingness to try out new products is positively affected by brand uniqueness while a study by Hariharan, Bezawada and Talukdar (2012:83) examined the factors that drive product trial and repeat purchases of co-branded extensions in the USA. Their empirical investigation established that trial probability is driven by consumers’ experiences with both host and ingredient brands. This means that consumers who are involved in co-branded extensions demonstrated extensive willingness to try out a product or brand. Relatedly, Reardon, Vianelli and Miller (2017:320) found that country of origin (COO) has a strong and positive effect on consumers’ trial probability, whether for high or low involvement products. These studies reckon that new product trial by consumers is affected by numerous factors such as COO, need for uniqueness and co-branded extensions.

Market mavens demonstrate a high need for uniqueness, which might lead to the inference that maven behaviour could potentially induce product trial among consumers. In specific terms, a strong and direct impact of market maven tendency on trial probability was found in the study by Steenkamp and Gielens (2003:377), who surveyed the effects of several consumer and market factors on the trial probability of new consumer packaged goods in Netherlands. In anticipation of validating similar findings, this study proposed and tested the following hypotheses:

Consumers’ market maven tendency does not have a positive and significant influence on new cosmetic products’ trial.

Consumers’ market maven tendency has a positive and significant influence on new cosmetic products’ trial.
3.10 CONCLUSION

Product trial gives consumers the opportunity to gain first-hand experience with an unfamiliar product or brand during pre-purchase search. With regard to cosmetic and grooming products, female mavens are posited as the key agents that drive product trial. As such, cosmetic companies utilise a combination of formal and informal strategies as part of their marketing program to stimulate trial of new products. Of specific relevance to this work, product trial is attained through WOM efforts, albeit emanating from informal sources who are poised as having both communicative social influence on the greater community of consumers. This is because influential consumers deploy interpersonal influence, which aids in reducing the perceived risks associated with adopting new products.

This study focuses on market mavens as they form universal targets that transmit new product information, coupled with social influence to other members of a social system. The marketplace orientation of market mavens is not restricted to one specific product class, rather broad product categories. This underscores the prominence of market mavens, thus providing ample support for the decision to nominate female market mavens as the core units of analysis in this research. Nevertheless, while following the underlying principles of the Two-step flow theory of interpersonal influence as well as the SOR theory of environmental influence, this study was able to identify selected factors that inspire product trial among South African consumers. Specifically, combinations of internal stimuli (consumer innovativeness and aspirational attractiveness) as well as external stimuli (social norms influence and advertising efficacy) were elected as the principal determinants of market maven behaviour among female consumers. In the same vein, the tendency for female consumers to demonstrate market maven behaviour was considered vital towards the understanding of product trial inclinations. In light of this, a conceptual framework was postulated in this chapter, together with five hypotheses for testing. The procedure for the empirical investigation as well as the hypotheses test results are presented in Chapters 4 and 5 of this dissertation.

The next chapter discusses the research design and methodology that was followed in this research. Specifically, the sampling strategy, fieldwork procedure as well as the data analysis techniques are elaborated on in-depth.
CHAPTER 4
RESEARCH DESIGN AND METHODOLOGY

4.1 INTRODUCTION

Bilau, Witt and Lill (2018:599) denote that the research methodology represents “the procedural framework undertaken to produce research data, albeit as it leans towards creating knowledge by following scientific methods”. Based on this assertion, the chapter outlines the systematic procedure that was followed upon conducting the empirical component of this research. Specifically, the methods that were followed were aimed at providing sufficient grounds to collect data, analyse it and, thereafter, draw conclusions relating to the empirical objectives set out in Section 1.4.3 of this study.

Section 4.2 of this study delimits the scope within which this study is premised. In applying scientific inquiry, the study followed the metaphor of the research onion, wherein a detailed description of the research philosophy, methodical choice, research strategies, time horizons, techniques as well as data collection procedures were specified in Section 4.3 of this study, respectively. On the other hand, the research design that was applied in this research is explained in Section 4.4. Thereafter, Section 4.5 provides a cross-examination regarding the approaches applied in marketing research, including qualitative and quantitative research. In this vein, Section 4.6 paved way into the practicalities of the sampling design process. In Section 4.7, detail is provided on the data collection procedure that was applied in this work, whereas the design of the survey instrument is elaborated on in Section 4.8 of this study. Likewise, the ethical considerations that were upheld in the study are pointed out in Section 4.9. Section 4.10 describes the evaluation of the measuring instrument by assessing various reliability and validity measures while Section 4.11 describes the manner in which the data were prepared for subsequent statistical analysis, after the fieldwork. Section 4.12 explains the preliminary statistical analysis procedures that were applied in this work including frequency distributions (Section 4.12.1), tabulation (Section 4.12.2), EFA (Section 4.12.3), descriptive statistics on the computed factors (Section 4.12.4) and inter-factor correlation analysis (Section 4.12.5). Relatedly, Section 4.13 delves into a discussion on the SEM procedure as the principal multivariate statistical procedure for testing the hypotheses that were formulated in this work. Finally, the chapter ends with Section 4.14.

The next section delimits the scope within which this study is premised.
4.2 SCOPE OF THE STUDY

In view of fitting the scale of a Master’s dissertation, several sacrifices were made in view of delimiting the scope of this work. First, this study focuses on the forerunners of media-related information, namely market mavens. Whereas Blythe (2013:229) identifies the agents of WOM communication as innovators and/or early adopters, opinion leaders and market mavens. The latter are considered universal targets since they are the only cohort of influential consumers who demonstrate a dual orientation towards products and markets. Primarily, market mavens are knowledgeable about diverse products and markets (Ruvio & Shoham 2007:706). Secondarily, market mavens are directly involved in consumption of products through either product trial and/or direct purchase (Feick & Price; 1987:84; Williams & Slama 1995:5). Therefore, Smith and Fink (2015:2) denote that by identifying and engaging with such consumers, marketing messages can easily penetrate the market.

Secondly, a decision was taken to focus on the spread of marketing messages within the domain of cosmetic products. This is because the cosmetic industry is broadly recognised as one of the fastest growing consumer markets both locally (Imrie 2014:1), continentally (Korai 2017:250) and internationally (Khraim 2011:124). Notably, new product innovations have been cited as the major driver of success in the cosmetics industry. In view of this, the third sacrifice in this work was to nominate to focus on new product trial as the outcome of this study. This choice was made because new product trial serves as an observable behaviour, which is very close to actual purchase. Rather than only reporting the intention to try a new cosmetic product in a survey, the product trial experience is a direct indicator of the conative behaviour of the market mavens. Likewise, drawing from their altruistic motives, market mavens also want to have first-hand experience with using a product prior to disseminating any information about its qualities and features (Fitzmaurice 2011:71). In addition, the testing of new products seems to be the least expensive and yet most relevant variable leading up to and including the first time usage of cosmetic products. Furthermore, in Section 3.6, this study elected to focus on female consumers only based on their predisposition towards product disseminating behaviour (Price et al. 1987:333).

Finally, this research was restricted to the southern Gauteng region of South Africa owing to proximity to the researcher and limited financial resources of incorporating a broader population. Specifically, this study was situated in this area because the southern Gauteng region denotes three emergent towns, namely Meyerton, Vereeniging and Vanderbijlpark. These towns not only contribute towards the development of the Gauteng province as a whole, but also significantly contribute to the economy of the region, which is soon to be established as a metropolitan area.
owing to its increasing revenues. By implication, the results of this study can be considered to have high predictive value in other emerging countries as well. Furthermore, it can also be assumed that the empirical findings attained while studying this geographical area may largely be representative of the entire population of the country.

4.3 THE RESEARCH PROCESS

According to Saunders et al. (2016:122), the metaphor of a research onion can best explicate the research process. However, drawing from the typical arrangement of an actual onion plant organism that has cells that peel off from the cell wall, the procedure for conducting research is outlined. Thus, the scholars deduce that the research onion infers the different peripheral layers that should be unravelled in order to achieve the empirical research objective(s) set out at the beginning of a study. Without doubt, a systematic process is needful for researchers to reach the central zone of the research onion comprising the key data collection phase and subsequent analysis procedures. Figure 4.1 illustrates the research onion put forward by Saunders and Tosey (2013:59).

Figure 4.1: The research onion

Source: Saunders and Tosey (2013:59)
The decisions taken in relation to the research philosophy, methodical choice, strategies and time horizons enabled the narrowing down of the context and boundaries of this study to the selected data collection techniques and data analysis strategies that underpin this research. These layers are discussed next.

4.3.1 Research philosophy (research onion layer one)

Collis and Hussey (2013:10) maintain that the preliminary phase in the entire research process is to determine the specific research philosophy, also termed a research paradigm in the literature (Bryman et al. 2017:19). According to the broader definition extrapolated from the Oxford Dictionary (2015:1115), a philosophy is defined as “the study of nature and meaning of the universe and of human life”. In the context of research, philosophies infer the conventions that comprise the scientific quest for knowledge (Bilau et al. 2018:600). Similarly, Saunders et al. (2016:124) define a research philosophy as the accumulation of knowledge that is built through a series of beliefs and assumptions. By extension, Creswell (2015:16) added the notion of philosophical worldviews, assumptions, beliefs, values and methods within which research is conducted. With that in mind, a research philosophy entails the outermost layer of the research onion (Saunders & Tosey 2013:58), which relates how science is essentially practised in an attempt to yield cutting-edge knowledge about the world (Wilson 2014:8). Notwithstanding this, Babbie (2013:58) upholds that research philosophies enable researchers to elucidate logical frameworks within which theories are created. This means interpreting reality as it is supposed to be.

According to Saunders et al. (2016:136), the overarching research philosophies that guide overall research and understanding of reality include positivism, realism, interpretivism and pragmatism. While they exist independently, each of these philosophies is uniquely determined by four attributes, namely the ontology, epistemology, axiology and data collection methodologies. In this study, a positivist philosophy was followed.

Positivism emanates from the empiricist tradition of natural sciences put forward by Comte (1798-1857) cited by Eriksson and Hovalainen (2016:19). Positivists uphold the view of social reality that is hard and concrete, which Bilau et al. (2018:600) deciphers as being objective and singular, at best. Positivists observe reality by allowing objective knowledge to be developed (Antwi & Kasim 2015:218), by formulating laws and principles that will help researchers yield a basis for predictions. In agreement, Robson and McCartan (2016:21) emphasise that in the positivist philosophy, the measurement of participants is guided by established theoretical propositions. In other words, in positivist research, laws and theories form doctrines that provide the basis of
explanation, prediction and anticipation of social phenomena. Wilson (2014:13-14) refer to this pro-theoretic reasoning as deductive theory building. In this regard, the researcher takes an independent stance, while acting as an external social actor in the research process. In terms of phenomenology, positivists uphold the view that only observable phenomena provide credible data and facts (Denscombe 2014:2). This means that researchers observe general patterns of behaviour among individuals by forming a normative base for predicting and explaining of social phenomena (Saunders et al. 2016:136). Thus, phenomenon is reduced to simple elements by focusing on causality and law generalisations that depict truth statements about the entire universe. This view concurs with the notion of a social world that conforms to certain fixed and unalterable laws in an endless chain of causation.

In the positivist philosophy, systematic procedures are evoked by developing tentative statements to be proven, termed hypotheses. Thereafter, the hypotheses developed are scrutinised empirically (Wilson 2014:9), in view of understanding how facts about the social phenomena corresponds with reality as it is translated into operational terms (Iacobucci & Churchill 2010:84). According to Saunders et al. (2016:136), the scrutiny might comprise field observations whereby research is undertaken in a value-free manner in that the researcher is neutral and independent of the data and thereby maintains an objective position (Bryman et al. 2017:12). In other words, the research is objective, structured and highly organised in the data collection and measurement process, whereas large samples are utilised. Therefore, the significance of the positivist philosophy lies in the nature of knowledge, which is proven to be functional in the sense that reality holistically accounts for the truth statements across consumers, organisations and cultures (Eriksson & Hovalainen 2016:270). Such comparability of empirical findings with hypotheses yields an enhanced understanding of a situation, leading to generalisation of findings.

This study leans towards the positivist philosophy since it sought to test and extract specific propositions (hypotheses) derived from the theory of social and interpersonal influence, by using general accounts of empirical reality drawn from a sample of female market mavens. In the empirical analysis, the study adopted a detached, neutral and non-interactive position, thereby fostering an objective analysis and interpretation of the empirical data. In this case, social reality is considered free and independent of the researcher, who takes the stance of a viewer and observer (Aliyu, Bello, Kasim & Martin 2014:81). Therefore, positivism was followed in lieu of obtaining reliable, valid and representative findings. Moreover, a quantitative research approach was followed in this study since positivists prefer an analytical interpretation of quantifiable data, leading to the declaration by Saunders et al. (2016:137) that “positivists are mainly concerned with providing research facts, rather than impressions of social reality”.
4.3.2 **Methodical choice (research onion layer two)**

Wiid and Diggines (2015:63) state that qualitative, quantitative and/or mixed methods serve as the fundamental methods that researchers use in an attempt to design a significant research project. In this regard, the decision pertaining to the methodical choice is inferred as the second layer of the research onion. Broadly speaking, Saunders *et al.* (2016:165) mention that choosing a research method relies on the choice between multiple methods and/or mono methods, which are framed within the qualitative and quantitative research strategies.

Multiple methods refer to a combination of more than one data collection technique and statistical analysis procedures that are only restricted within the divisions of quantitative and/or qualitative worldviews (Glogowska 2011:253; Saunders *et al.* 2016:166). According to Creswell (2015:3), multiple methods come in different forms. For instance, a qualitative multi-method entails the use of more than one qualitative data collection technique together with corresponding analysis procedures such as the simultaneous use of both in-depth interviews and diary accounts. On the other hand, a quantitative multi-method involves the use of more than one quantitative technique of data collection such as a questionnaire and observations. Collectively, Morgan (2015:789) asserts that the main aim of using multiple methods is to add additional strengths of which would have been difficult to accomplish with only using one method. This infers that adding strengths of one method to the other would lead to translating conceptual models into measurable variables that can later be operationalised. With that in mind, a cross-analysis of both qualitative and quantitative techniques and statistical analysis procedures cannot be used simultaneously in a multi-methodical approach (Kumar 2014:22-23).

Since mono means one, a mono method manifests as a methodological stance that utilises a singular data collection technique and corresponding statistical analysis procedures (Saunders *et al.* 2016:166). For example, a qualitative mono method is concerned with collecting data through in-depth interviews only, whereas the narrative technique becomes the overarching procedure for analysing data (Saunders & Tosey 2013:59). On the other hand, a quantitative mono method may be applied, as was the case in this work. Specifically, a survey strategy using a research questionnaire was employed as the relevant technique for collecting empirical data in this study. Thereafter, data were analysed using prescribed statistical software packages.

4.3.3 **Research strategies (research onion layer three)**

In general, a strategy is a fundamental plan of action designed to address a specific goal clearly (Denscombe 2014:3). In the context of marketing research, a research strategy is a “blueprint that
links a research philosophy with the subsequent choice of data collection methods and analysis” (Saunders et al. 2016:177). Saunders and Tosey (2013:59) advocate that the chosen research strategy should aim to answer the formulated research objectives. Depending on the researcher’s nominated philosophical stance, various strategies can be selected.

Positivists are privy to applying either experimental or survey-based research strategies. According to Zikmund, Babin, Carr and Griffin (2013:59), an experiment is concerned with studying causal relationships between variables in an attempt to determine the probability of change of one independent variable causing a change in another dependant variable. The main objective of using experiments is that they foster a large degree of control over the elements under study through manipulation whilst improving internal validity of the experiment (Tustin, Ligthelm, Martins & Van Wyk 2010:294). On the other hand, where there are financial and time limitations, survey-based strategies can be applied in an objective manner. Moreover, it is conventional practise to apply survey research in business and management studies (Saunders et al. 2016:181).

This study applied a survey research strategy after considering a number of reasons. First, a survey enables the administration of a research instrument in a cost-effective and time-efficient manner (Babin & Zikmund 2016:168). Considering the restrictions of an academic research, a survey strategy was considered suitable, as the degree programme is restricted to a maximum of two years of full time study, hence the data collection process and report writing were to be completed within the specified time frame. Secondly, the significance of using a survey rests in that it ensures great convenience as it allows participants to complete the questionnaire at their own time, which is mostly applicable in self-administered surveys. In this study, flexibility was incorporated by allowing participants to complete the questionnaires at their own time with relative ease. Thirdly, the survey research strategy delivers an inordinate degree of control over the entire research process as the researcher is physically invested in the entire data collection procedure. Ultimately, the choice of a survey-based strategy in this work permitted a reflection on the inclinations of female mavens, while continuously updating relevant data relating to their trial of new cosmetic products.

4.3.4 Research time horizons (research onion layer four)

The fourth layer of the research onion pertains to time horizons, namely cross-sectional and longitudinal research. Specifically, time horizon serves to highlight the interval in which the research is undertaken (Saunders & Tosey 2013:59).
Longitudinal research provides information pertaining to the mechanisms and processes through which changes occur over time (Bryman et al. 2017:109). This means that phenomenon can be observed and empirically documented over several months and/or years. Relatedly, longitudinal research encompasses a fixed sample of which the same sample elements are measured repeatedly on the same variables (McDaniel & Gates 2013:117). This enables researchers to detect notable behavioural changes of individuals towards changes in marketing variables such as advertising, packaging, pricing and distribution (Burns, Veeck & Bush 2017:99). Nonetheless, longitudinal designs are susceptible to response bias owing to the repeated approaches, which may lead to non-representativeness of the research results (Brown et al. 2018:129).

Cross-sectional research involves investigating either a single sample or multiple samples of units from the population of interest whereby characteristics of the sample are measured at one point in time (Burns et al. 2017:99). Rather than producing a series of pictures that portray a vivid illustration of the situation and the changes that occur (Iacobucci & Churchill 2010:93), cross-sectional research only serves as a snapshot of the variables under study at a single point in time. In this vein, a single-cross sectional research was applied in this work, meaning that the sample data was obtained from a singular group of participants at a single point in time (Wilson 2014:331; Brown et al. 2018:128). The dominance of cross-sectional research is favoured since it accounts for the least possibility of response bias (Malhotra et al. 2017:77).

4.3.5 Techniques and procedures (research onion layer five)

The central and final layer of the research onion pertains to the choices made with regard to the data collection techniques and procedures. Zikmund et al. (2013:20) stress that data collection technique reflects the decisions taken concerning obtaining relatable information that could be used to address the formulated research objectives. The latter represents the execution of the research process and the analysis of the data (Tustin et al. 2010:119). Specifically, researchers can choose from among interviews, focus groups, observation and survey questionnaires. The details pertaining to the data collection process are explained in Section 4.7 of this study.

The next section elaborates on the design of this research.

4.4 RESEARCH DESIGN

McDaniel and Gates (2013:42) define a research design as a framework that demonstrates the procedural steps that a researcher undertakes to retrieve important information when conducting a marketing research project. Considering the significance of the discipline in which this research is situated, a decision was taken to consider Malhotra et al. (2017:69) two-fold classification of
the research designs used in marketing, namely exploratory and conclusive research. These research designs are explained next.

4.4.1 Exploratory research design

The exploratory research design involves a preliminary examination of a research problem or situation that aims to identify underlying parameters that are not clearly defined in the literature (Tustin et al. 2010:84). The objective of exploratory research is to explore new ideas, concepts, insights and understanding relating to new research phenomenon (Wiid & Diggines 2015:66). In so doing, unfamiliar research problems are defined in a precise manner (Saunders et al. 2016:175). This serves to narrow down the scope of unknown variables (Babin & Zikmund 2016:64). In this vein, exploratory research is framed within the qualitative research strategy (Tustin et al. 2010:84), which leans towards an inductive epistemological stance (Bernard 2018:7). Notably, the scholars pinpoint that exploratory research utilises unstructured data collection techniques comprising focus groups, personal interviews and projective techniques (Shiu, Hair, Bush & Ortinau 2009:61-62). Furthermore, the empirical results from exploratory research cannot be generalised to the entire population of interest owing to the tentative findings (Malhotra et al. 2017:69). This is the case since exploratory research encapsulates a small scale of participants (McDaniel & Gates 2013:80). Relatedly, the sample elements used in exploratory research are barely representative (Hair, Celsi, Ortinau & Bush 2013:78), implying that generalisations and truth-value from the empirical findings are limited to the extent of knowledge of the researcher.

4.4.2 Conclusive research design

According to Malhotra et al. (2017:72), conclusive research is premised on the notion that large and representative samples produce unquestionable results. As such, conclusive research designs may be useful as an input in assisting marketers to make concrete managerial decisions. Nonetheless, the scholar mentions that conclusive research can be facilitated using either causal and/or descriptive research designs.

Causal research sets to determine the direct influence of one event on the occurrence of another (Iacobucci & Churchill 2010:59). In concert, Hair et al. (2013:37) underline that in general terms, causal research involves collecting data to determine the cause and effect relationships between two or more variables under investigation. In specific terms, a causal research design has the potential to demonstrate that a change in one variable can lead to an observable and/or predictable change in another variable (McDaniel & Gates 2013:179). Nevertheless, the scientific notion of causation is premised on three conditions. First, co-variation reflects the amount of change in
which one variable is consistently related to the change in another variable of interest (Shiu et al. 2009:550; Burns et al. 2017:382). Such consistency of the relative position of the variables is evaluated using a graphic plot known as a Scatter plot. The second criterion for causation is the elimination of extraneous variables, which hints at eliminating all possible variables other than the outcome variable that may have an effect on the dependant variable (Brown et al. 2018:115). This implies that for perfect causation to occur, the examination of variables should be in a relatively controlled and manipulated environment such as a laboratory (Malhotra et al. 2017:323). Thus, Tustin et al. (2010:87) posit that pure experiments are a useful method for collecting data when following the causal research design. Thirdly, time order of occurrence or temporal precedence is important in causal research. This implies having an appropriate two-way order of events, whereby causes should occur prior to the espoused effects (Zikmund et al. 2013:55).

Both Iacobucci and Churchill (2010:84) and Widd and Diggines (2015:67) concur that descriptive research encapsulates prior knowledge about a particular phenomenon under study. Primarily, descriptive research seeks to profile consumers in a given situation (Saunders et al. 2016:175) in terms of consumers’ attitude, perceptions and opinions (Burns et al. 2017:99). Secondarily, the descriptive research design seeks to ascertain the frequency and/or existence of relationships between two variables. Hence, it is directed by the formulation of hypotheses (Zikmund et al. 2013:55). In addition, the descriptive research design permits researchers to estimate the proportion of members that participated in a study in view of proffering specific predictions and/or conclusions (Brown et al. 2018:128).

A descriptive research design was considered appropriate for this study. Specifically, a single cross-sectional research design was followed as the blue print of this research because data were collected at a single point in time between 1 March and 31 July 2018, from one sample group of female market mavens, only. The descriptive research design enabled the answering of five pertinent questions pertaining to the who, what, when, where and how elements of research (Babin & Zikmund 2016:54). Specifically, the sample of female market mavens (who) was identified, including the specific factors that influence market maven tendency (what). In addition, the time occurrence of the research in 2018 (when) and the geographic context of the southern Gauteng region within an emerging market (where) using a survey strategy (how), were specified in this research design.

The next section elaborates on the research approaches used in designing a research study.
4.5 RESEARCH APPROACH

Designing research serves as an art of science. In essence, a researcher can utilise one of four research approaches in designing an appropriate research project, namely mixed methods, triangulation, qualitative and quantitative research (Saunders et al. 2016:164). These are explained next.

4.5.1 Mixed methods research

Mixed methods refer to a combination of quantitative and qualitative research approaches; whereby, more than one method of data collection, analysis and reporting of data is used in a single study (Wiid & Diggines 2015:65). This allows researchers to draw interpretations based on the combined strength of findings from both quantitative and qualitative research (Creswell 2015:2). The latter advocates that by incorporating both procedures (qualitative and quantitative), a design is thus formulated for conducting a particular study, which is conventionally framed as the post-positivist philosophy.

4.5.2 Triangulation research

Triangulation refers to the combination of methodologies or data sources in a study of the same phenomenon (Bryman et al. 2017:45). Bentahar and Cameron (2015:6) highlight that triangulation allows researchers to corroborate and cross check research findings relative to the same phenomenon using different methods to enrich validity and authenticity of the data. Put simply, triangulation is all about cross checking if the use of two or more approaches will yield similar conclusions. Thus, for a comprehensive understanding of phenomenon that manifests over an extended period, as is the case with longitudinal studies, both mixed methods and triangulation are predominately used.

4.5.3 Qualitative research

Hair et al. (2013:78) were able to distinguish between qualitative and quantitative research by focusing on various factors pertaining to the nature of the research as well as the actual procedure for executing the research. According to the scholars, qualitative research involves discovering new ideas, thoughts and feelings, through procedures that seek to uncover hidden psychological and social phenomenon. In support, Wiid and Diggines (2015:64) as well as Burns et al. (2017:96) aver that qualitative research is exploratory in nature because it seeks to understand the underlying reasons and motives behind individual actions. This supposes that qualitative research offers a diagnostic understanding of social phenomenon. Owing to this diagnostic nature, researchers
implementing the qualitative research approach make use of unstructured questions when collecting data (Tustin et al. 2010:90). Such a questioning format lends credence to the use of open-ended responses and probing techniques, thereby fostering augmented flexibility between the researcher and the participants. Hence, the credibility of qualitative research lies in the depth of information that is retrieved, rather than the quantity. Relatedly, qualitative research utilises small sample sizes, implying that the execution period of collecting data tends to be relatively short and somewhat of a lower cost (Shiu et al. 2009:174). Nonetheless, in so doing, the representativeness of the overall population remains limited (McDaniel & Gates 2013:80), thereby implying that generalisations cannot be made from the empirical data for final decision-making (Creswell 2015:5).

Since the analysis of qualitative research findings is dependent on the researcher’s impressions and reactions, the approach leans towards subjectivity as the interpretation of results is researcher-oriented (Zikmund et al. 2013:132). Similarly, researchers who nominate to apply qualitative research should possess extensive interpersonal communication and interpretive skills (Shiu et al. 2009:71). Such skills are useful in terms of gaining access to the subconscious and/or unconscious levels, feelings and experiences of individuals through applying in-depth probing techniques. Moreover, researcher skills are important during the data analysis stage, which heavily relies on de-briefing, content and interpretative analysis (Malhotra et al. 2017:152). Nevertheless, Hair et al. (2013:79) pinpoint that the qualitative research approach seldom enjoys the beneficence of well-trained researchers, which presents difficulty in producing reliable estimates of the magnitude of phenomena under investigation. Another drawback with qualitative research lies in the use of intensive data collection methods such as focus groups, in-depth interviews and projective techniques, which are scantily subjected to mathematical analysis (Antwi & Kasim 2015:219).

### 4.5.4 Quantitative research

Quantitative research seeks to quantify the salience of various marketing phenomena, including consumers’ perceptions, attitudes and experiences (Hair et al. 2013:109). Tustin et al. (2010:90) as well as McDaniel and Gates (2013:80) denote that the quantitative research approach is often integrated with descriptive and causal research designs, which are conclusive in nature. Furthermore, the extended interval during the data collection process is somewhat influenced by the large sample sizes, which are useful for yielding high levels of representativeness in the data (Zikmund et al. 2013:135). Thus, generalisation of findings provides support for reliable deductions and conclusions from the empirical data such that a final course of action can be
recommended for practitioners. In so doing, researchers attempt to extrapolate sample findings to the entire universe (Wilson 2014:15). The information sought by quantitative researchers is often incorporated using structured questioning, which is predisposed to a set of pre-determined response options (Shiu et al. 2009:171). Whereas surveys, panels and experiments are utilised during the data collection process (Antwi & Kasim 2015:221), statistical methods are used to derive predictions and explanations of a phenomenon (Ang 2014:98). This helps to attain precision and objective accuracy during the empirical analysis.

Owing to time and financial constraints, the quantitative research approach was pursued in this study, albeit restricted to a singular (mono) method. The choice of a quantitative research approach was justified by a number of reasons. First, the quantitative research approach draws from the underlining of the positivist research philosophy, whereby theories are tested, empirically (Antwi & Kasim 2015:220; Saunders et al. 2016:166). This was accomplished since the research commenced with an existing theory. Specifically, the study located the SOR and the Two-step theory of interpersonal influence as the two overarching theories for this study. By engaging the two theories, a basis for explaining social phenomena was provided. Specifically, a conceptual description of market maven tendency and cosmetic product trial was inferred. Secondly, deductive reasoning evoked the researcher to test the relationships among the variables identified within the literature by postulating hypotheses or tentative statements. Thereafter, a conceptual model was developed in view of providing a visual description regarding how facts and variables in this study can be operationalised (Iacobucci & Churchill 2010:84). Thirdly, inferences were drawn based on observations of a large sample (475 female participants), advancing the empiricism state of this research. Thereafter, the study hypotheses were tested through the survey fieldwork and the results are presented in Section 5.11.8 of this study.

The sampling design procedure that was adhered to in this research is discussed in the next section.

4.6 SAMPLING DESIGN PROCESS

According to Zikmund et al. (2013:68), sampling is a procedure that draws conclusions based on a small scale of the entire population. It serves as a systematic process that helps a researcher to select the appropriate subjects to be observed. As such, Brown et al. (2018:204) pinpoint that a sampling design procedure consists of 6 unified phases, comprising stages involving defining the target population, identifying the sampling frame, selection of a correct sampling procedure, determining an appropriate sample size, selection of sampling elements as well as conducting the final data collection process. The chronology of these steps is illustrated in Figure 4.2.
Figure 4.2: The six-step procedure for drawing a sample

Source: Brown et al. (2018:205)

The decisions taken during each step of the sampling design process for this study are explained next.

4.6.1 Defining the target population

A target population relates to individuals and/objects that meet the requirements for inclusion in the overall population group (Brown et al. 2018:205). Burns et al. (2017:238) attest that a researcher needs to be prudent when defining the population as it helps create a clear-cut description of the population group under investigation. On the other hand, Hartely (1998:58) denotes that the procedure for drawing a sample from a population ought to be both logical and statistically defensible. Bearing this in mind, a prescription by Iacobucci and Churchill (2010:282) stipulates that a target population must be defined in terms of elements, units, time and geographic boundaries. Moreover, the research objectives as well as the scope of the study should be considered upon defining the target population. In this vein, the sampling element for this study were female consumers of cosmetic products, whereas the unit of analysis is market mavens who at the time of the survey, were actively involved in disseminating information about cosmetic products (among other product categories), places to shop as well as other market-related information. To ensure representativeness, all ethnic categories were included in the target population, consistent with the population structure of South Africa. On the other hand, the study
was restricted to individuals residing in the southern Gauteng region of South Africa owing to proximity and financial inhibitions on the part of the researcher.

The choice in utilising female consumers in this research was based on a three-pronged decision rationale. First, the utilisation of female consumers is consistent with the assertion made by previous scholars who aver that market mavens are predominantly female (Feick & Price 1987:92; Abratt et al. 1995:35-36; Williams & Slama 1995:5). Secondly, the decision was justified by the notion that female mavens account for the largest share of the consumer market in the cosmetic and non-durable goods sector (Kumar et al. 2006:285; Souiden & Diagne 2009:98). Thirdly, the reasoning is ascribed to the escalation in the consumption of cosmetic products by women who seek to accentuate their physical beauty by purchasing cosmetic products (Korai 2017:250). Relatedly, the scholar opines that cosmetic purchases are prevalent among female consumers regardless of age, income or education. In this regard, the nominated target population incorporated the broader consumer community of female mavens.

For precision, the target population was restricted to female mavens who had engaged in a recent trial of a new cosmetic product within three months from the survey dates. The desired characteristic of previous cosmetic product testers was easily identifiable through the filter question, ‘have you tried out a new cosmetic product within the past 3 months’ (item B4 of the questionnaire). Brown et al. (2018:187) highlight that a filter question can be used in research to determine whether a participant is likely to possess the knowledge being sought and/or qualify an individual as a member of the identified population.

4.6.2 Identifying the sampling frame

Identifying a sampling frame serves as a systematic process that allows the researcher to select adequate sample elements (Bernard 2018:116). This ensures that relevant information regarding a particular phenomenon of interest is obtained. In this respect, numerous scholars refer to a sample frame as “a list of all the population elements with which units are selected” (McDaniel & Gates 2013:281; Brown et al. 2018:206). Notably, Tustin et al. (2010:342) as well as Burns et al. (2017:239) concur that a sampling frame is a master source that researchers consult in view of identifying all sample units of the entire population or universe. In this vein, Babin and Zikmund (2016:342) refer to the sampling frame as a working population. This prescription evokes the need to identify and work with a physical list that is complete and correct, accurate and up to date (Wiid & Diggines 2015:188). Examples of sampling frames include but are not limited to telephone directories, lists of registered voters, lists of email addresses, research company databases, online newsgroup postings and customer lists (Denscombe 2014:34).
In the absence of a comprehensive list, a researcher has the option to either re-define the target group or compile a new sampling frame by drawing upon a combination of existing lists (Saunders et al. 2016:277). Nevertheless, neither of the two options was feasible in this study owing to the absence of any populated physical list of active market mavens in South Africa. Ultimately, this study proceeded to consider a non-probability based sampling procedure.

### 4.6.3 Selecting the sampling procedure

According to Malhotra et al. (2017:415), the process of selecting a sampling technique involves the use of either the Bayesian sampling approach, sampling with or without replacement or the use of non-probability and probability-based sampling. The scholars indicate that the Bayesian approach involves selecting population elements sequentially, by incorporating prior information regarding population parameters as well as accounting for the probabilities associated with making the wrong decisions. In essence, the Bayesian approach works effectively if the researcher possesses prior information regarding the population parameters. On the other hand, sampling with replacement entails including an element in the sample more than once while drawing out a sample, whereas sampling without replacement requires that the element be drawn out only once (Kumar 2014:239). Nonetheless, Shiu et al. (2009:469) denote that it is conventional practise among marketing researchers to choose between probability and non-probability based sampling procedures because they incorporate a high degree of accuracy while accounting for the available resources as well as the scope of the study. Furthermore, marketing researchers prefer probability and non-probability sampling because it easily determines the choice of a sample size to be used in a study.

According to Brown et al. (2018:209), probability sampling is concerned with a random component in how population elements are objectively selected, which means, while the chances of each member of the desired population group being investigated may, to some degree be unequal, every sample element has a chance of being part of the sample (Zikmund et al. 2013:392). This is because the population is known and the population parameters are determinable from a finite sample frame (Denscombe 2014:33). This means that in probability sampling, sample elements are drawn out based on a known likelihood of estimation, whereas researchers are able to evoke statistical analysis measures such as significance tests and confidence intervals, thereby minimising the occurrence of sampling error (Hair et al. 2013:140).

While applying non-probability sampling techniques, a researcher utilises methods whereby there is an unknown probability in the selection of sampling elements (Ang 2014:131). This is because the methods used in non-probability sampling are subjective owing to intrusion from the
researcher’s personal judgement (Tustin et al. 2010:344). Nonetheless, non-probability based sampling procedures are pragmatic solely because they address a specific research purpose. They include but are not limited to convenience, quota, judgemental and snowball sampling (Babin & Zikmund 2016:348).

This study utilised the snowball sampling procedure. The decision for employing the snowball sampling procedure is enshrined within the assertions made by Malhotra et al. (2017:423) that snowball sampling “enables a researcher to discover consumer characteristics that are rare, scattered and that cannot be easily recognised from the population group”. Likewise, Iacobucci and Churchill (2010:287) uphold that when referrals are made, there is a great chance of attaining unique characteristics and/or sample elements that are not easily identified. Upon applying snowball sampling, an initial group of known female market mavens were randomly selected. According to Hair et al. (2013:146), these initial subjects are deemed to possess the desired characteristics for answering the research objectives. Furthermore, Ang (2014:132) asserts that the initial respondents are known as the ‘linchpin’ or cornerstone for accessing additional participants. They included the researcher’s associates and immediate acquaintances who are considered forerunners in collecting and distributing media related information as well as subsequently display cosmetic products trial behaviour. Thereafter, subsequent respondents were obtained based on the information provided by the initial respondents (Babin & Zikmund 2016:350). The initial participants were requested to suggest at least four other female consumers who are active in seeking and spreading market-related information about cosmetic products. This process continued until the required sample size was obtained, at which point the researcher was satisfied with the level of data saturation. Typically, the final sample for the study was constructed through a series of referrals, evoking what is termed the “chain referral” (Burns et al. 2017:256).

4.6.4 Determining the sample size

McDaniel and Gates (2013:284) state that a sample size is the number of sample elements that account for inclusion in a study. While determination of an appropriate sample size is often an intricate step for many scholars, Burns et al. (2017:265) emphasise the consideration of practically feasible aspects about the research. This means that sample size decisions should pertain to the significance of the study as well as the parameters of the population (Brown et al. 2018:214).

In this study, statistical calculations of sample size could not be made owing to the absence of a finite population size, determinable from a sampling frame. Instead, scholarly rule of thumbs and historical evidence were considered. Specifically, the rule of thumb by Green (1991) cited by Van Voorhis and Morgan (2007:48) was upheld, expressed as $N \geq 50 + 8M$, whereby $M$ represents the
number of predictor variables used in the study. Thus, considering the existence of moderate and linear association among the predictor variables (refer to Section 5.10 of this study), the minimum sample size for this study was estimated at 50 + (8*5), implying a sample size of 90 participants or greater. In addition, the study considered the rule of thumb by Avikaran (1994:15) of sample sizes greater than 300 in consumer-based studies.

At the secondary level, support for a large sample size in this study was guided by the recommendation put forward by several scholars for conducting multivariate statistical procedures such as SEM. For example, Malhotra et al. (2017:804) recommend that structural equation models with more than five constructs, with several constructs being measured with about three observed variables and with multiple scale indicators with low communality values (below 0.50), then the sample size should be at least 400. In addition, other methodology scholars (Schumacker & Lomax 2010:99; Bagozzi & Yi 2012:8) aver that large sample sizes are required if SEM is to be applied in a study. Thus, in view of the aforementioned guidelines, a final sample size of 600 female consumers was elected as a prudent size for fulfilling the empirical objectives of this study.

To stress the choice made regarding the sample size, an evaluation was made of sample sizes that were used in previous studies that are in line with the current inquiry. Whereas Zikmund et al. (2013:69) and Brown et al. (2018:214) attest that the sample sizes used in prior studies may not be the same as the prevailing research; historical evidence helps researchers to conduct a comparative assessment of similar work as shown in Table 4.1.

Table 4.1: Sample size determination based on empirical precedence

<table>
<thead>
<tr>
<th>Author(s)</th>
<th>Summary of study</th>
<th>Unit of analysis</th>
<th>Country</th>
<th>Sample size</th>
</tr>
</thead>
<tbody>
<tr>
<td>Kiani et al. (2015:1123)</td>
<td>Determining the influence of mavenism traits on altruistic behaviour</td>
<td>University students</td>
<td>USA</td>
<td>496</td>
</tr>
<tr>
<td>Ruvio and Shoham (2007:709-710)</td>
<td>Relationship between market mavership, opinion leadership and innovativeness</td>
<td>Consumers</td>
<td>Israel</td>
<td>300</td>
</tr>
<tr>
<td>Wiedmann et al. (2001:199)</td>
<td>Investigating decision making styles of man-mavens</td>
<td>Male consumers</td>
<td>Germany</td>
<td>455</td>
</tr>
<tr>
<td>Abratt et al. (1995:38)</td>
<td>Investigating the role of market mavens as general marketplace influencers</td>
<td>Retail consumers</td>
<td>South Africa</td>
<td>621</td>
</tr>
</tbody>
</table>

Source: Author compilation (2018)
Drawing from the aforementioned rule of thumbs as well as the empirical precedence of works shown in Table 4.1 of this study, a sample size of 600 female mavens was upheld in this research.

### 4.6.5 Selecting the sample elements

According to Malhotra et al. (2017:417), the process of selecting sampling elements is often conducted in conjunction with the development of a sampling plan with respect to target population, sampling frame, sampling technique and sample size. In doing so, executing the sampling plan seeks to reduce the potential occurrence of sampling error, whereby useful sample elements are inadvertently excluded from a study (Tustin et al. 2010:336). Thus, Brown et al. (2018:204) underline that the ability to make inferences about the entire population depends on how one selects the sample elements.

### 4.6.6 Collecting data from designated elements

The sample was only selected once the appropriate target population had been identified, the sampling frame searched for, sampling procedure chosen and the desired sample size nominated. Effectively, a sampling plan was developed to assist the researcher in obtaining vast amounts of data from the nominated sample elements. The choice decisions that were taken in this study are summarised as follows:

<table>
<thead>
<tr>
<th>Target population:</th>
<th>Female market mavens</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sampling frame:</td>
<td>None</td>
</tr>
<tr>
<td>Sampling method:</td>
<td>Snowball (non-probability based)</td>
</tr>
<tr>
<td>Sample size:</td>
<td>600</td>
</tr>
<tr>
<td>Data collection strategy:</td>
<td>Sample survey using a self-administered questionnaire</td>
</tr>
<tr>
<td>Time frames:</td>
<td>1 March 2018 to 31 July 2018</td>
</tr>
<tr>
<td>Geographical context:</td>
<td>southern Gauteng region</td>
</tr>
</tbody>
</table>

A detailed review of the data collection process that was applied in this work is provided in the next section.
4.7 DATA COLLECTION PROCESS

The objective of employing appropriate data collection methods is to obtain accurate, valid and reliable information from participants that could be used to address specific research objectives (Zikmund et al. 2013:20). As such, Tustin et al. (2010:119) attest that the lack of data makes it impossible for one to conduct research, draw conclusions and provide recommendations to management. Bearing this in mind, both secondary and empirical data were integrated in this quantitative study.

4.7.1 Secondary data collection (desk research)

According to Burns et al. (2017:116), secondary data are defined as “data that have been previously collected, often for some other purpose than the research project at hand”. As a proxy, some scholars label secondary data as ‘packaged data’, because it is readily available (Brown et al. 2018:60). Secondary data is normally used to address a particular problem or opportunity and such information is usually stored either on a company’s internal decision support system or comes from external sources such as journal databases in libraries and media outlets.

The assembly of secondary data provide researchers with profound understanding of a particular marketing phenomenon. In this sense, ample research on cosmetic products, the cosmetics industry and the marketing of new cosmetic products was completed in Chapter 2 of this study, thereby meeting the expectations of the first four theoretic objectives set out in Section 1.4.2 of this study. In addition, the theory behind social and interpersonal influence as well as the determinants of market maven behaviour was unravelled in Chapter 3, thereby meeting the expectations of the last three objectives set out in Section 1.4.2 of this study.

4.7.2 Empirical data collection (fieldwork)

The fieldwork represents the practical orientation of gathering information. Empirically, data collection refers to the observational aspect of science (Babbie 2013:8). Likewise, Jasti and Kodali (2014:1081) define the term empirical as “the systematic process of deriving data directly from participants”. Ultimately, the scholars indicate that the empirical data assists researchers to build theory and/or verify a proposed theory or model. The researcher carried out the empirical data collection in this study. Assistance from fieldworkers was not evoked in an attempt to avoid misunderstanding in terms of the articulation of the research purpose when reported by the fieldworkers who while trained, may infiltrate the study content with their own interpretations. Likewise, since this study pertained to a diversified cohort of female participants speaking
different languages and of African descent (implying that English was a second language for most of them), the researcher was concerned with the unitary presentation of the research questions, hence the decision was taken to exclude fieldworkers.

Section 4.3.3 of this study refers to the choice of a survey strategy for collecting data in this work. Surveys prove useful when a research project makes use of large sample sizes in order to ensure that the study at hand accurately generates inclusive and representative results of the overall population. The epitome of employing surveys as a basis of collecting data is outlined in Figure 4.3.

**Figure 4.3: Advantages of surveys**

**Source:** Burns et al. (2017:172)

A survey is a standardised tool that consists of a set of pre-determined questions that help marketers answer research questions (Saunders et al. 2016:181). In particular, surveys comprise structured questioning of participants as well as the subsequent recording of respondents, which may be done either by the interviewer verbally, in writing or online termed interviewer-administered surveys (Wilson 2014:152). In other cases, the responses are completed by the
participants themselves (self-completion). In this study, data were collected at different time intervals and days of the week to ensure randomisation during the period from 1 March 2018 to 31 July 2018. Nevertheless, the researcher experienced numerous unanticipated challenges that included time and costs of travelling to various locations within southern Gauteng. In addition, setting up survey appointments with some referrals proved to be cumbersome and unwieldy. Consistent with the choice of a survey strategy, a structured questionnaire was employed as the main data collection instrument in this study. Specifically, a paper and pencil self-administered survey was deemed appropriate, whereby the questionnaires were administered on a ‘drop and pick later’ technique. This afforded the respondents ample time to complete the surveys in their own space and time and thereby, familiarise themselves with the study.

The following section describes the development of the measuring instrument that was utilised during the survey.

4.8 QUESTIONNAIRE DEVELOPMENT

Earlier work by Hartely (1998:50) referred to a questionnaire as “a customary instrument used to collect data”. More recently, Burns et al. (2017:216) defined a questionnaire as a “vehicle used to present the questions that the researcher desires respondents to answer”. In this regard, a questionnaire designates the formalised document comprising a set of questions with which to acquire information from sample elements (Shiu et al. 2009:329). Likewise, Saunders et al. (2016:457-458) acknowledge that the use of questionnaires enables researchers to standardise the data collection process by ensuring that all the participants are asked the same questions in the same order of occurrence, as they appear on the questionnaire. Of note, the questionnaire enabled the generation of insightful data in accordance with the empirical research objectives set out in Section 1.4.3 of this study. Apart from posing as a permanent record of the research, a questionnaire fosters co-operation between participants, whilst keeping them motivated owing to the structure, format, wording and overall appearance of the survey questionnaire.

4.8.1 Questionnaire structure

McDaniel and Gates (2013:246) state that questionnaires are categorised as either unstructured or structured, while being amenable to either open-ended or close-ended response options, respectively. Open-ended response options enable participants to provide responses based on their personal frame of reference and in their own way (Saunders et al. 2016:452). This provides a great degree of flexibility in answering, whereas the researcher utilises probing questions, which
encourage participants to elaborate further on a particular subject, in view of gaining deep insight (Denscombe 2014:176).

The questionnaire for this study comprised structured questions. Brown et al. (2018:190) pinpoint that structured questions with close-ended response options require participants to choose a response among a series of pre-determined responses. Since possible response options are delivered in advance, the questionnaires are administered with great ease. Generally, participants are presented with instructions and they are requested to mark their responses using a tick, cross or circle. The art of gaining effective data is guided by two principles. Primarily, the response categories must be exhaustive, exclusive and refer to a single dimension (Babbie 2013:231). This means all possible response categories should be included. Nonetheless, the scholar mentions that the ‘other’ response category is often used in an attempt to cater for any possible response option that may not have been originally conceived during the questionnaire development phase. This option eliminates the possible exclusion of participants’ responses. Secondarily, response categories must be mutually exclusive (Wiid & Diggines 2015:169), implying that the participants’ answers should be limited to only one response category and should not overlap to the next available option on the same question. In this vein, Pallant (2011:8) and McDaniel and Gates (2013:253) uphold that structured questions are less prone to interviewer bias because the option of expounding on a given topic is not granted. Typically, structured questions come in the form of dichotomous, multiple choice or scale response statements.

4.8.2 Questionnaire format

Questionnaire format refers to the layout of the set of questions that are included within the context of the research instrument (Sarantakos 2013:251). The format of a questionnaire enhances the possibility of acquiring accurate data. This is because a good layout elicits responses that are given out thoughtfully and with consideration and much detail (McDaniel & Gates 2013:258). Correspondingly, Shiu et al. (2009:332) emphases that the format of a questionnaire plays a significant role in influencing participants’ willingness and ability to take part in a study. In this study, questions were formatted as either dichotomous, multiple choice and/or scaled response formats, consistent with the section numbering used in the questionnaire. Details about the questionnaire format as well as the measurement scaling options are shown in Table 4.2.
Table 4.2: Questionnaire format and scaling

<table>
<thead>
<tr>
<th>Section</th>
<th>Nature of question</th>
<th>Item</th>
<th>Format</th>
<th>Measurement scale</th>
</tr>
</thead>
<tbody>
<tr>
<td>Section A</td>
<td>Demographic information</td>
<td>A1: Age</td>
<td>Multiple choice</td>
<td>Interval</td>
</tr>
<tr>
<td></td>
<td></td>
<td>A2: Ethnicity</td>
<td>Multiple choice</td>
<td>Nominal</td>
</tr>
<tr>
<td></td>
<td></td>
<td>A3: Language</td>
<td>Multiple choice</td>
<td>Nominal</td>
</tr>
<tr>
<td></td>
<td></td>
<td>A4: Marital status</td>
<td>Multiple choice</td>
<td>Nominal</td>
</tr>
<tr>
<td></td>
<td></td>
<td>A5: Highest educational qualification</td>
<td>Multiple choice</td>
<td>Ordinal</td>
</tr>
<tr>
<td></td>
<td></td>
<td>A6: Monthly income before tax</td>
<td>Multiple choice</td>
<td>Interval</td>
</tr>
<tr>
<td>Section B</td>
<td>New cosmetic products trial information</td>
<td>B1: Primary communication strategy about new cosmetic products</td>
<td>Multiple choice</td>
<td>Nominal</td>
</tr>
<tr>
<td></td>
<td></td>
<td>B2: Primary communication source about new cosmetic products</td>
<td>Multiple choice</td>
<td>Ordinal</td>
</tr>
<tr>
<td></td>
<td></td>
<td>B3: Type of information disseminated by influential consumers</td>
<td>Multiple choice</td>
<td>Nominal</td>
</tr>
<tr>
<td></td>
<td></td>
<td>B4: Trial of new cosmetic products</td>
<td>Dichotomous</td>
<td>Ordinal</td>
</tr>
<tr>
<td></td>
<td></td>
<td>B5: Category of new cosmetic products tried out</td>
<td>Multiple choice</td>
<td>Nominal</td>
</tr>
<tr>
<td></td>
<td></td>
<td>B6: Favourite cosmetic brand in the market</td>
<td>Multiple choice</td>
<td>Nominal</td>
</tr>
<tr>
<td></td>
<td></td>
<td>B7: Venue for recent cosmetic product trial</td>
<td>Multiple choice</td>
<td>Nominal</td>
</tr>
<tr>
<td></td>
<td></td>
<td>B8: Frequency of cosmetics product trial experiences per year</td>
<td>Multiple choice</td>
<td>Interval</td>
</tr>
<tr>
<td>Section C</td>
<td>Factors influencing market maven tendency</td>
<td>Consumer innovativeness (Items C1 to C6)</td>
<td>Seven-point Likert scale</td>
<td>Interval</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Aspirational attractiveness (Items C7 to C11)</td>
<td></td>
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<td></td>
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<td>Social norms influence (Items C12 to C17)</td>
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<tr>
<td></td>
<td></td>
<td>Advertising efficacy (Items C18 to C22)</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Table 4.2: Questionnaire format and scaling (continued …)

<table>
<thead>
<tr>
<th>Section</th>
<th>Nature of question</th>
<th>Item</th>
<th>Format</th>
<th>Measurement scale</th>
</tr>
</thead>
<tbody>
<tr>
<td>Section D</td>
<td>Market maven tendency</td>
<td>Market maven tendency (Items D1 to D6)</td>
<td>seven-point Likert scale</td>
<td>Interval</td>
</tr>
<tr>
<td>Section E</td>
<td>New cosmetic products’ trial</td>
<td>New product trial (Items E1 to E5)</td>
<td>seven-point Likert scale</td>
<td>Interval</td>
</tr>
</tbody>
</table>

Source: Author compilation (2018)

Dichotomous questions have only two possible response categories (Wiid & Diggines 2015:170). They typically make use of a yes or no and/or true or false response options. In this study, question B4 (have you tried a new cosmetic product within the past 3 months) was presented as a dichotomous question with only two possible categories to choose from, namely, yes or no.

Multiple-choice questions incorporate a plethora of possible responses from which the participant may choose an answer among the several options provided (McDaniel & Gates 2013:253). In this study, statements A1, A2, A3, A4, A5 and A6 as well as statements B1, B2, B3, B5, B6, B7 and B8 were presented as multiple-choice questions, each with a minimum of 3 possible categories. These items were anchored on either nominal, ordinal and/or interval scales, whereas they pertained to the demographic aspects as well as the new product trial habits of the market mavens.

To increase sensitivity of the instrument, a multi-item scale was utilised, instead of a single-item scale (Zikmund et al. 2013:307). This is because multi-item scales contain a broad form of response points, which provide a great degree of flexibility in outlining the phenomenon under study (Babin & Zikmund 2016:296). Scaled-response questions are designed to capture the intensity of feeling and/or perception (McDaniel & Gates 2013:255). Specifically, sections C, D and E comprised 33 scale items in the form of a seven-point Likert scale of agreement. A Likert scale may be described as series of statements, which reveal the specific dimension of a participant’s affiliation towards a particular concept (Saunders et al. 2016:457). Generally, a Likert scale is based on an agreement continuum, with numerous response options. The choice of a Likert scale was motivated by the ability to generate ample data to solve the research problem. Likewise, scaling enabled easy pre-coding since participants’ responses are easily converted into a numerical format, which is ready for entry into various statistical software programmes such as SPSS. The Likert scale applied broad scale options ranging from one (strongly disagree) to seven (strongly agree), which enabled the participants to discriminate among the given options with ease.
4.8.3 Questionnaire content

The questionnaire comprised of a cover letter and five sections. Developing precise content for a study is based on a three-fold set of considerations. Where constructs are not defined in universal terms within the literature, a researcher can choose to either formulate a completely new set of questions as in the case of exploratory studies (Burns et al. 2017:217). On the other hand, Saunders et al. (2016:452) denote that a researcher can decide to either adopt an existing scale developed by previous scholars. Scale adoption implies upholding holistic scales that have been validated in previous studies whereas in scale adaptation, researchers can make use of scale items that have been operationalised by multiple researchers, implying that the abstract concepts have been reduced to some measurable and tangible format. Nevertheless, since this study follows a confirmatory strategy, it was necessary to comment on the original source of adaptation as well as the psychometric properties of the original scales as they were applied in this research. Thus, while observing the psychometric properties of previous scales, the reliability of the scales can be inferred. In this study, scale adoption and adaptation helped save time. In addition, it enabled the researcher to scrutinise the wording of the questions to ensure that the questions were worded in a way that participants would be able to respond to with relative ease (Babin & Zikmund 2016:306).

4.8.3.1 Cover letter

Initially, the questionnaire comprised a cover letter as a primer to the questionnaire. The cover letter served to enlist the research title, researcher and study leaders’ names and contact details as well as the institution of affiliation. In addition, the cover letter explained the research purpose in clear terms to the reader. Moreover, the cover letter served as the introductory letter seeking for permission to conduct the study as well as the ethical responsibilities of the researcher pertaining the study. The expected questionnaire completion time was also spelt out on the cover letter. Thereafter, the questionnaire included five sections comprising the set of questions to which the researcher sought information from the participants.

4.8.3.2 Section A of the questionnaire

Section A elicited information relating to the demographic profile of the participants wherein the items included questions relating to the participants’ age (A1), ethnicity (A2), native language (A3), marital status (A4), highest educational qualification (A5) and monthly income before tax (A6). This information was required in view of obtaining an exhaustive profile of the female mavens who contributed towards this study.
4.8.3.3 Section B of the questionnaire

Section B comprised questions relating to the female participants’ trial of new cosmetic products. The first three questions in this section requested participants to indicate their primary communication strategy for accessing information about new cosmetic products (B1), their primary source of communication about new cosmetic products (B2) as well as the type of information they acquire from these sources (B3). This information was considered useful in terms of understanding the nature of cosmetic products’ information dissemination among the cohort of female mavens. Relatedly, item B4 was retained as the main filter question for this research, seeking to delineate that the questionnaire was only completed by those consumers who had tried out a new cosmetic product within three months from the survey date. This question posed as the inclusion/exclusion criterion, whereas only those female consumers who had reported that they had explored and tested a new cosmetic product in the specified time were included in the study. Following on, item B5 inquired as to the product category of interest to female mavens when trying out a new cosmetic product. In item B6, the participants were requested to indicate their favourite cosmetic brand in the market, whereas items B7 and B8 inquired about the actual venue where the new cosmetic product trial experience had taken place as well as the frequency with which the participants actually try out new cosmetic products in a year, respectively.

4.8.3.4 Section C of the questionnaire

Section C comprised 22-scaled items that sought to elicit information pertaining to the internal and external stimulus factors influencing market maven tendency. In essence, since the innovativeness trait is considered a generic factor that induces maven tendency, participants were asked to indicate their inclination towards innovativeness. Thus, the general consumer innovativeness scale items (C1 to C6) were adopted from a study by Kim et al. (2010:137). The original scale reported very high internal consistency among the scale items as observed by a high Cronbach’s alpha coefficient value of 0.96. Therefore, modification of the six-item innovativeness scale was minimal since similar wording and the same seven-point Likert scale format used in the original study was maintained in this research. Specifically, the response options were anchored along 1=strongly disagree, 2=disagree, 3=slightly disagree, 4=neither agree nor disagree, 5=slightly agree, 6=agree and 7=strongly agree.

Statements C7 to C11 described the extent to which participants aspire to be attractive upon trying out the most recent cosmetic products in the market. While originally singled out as a sub-construct of the materialism construct in a study by Kasser (2002:10), the five-item attractiveness dimension was later adapted by Goldsmith et al. (2012:396) in their research on consumer involvement with
mobile phones and clothing. Consequently, the scale invariance was proven by the scholars as it attained a composite reliability value of 0.85 during model fit evaluation, thereby inferring both reliability and convergent validity of the scale. In this study, adaptation of the aspirational attractiveness scale evoked the need to ask the participants to specify their sought after physical looks, upon trying out new cosmetic products. In addition, a seven-point Likert scale of agreement was upheld in this study, ranging from 1=strongly disagree, 2=disagree, 3=slightly disagree, 4=neither agree nor disagree, 5=slightly agree, 6=agree and 7=strongly agree.

Social norms influence was measured along six scale items (C12 to C17) adapted from a longitudinal study by Steenkamp and Maydeu-Olivares (2015:307), who labelled the trait as susceptibility to normative influence (SNI). Whereas no clear-cut evaluation properties are cited by the scholars, there is an indication of adequate model fit along the scale. In particular, the scholars found that the means for the SNI scale were not significantly different across the sample in studies conducted between 2002 and 2013. This points to the time and cultural invariance of the SNI trait, herein labelled social norms. Nonetheless, consistent with Pearse’s (2011:161) views on achieving greater precision in the type and quality of data to be collected, this study utilised a more granularised Likert scale of agreement with seven response options instead of a five-point Likert scale, as was done in the original scale. Specifically, the scale in this work ranged from 1=strongly disagree, 2=disagree, 3=slightly disagree, 4=neither agree nor disagree, 5=slightly agree, 6=agree and 7=strongly agree.

The effectiveness of mass media advertising was adapted from a shortened scale applied in a study by Sachdeva (2015:24). While the original scale comprised 13 indicators with item-total correlation coefficients ranging between 0.430 and 0.598, a shortened version of the scale with five scale items (C18 to C22) only was used in this research to avoid redundancy, whereas the scale was labelled advertising efficacy in this work. Broadly speaking, scale adaptation in this work involved altering the unit of analysis to encapsulate a measure of the effectiveness of advertisements featuring new cosmetic products, explicitly. To this end, the participants were asked to recall the extent to which they consider the new cosmetic products advertisements, effective. Moreover, the seven-point Likert scale used in the original scale was maintained in this study, whereas 1=strongly disagree, 2=disagree, 3=slightly disagree, 4=neither agree nor disagree, 5=slightly agree, 6=agree and 7=strongly agree.

4.8.3.5 Section D of the questionnaire

In Section D of the questionnaire, the original scale measuring market maven tendency was adapted from a study by Feick and Price (1987:95) and anchored as scale items D1 to D6 on the
questionnaire used in this research. Williams and Slama (1995:5) attest that the market maven scale measures an individual’s tendency to be a general provider of market related information about products on an informal basis. Therefore, the scale attained cultural invariance through its application in later studies by Abratt et al. (1995:37) and Mailu et al. (2011:6). In their studies, the scholars established strong internal validity for the scale by reporting high item-total correlation coefficients ranging between 0.57 and 0.78 as well as Cronbach’s alpha coefficient values of 0.78, albeit in the emerging markets contexts of South Africa and Kenya, respectively.

In this study, the market maven scale was adopted in its original form, whereas a seven-point Likert scale was also used to anchor the response options, similar to previous scholars. Specifically, the scale ranged from 1=strongly disagree, 2=disagree, 3=slightly disagree, 4=neither agree nor disagree, 5=slightly agree, 6=agree and 7=strongly agree. Moreover, in keeping with the scale adaptation by Abratt et al. (1995:37), Wiedmann et al. (2001:200) as well as Walsh and Elsner (2011:76), this study utilised a trichotomisation of summated scores, in the order of low maven tendencies (19-24), moderate maven tendencies (25-30) and high maven tendencies (31-42). The frequency distribution of these maven cohorts is reported in Section 5.4.1 of this study, whereas those respondents who reported scores below 19 were excluded from this study as they were viewed as non-mavens. In particular, 79 non-mavens were identified in this study, whereas the questionnaires from these individuals were discarded and excluded from subsequent statistical analysis since they did not meet the criteria stipulated for the unit of analysis.

4.8.3.6 Section E of the questionnaire

Section E included five questions, comprising scale items E1 to E5 relating to the trial of new cosmetic products by female market mavens. The scale was adapted from the exploratory acquisition of products scale used by Van Trijp et al. (1996:291). In the previous study by these scholars, the scale revealed adequate internal consistency among the items, demonstrated by a Cronbach’s alpha coefficient value of 0.79. Scale adaptation in this study involved altering the unit of analysis only, from an examination of restaurant food products (stated by the previous scholars) to the explorative trying out of new cosmetic products. Furthermore, in view of proffering precision, a seven-point Likert scale format was utilised with the anchors ranging from 1=strongly disagree, 2=disagree, 3=slightly disagree, 4=neither agree nor disagree, 5=slightly agree, 6=agree and 7=strongly agree.

The cover letter and main survey questionnaire are included as Appendix A.
4.8.4 Pre-testing

To ensure that the questionnaire is properly developed prior to collecting data, a pre-test exercise was conducted. In this way, the process of pre-testing acted as a dry run process wherein the questionnaire was administered on a limited yet representative sample of participants (Burns et al. 2017:230). In this study, the researcher initially developed the questionnaire. Thereafter, a pre-test was conducted through a de-brief exercise with the study leaders, one language expert as well as two other subject matter experts from the marketing and consumer behaviour disciplines, in an attempt to identify and correct any obvious linguistic and stylistic errors. Moreover, members of the pre-test checked for the clarity and appropriateness of the statements included in the questionnaire. The comments and/or inputs received from these contributors related to the wording of the questionnaire, leading to limited language modification. In this regard, the pre-test proved to be an inexpensive exercise that reassured the success of the questionnaire and consequently the research project. Thereafter, a preliminary survey was piloted on a small-scale sample.

4.8.5 Pilot study

McDaniel and Gates (2013:37) describe a pilot study as a survey that uses a limited number of sample elements, whereas sampling and analytic techniques are applied in a less-rigorous manner. Specifically, Zikmund et al. (2013:59) highlight that pilot testing is important in helping to refine survey questions and reduce the potential risk of the entire study being unreliable. A pilot study was conducted in view of establishing the content validity of the compiled questionnaire, whereas reliability statistics were computed on the scales. To avoid bias, the pilot sample comprised foreign nationals who are registered students at a university of technology, implying that they did not form part of the target population at the main survey. While 60 survey questionnaires were sent out, the filter question ‘Have you tried out a new cosmetic product within the past 3 months’ (Item B4) eliminated seven participants, thus only 53 participants were included in the pilot survey.

4.8.6 Questionnaire administration and return rate

The study targeted and reached out to 600 female market mavens based in the southern Gauteng region and identified on a referral basis. From the study, 554 out of the 600 sample participants filled-in the questionnaires, which were returned and collected by the researcher with ease. Nevertheless, 79 participants failed to meet the market maven criteria when they scored less than 19 on the summated market maven scale, yielding a 79.2 percent co-operation rate.

The next section outlines the ethical aspects that guided this research.
4.9 RESEARCH ETHICS

According to the Oxford dictionary (2015:509), ethics are the “moral principles that control or influence a person’s behaviour”. This means that the researcher conducts before, during and after the data collection process should be dictated by a clear and deliberate ethical and moral compass. Consistent with earlier work by Blanche, Durrheim and Painter (2006:67), four key philosophical principles involved while upholding research ethics were applied in this work.

4.9.1 Confidentiality and anonymity

Confidentiality and anonymity were maintained in respect of protecting the identity of participants by not divulging both the names of the participants as well as avoiding ascription of responses to specific individuals. Furthermore, the individual responses were not disclosed to specific participants, exclusively. Instead, all the research results were reported on an aggregated basis in the form of a MTech dissertation.

4.9.2 Non-maleficence

Non-maleficence refers to the degree in which one aims to prevent harm (Chua & Pitts 2015:1556). As such, this philosophical principle requires that researchers ensure that no harm transpires to the participants whilst contributing to the study. While the research instrument used in this study steered clear from asking sensitive questions or questions that are detrimental to the self-interest of the contributors, the participants were given an opportunity to take part in the study on a voluntary basis, strictly. Thus, none of the participants were coerced, neither were incentives used to encourage participation in this research. Furthermore, a notification was made on the cover letter to the effect that the participants had a right to withdraw from the study should they feel uncomfortable at any stage.

4.9.3 Beneficence

Beneficence refers to the actions undertaken by researchers in view of promoting the well-being of participants (Chua & Pitts 2015:1556). This philosophical principle attempts to maximise the benefits to be gained by participants upon taking part in the research. In this study, the aim and legitimacy of the study was explained. Moreover, the researcher highlighted through the cover letter that the research results would be used strictly for academic purposes, while being reported in the form of a MTech dissertation. Furthermore, the dissertation would be available as a hardcopy as well as a softcopy within the Vaal University of Technology library repository for the participants to have access to the aggregated report.
4.9.4 Justice

Justice in research requires that each participant be treated with equity and fairness during all stages of research (Blanche et al. 2006:68). This infers that the benefits of the research should be shared fairly amongst participants within a society where the study is taking place (Babbie 2013:34). In essence, justice can only be fostered if there is mutual trust between the two parties. Of significance to this study, all the participants were treated equally and with respect while maintaining a high level of professionalism throughout the study. First, prior to conducting the survey, permission was sought from each participant. Secondly, a cover letter was included to introduce the participants to the terms and conditions of being involved in the study. Thirdly, the participants completed the questionnaires at their own time and pace, out of respect of their busy schedules. Further to upholding fairness in this research, a standardised questionnaire was administered to all the participants, with the same type of questions being asked.

While the aforementioned discussion reports on the ethical aspects considered before, during and after the data collection process, the next section discusses the manner in which the measurement scale was evaluated.

4.10 SCALE EVALUATION

Whereas the research instrument developed in this study made use of multi-item scale measures, Malhotra et al. (2017:358) stresses the importance of evaluating the accuracy and applicability of a scale by assessing its reliability, validity and generalisability elements, as depicted in Figure 4.4.
The sections that follow discuss the elements that should be assessed upon testing the quality of a research instrument.

### 4.10.1 Reliability assessment

Brown et al. (2018:180) define reliability as the “ability of a measure to obtain similar scores for the same variable, trait or construct across time, different evaluators or across the items forming the measure”. Other scholars reduce scale reliability to the scope in which a scale produces consistent data and is free from measurement error (Iacobucci & Churchill 2010:258; McDaniel & Gates 2013:215; Bryman et al. 2017:36). This includes determining if there is an association between the scores obtained from different administrations of a multi-item scale (Bernard 2018:42). According to Malhotra et al. (2017:358), reliability evaluation can be performed using any of the three approaches, namely test-retest, alternative forms and internal consistency assessment.

#### 4.10.1.1 Test-retest reliability

Test-retest reliability assessment involves administering a scale to the same objects on two different occasions and then computing the correlation coefficients between the two scores (Babin & Zikmund 2016:281). Test-retest reliability assessment serves as a parallel measure in that the same instrument is administered repeatedly on the same participants (Zikmund et al. 2013:307).
Generally, the scale is administered repeatedly over a six months interval. Thereafter, the correlation coefficients are observed between the two tests, whereby the test that yields a higher correlation coefficient infers greater reliability of the scale (Pallant 2011:6).

4.10.1.2 Alternative forms reliability

In alternative forms reliability, two equivalent scales are constructed and then administered, simultaneously (Saunders et al. 2016:451). Typically, the time interval for this type of reliability occurs between two to four weeks apart with a different scale being administered each time. Thereafter, the scores from the alternative scales are correlated to determine consistency across the two forms (Malhotra et al. 2017:359). This type of reliability serves to inform the researcher if the two parallel forms of the same measure will produce similar results. In this regard, some researchers refer to this reliability element as equivalence form reliability or parallel form reliability (Kumar 2014:217). Nevertheless, alternative-form reliability is scantly considered by researchers since it is expensive, time-consuming and challenging to construct two scales that are identical (Hair et al. 2013:166).

4.10.1.3 Internal consistency reliability

Babin and Zikmund (2016:280) point out that internal consistency reliability is an evaluation technique that assesses the reliability of a summated scale whereas the scale items are summed to form a total score. Put simply, internal consistency reliability measures the extent to which the scale items are measuring the same underlying attribute (Kumar 2014:218). To assess internal consistency of the scale items, researchers utilise the split-half method. The split-half method entails developing a scale and then dividing the scale into two parts (Hair et al. 2013:166), whereas, one-half of the scale represents odd numbered items and the other half of the scale represents even numbered items. The resulting half scores are then correlated. Consequently, high correlation coefficients between the halves depict high internal consistency reliability along the scale. This method is inferred from the alpha statistic, commonly referred to as Cronbach’s alpha coefficient (Pallant 2011:6; Zikmund et al. 2013:302; Saunders et al. 2016:451).

In this study, the split-half method was interpreted from the Cronbach’s alpha coefficient values. The coefficient alpha was coined by Cronbach (1951:300), representing the mean of all split-half coefficients of a given test. Zikmund et al. (2013:306) indicate that Cronbach’s alpha coefficient values range from zero to one, whereas these values are the absolute thresholds in data analysis. Nonetheless, research methodologists seem to agree Cronbach’s alpha coefficient values ranging between 0.70 and one provide sufficient evidence of the internal consistency of scale items in a
study. This benchmark was upheld in this research as reported in Section 5.8 of this study, whereas the reported alpha coefficient values for this research ranged between 0.792 and 0.876.

4.10.2 Validity assessment

Validity refers to the degree to which an empirical measure reflects true differences among constructs based on the characteristics being measured (Babin & Zikmund 2016:280). In other words, validity measures the appropriateness and meaningfulness of inferences based on research results, thereby mirroring the accuracy of a measure and the generalisability of the findings (Saunders et al. 2016:202). This study evaluated the content, criterion and construct validity of the measuring instrument.

4.10.2.1 Content validity

Content validity refers to the adequacy of a scale when tested on the nominated sample elements (Pallant 2011:7). It measures the degree of sufficiency with which a scale grasps the theoretical constructs under study (Iacobucci & Churchill 2010:258). In this study, subject matter experts took part in a briefing session in order to ensure that face validity was observed in this study (Refer to Section 4.8.4 of this study). On the other hand, content validity was assessed through a pilot survey comprising 53 international students from a university of technology (Refer to Section 4.8.5 of this study), whereas the results proving the internal consistency among the scale items during the pilot survey are reported in Section 5.2 of this study.

4.10.2.2 Criterion validity

Zikmund et al. (2013:308) define criterion validity as the “ability of a measure to correlate with other standard measures of similar constructs or established criteria”. The scholars attest that criterion validity involves a series of empirical tests for evaluating constructs in terms of prediction and/or estimation. In this study, item-total correlation coefficients were useful in pinpointing whether there were any problematic scale items. In particular, Field (2013:2047) note that item-total correlation coefficients that fall below 0.30 should be deleted because they do not correlate well with the scale, which supposes that there is no correlation among the scale items. In the same vein, the threshold emphasised by Clark and Watson (1995:316) suggests that average inter-item correlation coefficients should fall within the 0.15 and 0.50 range, thereby pointing to the criterion validity of a study. Furthermore, Brakus, Schmitt and Zarantonello (2009:58) pinpointed that criterion validity of a new or shortened scale is calculated by observing the mean values for each of the variables.
4.10.2.3 Construct validity

Iacobucci and Churchill (2010:257) point out that construct validity explains the degree of association between measurement items and the underlying theoretical constructs they represent. It reflects the interrelationships between the measurement items and the constructs under investigation (Bagozzi & Yi 2012:18; Bernard 2018:45). In practise, construct validity embodies the theoretical context or topic under study (Babin & Zikmund 2016:283), albeit as it is assessed through convergent, discriminant and nomological validity.

Convergent validity measures the extent to which a measuring instrument correlates positively with other standard measures of the same construct (Saunders et al. 2016:451). This infers gauging a measure by comparing it to other measures in the same theoretical context (Bryman et al. 2017:39). Convergent validity was assessed in this work by computing the item-total correlation coefficients as well as in observing the factor loadings. The rule of thumb is to have corrected item-total correlation coefficients above 0.30 (Pallant 2011:100; Field 2013:2047). Significant and large factor loadings (loadings above 0.50 at $p<0.01$) during the EFA procedure are also a direct indicator of the convergent validity of a study (Hair, Black, Babin & Anderson 2018:675). In this study, the corrected item-total correlation coefficients ranged between 0.540 and 0.763, after the second EFA procedure was conducted on 31 variables. These results are reported in Section 5.7.3 of this study. Consequentially, the requirements for convergent validity were confirmed in this work.

According to Saunders et al. (2016:451), discriminant validity refers to the extent to which a construct is disassociated with another, theoretically. In other words, it represents how a measurement scale is uncorrelated with a measure of a different construct (Zikmund et al. 2013:308). Bearing that in mind, it is apparent that discriminant validity represents the uniqueness of a construct or measure (Hair et al. 2018:163).

Nomological validity is concerned with how a measurement scale correlates in theoretically predicted ways with measures of different but related established constructs (Shiu et al. 2009:382). Nomological validity is inferred from the bivariate correlation coefficient matrix, where the researcher observes the strength and direction of linear relationships amongst the constructs of interest. In particular, Anderson and Gerbing (1988:411) indicate that values on the correlation matrix should be below one to infer nomological validity.
4.10.3 Generalisability

Generalisability describes the extent to which the scope of a research project and the empirical findings become applicable from one setting to another (Serakan & Bougie 2016:22). It enables researchers to draw inferences about the population on the grounds of what has been observed from the target population of interest (Burns et al. 2017:318). With that in mind, the concept of generalisability can be assumed analogous to sample representativeness. In this vein, Denscombe (2014:272) posits that electing a sample that is representative yields high levels of generalisability. Thus, to account for wider generalisation of the research findings, this study followed a sound sampling design procedure and the collection of data were meticulously followed. Moreover, the study drew conclusions about the broader population of cosmetics consumers based on the information drawn from a sample of 475 female market mavens based in southern Gauteng.

The next section elucidates on how the data were sorted and prepared after the fieldwork, immediately prior to statistical analysis.

4.11 DATA PREPARATION

Data preparation refers to the inspection of data quality after the questionnaire has been administered subsequently to convert the data into usable codes prior to statistical analysis (Hair et al. 2013:242). Whereas this procedure is essential in view of sorting, refining and organising participants’ responses, it is a significant stage in research as it seeks to verify the quality of the fieldwork. According to Malhotra et al. (2017:530), data editing, coding, capturing and cleaning are the techniques applied during the data preparation phase.

4.11.1 Data editing

Data editing entails a comprehensive and critical examination of completed questionnaires (Tustin et al. 2010:452). This step ensures that each completed questionnaire complies with the study criteria, while remaining legible and complete in terms of responses provided (McDaniel & Gates 2013:327). Thus, the editing process enables researchers to detect errors and omissions on each questionnaire (Brown et al. 2018:241). In this study, the data were visually checked during the fieldwork process for any ‘out of the ordinary’ cases and duplications, but these were not detected. Nonetheless, central editing was conducted, whereby the researcher identified 13 questionnaires with inconsistent and/or incomplete responses.
4.11.2 Data coding

Shiu et al. (2009:502) concur with Brown et al. (2018:241) that coding is a technical process of assigning a numeric score or a character symbol (codes) to represent a participant’s response to a specific question. Specifically, it serves as a systematic way of converting participants’ responses into numeric values that can be easily computed for statistical analysis (Hair et al. 2013:249). In coding, each variable is grouped into a limited number of categories, which are mutually exclusive, collectively exhaustive, appropriate to the research purpose and further derived from a single dimension (Wiid & Diggines 2015:225). In this study, both pre-coding and post-coding were applied. Pre-coding is a process of assigning a code to represent a participant’s response on each question on the designed questionnaire (Malhotra et al. 2017:539). Consistent with the choice of a seven-point Likert scale on sections C, D and E of the questionnaire, pre-coding was infused into the design of the survey instrument whereby the codes ranged between 1 (strongly disagree), 2 (disagree), 3 (slightly disagree), 4 (neither agree nor disagree), 5 (slightly agree), 6 (agree) and 7 (strongly agree). Conversely, post-coding was applied to sections A and B of the questionnaire after reviewing the actual responses provided by the participants. Section 5.4.2 illustrates the resultant coding table for this study.

4.11.3 Data capturing

Data capturing and transcribing are two terms that are often used interchangeably in the literature. According to Hair et al. (2013:252), capturing involves the process of transferring coded data into a computer by inputting participants’ responses from the questionnaires into an acceptable format. After developing a coding manual, data were captured onto a Microsoft Excel™ spreadsheet in order to prepare for statistical analysis. In the file, each respondent was identified by way of a case number since names were not required. Thereafter, the actual responses given by each case for all the questions were captured in terms of the codes that had been created for this study. The Microsoft Excel™ spreadsheet was imported and saved as a SPSS data file.

4.11.4 Data cleaning

Data cleaning serves as a useful indicator of the quality of data. It refers to a process of ensuring that the transcribed data are precise and consistent with each category on the questionnaire (Saunders et al. 2016:572). As such, data cleaning is viewed as an overarching component embracing consistency checks and treatment of missing data. According to Zikmund et al. (2013:476), consistency checks involve the detection of errors that may arise from the data, including out of range data, termed outliers. On the other hand, data cleaning involves the
treatment of missing values, whereas imputation of modal responses should only be limited to incomplete questionnaires with less than 10 percent missing responses (Hair et al. 2013:253).

In this study, the imported data captured in SPSS were cleaned to eliminate those cases that fell outside the scope of the identified unit of analysis. In other words, the data cleaning process helped to identify 79 questionnaires that did not meet the maven criteria in terms of the summated scores (below 19 on the market maven scale) as explained in Section 5.4.1 of this study.

The next section discusses the data analysis approach applied in this research.

4.12 STATISTICAL ANALYSIS

After completing the data preparation process, the data were analysed using the SPSS by applying the statistical analysis techniques outlined next.

4.12.1 Frequency distributions

Hair et al. (2013:170) denote that a frequency distribution is an analytical tool that is used to count the number of responses provided by participants. There are several reasons why frequencies are used in marketing research. Principally, frequencies assist in determining the extent to which non-response occurs along each variable in the study by identifying possible missing values (Brown et al. 2018:255). In addition, frequencies help to point out the popularity of responses among the units of analysis (Tustin et al. 2010:523). In this study, frequencies were used to analyse sections A and B of the questionnaire by describing the demographic profile of the respondents (refer to Section 5.5 of this study). In this regard, a combination of charts and graphs were utilised to convey a visual illustration of the total count of responses for each question.

4.12.2 Tabulation

Tabulation involves counting the numbers of cases that fall into various categories and then presenting them in a table format (Shiu et al. 2009:509). Whereas simple tabulation involves counting a single variable, cross tabulation is a multivariate technique wherein the relationships between two or more categorical variables are studied, simultaneously (Brown et al. 2018:269). In this study, simple tabulation was utilised to report the frequency distributions of the responses in sections 5.5 and 5.6 of this study.
4.12.3 Exploratory factor analysis (EFA)

According to Hair et al. (2018:124), EFA is a multivariate statistical tool that researchers use to analyse the structure of interdependent relationships amongst a large set of variables. In other words, it is a technique that condenses highly correlated variables into small identifiable factors or components (Shiu et al. 2009:630; McDaniel & Gates 2013:376; Byrne 2016:6). In other words, EFA expresses linear combinations of the underlying patterns and/relationships among the factors (Tustin et al. 2010:668). These interrelationships are presented in the form of factor loadings, which are normally illustrated on a rotated component matrix.

Malhotra et al. (2017:712) suggest the following steps in conducting factor analysis as shown in Figure 4.5.

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**Figure 4.5: Conducting factor analysis**

Source: Malhotra et al. (2017:712)
Initially, a correlation matrix is observed to assess the interrelationships among constructs (Field 2013:1924). Thereafter, factorability of the data is observed by computing the Kaiser-Meyer-Olkin (KMO) measure of sampling adequacy as well as the Bartlett’s test statistic and Chi-square. Accordingly, the measure of sampling adequacy refers to an index that compares the magnitude of the observed correlation coefficient to the magnitudes of partial correlations (Malhotra et al. 2017:711). Kaiser (1956) cited by Hair et al. (2018:136) suggests that a small KMO value detects that the correlation between the variables under investigation cannot be explained, implying inappropriateness of the data for factorability whereas values ranging between 0.50 and 1.0 are considered an acceptable indicator of factorability. Conversely, the Bartlett’s test of sphericity explains the null hypothesis that there are no factors to be extracted from the sample data. Upon evaluating the Chi-square transformation of the determinant of the matrix, a large Chi-square value would assist in the rejection of the null hypothesis. Nevertheless, since Bryman et al. (2017:327) indicate that the chi-square test allows researchers to establish whether there exists a relationship between two variables in a population, the test of sphericity is thus meaningfully interpreted in conjunction with its associated level of significance, which can be accepted at the $p<0.01$ level.

After determining factorability of the data, an appropriate method for running the EFA procedure can then be nominated. The two principal methods for conducting EFA include either common factor analysis or principal component analysis (PCA) (Malhotra et al. 2017:717). Common factor analysis (also known as Principal axis factoring) produces a factor structure by identifying underlying dimensions, which possess common variance, whereas PCA (also known as components analysis) only considers the total variance accounted for by the extracted factors (Hair et al. 2018:139). In this study, the PCA method was applied in view of determining the maximum variance in the data produced after decomposing the initial variables into a linear set of components (Field 2013:1925).

Following the factor extraction using the PCA method, a component structure was produced as an output of the analysis. Since the researcher did not wish to constrain the number of factors to be extracted, a decision was made to apply the Eigen values criterion of factor extraction, instead. The criterion stipulates that only those components with extracted Eigen values greater than 1.0 should be retained in a study (Pallant 2011:184; Wiid & Diggines 2015:243). Secondly and consistent with the percentage of variance criterion in the social sciences, a decision was taken to consider the six extracted factors that account for more than 60 percent of the total variance in the EFA procedure (Hair et al. 2018:142). Thirdly, the number of factors to be extracted was also determined by the shape of the scree plot; whereas, the break between the steep slope of factors with high roots Eigen values and a gradual trailing off associated with the rest of the factors was
observed (Malhotra et al. 2017:717). Typically, the shape of the scree plot allows easier interpretation of how many true factors should be extracted. Fourthly, to assess the fit of the model, the differences between the observed correlations (R-matrix) and the correlations based on the model (reproduced correlations) were observed. These differences are termed residuals.

Following the factor extraction procedure, the component structure was cleaned for easier interpretation by applying a factor rotation procedure (Field 2013:1928). Generally, researchers can choose to apply either Oblique rotation methods, which produce factors that possess high association by disregarding axes at right angles during rotation or orthogonal rotation methods, which minimise the number of variables accounted for by the study upon maintaining rotational axes at right angles (Hair et al. 2018:147). The factor rotation assists researchers to identify all those items with significant factor loadings, meaning all those scale items comprising factor loadings between 0.50 and 1.00 (Malhotra et al. 2017:719). This would make it easier for the researcher to identify those scale items, which are likely to be problematic in future statistical applications.

Through a rotation procedure, insignificant scale items can be detected (loadings below 0.50). A factor rotation procedure can also help to identify the size of communality values. Hair et al. (2018:632) mention that communality values infer the amount of variance a variable shares with all the other variables being considered. It is also the proportion of variance explained by common factors. Additionally, communalities matter since they also reflect on the importance of sample sizes. In this study, an orthogonal rotation method was applied. Specifically, Varimax rotation using Kaiser Normalisation in six iterations was applied based on its robustness. The communality sizes were above 0.50 as recommended by Field (2013:1974), whereas in some cases the communality values were even above 0.60 except for item D1, which yielded a communality value of 0.474. On the other hand, factor rotation helped to expose cross-loadings, described as those variables, which load on more than two factors, whereas the difference in loadings between the two cross-loads is less than 0.30 (Malhotra et al. 2017:719). In this study, items C8 and C14 were identified as cross-loading and yielding weak communality values (below 0.40). After this initial EFA procedure, a second procedure was conducted whereby the rotated factor component matrix yielded six factors as anticipated, with all significant loadings ranging between +0.588 and +0.839. The EFA results are reported in Section 5.7 of this study.

As a final step, the EFA procedure culminates in the naming and interpretation of factors in accordance with the significant scale items loading on each factor (Malhotra et al. 2017:720). In so doing, naming of the factors includes a close inspection of all the items loading on each
extracted factor. Thereafter, each factor is given a label or name that closely describes it based on the corresponding item loadings. Drawing from the variables that are considered significant on each factor, factor scores were then computed and surrogate variables created using the ‘compute variable’ command on SPSS in view of conducting further multivariate statistics on the established factor scores. Finally, model fit was determined based on a clear identification of the significant factor loadings.

4.12.4 Descriptive statistics

Descriptive statistics are a summary of statistical measures that provide summated sample characteristics (Wilson 2014:331). Brown et al. (2018:259) advocate that descriptive statistics depict the distribution and general pattern of participants’ responses for each scaled variable. In this study, descriptive statistics were applied in view of examining the responses made on the 31 Likert-scaled items on the questionnaire. Specifically, the study reports on the sample findings regarding the measures of central tendency, measures of variability as well as the measures of peakedness (Babin & Zikmund 2016:365; Burns et al. 2017:319).

4.12.4.1 Measures of central tendency

Measures of central tendency (also termed measures of location) encapsulate the typical description of responses to a particular question (Burns et al. 2017:319). They comprise common summary statistics that locate the central distribution of responses in a data set including the mean, median and mode (Hair et al. 2013:170).

Babin and Zikmund (2016:365) ascertain that the mean is a statistical measure aimed at uncovering the average score of a data set. When evaluating ratio or interval scaled data such as Likert scales, the mean is considered an arithmetic average calculated by summing up the scores in a data set and dividing the total value of those scores by their number (Brown et al. 2018:260). In this study, a seven-point Likert scale was applied on the interval-based questions (sections C, D and E), implying that the arithmetic mean would be settled at a value of 4.0.

According to Babin and Zikmund (2016:366), the median expresses the value below which 50 percent of the values in a data set fall. In other words, the median value rests at the exact middle of a given set of values, in the case of an odd-numbered data set when arranged in ascending order (Wilson 2014:246; Saunders et al. 2016:529). However, if the data set is even-numbered, it is conventional practise to add the two middle values thereby dividing the sum value by two (Tustin et al. 2010:541). In the case of a seven-point Likert scale that was applied on the interval scaled
questions in this work, the median value was considered as four (1, 2, 3, 4, 5, 6 and 7), as it depicts the middle value on the odd-numbered scale.

The mode is a descriptive statistic that specifies the value with the highest frequency in a data set (Wilson 2014:246). When distribution graphs are used to observe data, the mode will represent the highest peak on such a graph (Wiid & Diggines 2015:253). In some cases, more than one modal value may be identified in a data set, signalling either two (bimodal) or more (multimodal) instances represented by the same frequency (Tustin et al. 2010:544-545). Modal values reported on each statement on the non-categorical data are shown in Section 5.4.3 of this study.

4.12.4.2 Measures of variability

Measures of variability (also termed measures of dispersion) reveal the symbolic difference between a string of values in a data set (Burns et al. 2017:320). In other words, the statistics reveal how similar respondents are to each other based on the subject of interest. This measure is an important consideration for marketing researchers who wish to establish segmentation strategies by profiling a group of respondents. Thus, the measures explained in this category permit researchers to draw contrasts between comparable distributions of values within a data set (Bryman et al. 2017:319). In this study, the range, standard deviation and variance were computed to evaluate the level of dispersion among the participants’ responses.

The range is a simple statistic, which identifies the differential distance between the maximum and the minimum values in an ordered distribution (Hair et al. 2013:271). The range is calculated by subtracting the smallest value from the highest value in a scale (Denscombe 2014:255). In this study, the range lies between the minimum value on the Likert scale continuum (1) and the maximum value (7). Any values outside of these parameters are considered out of range values, therefore, not desirable for this research.

According to Wilson (2014:247), the standard deviation refers to the average distance of a distribution from the mean value. As such, the standard deviation acts as a convenient measure of the variation in responses for continuous measures (Brown et al. 2018:260). Whereas the standard deviation is the square root of the variance values, the former is expressed in the same units as the mean yet the latter is expressed in square units. In general, the standard deviation values should be cluttered around one.
4.12.4.3 Measures of peakedness

Measures of peakedness (shape) are useful in understanding the nature of data distribution (Tustin et al. 2010:554). Secondarily, the measures of peakedness are applied as a basic statistic for communicating the degree of normality within a data distribution (Ho & Yu 2015:370). Specifically, skewness and kurtosis values are computed in view of assessing the shape of the normal distribution curve and, thereby, inferring the extent of data normality within the empirical data.

Skewness is a measure of the symmetrical position of a distribution (Tustin et al. 2010:554). Put simply, skewness points to the balance of a distribution. In symmetrical distributions, the mean, mode and median are equal on either half of a data distribution (mean=median=mode). The skewness value is the extent of deviation from the mean on a data distribution, to the left or the right (Pallant 2011:57). Positive skewness in unimodal distributions suggests positive values whereas negative skewness suggests extreme negative values (Ho & Yu 2015:370). Nevertheless, the cut-off values for skewness falling outside of range of -2 to +2 denote a substantially skewed distribution (George & Mallery 2016:114-115). Thus, the skewness values reported in this study (ranging between -0.792 and +0.179) denote data normality.

The kurtosis value relates to the peakedness or flatness of the distribution curve (Saunders et al. 2016:519). A zero kurtosis value represents a normally distributed data set; although it is unlikely to obtain a data set that produces a threshold of exactly zero (Malhotra et al. 2017:564). Be that as it may, if the kurtosis curve is aligned mostly to the positive side of the axis, then the distribution of data is more peaked (leptokurtic) yet if the curve is aligned to the negative side of the axis, it means the distribution is flat relative to a normal distribution (platykurtic) (Wiid & Diggines 2015:254; Hair et al. 2018:94). The kurtosis values ranging between -1.156 and +0.623) reported in Section 5.9 of this study were within the less conservative threshold of ±2, thereby suggesting that the empirical data were reasonably normal.

4.12.5 Correlation analysis

Correlation analysis entails an assessment of the level of association or relationships that exist between the independent and dependant variables of a study (Burns et al. 2017:318). This involves an evaluation of the strength as well as the direction of the relationships among variables (Brown et al. 2018:276). Nevertheless, a high level of correlation does not necessarily indicate cause and effect between variables. Instead, correlation analysis serves to determine the patterns of association between variables, only (Pallant 2011:129). In this study, a bivariate correlation
Analysis procedure was conducted by extracting Pearson’s correlation coefficients \( r \). The choice of this statistic was inferred from two key assumptions. First, linearity was assumed based on the theoretic supposition that a straight-line relationship exists between the variables chosen for this study. Secondly, the assumption of homoscedasticity was satisfied by evidence of a normally distributed data set, explained in Section 5.11.2 of this study.

In terms of interpreting the statistic, if Pearson’s correlation coefficient \( r \) is reported as a value of zero, this implies that there is no relationship among the variables, whereas a value of one, suggests a perfect and linear relationship among the variables of interest (Prion & Haerling (2014:587)). The scholars suggest that the statistic be interpreted in light of varying thresholds in either direction, ranging from negligible \( (0 \leq r \leq 0.20) \), weak \( (0.21 \leq r \leq 0.35) \), moderate \( (0.36 \leq r \leq 0.67) \), strong \( (0.68 \leq r \leq 0.90) \) and very strong \( (0.91 \leq r \leq 1.0) \) correlations among a combination of variables. This interpretation was applied in this work, as evidenced by the correlation coefficients ranging between +0.297 and +0.642 implying weak to moderate relationships in accordance with the thresholds specified by the scholars. Moreover, the computed correlation coefficients were positive and significant at \( p<0.01 \). These results are reported in Section 5.10 of this study.

### 4.12.5.1 Multicollinearity assessment

Upon applying multivariate statistical techniques, it is very important to consider the level of multicollinearity within a data set. Multicollinearity is inferred from the high inter-factor correlations between the independent variables (Saunders et al. 2016:549), thereby making it difficult to assess the relative strength of a predictor variable when explaining the variation on a dependent variable. In this study, the inter-factor correlation matrix was inspected in view of determining the extent to which the variables are highly collinear. To this end, the prescription by Hair et al. (2018:319) that any correlation coefficient greater than \( \pm 0.70 \) signifies collinearity problems was upheld in this work. In this regard, no multi-collinearity problems were identified in this work since the highest correlation coefficient reported in the correlation matrix computed for this study was +0.642 \( (p<0.01) \).

The SEM approach is discussed in the next section as it entails the foundational anchor that was used for testing the conceptual model and hypotheses formulated in this study.

### 4.13 STRUCTURAL EQUATION MODELLING (SEM)

The SEM approach is a hybrid multivariate statistical technique used for testing structural theory that incorporates both observed and latent variables (Ho, Kuo & Lin 2012:844). According to
Bagozzi and Yi (2012:8), the SEM procedure is complementary multiple regression analysis and analysis of variance (ANOVA). Nevertheless, its uniqueness lies in that the procedure concurrently account for measurement error while assessing the causal relationships among variables, simultaneously (Hair et al. 2018:607). This has rendered the SEM procedure a predominant methodology in Management fields. In this study, a covariance-based SEM approach was applied using the AMOS software (Version 25.0). Owing to the confirmatory nature of this research, the dual approach followed by Anderson and Gerbing (1988:411) was followed whereby a measurement model was specified first, followed by a structural model. According to earlier work by Cheng (2001:650), these dual components are known to expand the explanatory and statistical efficiency for testing a model within a single comprehensive framework. The specific steps that were followed during the SEM procedure are explained next.

4.13.1 Defining the individual constructs

The SEM procedure is heavily grounded in theory (Schumacker & Lomax 2010:2; Malhotra et al. 2017:802). This means that the specific constructs, their operational definitions, measurement and interrelationships should be specified in advance, prior to applying the statistical procedure (Hair et al. 2018:614). Whereas measurement theory explains how the constructs are represented, structural theory posits how the constructs are interrelated, empirically.

4.13.2 Specification of the measurement model

According to Anderson and Gerbing (1988:411), a measurement model relates the study theory by specifying how the latent factors are represented by their respective observed variables. In this regard, the measurement model describes the underlying relationships depicting how well the observed variables serve as a measurement mechanism for their latent variables (Jöreskog & Sörbom 1993:17). In this study, the measurement model was specified using the Maximum Likelihood Estimation (MLE) technique. Largely, the MLE technique is desirable among researchers since it enacts asymptotic properties that include the absence of measurement bias and minimum variance in a data (Blunch 2008:81). In this regard, the measurement model was specified by assigning the 31 observed variables drawn from the questionnaire to each respective latent construct. Since a latent variable is not observed it has no metric values, hence specification required setting one of the factor loadings to a value of one. The specified measurement model is pictorially illustrated in Section 5.11.3 of this study.


4.13.3 Sample size requirements and data normality

The sample size requirements in SEM are dictated by the complexity of the model, the chosen estimation technique, amount of missing data and the amount of error variance among the scale indicators as well as the distribution of the data (Malhotra et al. 2017:804). Generally, models with a large number of variables are considered complex and thus require large sample sizes (Schumacker & Lomax 2010:99). Large sample sizes are also required if there are less than three observed variables along a latent factor or if the extent of missing data is higher than 10 percent. On the other hand, choosing the MLE technique points to the use of large sample sizes, ranging between 200 and 400 (Blunch 2008:82). Likewise, the sample size guidelines put forward by previous scholars were taken into consideration upon determining the appropriate sample size for this study as explained in Section 4.6.4 of this study.

The validity of a measurement model depends on the goodness-of-fit results, reliability and evidence of construct validity. These elements are explained next.

4.13.4 Assessment of the measurement model fit

The aim of model fit assessment is to determine the significance of the identified interrelationships and covariance that exists between the latent variables (Shiu et al. 2009:654). When assessing goodness-of-fit of a measurement model, it is possible to evaluate the extent to which the specified model reproduces the covariance of the indicator variables (Σk) in the sample data (N) (Malhotra et al. 2017:805). The scholars highlight that the various measures designed to assess model fit comprise, absolute fit, incremental fit and parsimonious fit indices.

Absolute fit indices measure either goodness- or badness-of-fit; whereas, goodness-of-fit indices indicate how well a specified model fits the empirical data and badness-of-fit indices measure error or some form of deviation (Malhotra et al. 2017:798). In general, high values are desirable for goodness-of-fit indices (greater than 0.90); whereas, lower values are accepted in the case of badness-of-fit indices (less than 0.08) (Hooper, Coughlan & Mullen 2008:54). Goodness-of-fit indices comprise the goodness-of-fit (GFI) as well as the adjusted goodness-of-fit indices (AGFI), whereas badness-of-fit indices comprise the chi-square (χ²), the root mean square residual (RMSR), the standardised root mean square residual (SRMSR) as well as the root mean square error of approximation (RMSEA).

Incremental fit indices evaluate how well the specified model fits the sample data, relative to some alternative model that is treated as a baseline model (Hooper et al. 2008:54). Typically, the
baseline model is the null hypothesis that assumes that the observed variables are uncorrelated. They comprise the normed fit index (NFI), the non-normed fit index (NNFI), the comparative fit index (CFI), the Tucker-Lewis index (TLI) as well as the relative fit index (RFI) (Hair et al. 2018:639).

Parsimonious fit indices are designed to assess fit in relation to model complexity by calculating the parsimony ratio as the ratio of the degrees of freedom used by the model to the total degrees of freedom available (Hair et al. 2018:639). The indices in this category include the parsimony goodness-of-fit index (PGFI) as well as the parsimony normed fit index (PNFI).

4.13.5 Confirmatory factor analysis (CFA)

Confirmatory factor analysis is a technique that seeks to confirm the number of factors (constructs) and the loadings of the observed indicator variables as predicted by the measurement model (Hair et al. 2018:660). According to Byrne (2016:6), when applying the CFA procedure, the researcher proposes relationships between the observed measures and their underlying factors based on a priori theory and/or hypothesis. This means a researcher specifies a number of factors that are highly associated and specifies observed variables that measure each factor.

If the validity of a proposed measurement model is not satisfactory, the diagnostics information from the CFA procedure can be useful for making appropriate modifications. This commences with an assessment of the size, significance and direction of the reported standardised regression weights, also termed factor loadings. In addition, the diagnostics include an assessment of the squared multiple correlations (SMC), error variances as well as the standardised residuals and modification indices. In this study, all four conditions were met as reported in Section 5.11.5 of this study.

4.13.6 Reliability assessment of the measurement model

The reliability of a measurement model can be assessed using two statistics, namely the Cronbach’s alpha coefficient discussed in Section 4.10 of this study as well as the composite reliability (CR) statistic. The latter is a robust measure that assesses the degree to which observed variables measure the latent variables (Hair et al. 2018:659). CR is computed by squaring the summation of the factor loadings and adding the summation of error variances. According to Malhotra et al. (2017:807), the formula for calculating CR is as follows:
For a measurement model to be deemed reliable, each latent variable should report a CR value that is between 0.70 and 1.0. However, if the estimates for model validity are good, values between 0.60 and 0.70 may be considered acceptable (Malhotra et al. 2017:807).

4.13.7 Validity assessment of the measurement model

Construct validity of the measurement model was evaluated in terms of the convergent, discriminant and nomological validity considerations.

4.13.7.1 Convergent validity of the measurement model

To measure convergent validity, three statistics were considered. First, the size and statistical significance of the factor loadings on the CFA procedure were considered. Secondly, the average variance extracted (AVE) values were calculated. The formula recommended by Fornell and Larcker (1981:46) for calculating AVE is denoted as follows:

\[ V_\eta = \frac{\sum \lambda_i^2}{\sum \lambda_i^2 + \sum \varepsilon_i} \]

\[ \text{AVE} = \frac{\text{summation of the squared of factor loadings}}{\text{summation of the squared of factor loadings} + \text{summation of error variances}} \]

The threshold of AVE values greater than 0.50 was met (0.526 ≤ AVE≤ 0.612) and is reported in Section 5.11.7 of this study. Thirdly, based on an indirect extrapolation from the CR values greater than 0.70 across all six latent variables, it was also concluded that the convergent validity of the measurement model is adequate.

4.13.7.2 Discriminant validity of the measurement model

In SEM, it is assumed that a set of observed variables load on only one construct and should typically represent only one underlying construct, signalling uni-dimensionality (Hair et al. 2018:664). In this regard, all cross-loadings are specified and fixed to be at zero. Secondly, Fornell and Larcker’s (1981:44) guideline of checking if the square roots of each AVE value are higher than the largest correlation coefficient in the bivariate correlation matrix is considered. In this study, the computed square root values for all AVE values for the constructs ranged between 0.725
and 0.792, which is significantly larger than the highest correlation coefficient \((r=+0.642; p<0.01)\) in the matrix. These results are shown in Section 5.10 of this study.

### 4.13.7.3 Nomological validity of the measurement model

Constructing a correlation matrix is a useful tool in assessing the nomological validity of a specified measurement model (Anderson & Gerbing 1988:411). In this study, the inter-construct correlation matrix correlation coefficients were computed. The positive, weak to moderate yet significant correlation results denote the nomological validity of this study as explained in Section 5.11.7 of this study.

If all the constructs meet the requirements of reliability and validity, the variables are then incorporated into the structural model.

### 4.13.8 Specification of the structural model

Upon moving from the measurement model to the structural model, the emphasis shifts from the relationships between latent constructs and their observed variables to the nature and the magnitude of the relationship between the latent constructs themselves (Arslan, Yilmaz & Aksoy 2012:32). In so doing, the theoretical underpinnings of a study and the significance of the relationships among the constructs are thereby demonstrated (Jenatabadi & Ismail 2014:27). The following steps were applied upon evaluating the structural model for this study.

#### 4.13.8.1 Assessment of the structural model fit

Whereas the observed covariance matrix does not change since the same empirical data are used to estimate the structural model, the estimated covariance matrix will change based on the set of estimated relationships (Malhotra et al. 2017:810). By implication, the model fit statistical values will change, indicating that the fit of the structural model may be different from the fit of the measurement model. In this study, the structural model depicted adequate fit as demonstrated by the fit indices reported in Section 5.11.8 of the study.

#### 4.13.8.2 Hypotheses testing

The graphical representation of a structural model is called a path diagram (Anderson & Gerbing 1988:411; Hair et al. 2018:27). In specifying the structural model, it is desirable to estimate the factor loadings and the error variances along with the structural parameters. Notably, Wu (2010:136) emphasises that the purpose of path modelling is to explain the standardised
regressions in terms of direction, size and regression coefficients. The results of the structural model and hypotheses testing are reported in Section 5.11.8.2 of this study.

4.13.8.3 Competing models

In addition to having a structural model with good fit indices, it is good practise to show that the proposed model has better fit than any other competing models that might be considered to be an alternative. Thus, the ultimate principle of competing models assessment is to ensure that the proposed model not only has acceptable model fit but also assesses whether one model outperforms a plausible alternative model (Malhotra et al. 2017:811). This means once SEM is conducted and model fit of the structural model is determined, it does not mean that the initial model is the only model that can explain the concepts better (Hair et al. 2018:619). While acknowledging that there is a possibility that there could be superior/competing models that could explain the theory of market maven tendency better, this element was not included in the dissertation in view of upholding brevity of this work.

4.14 CONCLUSION

This chapter presented the steps that were followed to obtain and analyse the empirical data for this study. Specifically, the work by Saunders and Tosey (2013:59) guided the methodology in this research. The chapter elaborated on the positivism research philosophy, which guided this research as it closely props towards deductive theory building. A single-cross sectional descriptive research design was followed in this research, whereby data were collected from a sample of 475 female market mavens, using a self-administered survey questionnaire. Thereafter, the data preparation process was outlined, clarifying how editing checks were conducted during the field as well as the data cleaning process that was conducted on SPSS. Thereafter, the chapter explains various statistical analysis procedures in the order in which they were applied in this work. Finally, the steps involved in the SEM procedure are discussed since SEM entails the main procedure wherewithal the hypotheses for this study were tested.

The next chapter reports on the empirical results and then proceeds to interpret the findings in light of the extrapolated hypotheses and conceptual model testing that was performed in this study.
CHAPTER 5
DATA ANALYSIS AND INTERPRETATION OF THE EMPIRICAL FINDINGS

5.1 INTRODUCTION

The purpose of this chapter is to present the results of the statistical data analysis that was conducted in this work. Specifically, the chapter depicts the findings in a vivid and coherent manner for readability. Babin and Zikmund (2016:393) attest that data analysis and interpretation allows researchers to make inferences beyond the scope of a research project and the empirical findings. In this regard insights are provided from the research results, which then become useful inputs for managerial decision making (Serakan & Bougie 2016:22). Thus, the findings of the empirical component of this work are interpreted in light of the existing literature in view of identifying possible implications for marketers.

In this chapter, the first phase of data analysis that is reported in Section 5.2 commenced with the results of the pilot study. Thereafter, a description of the data gathering process that was undertaken at the main survey is provided in Section 5.3 of this study. This discussion includes the preliminary data preparation checks that were conducted, comprising the data editing, cleaning and coding procedures. Section 5.4 presents the frequency distributions for the non-categorical data, in the form of simple tabulation. Following on, the sampling distribution profile is presented in the form of bar charts and pie charts in Section 5.5, which clearly depict the modal distribution of the sample, with respect to the demographic data. Moreover, the new cosmetics trial behaviour of the participants is summated in Section 5.6 of this study.

The second phase of data analysis comprises the inferential statistics that were employed on the scaled response categories. This commences with a presentation of the results of the EFA procedure that was conducted in Section 5.7, thereby leading to the identification of individual components, termed factors. Thereafter, the identified factors are evaluated for internal-consistency reliability with a limited considerate on the validity of the scale in Section 5.8, whereas the computation of the descriptive statistics in Section 5.9 helped to summarise the data distribution along the computed factor scores. Thereafter, Section 5.10 was useful in demonstrating the existence of weak to moderate correlational strength among the identified variables in this study.

Finally, the results of the SEM procedure are presented in Section 5.11 of this study, where both the measurement and structural models are evaluated. This discussion culminates in a theoretic-
based discussion on the hypotheses testing results in Section 5.12 and the chapter culminates in Section 5.13, while alluding to the next chapter.

5.2 PILOT TEST RESULTS

A pilot study was undertaken in view of ascertaining that the questionnaire captured the essential variables at the main survey. Whereas some scholars omit this stage after adapting measurement scale items from previous scholars, the pilot test was considered an invaluable exercise in view of determining the semantic structure of the items used in this study. Moreover, a pilot test was considered necessary since several adaptations had been effected on the original scales, to suit the context of this work (refer to Section 4.8.5 of this study). Table 5.1 summarises the results of the pilot survey.

Table 5.1: Summary of the pilot test results

<table>
<thead>
<tr>
<th>Variable description</th>
<th>Items</th>
<th>Cronbach’s alpha coefficients</th>
<th>Average inter-item correlations</th>
<th>Mean</th>
<th>Standard deviation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Consumer innovativeness</td>
<td>C1-C6</td>
<td>0.815</td>
<td>0.489</td>
<td>4.145</td>
<td>1.289</td>
</tr>
<tr>
<td>Aspirational attractiveness</td>
<td>C7-C11</td>
<td>0.836</td>
<td>0.532</td>
<td>4.940</td>
<td>1.425</td>
</tr>
<tr>
<td>Social norms influence</td>
<td>C12-C17</td>
<td>0.832</td>
<td>0.498</td>
<td>3.676</td>
<td>1.466</td>
</tr>
<tr>
<td>Advertising efficacy</td>
<td>C18-C22</td>
<td>0.845</td>
<td>0.554</td>
<td>5.377</td>
<td>1.192</td>
</tr>
<tr>
<td>Market maven tendency</td>
<td>D1-D6</td>
<td>0.826</td>
<td>0.461</td>
<td>5.094</td>
<td>1.196</td>
</tr>
<tr>
<td>New product trial</td>
<td>E1-E5</td>
<td>0.837</td>
<td>0.556</td>
<td>3.881</td>
<td>1.462</td>
</tr>
</tbody>
</table>

Source: Author compilation (2018)

The pilot study was a small-scale survey comprising 53 participants, only. In this test, the internal consistency reliability of the pilot sample was assessed by calculating Cronbach’s alpha coefficients. Overall, the results obtained from the pilot survey provided a satisfactory indication of the internal consistency reliability for all the scaled items included in the questionnaire. In addition, the results exceeded the suggested reliability cut-off threshold of 0.70 suggested by Nunnally (1978:245) and in all cases, the results exceeded 0.80 across all the reported values on Cronbach’s alpha coefficient, which Bryman et al. (2017:38) posits as being a signal of acceptable internal consistency reliability.
The internal consistency reliability for consumer innovativeness (C1 to C6) was reported at a value of 0.815 on Cronbach’s alpha test, whereas aspirational attractiveness (C7 to C11) returned a Cronbach’s alpha coefficient of 0.836. Similarly, social norms influence (C12 to C17) as well as advertising efficacy (C18 to C22) yielded Cronbach’s alpha coefficients of 0.832 and 0.845, respectively. With respect to the market maven tendency scale items (D1 to D6), a value of 0.826 was reported on Cronbach’s alpha test. Relatedly, the five scale items measuring new product trial (E1 to E5) returned a Cronbach’s alpha coefficient of 0.837.

The average inter-item correlation coefficients were used as a measure of convergent validity amongst the scale items used at the pilot survey. Pallant (2011:97) recommends that average inter-item correlation coefficients between 0.20 and 0.40 be considered adequate. In this study, the lowest value reported on the average inter-item correlation coefficients was 0.461. Thus, since a small sample size had been used in this pilot survey (N=53), a less restrictive threshold by Clark and Watson (1995:316) was upheld in this work, which suggests that researchers can include average inter-item correlation coefficients between 0.15 and 0.50. Notably, the average inter-item correlation coefficients for items C7 to C11 (0.532), items C18 to C22 (0.554) as well as items E1 to E5 (0.556) were above the 0.50 threshold, albeit by a minimal margin. Nonetheless, a decision was made to retain the items as the values were still within tolerable parameters to warrant any concerns about collinearity in the study.

Descriptive statistics were computed in view of evaluating the variability of the responses from the arithmetic mean. The scale items yielded mean values ranging between 3.676 and 5.377, whereas the standard deviation values were close to the arithmetic mean, as depicted by the values approximated at ±1 (ranging between 1.192 and 1.466). While the mean values for scale items C12 to C17 (3.676) as well scale item E1 to E5 (3.881) were below the arithmetic mean of 4.0, it was noted that the low sample size at the pilot survey (N=53) may have contributed towards the marginally weak mean values. Overall, the responses provided at the pilot stage pointed to the agreeability of the participants towards market maven attributions as well as new cosmetics product trial.

Following the pilot survey, the study proceeded to collect data at the main survey without effecting any modifications on the questionnaire. The following section discusses the data gathering process that was undertaken at the main survey.
Chapter 5: Data analysis and interpretation of the empirical findings

5.3 DATA GATHERING PROCESS (MAIN SURVEY)

The data in this research were collected after following the sampling design procedure by Brown et al. (2018:205). Specifically, data were collected from female market mavens residing in the southern Gauteng region of South Africa. The mavens purported to have tried out a new cosmetic product within 3 months from the survey date (refer to Section 4.8.3.3 of the study). A self-administered questionnaire was used to collect the relevant information from the sample elements. To stimulate response rate, a cover letter was attached to the questionnaire, explaining the nature, purpose and legitimacy of the study. The questionnaires were hand delivered to the identified participants on a ‘drop and pick later’ basis. Consistent with the sample size, the researcher delivered 600 questionnaires during the period 1 April 2018 to 31 July 2018 in different locations, as advised by the referrals.

The preliminary data preparation checks that were applied are discussed in the next section.

5.4 DATA PREPARATION

Data editing, cleaning, coding and tabulation were carried out during the preliminary data analysis phase. These elements are discussed next.

5.4.1 Data editing and cleaning

The data were visually checked for completion and consistency, during the fieldwork process. Thereafter, central editing was done in the office, whereby the researcher took time to scrutinise every questionnaire for consistency. Nevertheless, the data editing and cleaning phases were conducted in two consecutive phases. Table 5.2 explains the data editing procedure.

Table 5.2: Data editing and questionnaire return rate

<table>
<thead>
<tr>
<th>Fieldwork activity</th>
<th>Frequency</th>
<th>Percentage (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Questionnaires distributed</td>
<td>600</td>
<td>100%</td>
</tr>
<tr>
<td>Refusals</td>
<td>19</td>
<td>(19/600)*100 = 3.17%</td>
</tr>
<tr>
<td>Responded and did not return</td>
<td>14</td>
<td>(14/600)*100 = 2.33%</td>
</tr>
<tr>
<td>Incomplete/inconsistent responses</td>
<td>13</td>
<td>(13/600)*100 = 2.17%</td>
</tr>
<tr>
<td>Responded and returned complete</td>
<td>554</td>
<td>(554/600)*100 = 92.3%</td>
</tr>
<tr>
<td></td>
<td>600 - (19+14+13)=554</td>
<td></td>
</tr>
</tbody>
</table>

Source: Author compilation (2018)
Initially, 600 questionnaires were distributed to the identified referrals within the four months period of data collection. Nevertheless, 19 of the participants who had been identified refused to take part in the study, citing busy schedules and unwillingness to complete the questionnaire. Following on, 14 questionnaires that were administered successfully were not returned owing to the participants either not responding to the researcher’s phone call requests for collection or the respondents’ unavailability on the agreed date for collecting the completed questionnaires. Therefore, by the end of July 2018, 567 questionnaires had been completed and were on hand. Thereafter, the central editing process was conducted whereby the 567 questionnaires were scrutinised closely. In this process, 13 questionnaires were identified as having either too many incomplete and/or inconsistent responses, which resulted in them being discarded, thereafter yielding 554 complete and usable questionnaires.

The 554 usable questionnaires were then captured onto SPSS software. This gave the researcher an opportunity to clean the data by checking for missing values and, thereafter, demarcating the accuracy of the target population. Concerning the latter, it was considered necessary at this stage to ensure that professed market mavens had completed the questionnaires only, whereas individuals who did not report true market maven tendency were to be excluded from the research. Thus, the 554 usable questionnaires were subjected to a second phase of scrutiny, yielding a clear categorisation of market maven scores as shown in Figure 5.1 of this study.

![Market maven tendency scores](image)

**Figure 5.1:** Market maven tendency scores

**Source:** Author compilation (2018)
Guided by the use of a seven-point Likert scale comprising six scale items on the market maven attribute (scale items D1 to D6), the highest maven score was deemed to be 42. Consistent with the discussion presented in Section 4.8.3.5 of this study, subsequent scoring were categorised in accordance with previous scholars (Abratt et al. 1995:37; Wiedmann et al. 2001:200; Walsh & Elsner 2011:76) as follows:

- Non-maven tendency (market maven score below 19)
- Low maven tendency (market maven score between 19 and 24)
- Moderate maven tendency (market maven score between 25 and 30)
- High maven tendency (market maven score between 31 and 42).

The majority of the participants scored between 31 and 42 along the market maven scale (n=248; 44.8% of the sample), implying that they demonstrated high maven tendency. This result correlates with the finding of previous scholars that the mainstream demographic among market mavens is that of the female consumer (Price et al. 1987:333; Ruvio & Shoham 2007:705). Likewise, a sizeable proportion of the sample comprised individuals who reflected either moderate (n=141; 25.5% of the sample) or low (n=86; 15.5% of the sample) market maven tendency. The totality of this outcome in terms of responses provided on the market maven scale resonates with Ruane and Wallace’s (2013:318) assertion that “female mavens are the most relevant cohort when marketers wish to incite new products in the market”. In this case, female market mavens are renowned for stimulating the trial of new cosmetics owing to their affinity for experimenting with new products. Finally, the summated scores enabled the researcher to single out those individuals who did not portray market maven tendency, as represented by the participants who reported a market maven score below 19 (n=79; 14.3% of the sample). Thereafter, the data were cleaned as shown on Table 5.3.
Table 5.3: Data cleaning results

<table>
<thead>
<tr>
<th>Data cleaning element</th>
<th>Number of cases/Frequency</th>
<th>Percentage (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Responded and returned complete (refer to Table 5.2 of this study)</td>
<td>554</td>
<td>(554/600)×100 = 92.3%</td>
</tr>
<tr>
<td>Failed to meet maven criteria (less than 19 score on the maven scale)</td>
<td>79</td>
<td>(79/554)×100 = 14.26%</td>
</tr>
<tr>
<td>Admissible questionnaires</td>
<td>N=86+141+248=475</td>
<td>(475/554)×100 = 85.7%</td>
</tr>
<tr>
<td></td>
<td>Low maven score =86</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Medium maven score =141</td>
<td></td>
</tr>
<tr>
<td></td>
<td>High maven score =248</td>
<td></td>
</tr>
<tr>
<td>Response rate</td>
<td>475/600×100 = 79.2%</td>
<td></td>
</tr>
</tbody>
</table>

Source: Author compilation (2018)

Drawing from the results reported in Table 5.3, the study yielded a participation rate of 92.3 percent. Nevertheless, of the 554 cases that were admitted in the study, 79 cases demonstrated non-maven tendency (79÷554×100=14.26%) and these were discarded as they did not meet the stipulated criteria for the unit of analysis in this study. Ultimately, only 475 questionnaires were considered admissible for eventual statistical analysis, yielding a 79.2 percent response rate.

5.4.2 Data coding

In this study, data were captured on a Microsoft Excel™ spreadsheet and post-coding was applied to sections A and B of the questionnaire after editing checks had been completed. However, in sections C, D and E there was no need to alter the codes, of which the responses elicited by the participants on the scaled items were already codes in themselves. Table 5.4 presents the codes assigned for each item in the questionnaire.

Table 5.4: Data coding at the main survey

<table>
<thead>
<tr>
<th>Question</th>
<th>Code</th>
<th>Variable</th>
<th>Value assigned to responses</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td>Section A: Demographic information</td>
</tr>
<tr>
<td>Question 1</td>
<td>A1</td>
<td>Age</td>
<td>18-20 years (1), 21-30 years (2), 31-40 years (3), 41-50 years (4), Over 50 years (5)</td>
</tr>
<tr>
<td>Question 2</td>
<td>A2</td>
<td>Ethnic group</td>
<td>Black African (1), Coloured (2), Asian (3), White (4), Other (5)</td>
</tr>
</tbody>
</table>
Table 5.4: Data coding at the main survey (continued …)

<table>
<thead>
<tr>
<th>Question</th>
<th>Code</th>
<th>Variable</th>
<th>Value assigned to responses</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Section A: Demographic information</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Question 3</td>
<td>A3</td>
<td>Native language</td>
<td>Afrikaans (1), English (2), IsiNdebele (3), IsiXhosa (4), IsiZulu (5), Sepedi (6), Sesotho (7), Setswana (8), SiSwati (9), Tshivenda (10), Xitsonga (11), Other (12)</td>
</tr>
<tr>
<td>Question 4</td>
<td>A4</td>
<td>Marital status</td>
<td>Single/Never been married (1), Married (2), Separated (3), Divorced (4), Widowed (5), Other (6)</td>
</tr>
<tr>
<td>Question 5</td>
<td>A5</td>
<td>Highest educational qualification</td>
<td>Grade 12/Matric (1), Nated (2), Higher certificate (3), Diploma (4), Degree (5), Masters/PhD (6)</td>
</tr>
<tr>
<td>Question 6</td>
<td>A6</td>
<td>Monthly income (before tax)</td>
<td>Less than R5 000 (1), R5 001–R10 000 (2), R10 001–R20 000 (3), R20 001–R30 000 (4), Above R30 000 (5)</td>
</tr>
<tr>
<td><strong>Section B: New cosmetic products trial information</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Question</td>
<td>B1</td>
<td>Primary communication strategy about new cosmetic products</td>
<td>Broadcast (1), Print (2), Electronic (3), Social media (4), Word of mouth (5)</td>
</tr>
<tr>
<td>Question</td>
<td>B2</td>
<td>Primary communication source about new cosmetic products</td>
<td>Mass media (1), Family, friends and/or colleagues (2), Other influential consumers (3)</td>
</tr>
<tr>
<td>Question</td>
<td>B3</td>
<td>Type of information disseminated by influential consumers</td>
<td>Which product/brand to buy (1), Where to buy (2), Best value (3), Product quality (4)</td>
</tr>
<tr>
<td>Question</td>
<td>B4</td>
<td>Trial of new cosmetic products within the past 3 months</td>
<td>Yes (1), No (2)</td>
</tr>
<tr>
<td>Question</td>
<td>B5</td>
<td>Category of new cosmetic products tried out</td>
<td>Skincare (1), Haircare (2), Fragrances (3), Toiletries (4), Decorative (5)</td>
</tr>
<tr>
<td>Question</td>
<td>B6</td>
<td>Favourite cosmetic brand in the market</td>
<td>Revlon™ (1), Avon™ (2), L’Oreal™ (3), Other (4)</td>
</tr>
<tr>
<td>Question</td>
<td>B7</td>
<td>Venue for recent cosmetic product trial</td>
<td>Retail store (1), Online shop (2), Through a consultant from a cosmetics company (3), Beauty salon/spa (4), Family home (5), Pop up shop</td>
</tr>
<tr>
<td>Question</td>
<td>B8</td>
<td>Frequency of cosmetics product trial experiences per year</td>
<td>Once a year (1), At least twice a year (2), At least four times a year (3), At least 12 times a year (4), At least 52 times a year (5)</td>
</tr>
</tbody>
</table>
### Table 5.4: Data coding at the main survey (continued …)

<table>
<thead>
<tr>
<th>Section C: Factors influencing market maven tendency</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Question</strong></td>
</tr>
<tr>
<td>-----------------</td>
</tr>
<tr>
<td>Item 1-6</td>
</tr>
<tr>
<td>Item 7-11</td>
</tr>
<tr>
<td>Item 12-17</td>
</tr>
<tr>
<td>Item 18-22</td>
</tr>
</tbody>
</table>

### Section D: Market maven tendency

| Item 1-6 | D1 D2 D3 D4 D5 D6 | Market maven tendency | Strongly disagree (1), Disagree (2), Slightly disagree (3), Neither agree nor disagree (4), Slightly agree (5), Agree (6), Strongly agree (7) |
Table 5.4: Data coding at the main survey (continued …)

<table>
<thead>
<tr>
<th>Section E: New cosmetic products trial</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Question</strong></td>
</tr>
<tr>
<td>Item 1-5</td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td></td>
</tr>
</tbody>
</table>

Source: Author compilation (2018)

5.4.3 Tabulation of variables

The frequencies obtained for Section C, D and E of the questionnaire are specified in Table 5.5.

Table 5.5: Frequency distribution table of responses

<table>
<thead>
<tr>
<th>Scale item</th>
<th>Strongly disagree (1)</th>
<th>Disagree (2)</th>
<th>Slightly disagree (3)</th>
<th>Neither disagree nor agree (4)</th>
<th>Slightly agree (5)</th>
<th>Agree (6)</th>
<th>Strongly agree (7)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Section C: Factors influencing market maven tendency</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>C1</td>
<td>23</td>
<td>23</td>
<td>53</td>
<td>93</td>
<td>120</td>
<td>73</td>
<td>90</td>
</tr>
<tr>
<td>C2</td>
<td>21</td>
<td>28</td>
<td>52</td>
<td>81</td>
<td>145</td>
<td>77</td>
<td>71</td>
</tr>
<tr>
<td>C3</td>
<td>13</td>
<td>12</td>
<td>41</td>
<td>36</td>
<td>152</td>
<td>96</td>
<td>125</td>
</tr>
<tr>
<td>C4</td>
<td>31</td>
<td>22</td>
<td>62</td>
<td>111</td>
<td>120</td>
<td>82</td>
<td>47</td>
</tr>
<tr>
<td>C5</td>
<td>30</td>
<td>20</td>
<td>70</td>
<td>122</td>
<td>99</td>
<td>90</td>
<td>44</td>
</tr>
<tr>
<td>C6</td>
<td>30</td>
<td>32</td>
<td>71</td>
<td>111</td>
<td>102</td>
<td>78</td>
<td>51</td>
</tr>
<tr>
<td>C7</td>
<td>19</td>
<td>28</td>
<td>40</td>
<td>42</td>
<td>139</td>
<td>82</td>
<td>125</td>
</tr>
<tr>
<td>C9</td>
<td>19</td>
<td>30</td>
<td>54</td>
<td>87</td>
<td>116</td>
<td>63</td>
<td>106</td>
</tr>
<tr>
<td>C10</td>
<td>13</td>
<td>21</td>
<td>34</td>
<td>70</td>
<td>123</td>
<td>77</td>
<td>137</td>
</tr>
<tr>
<td>C11</td>
<td>6</td>
<td>14</td>
<td>29</td>
<td>43</td>
<td>156</td>
<td>90</td>
<td>137</td>
</tr>
<tr>
<td>C12</td>
<td>23</td>
<td>43</td>
<td>55</td>
<td>95</td>
<td>162</td>
<td>54</td>
<td>43</td>
</tr>
<tr>
<td>C13</td>
<td>38</td>
<td>49</td>
<td>78</td>
<td>90</td>
<td>133</td>
<td>48</td>
<td>39</td>
</tr>
</tbody>
</table>
Table 5.5: Frequency distribution table of responses (continued …)

<table>
<thead>
<tr>
<th>Scale item</th>
<th>Strongly disagree (1)</th>
<th>Disagree (2)</th>
<th>Slightly disagree (3)</th>
<th>Neither disagree nor agree (4)</th>
<th>Slightly agree (5)</th>
<th>Agree (6)</th>
<th>Strongly agree (7)</th>
</tr>
</thead>
<tbody>
<tr>
<td>C15</td>
<td>49</td>
<td>56</td>
<td>83</td>
<td>101</td>
<td>91</td>
<td>64</td>
<td>31</td>
</tr>
<tr>
<td>C16</td>
<td>83</td>
<td>67</td>
<td>67</td>
<td>86</td>
<td>104</td>
<td>48</td>
<td>20</td>
</tr>
<tr>
<td>C17</td>
<td>64</td>
<td>47</td>
<td>55</td>
<td>107</td>
<td>121</td>
<td>46</td>
<td>35</td>
</tr>
<tr>
<td>C18</td>
<td>14</td>
<td>5</td>
<td>20</td>
<td>69</td>
<td>177</td>
<td>89</td>
<td>101</td>
</tr>
<tr>
<td>C19</td>
<td>7</td>
<td>17</td>
<td>28</td>
<td>68</td>
<td>154</td>
<td>106</td>
<td>95</td>
</tr>
<tr>
<td>C20</td>
<td>4</td>
<td>5</td>
<td>20</td>
<td>39</td>
<td>163</td>
<td>116</td>
<td>128</td>
</tr>
<tr>
<td>C21</td>
<td>3</td>
<td>4</td>
<td>21</td>
<td>46</td>
<td>175</td>
<td>117</td>
<td>109</td>
</tr>
<tr>
<td>C22</td>
<td>3</td>
<td>4</td>
<td>16</td>
<td>45</td>
<td>166</td>
<td>97</td>
<td>144</td>
</tr>
</tbody>
</table>

Section D: Market maven tendency

| D1         | 16                    | 15           | 22                    | 86                             | 162               | 64        | 110               |
| D2         | 3                     | 6            | 45                    | 85                             | 160               | 104       | 72                |
| D3         | 5                     | 15           | 46                    | 130                            | 132               | 87        | 60                |
| D4         | 1                     | 14           | 35                    | 93                             | 148               | 103       | 81                |
| D5         | 4                     | 0            | 16                    | 57                             | 148               | 76        | 174               |
| D6         | 8                     | 11           | 31                    | 133                            | 120               | 87        | 85                |

Section E: New product trial

| E1         | 66                    | 43           | 64                    | 123                            | 105               | 53        | 21                |
| E2         | 56                    | 49           | 76                    | 94                             | 121               | 53        | 26                |
| E3         | 25                    | 38           | 50                    | 72                             | 171               | 56        | 63                |
| E4         | 28                    | 38           | 66                    | 109                            | 134               | 63        | 37                |
| E5         | 53                    | 39           | 62                    | 111                            | 107               | 65        | 38                |

Source: Author compilation (2018)

Simple tabulation was used to report on the frequency distribution of responses given in sections C, D and E of the questionnaire. Drawing from the modal responses presented in Table 5.3, it is
evident that there is a grander weight of responses towards agreement, depicted by higher frequencies on the slightly agree (5), agree (6) and strongly agree (7) category options.

The next section presents the frequencies along the categorical data.

5.5 DEMOGRAPHIC PROFILE OF THE SAMPLE (SECTION A OF THE QUESTIONNAIRE)

Section A of the measuring instrument included questions pertaining to the demographic profile of the sample. Specifically, the participants responded to questions relating to age (A1), ethnicity (A2), native language (A3), marital status (A4), highest educational qualification (A5), as well as average monthly income (A6). The responses provided by the participants are pictorially depicted using pie charts and bar graphs for readability.

5.5.1 Participants’ ages

Figure 5.2 presents a summary of the of the participants’ ages at their next birthday.

Figure 5.2: Participants’ ages at the next birthday

Source: Author compilation (2018)

The participants were grouped into four age groups categories as shown in Figure 5.2. The majority of the participants were in the 21 to 30 years age group (n=191; 40.2% of the sample).
This result is consistent with previous scholars that a typical market maven is ubiquitously young (Feick & Price 1987:87; Williams & Slama 1995:5; Ruvio & Shoham 2007:705). Nevertheless, the second most popular age group in the sample were the slightly older participants who were between 31-40 years (n=116; 24.4% of the sample). Similarly, participants between the ages of 18 to 20 years (n=67; 14.1% of the sample) as well as those individuals between 41 and 50 years in age (n=64; 13.5% of the sample) comprised a comparable proportion of the sample drawn in this research. Nevertheless, the least number of participants were the older participants, who were above the 50 years age mark (n=37; 7.8% of the sample).

5.5.2 Participants’ ethnic groups

Figure 5.3 relates to the ethnicity of the participants.

![Ethnic group chart]

**Figure 5.3: Participants’ ethnic groups**

**Source:** Author compilation (2018)

Drawing from the information presented in Figure 5.3, it is clear that the majority of the participants comprised members of the black African community (n=377; 79.4% of the sample). The reason for this heavy weighting of black Africans could be explained by the geographical area in which this research took place, which is the southern Gauteng region of South Africa. Conversely, the minority groups that took part in this study comprised individuals who may be classified as either White (n=60; 12.6% of the sample), Coloured (n=28; 5.9% of the sample) or of Asian descent (n=10; 2.1% of the sample). Thus, the reported distribution is considered
proportionate with the racial demographics currently prevailing in the region and Gauteng province at large.

5.5.3 Participants’ native languages

At the main survey, a question was included asking the participants to indicate the native languages they spoke. This served to clarify the composition of the sample in light of the heterogeneous groups and cultures that exist in South Africa. In light of this, Figure 5.4 reports on the native languages of the participants who took part in this study.

Figure 5.4: Participants’ native languages

Source: Author compilation (2018)

In the face of extensive language versatility in South Africa, Figure 5.4 presents the native languages that are articulated by the participants who took part in this research. The majority of the participants indicated that their native language is Sesotho (n=111; 23.4% of the sample) followed by Afrikaans (n=76; 16% of the sample). These results were followed by individuals who spoke IsiZulu (n=56; 11.8% of the sample), Setswana (n=51; 10.7% of the sample), IsiXhosa (n=43; 9.1% of the sample) and Sepedi (n=39; 8.2% of the sample). Nonetheless, there were fewer individuals who nominated English (n=26; 5.5%), SiSwati (n=22; 4.6% of the sample) and
Xitsonga (n=17; 3.6% of the sample), respectively as their native languages. In the same vein, the languages that were represented by a minority proportion of the sample comprised IsiNdebele (n=15; 3.2% of the sample) and Tshivenda (n=15; 3.2% of the sample). In addition, four individuals (0.7% of the sample) indicated that they spoke and regarded Hindi as their native language.

5.5.4 Participants’ marital status

Figure 5.5 summarises the participants’ marital status.

\[
\begin{array}{c|c|c|c|c|c}
\text{Marital status} & \text{Single never been married} & \text{Married} & \text{Separated} & \text{Divorced} & \text{Widowed} \\
\hline
\% & 59.2 & 31.2 & 2.5 & 4.6 & 2.5 \\
\end{array}
\]

\textbf{Figure 5.5:} Participants’ marital status

\textbf{Source:} Author compilation (2018)

According to Figure 5.5, more than half the sample were single and had never been married before (n=281; 59.2% of the sample). This outcome is welcome as it is consistent with the predominant youthful age groups that were reported in Section 5.5.1 of this study. Furthermore, this demographic is consistent with Feick and Price (1987:87), Williams and Slama (1995:5) as well as Ruvio and Shoham (2007:705) who concede that market mavens are likely to be young; thereby, alluding to their energetic, extroverted and explorative spirits (Maurice 2010:9) while playing the market maven role. Following on, the married individuals comprised 31.2 percent of the sample (n=148), whereas those who were divorced comprised 4.6 percent of the sample (n=22). Nevertheless, the least participants in this study included those individuals who were either separated or widowed, comprising 12 participants in each case (2.5% of the sample).
5.5.5 Participants’ highest educational qualifications

Figure 5.6 provides a summary description of the participants’ highest educational qualifications.

![Graph showing highest educational qualifications]

**Figure 5.6: Participants’ highest educational qualifications**

**Source:** Author compilation (2018)

The majority of the participants who took part in this study were in possession of either a Grade 12/ matric certificate (n=175; 36.8% of the sample) or a diploma (n=149; 31.4% of the sample) as their highest qualification. At face value, this result seems to concur with Brancaleone and Gountas (2007:526) that the average market maven possesses basic education of sorts. Nevertheless, 116 participants indicated that they had completed a degree (24.4% of the sample), whereas only 31 individuals purported to be holders of a postgraduate qualification in the form of a masters or PhD qualification (6.5% of the sample). Nevertheless, the least number of participants indicated to having attained either a higher certificate (n=3; 0.6% of the sample) or a nursing certificate, which is a nated course from a private college (n=1; 0.2% of the sample).

5.5.6 Participants’ monthly income before taxation

The monthly income distribution of the participants is presented in Figure 5.7.
Figure 5.7: Participants’ monthly income distribution

Source: Author compilation (2018)

The greater proportion of the sample indicated that they earn less than R5 000 (n=152; 32% of the sample) followed by those who earn between R5 001 and R10 000 (n=100; 21.1%). Whereas the predominant participants may be categorised as the low-income earners, the prevailing results are consistent with the assertion made by Korai (2017:1) that consumers purchase cosmetic products despite their level of education and income. On the other hand, the individuals who earn between R20 001 and R30 000 per month comprised 17.7 percent of the sample (n=84). The remaining participants indicated monthly income earnings ranging between R10 001 and R20 000 (n=74; 15.6% of the sample). While this is so, only 65 individuals who may be classified as middle to upper income earners reported monthly income earnings greater than R30 000 (13.7% of the sample).

The next section elaborates on the cosmetics product trial habits of the participants who took part in this study.
5.6 NEW COSMETIC PRODUCTS TRIAL INFORMATION (SECTION B OF THE QUESTIONNAIRE)

Section B of the questionnaire presented eight questions pertaining to the new cosmetic products trial habits of the participants. The results are discussed next.

5.6.1 Primary communication strategy for disseminating new cosmetic products information

Table 5.6 presents the responses given by the participants when asked about their primary communication strategy (item B1 of the questionnaire) in which they use to access information about new cosmetic products in the market. Since the respondents were permitted to nominate more than one response, tabulation was considered the most preferable format with which to depict the results.

Table 5.6: Primary communication strategy

<table>
<thead>
<tr>
<th>Primary communication strategy</th>
<th>Frequency</th>
<th>Percentage (%)</th>
<th>Cumulative percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Broadcast media (television, radio)</td>
<td>112</td>
<td>23.6</td>
<td>23.6</td>
</tr>
<tr>
<td>Print media (newspapers, flyers, magazines, pamphlets)</td>
<td>84</td>
<td>17.7</td>
<td>41.4</td>
</tr>
<tr>
<td>Electronic media (email, online newsletters, pop-up adverts)</td>
<td>31</td>
<td>6.5</td>
<td>47.9</td>
</tr>
<tr>
<td>Social media (YouTube™, Facebook™, Pinterest™, Twitter™, Instagram™)</td>
<td>145</td>
<td>30.6</td>
<td>78.5</td>
</tr>
<tr>
<td>Word-of-mouth (friends, family, colleagues, acquaintances)</td>
<td>102</td>
<td>21.5</td>
<td>100</td>
</tr>
<tr>
<td>Total</td>
<td>474</td>
<td>100</td>
<td></td>
</tr>
<tr>
<td>Missing in system</td>
<td>1</td>
<td>.2</td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>475</td>
<td>100</td>
<td></td>
</tr>
</tbody>
</table>

Source: Author compilation (2018)

Drawing from Table 5.6, it is interesting to note that the predominant communication strategy was stipulated as either social media (n=145; 30.6% of the sample) or mass media (n=112; 23.6% of the sample). These results are consistent with Geissler and Edison (2005:77) who established that mavens have great affinity for electronic technology when communicating with other consumers.
Specifically, the infiltration of social media platforms, such as YouTube™, Facebook™, Pinterest™, Twitter™ and Instagram™ has contributed largely towards the diffusion of new cosmetic products across different markets (Walsh & Mitchell 2010:48). In the same vein, the broad proliferation of mass media platforms, such as television and radio also contribute towards the broad communication access.

Word-of-mouth sources of communication, such as friends, family and colleagues (n=102; 21.5% of the sample) also pose as an indispensable platform in sharing information related to new cosmetic products. Conversely, print media (n=84; 17.7% of the sample) as well as electronic media channels comprising emails, online newsletters and pop-up adverts (n=31; 6.5% of the sample) seem to play a miniscule role in the dissemination of information relating to new cosmetic products. There was one missing value in the system comprising 0.2 percent of the sample.

5.6.2 Primary source for communicating new cosmetic products information

Given the diverse marketing communication mix elements in the marketplace, marketers continue to maximise message effect by applying multiple techniques for conveying new product information to consumers. As such, item B2 was asked in view of gaining an understanding as to the first reference point for the participants, when it comes to acquiring information about new cosmetic products. The results are presented in Figure 5.8.

![Primary source of information](image)

**Figure 5.8:** Primary communication source

**Source:** Author compilation (2018)
Drawing from the results presented in Figure 5.8, it can be observed that the participants actively rely on word-of-mouth from friends and family (n=222; 47.6% of the sample), when it comes to accessing information about new cosmetic products. This result affirms the indispensable role of interpersonal communication in the marketing communication mix of any organisation. Furthermore, mass media (n=172; 36.6% of the sample) proves to be an interminable source of new product information. Nevertheless, a sizeable number of respondents specifically pointed to influential sources as their primary source of new cosmetic product information (n=81; 17.1% of the sample).

5.6.3 Type of cosmetic products’ information received

Table 5.7 depicts the nature of information that is received by participants from the influential consumers.

Table 5.7: Type of information received from influential consumers

<table>
<thead>
<tr>
<th>Type of information</th>
<th>Frequency</th>
<th>Percentage (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Type of product to buy</td>
<td>167</td>
<td>35.16</td>
</tr>
<tr>
<td>Retail outlet to buy from</td>
<td>99</td>
<td>20.84</td>
</tr>
<tr>
<td>Best value for money options</td>
<td>141</td>
<td>29.68</td>
</tr>
<tr>
<td>Product quality</td>
<td>156</td>
<td>32.84</td>
</tr>
</tbody>
</table>

Source: Author compilation (2018)

While acknowledging that the participants consult certain influential people as sources of product information, the majority of the participants indicated that they receive information relating to which cosmetic products to buy (n=167; 35.2% of the sample) as well as the quality of the specified cosmetic products (n=156; 32.8% of the sample). Nonetheless, 29.7 percent of the sample (n=141) indicated that they receive information relating to the options and varieties of cosmetic products that yield the best value for money. Similarly, 99 respondents (20.8% of the sample) indicated that the influential consumers were active in disseminating information relating to the best retail stores from which to buy new cosmetic products.

5.6.4 Trial experience with new cosmetic products

Consistent with the specification of the target population outlined in Section 4.6.1 of this study, all the participants included at the main survey should have tried out a new cosmetic product, at
least 3 months from the time of the survey. This information was reflected as the filter question in item B4 of the questionnaire, thereby assisting to determine the exclusion criterion to be applied in this study. Therefore, since the sample elements were nominated based on a true referral basis, all the participants (N=475) indicated that they had tried out at least one new cosmetic product within three months from the survey date.

5.6.5 Category of new cosmetic products tried out

Figure 5.9 relates to the new cosmetic product category that the participants claimed to have tried out.

![Cosmetics product category](image)

**Figure 5.9: Category of cosmetic products tried out**

**Source:** Author compilation (2018)

Figure 5.9 outlines the five product categories that exist in the market, as specified by COPILA (Dhanirama et al. 2012:1598). The majority of the participants indicated that they had tried the skincare range of cosmetic products (n=178; 37.5% of the sample). With the skincare category being the largest category being tried out by participants in this study, a picture is portrayed about active female market mavens who are concerned about improving the state of their health (Newburger 2009:446) by using dermatological products. In particular, the skin care range of cosmetics is used because of its medicinal properties as well as the protective ability from harsh environmental conditions (Tripathi 2012:9). While this is so, the participants indicated that they had tried out fragrances (n=80; 16.8% of the sample) as well as haircare (n=76; 16% of the sample)
cosmetic categories in their most recent trial experience. Of the remaining participants, approximately 70 individuals (14.7% of the sample) indicated that they had tried out products within the toiletries and decorative product categories, separately. Nevertheless, there was one missing value in the system comprising 0.3 percent of the sample.

5.6.6 Favourite cosmetics brand

Figure 5.10 depicts the participants’ favourite cosmetic brand.

![Favourite cosmetics brand](Image)

**Figure 5.10:** Participants’ favourite cosmetic brand

**Source:** Author compilation (2018)

In terms of preference for cosmetic brands in the market, Avon™ (n=148; 31.2% of the sample) and Revlon™ (n=96; 20.2% of the sample) were considered the leading brands. This is a very interesting observation considering that both brands are also market leaders in the international cosmetics market (Imrie 2014:2). While it is acknowledged that these two brands are superior and charged at premium pricing, the high frequency distribution reported for both Avon™ and Revlon™ could be explained by the rampant increase in Chinese and Indian cosmetic categories that are found in the informal market. Regrettably, some of these brands are not tested and tend to be counterfeits of the original brands whereas the distinction between original and counterfeit
brands was not made in the questionnaire. Nonetheless, 92 respondents (19.4% of the sample) reported that they preferred using miscellaneous cosmetic brands with South African extracts and other local ingredients. Perhaps, the low-cost and supply status of such miscellaneous brands lends them credibility in the market, even. Following on, 18.7 percent of participants indicated that they preferred the L’Oreal™ brand (n=89), followed by Nivea™ (n=16; 3.4% of the sample). Finally, Yardley™ and Clinique™ were nominated by a small proportion of the sample (n=9; 1.9% of the sample), equally whereas Dove™ and Mac™ were each elected as favourite brands by only 1.7 percent of the sample (n=8) in each case.

5.6.7 Venue for the most recent new cosmetics product trial

It was considered necessary to establish the specific venue where the participants had actually had their most recent cosmetic product trial experience. As such, Figure 5.11 depicts the identified venues for new cosmetic product trial.

![Venue for cosmetics' product trial](image)

Figure 5.11: Venue for new cosmetic products’ trial

Source: Author compilation (2018)

The majority of the participants indicated that they had tried a new cosmetic product within a retail setting (n=244; 51.4% of the sample). In general, this comprises the cosmetics section within large departmental stores or within pharmacies, supermarkets and/or boutiques. On the other hand, 136 participants (n=28.6% of the sample) indicated that they had tried out a new cosmetic product.
directly through a cosmetic consultant or independent distributor. Relatedly, 12.2 percent of the sample (n=58) comprised participants who had tried out a new cosmetic product through an online retail store. In this vein, recent advances in technology contribute significantly towards enhancing the sensory experiences of consumers at online cosmetic stores. Notably, digital scent technology for smelling fragrances through the four air streams of a computer (Priscill & Anandhavalli 2018:451) as well as Sephora™ virtual artist, a mobile application that allows users to try various shades of decorative cosmetics online (Carman 2017:1) are some of the most recent advances aimed at inducing cosmetics product trial at online stores.

Approximately 4.8 percent of the sample (n=23) reported that they had tried out a new cosmetic product in either a beauty salon or spa. This was considered a remarkable finding since beauty salons and spas provides a clinical setting that is accessory to an actual cosmetics store. Finally, the least of the sample was accounted by participants who indicated that they had tried out a new cosmetic product either in the comfort of their homes (n=10; 2.1% of the sample) or in the recently mushrooming pop up shops within urban malls (n=4; 0.8% of the sample).

5.6.8 Frequency of trial of new cosmetic products

Figure 5.12 depicts the frequency with which the participants were involved in trying out new cosmetic products within the year.

![Frequency of new cosmetics' product trial](image)

Figure 5.12: Frequency of new cosmetic products’ trial

Source: Author compilation (2018)
According to Figure 5.12, new cosmetic product trial experiences took place at least twice a year (n=151; 31.8% of the sample), quarterly (n=142; 29.9% of the sample) or even once a year (n=93; 19.6% of the sample). This result points to the infrequent and slow pace with which South African consumers are exposed to new cosmetic products in any given year. Of the remaining participants, only 63 individuals indicated that they tried out a new cosmetic product at least once every month (n=63; 13.3% of the sample), whereas the minority of the sample (n=26; 5.5% of the sample) indicated that they had tried out a new cosmetic product on a weekly basis. Perhaps the new developments of economic hubs, retail parks, shopping malls and wellness centres in the southern Gauteng region would help to stimulate an exponential growth in the new cosmetic product encounters of consumers.

The next section proceeds to analyse the information that was presented as categorical data presented in the questionnaire.

5.7 EXPLORATORY FACTOR ANALYSIS

Although the scale items used in the questionnaire were adopted and adapted from previous scholars, the psychometric properties reported in Section 4.8.3 of this study were rudimentary as they merely scrutinised the internal consistency of the scale items. Therefore, EFA was considered a necessary procedure in view of demonstrating the dimensionality of the variables in the context of the sample data at hand. In other words, the EFA served to summarise the highly correlated variables into small identifiable factors (McDaniel & Gates 2013:376). As such, the EFA procedure was applied on the variables measured as scaled items in Sections C, D and E of the questionnaire.

The initial EFA procedure yielded seven components (refer to Appendix B of this dissertation). Nevertheless, after careful inspection of the communality values, items C8 and C14 reported communality values of 0.360 and 0.397, respectively. Considering that 475 sample elements (N>300) were incorporated in the eventual data analysis, it was within the interest of this study to only report on variables with communality sizes that were greater than 0.50, since Field (2013:1974) points to this threshold as an indicator of a stable solution. Moreover, both items C8 and C14 cross-loaded onto two separate components implying that both items did not converge well with other similar items of interest. Specifically, item C8 cross-loaded onto component six (0.531) and component seven (0.515) on the initial EFA with the difference between the two loadings being smaller than 0.30. Similarly, item C14 cross-loaded onto component two (0.453) and component six (0.537) on the initial EFA with the difference between the two loadings being smaller than 0.30. These results of the initial EFA procedure are presented as Appendix B of this
dissertation. Nonetheless, consultation with the study leaders affirmed the intended item deletions would not affect the conceptualisation of the identified components since multiple indicators had been used. Therefore, in light of the unsatisfactory performance of these two variables, a decision was taken to discard both scale items from subsequent analysis. Moreover, it was considered undesirable to extract seven components in this study, since the initial EFA reported that the seventh component had only one significant item loading onto it \( (C9=0.791) \). Subsequently, a second EFA procedure was conducted with 31 scale items only, whereas the EFA procedure yielded six components only.

The EFA procedure commenced with checking for the appropriateness of the sample data.

### 5.7.1 Checking for the appropriateness of EFA

Initially, a visual scan of the correlation matrix was conducted to check that the correlations were significant and greater than 0.30 as recommended by (Field 2013:2001). Conversely, the correlation coefficients were also scanned for any values greater than 0.90, as this might suggest potential problems with multicollinearity. In this study, the inter-item correlation coefficients in the matrix ranged between 0.296 and 0.614, implying that the variables were similar with other variables under review. Furthermore, the value of the determinant of the correlation matrix (8.183) was larger than 0.00001, which also pointed to the absence of multicollinearity problems in the data during the EFA procedure. Thereafter, factorability of the data were established by observing two formal statistics, namely the KMO test as well as the Bartlett’s test of sphericity. These results are presented in Table 5.8 of this study.

#### Table 5.8: KMO and Bartlett’s test results

<table>
<thead>
<tr>
<th>KMO and Bartlett’s test</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Kaiser-Meyer-Olkin Measure of sampling adequacy</td>
<td>0.893</td>
</tr>
<tr>
<td>Bartlett’s test of sphericity</td>
<td></td>
</tr>
<tr>
<td>Approximation of chi-square</td>
<td>6834.778</td>
</tr>
<tr>
<td>Df</td>
<td>465</td>
</tr>
<tr>
<td>Significance</td>
<td>.000</td>
</tr>
</tbody>
</table>

Source: Author compilation (2018)

Hutcheson and Sofroniou (1999) cited by Field (2013:1975) provided appealing guidelines for checking the adequacy of the sample during the EFA, each starting with the letter ‘M’:

- Marvellous: values in the 0.90s
• Meritorious: values in the 0.80s
• Middling: values in the 0.70s
• Mediocre: values in the 0.60s
• Miserable: values in the 0.50s
• Merde: values below 0.50 (meaning unacceptable sample data).

In this study, a value of 0.893 was returned on the KMO test statistic, signalling meritorious adequacy of the sample data for EFA. In addition, a visual check of the diagonal elements on the Anti-image correlation matrix showed that the KMO values for the individual variables ranged between 0.907 and 0.939, which is considered marvellous as all the values were well above the 0.50 threshold considered an acceptable indicator of factorability by Hair et al. (2018:136). Furthermore, the Bartlett’s test of sphericity was observed in view of examining the null hypothesis that the variables used in the study are indeed uncorrelated. A large and significant ($p<0.01$) chi-square value of 6834.778 with 465 degrees of freedom was reported on this measure. Thus, this latter measure proved that the population correlation matrix is indeed an identity matrix.

5.7.2 Factor extraction

The principal component analysis (PCA) method was applied during the factor extraction procedure. The PCA method was applied owing to its objective gesture of determining the minimum number of factors that account for maximum variance in the data (Hair et al. 2018:147). In fact, the PCA method is preferred over other methods, such as common factor analysis, because it scantily yields negative eigenvalues that are meaningless (Malhotra et al. 2017:717). Thus, PCA attempts to explain the maximum amount of total variance in a correlation matrix by transforming the original variables into linear variates, termed components.

In this study, six criterion were considered upon extracting the components. First, the magnitude of the associated eigenvalue put forward by Kaiser (1956) (cited by Field 2013:2010), termed the eigenvalues greater than one criterion was upheld in this study. The eigenvalue represents the total variance explained by each component. Of note, this extraction rule was the default criteria on SPSS (Version 25.0) whereas, the output pointed to the extraction of only six components, with positive eigenvalues greater than one. These results are shown in Table 5.9.
Table 5.9: Total variance explained by the extracted factors

<table>
<thead>
<tr>
<th>Component</th>
<th>Total eigenvalue</th>
<th>% of Variance</th>
<th>Cumulative % of variance</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>3.796</td>
<td>12.247</td>
<td>12.247</td>
</tr>
<tr>
<td>2</td>
<td>3.489</td>
<td>11.255</td>
<td>23.502</td>
</tr>
<tr>
<td>3</td>
<td>3.322</td>
<td>10.716</td>
<td>34.217</td>
</tr>
<tr>
<td>4</td>
<td>2.279</td>
<td>10.579</td>
<td>44.796</td>
</tr>
<tr>
<td>5</td>
<td>2.156</td>
<td>10.181</td>
<td>54.978</td>
</tr>
<tr>
<td>6</td>
<td>1.443</td>
<td>7.880</td>
<td>62.857</td>
</tr>
</tbody>
</table>

Source: Author compilation (2018)

Secondly, the cumulative percentage of variance accounted for by the extracted components was considered. Methodology scholars such as Pallant (2011:184), Wiid and Diggines (2015:243) and Hair et al. (2018:142) agree that the extracted components should account for a cumulative percentage of variance in excess of 60 percent. Therefore, Table 5.9 points to the extraction of six components, which explain 62.9 percent variance in the sample data.

Since the eigenvalues greater than one criterion is known for overestimating the number of components to retain in a study in cases where the average communality values are below 0.60 (Field 2013:2010), it was deemed necessary to observe the scree plot. A scree plot depicts the eigenvalues against the number of components in the order of extraction as shown in Figure 5.13 of this study.
Chapter 5: Data analysis and interpretation of the empirical findings

5.7.3 The rotated factor component matrix

The component matrix was rotated through using the Varimax rotation method with Kaiser normalisation in six iterations, whereby the axes were maintained at right angles (Hair et al. 2018:147). Table 5.10 presents the rotated component matrix.
Table 5.10: Rotated component matrix

<table>
<thead>
<tr>
<th>Measurement scale item</th>
<th>Component 1</th>
<th>Component 2</th>
<th>Component 3</th>
<th>Component 4</th>
<th>Component 5</th>
<th>Component 6</th>
<th>Communalties</th>
<th>Corrected item-total correlations</th>
</tr>
</thead>
<tbody>
<tr>
<td>C1</td>
<td>0.706</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>0.579</td>
<td>0.659</td>
</tr>
<tr>
<td>C2</td>
<td>0.683</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>0.533</td>
<td>0.602</td>
</tr>
<tr>
<td>C3</td>
<td>0.612</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>0.532</td>
<td>0.599</td>
</tr>
<tr>
<td>C4</td>
<td>0.834</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>0.748</td>
<td>0.761</td>
</tr>
<tr>
<td>C5</td>
<td>0.803</td>
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<td></td>
<td></td>
<td></td>
<td></td>
<td>0.740</td>
<td>0.762</td>
</tr>
<tr>
<td>C6</td>
<td>0.740</td>
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<td></td>
<td></td>
<td></td>
<td></td>
<td>0.659</td>
<td>0.700</td>
</tr>
<tr>
<td>C7</td>
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<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>0.660</td>
<td>0.582 0.581</td>
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<tr>
<td>C9</td>
<td></td>
<td></td>
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<td></td>
<td></td>
<td></td>
<td>0.606</td>
<td>0.568 0.574</td>
</tr>
<tr>
<td>C10</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>0.719</td>
<td>0.634 0.633</td>
</tr>
<tr>
<td>C11</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>0.770</td>
<td>0.694 0.633</td>
</tr>
<tr>
<td>C12</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>0.577</td>
<td>0.614</td>
</tr>
<tr>
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<td>0.732</td>
</tr>
<tr>
<td>C15</td>
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<td>0.746</td>
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<td></td>
<td></td>
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<td>0.623</td>
<td>0.641</td>
</tr>
<tr>
<td>C16</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>0.755</td>
<td>0.737</td>
</tr>
<tr>
<td>C17</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>0.654</td>
<td>0.668</td>
</tr>
<tr>
<td>C18</td>
<td></td>
<td></td>
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<td></td>
<td></td>
<td></td>
<td>0.628</td>
<td>0.663</td>
</tr>
<tr>
<td>C19</td>
<td></td>
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<td></td>
<td></td>
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<td>0.670</td>
<td>0.690</td>
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<td></td>
<td>0.741</td>
<td>0.751</td>
</tr>
<tr>
<td>C21</td>
<td></td>
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<td></td>
<td></td>
<td></td>
<td></td>
<td>0.745</td>
<td>0.763</td>
</tr>
<tr>
<td>C22</td>
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<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>0.630</td>
<td>0.674</td>
</tr>
</tbody>
</table>
Table 5.10: Rotated component matrix (continued …)

| Measurement scale item | Components | | | | | | | | |
|------------------------|------------|------------|------------|------------|------------|------------|------------------------|
|                        | Component 1| Component 2| Component 3| Component 4| Component 5| Component 6| Corrected item-total correlations |
| D1                     | 0.607      | 0.474      | 0.540      | 0.497      | 0.539      | 0.540      |
| D2                     | 0.706      | 0.568      | 0.621      | 0.474      | 0.526      | 0.568      |
| D3                     | 0.717      | 0.603      | 0.632      | 0.526      | 0.559      | 0.568      |
| D4                     | 0.732      | 0.638      | 0.670      | 0.559      | 0.591      | 0.569      |
| D5                     | 0.588      | 0.493      | 0.559      | 0.493      | 0.588      | 0.559      |
| D6                     | 0.629      | 0.502      | 0.569      | 0.502      | 0.569      | 0.569      |
| E1                     | 0.669      | 0.591      | 0.607      | 0.591      | 0.607      | 0.607      |
| E2                     | 0.734      | 0.651      | 0.680      | 0.651      | 0.680      | 0.680      |
| E3                     | 0.732      | 0.618      | 0.626      | 0.618      | 0.626      | 0.626      |
| E4                     | 0.751      | 0.657      | 0.644      | 0.657      | 0.644      | 0.644      |
| E5                     | 0.785      | 0.700      | 0.714      | 0.700      | 0.714      | 0.714      |

Source: Author compilation (2018)

The variables presented in Table 5.10 were inspected and it was noted that they aligned as expected with the theory for this research. This consideration was made in light of observing that the loadings were significant ($p<0.01$) and greater than 0.50 on each variable (Hair et al. 2018:675). In addition, the size of the communality values as well as the item-total correlations were observed in view of ascertaining the convergence among the scale items. In this regard, the recommendation that was upheld in this work is that of communality sizes that are larger than 0.50 as well as corrected item-total correlation coefficients that are greater than 0.30 (Field 2013:2047). As a result, the 31 variables were admitted for this study.

Factor labelling was conducted with an aim to look at the content of questions that load highly on the same factor to try to identify common themes (Field 2013:2017). Thus, if the mathematical factors represent some real-world construct, then common themes among the items that load highly can help to identify what the component might be. With that in mind, component one was
labelled consumer innovativeness as it comprised six items (C1 to C6) that describe the tendency with which an individual adopts innovations before the general populous does (Vandecasteele & Geuens 2010:309). In this vein, the female maven responded to questions that are concerned with how they perceive themselves to be inductive and inventive in their broader product choices, rather than a specific product category. This component explained 12.247 percent variance in the factor model, with an extracted eigenvalue of 3.796. The six items loading on this component were statistically significant, while yielding loadings ranging between 0.612 and 0.834, thereby depicting satisfactory convergence of the scale items along the respective component. Moreover, the extracted communality sizes on this component ranged between 0.532 and 0.748, while the corrected item-total correlation coefficients were above 0.50, thereby pointing to the sufficiency of the scale items in explaining consumer innovativeness as a factor.

The second component was labelled advertising efficacy, consisting of four five scale items (C18 to C22), which explained 11.255 percent variance in the factor model. On the other hand, the component yielded an eigenvalue of 3.489, upon extraction. The items loading on this factor explained the extent to which advertising tools evoke positive images in the minds of consumers about new cosmetic products, which therefore permits them to share media content with others across different platforms (Koekemoer 2014:123). The five items loaded satisfactorily along this component with significant loadings ranging between 0.737 and 0.811. In addition, the communality sizes for these five items ranged between 0.628 and 0.745, whereas the item-total correlations ranged between 0.663 and 0.763 suggesting adequate cohesiveness among the scale items.

Component three was named social norms influence (items C12, C13, C15, C16 and C17), with significant loadings ranging between 0.686 and 0.839. This component explained 10.716 percent variance in the factor model, while yielding an eigenvalue of 3.322 upon extraction. The large communality sizes for this component (0.577 to 0.755) as well as the high item-total correlation coefficients (0.614 to 0.737) also pointed to the convergence of these five items along the social norms influence attribute. The items loading on this component describe the extent to which market mavenship and new cosmetic product trial is evoked by a sense of social identity and belonging. Therefore, drawing from the altruistic behaviour of market maven, social norms influence lends them to be pre-disposed towards finding information that is likely to be of interest to the broader social circle (Fitzmaurice 2011:71).

Component four was labelled market maven tendency, depicting six scale items (D1 to D6), which explained 10.579 percent variance in the factor model. The component explains the
tendency of individuals towards seeking and/or disseminating new cosmetic product information. Nevertheless, the credibility of market mavens is derived from the vast amount of knowledge as well as their extensive product involvement. The reported eigenvalue along this component is 2.279, whereas the six items loading on this component depicted statistically significant loadings ranging between 0.588 and 0.732. In addition, the extracted communality sizes for the items loading on this component ranged between 0.474 and 0.638. Although the item D1 yielded a communality value that was slightly below 0.50 (D1=0.474), the item was retained in the study to avoid altering the original conceptualisation of the factor. Likewise, the high corrected item-total correlation coefficients (0.540 to 0.670) inferred convergence among the six items along this attribute.

The scale items E1 to E5 loaded on component five, which was subsequently labelled as **new product trial**. The five scale items loaded satisfactorily along this component (ranging from 0.669 to 0.785), whereas the sizes of the communality values ranged between 0.591 and 0.700. In addition, the item-total correlation coefficients on this component ranged between 0.607 and 0.714, implying high cohesiveness among the items. The items that loaded on this factor signalled the behaviour of trying out new cosmetic products available in the market. This component contributed 10.181 percent variance in the factor model, whereas the component yielded the least eigenvalue of 2.156.

Component six comprised four scale items only (C7, C9, C10 and C11) and was labelled **aspirational attractiveness**. The items loading on this factor explained the lowest percentage of variance in the factor model (7.880%) while yielding an eigenvalue of 1.443. Nevertheless, the loadings on the four items were statistically significant and greater than 0.50 (ranging between 0.606 and 0.770). Relatedly, the large values on the communals (0.568 to 0.694) as well as the high item-total correlation coefficients (0.574 to 0.633) pointed to convergent validity of the items. Thus, the notion of aspirational attractiveness recounts an individual’s ideal self-image drawn from the use of new cosmetic products.

The use of EFA in this study was exploratory, meaning that it only served to produce a foundation for examining the patterns within the sample data. In this vein, the six surrogate variables established in this section were subjected to further statistical analysis, commencing with the reliability assessment explained in the next section.

### 5.8 RELIABILITY AND VALIDITY OF THE SCALE

Numerous scholars attest that reliability is relatively important for producing consistent data that is free from measurement error (Iacobucci & Churchill 2010:258; McDaniel & Gates 2013:215;
Bryman et al. (2017:36). Considering the scale items used in this study were mostly adapted with minimal contextual and language modifications, it was considered necessary to subject the sample data to reliability testing in view of establishing the quality of the measurement that was used in this study.

First, an examination of the item-total-correlation coefficients reported in Table 5.8 depicted values ranging between 0.540 and 0.763 across all the 31-scale items, signalling adequate internal consistency of the variables along their respective components. Indirectly, the reported values point to the convergent validity of the items used in this work since they are above 0.30 (Pallant 2011:100). Secondly, Table 5.11 reports on Cronbach’s alpha coefficients as well as the average inter-item correlation coefficients.

Table 5.11: Reliability results

<table>
<thead>
<tr>
<th>Factor label</th>
<th>Scale items</th>
<th>N</th>
<th>Cronbach’s alpha coefficient</th>
<th>Average inter-item correlation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Consumer innovativeness</td>
<td>C1, C2, C3, C4, C5 and C6</td>
<td>475</td>
<td>0.876</td>
<td>0.505</td>
</tr>
<tr>
<td>Aspirational attractiveness</td>
<td>C7, C9, C10 and C11</td>
<td>475</td>
<td>0.792</td>
<td>0.408</td>
</tr>
<tr>
<td>Social norms influence</td>
<td>C12, C13, C15, C16 and C17</td>
<td>475</td>
<td>0.860</td>
<td>0.407</td>
</tr>
<tr>
<td>Advertising efficacy</td>
<td>C18, C19, C20, C21 and C22</td>
<td>475</td>
<td>0.875</td>
<td>0.444</td>
</tr>
<tr>
<td>Market maven tendency</td>
<td>D1, D2, D3, D4, D5 and D6</td>
<td>475</td>
<td>0.827</td>
<td>0.408</td>
</tr>
<tr>
<td>New product trial</td>
<td>E1, E2, E3, E4 and E5</td>
<td>475</td>
<td>0.846</td>
<td>0.439</td>
</tr>
</tbody>
</table>

Source: Author compilation (2018)

According to Zikmund et al. (2013:306), reliability thresholds in data analysis range between zero and one. In the same vein, Bryman et al. (2017:28) attest that Cronbach’s alpha coefficients ranging between 0.80 and 1 point to acceptable reliability. On the other hand, values between 0.70 and 0.80 provide evidence of good reliability, whereas those between 0.60 and 0.70 depict fair reliability (Babin & Zikmund 2016:281). Cronbach’s alpha coefficients ranging between 0.792 and 0.876 were reported in this study as shown in Table 5.10. Consumer innovativeness as well as advertising efficacy yielded values of 0.876 and 0.875 on Cronbach’s alpha test, respectively. Following on, social norms influence reported a value of 0.860 along Cronbach’s alpha test. The
five scale items measuring new product trial reported a Cronbach’s alpha coefficient value of 0.846, whereas market maven tendency yielded a Cronbach’s alpha coefficient of 0.827. Relatedly, the aspirational attractiveness reported a value of 0.792 on the Cronbach’s alpha test, thereby implying good reliability. Nevertheless, since the reported values were in excess of 0.70 across all six attributes, it can be ascertained that there was “sufficient evidence of internal consistency reliability” (Nunnally 1978:245) among the scale items used in this work.

A notable weakness of observing Cronbach’s alpha test statistic as a measure of internal consistency reliability is that the alpha coefficient is a sensitive test that can be influenced by the number of variables in the scale. In particular, the coefficients either increase or decrease consistently with either an increase or decrease in the number of scale items used in a study (Pallant 2011:6). For this reason, the average inter-item correlation coefficients are outlined as an additional test of internal consistency since each sub-scale used in this study comprised short scales, each with less than 10 items. The reported average inter-item correlation coefficients ranged between 0.407 and 0.505 across all sub-scales, which is indicative of the internal consistency reliability of the scale items used in this study.

The next section elucidates on the descriptive statistics computed in this work.

5.9 DESCRIPTIVE STATISTICAL ANALYSIS

Considering that a seven-point Likert scale was applied in this work, the minimum and maximum values that were computed ranged between one (strongly disagree) and seven (strongly agree), respectively. Nonetheless, mean scores of 4.0 and greater were maintained \[\frac{1+2+3+4+5+6+7}{7} = 4.0\] in this study. On the other hand, values of ±1 ranging between 0.982 and 1.347 were considered preferable along the standard deviation as they indicated close distribution of the variables around the arithmetic mean. The high standard deviation indicate that the respondents were agreeing with the variable although there is discriminance in terms of their responses per individual construct. Table 5.12 presents the results of the descriptive statistics at both item and construct level.
Table 5.12: Descriptive statistical results

<table>
<thead>
<tr>
<th>Scale</th>
<th>N</th>
<th>Minimum</th>
<th>Maximum</th>
<th>Mean</th>
<th>Standard deviation</th>
<th>Skewness</th>
<th>Kurtosis</th>
</tr>
</thead>
<tbody>
<tr>
<td>Consumer innovativeness</td>
<td>4.683</td>
<td>1.250</td>
<td>-0.422</td>
<td>-0.011</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>C1</td>
<td>475</td>
<td>1</td>
<td>7</td>
<td>4.770</td>
<td>1.674</td>
<td>-0.297</td>
<td>-0.818</td>
</tr>
<tr>
<td>C2</td>
<td>475</td>
<td>1</td>
<td>7</td>
<td>4.710</td>
<td>1.608</td>
<td>-0.287</td>
<td>-0.768</td>
</tr>
<tr>
<td>C3</td>
<td>475</td>
<td>1</td>
<td>7</td>
<td>5.290</td>
<td>1.526</td>
<td>-0.692</td>
<td>-0.264</td>
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<tr>
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<td>475</td>
<td>1</td>
<td>7</td>
<td>4.470</td>
<td>1.596</td>
<td>-0.320</td>
<td>-0.587</td>
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<td>475</td>
<td>1</td>
<td>7</td>
<td>4.420</td>
<td>1.579</td>
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<td>-0.632</td>
</tr>
<tr>
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<td>475</td>
<td>1</td>
<td>7</td>
<td>4.380</td>
<td>1.650</td>
<td>-0.146</td>
<td>-0.809</td>
</tr>
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<td>5.136</td>
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<td>-0.089</td>
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<td></td>
</tr>
<tr>
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<td>475</td>
<td>1</td>
<td>7</td>
<td>5.060</td>
<td>1.705</td>
<td>-0.611</td>
<td>-0.593</td>
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<tr>
<td>C9</td>
<td>475</td>
<td>1</td>
<td>7</td>
<td>4.810</td>
<td>1.679</td>
<td>-0.386</td>
<td>-0.663</td>
</tr>
<tr>
<td>C10</td>
<td>475</td>
<td>1</td>
<td>7</td>
<td>5.160</td>
<td>1.597</td>
<td>-0.632</td>
<td>-0.405</td>
</tr>
<tr>
<td>C11</td>
<td>475</td>
<td>1</td>
<td>7</td>
<td>5.380</td>
<td>1.420</td>
<td>-0.745</td>
<td>-0.047</td>
</tr>
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<td>Social norms influence</td>
<td>4.001</td>
<td>1.347</td>
<td>-0.082</td>
<td>-0.566</td>
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<td></td>
</tr>
<tr>
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<td>475</td>
<td>1</td>
<td>7</td>
<td>4.380</td>
<td>1.549</td>
<td>-0.283</td>
<td>-0.666</td>
</tr>
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<td>1.660</td>
<td>-0.069</td>
<td>-0.938</td>
</tr>
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<td>1</td>
<td>7</td>
<td>3.920</td>
<td>1.709</td>
<td>-0.070</td>
<td>-0.983</td>
</tr>
<tr>
<td>C16</td>
<td>475</td>
<td>1</td>
<td>7</td>
<td>3.600</td>
<td>1.809</td>
<td>+0.179</td>
<td>-1.156</td>
</tr>
<tr>
<td>C17</td>
<td>475</td>
<td>1</td>
<td>7</td>
<td>3.960</td>
<td>1.775</td>
<td>-0.081</td>
<td>-0.966</td>
</tr>
<tr>
<td>Advertising efficacy</td>
<td>5.410</td>
<td>1.044</td>
<td>-0.666</td>
<td>0.999</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>C18</td>
<td>475</td>
<td>1</td>
<td>7</td>
<td>5.240</td>
<td>1.367</td>
<td>-0.718</td>
<td>+0.554</td>
</tr>
<tr>
<td>C19</td>
<td>475</td>
<td>1</td>
<td>7</td>
<td>5.190</td>
<td>1.392</td>
<td>-0.648</td>
<td>+0.044</td>
</tr>
<tr>
<td>C20</td>
<td>475</td>
<td>1</td>
<td>7</td>
<td>5.520</td>
<td>1.242</td>
<td>-0.792</td>
<td>+0.611</td>
</tr>
<tr>
<td>C21</td>
<td>475</td>
<td>1</td>
<td>7</td>
<td>5.460</td>
<td>1.184</td>
<td>-0.713</td>
<td>+0.623</td>
</tr>
<tr>
<td>C22</td>
<td>475</td>
<td>1</td>
<td>7</td>
<td>5.570</td>
<td>1.227</td>
<td>-0.700</td>
<td>+0.353</td>
</tr>
</tbody>
</table>
Table 5.12: Descriptive statistical results (continued …)

<table>
<thead>
<tr>
<th>Scale</th>
<th>N</th>
<th>Minimum</th>
<th>Maximum</th>
<th>Mean</th>
<th>Standard deviation</th>
<th>Skewness</th>
<th>Kurtosis</th>
</tr>
</thead>
<tbody>
<tr>
<td>Market maven tendency</td>
<td></td>
<td></td>
<td></td>
<td>5.133</td>
<td>0.982</td>
<td>0.079</td>
<td>-0.874</td>
</tr>
<tr>
<td>D1</td>
<td>475</td>
<td>1</td>
<td>7</td>
<td>5.030</td>
<td>1.524</td>
<td>-0.461</td>
<td>-0.556</td>
</tr>
<tr>
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<td>475</td>
<td>1</td>
<td>7</td>
<td>5.040</td>
<td>1.283</td>
<td>-0.411</td>
<td>-0.495</td>
</tr>
<tr>
<td>D3</td>
<td>475</td>
<td>1</td>
<td>7</td>
<td>4.770</td>
<td>1.344</td>
<td>-0.243</td>
<td>-0.543</td>
</tr>
<tr>
<td>D4</td>
<td>475</td>
<td>1</td>
<td>7</td>
<td>5.070</td>
<td>1.317</td>
<td>-0.387</td>
<td>-0.633</td>
</tr>
<tr>
<td>D5</td>
<td>475</td>
<td>1</td>
<td>7</td>
<td>5.610</td>
<td>1.259</td>
<td>-0.678</td>
<td>-0.065</td>
</tr>
<tr>
<td>D6</td>
<td>475</td>
<td>1</td>
<td>7</td>
<td>4.930</td>
<td>1.407</td>
<td>-0.280</td>
<td>-0.548</td>
</tr>
<tr>
<td>New product trial</td>
<td></td>
<td></td>
<td></td>
<td>4.135</td>
<td>1.295</td>
<td>-0.267</td>
<td>-0.521</td>
</tr>
<tr>
<td>E1</td>
<td>475</td>
<td>1</td>
<td>7</td>
<td>3.810</td>
<td>1.689</td>
<td>-0.020</td>
<td>-0.952</td>
</tr>
<tr>
<td>E2</td>
<td>475</td>
<td>1</td>
<td>7</td>
<td>3.880</td>
<td>1.690</td>
<td>-0.005</td>
<td>-0.962</td>
</tr>
<tr>
<td>E3</td>
<td>475</td>
<td>1</td>
<td>7</td>
<td>4.530</td>
<td>1.646</td>
<td>-0.322</td>
<td>-0.696</td>
</tr>
<tr>
<td>E4</td>
<td>475</td>
<td>1</td>
<td>7</td>
<td>4.240</td>
<td>1.569</td>
<td>-0.156</td>
<td>-0.653</td>
</tr>
<tr>
<td>E5</td>
<td>475</td>
<td>1</td>
<td>7</td>
<td>3.970</td>
<td>1.684</td>
<td>-0.123</td>
<td>-0.873</td>
</tr>
</tbody>
</table>

Valid N (Listwise)= 475

Source: Author compilation (2018)

The highest mean score ranking in this study was reported on the advertising efficacy variable ($\bar{x}$ =5.410; SD=1.044), which ascertains the level of agreeability among the participants regarding the effectiveness of media advertisements in stimulating maven tendency. At item level, the lowest item mean score on this variable was reported on item C19 ($\bar{x}$ =5.190; SD=1.392), whereas item C22 ($\bar{x}$ =5.570; SD=1.227) reported the highest mean value along this variable.

Aspirational attractiveness was ranked second in terms of mean scores ($\bar{x}$ =5.136; SD=1.253). The four items anchoring this variable yielded mean scores ranging between 4.810 and 5.380, whereas the standard deviation values were also closely situated around arithmetic mean (ranging between 1.420 and 1.705). These results indicate that the majority of the participants demonstrated sturdy agreeability towards the salience of aspirational attractiveness as a key attribute in enhancing the appetite for disseminating new cosmetic products information to others. Thus, in order to present...
an appealing image that is broadly desirable, one needs to be in the lookout for newly developed cosmetic products in the market.

The market maven tendency scale returned a mean score value above 4.0 ($\bar{x}$ =5.133; SD=0.982) and was ranked third on the mean score rankings for this study. At item level, the mean values for this scale ranged between 4.770 and 5.610, whereas item D5 demonstrated the largest mean value ($\bar{x}$ =5.610; SD=1.259) and item D3 ($\bar{x}$ =4.770; SD=1.344) yielded the lowest mean value. Nevertheless, the overall result along this attribute, points to the strong agreement among the participants, with regard to their inclination towards market maveness.

Consumer innovativeness was ranked in fourth place on the mean score rankings ($\bar{x}$ =4.683; SD=1.250). The mean scores reported along the six scale items that fall under this variable ranged between 4.380 and 5.290, reflecting the level of agreeability among the participants regarding the tendency of the female consumers to be innovative in their general deportment and/or across a variety of products. Likewise, there was minimal variance in terms of the responses given along the scale items C1 to C6, as reported by the large standard deviation values ranging between 1.526 and 1.674, which closely surrounded the arithmetic mean (close to ±1.0).

New product trial scored fifth on the mean score rankings, after reporting a mean value of 4.135 as well as a standard deviation value of 1.295. In addition, the five items that loaded satisfactorily along this variable returned mean values ranging between 3.810 and 4.530 as well as standard deviation values ranging between 1.569 and 1.690. Whereas items E1 ($\bar{x}$ =3.810), E2 ($\bar{x}$ =3.880) and E5 ($\bar{x}$ =3.970) yielded mean values that were slightly below 4.0, a decision was taken to retain the items to avoid altering the overall conceptualisation of the variable.

The least mean score ranking was reported on the social norms influence variable, which reported an overall mean value above 4.0 ($\bar{x}$=4.001; SD=1.347). At item level, C12 and C13 loaded satisfactory along the variable with mean score of ($\bar{x}$=4.380; SD=1.549) and ($\bar{x}$=4.100; SD=1.660), respectively. Nonetheless, items C15 ($\bar{x}$=3.920), C16 ($\bar{x}$=3.600) and C17 ($\bar{x}$=3.960) anchored along this factor returned marginally weak mean scores that fell between 3.600 and 3.960. After a de-brief session with subject matter experts within the Marketing and Consumer behaviour disciplines, a decision was taken to keep the three items to avoid further alteration of the variable structure, since the scale items were adapted from previously validated studies.

In terms of evaluating the symmetry of the sample data, two measures of peakedness were observed along the skewness and kurtosis values. Whereas a skewness value of zero depicts a perfectly normal distribution data set (Tustin et al. 2010:554), the absolute value was not obtained.
in this study, owing to sampling fluctuations. While this is so, the actual skewness values reported in this study ranged between -0.792 and +0.179, pointing to a slight negative skewness; whereas, kurtosis values ranging between -1.156 and +0.623 indicated that the data set could be slightly flat. Only one item (C16=1.156) fell minimally outside the strict threshold of -1 and +1, posited by Hair et al. (2018:48), this study applied the less-conservative guideline by George and Mallery (2016:114) who maintain that skewness and kurtosis values ranging between -2 and +2 can still be considered to be within acceptable parameters for a normally distributed data set.

The results of the correlation analysis procedure are discussed next.

5.10 CORRELATION ANALYSIS

In view of assessing the strength and direction of the relationships among the identified factors, a bivariate correlation analysis procedure was conducted where the Pearson’s correlation (r), as well as the significance level was reviewed. Table 5.13 depicts the correlation analysis results of the study.

Table 5.13: Correlation analysis results

<table>
<thead>
<tr>
<th>Construct</th>
<th>Consumer innovativeness</th>
<th>Aspirational attractiveness</th>
<th>Social norms influence</th>
<th>Advertising efficacy</th>
<th>Market maven tendency</th>
<th>New product trial</th>
</tr>
</thead>
<tbody>
<tr>
<td>Consumer innovativeness</td>
<td>0.767</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Aspirational attractiveness</td>
<td>0.564**</td>
<td>0.725</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Social norms influence</td>
<td>0.400**</td>
<td>0.462**</td>
<td>0.781</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Advertising efficacy</td>
<td>0.458**</td>
<td>0.515**</td>
<td>0.331**</td>
<td>0.782</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Market maven tendency</td>
<td>0.639**</td>
<td>0.571**</td>
<td>0.531**</td>
<td>0.550**</td>
<td>0.775</td>
<td></td>
</tr>
<tr>
<td>New product trial</td>
<td>0.488**</td>
<td>0.396**</td>
<td>0.642**</td>
<td>0.297**</td>
<td>0.504**</td>
<td>0.746</td>
</tr>
</tbody>
</table>

**Correlation is significant at the 0.01 level (2-tailed)
√AVE values are indicated in bold above the correlation coefficients

Source: Author compilation (2018)

Drawing from the results on Table 5.13, it is evident that there exists linear association between the identified constructs in this study since only statistically significant correlation coefficients
were reported ($p<0.01$). In addition, only positive correlations were established across all pairs of inter-factor correlations, implying a direct association among the constructs, as anticipated.

While following the rule of thumb put forward by Prion and Haerling (2014:587), only positive and statistically significant correlation coefficients that are either weak or of a moderate size were observed in this work. In particular, positive and moderate relationships were reported between consumer innovativeness with aspirational attractiveness ($r=+0.564; p<0.01$), social norms influence ($r=+0.400; p<0.01$), advertising efficacy ($r=+0.458; p<0.01$), market maven tendency ($r=+0.639; p<0.01$) as well as new product trial ($r=+0.488; p<0.01$). These results suggest that the prominent role of consumer innovators in the marketplace increases with positive perceptions towards aspirational attractiveness, the influence of social norms, advertising efficacy, the tendency towards market mavenship as well as new cosmetics’ product trial. Similarly, positive and moderate sized correlation coefficients were reported between aspirational attractiveness with social norms influence ($r=+0.462; p<0.01$), advertising efficacy ($r=+0.515; p<0.01$), market maven tendency ($r=+0.571; p<0.01$) as well as new product trial ($r=+0.396; p<0.01$). Likewise, the results of this study reveal that female consumers place emphasis on enhancing physical appearance, as credited by the extent of the amplified influence of social norms, advertising effectiveness as well as increased new cosmetic product trial encounters. In other words, the penchant of consumers to aspire to be attractive is a holistic measure that allows them to rely on integrated marketing communications tools as well as social interpersonal sources for trying out new cosmetic products in the market.

Direct, moderate yet statistically significant relationships were observed between social norms influence with advertising efficacy ($r=+0.331; p<0.01$) and market maven tendency ($r=+0.531; p<0.01$). On the other hand, advertising efficacy yielded a moderate correlation coefficient with market maven tendency ($r=+0.550; p<0.01$), as compared to the weak correlation it exhibited when correlated against new product trial ($r=+0.297; p<0.01$). Therefore, this result confirms that there is stronger association between advertising efficacy with market maven tendency, rather than new product trial. Nonetheless, the association is direct in both cases. These results are in agreement with those from a study by Yang (2013:102), that consumers expose themselves to situations where they will be exposed to vast marketing messages, after which they actively disseminate the information to other people within a social system. Moreover, the results are consistent with a study by Chelminski and Coutler (2002:83) who found a significant association between market maven behaviour and positive attitudes towards advertising. While this is so, a moderate sized and direct association was reported between market maven tendency and new product trial ($r=+0.504; p<0.01$). This infers that the tendency towards market mavenship is
strongly associated with overt behaviour, such as new product trial and actual purchases. Interestingly, the highest correlation coefficient in the Bivariate correlation matrix was established between social norms influence and new product trial \((r=+0.642; p<0.01)\). This direct association is analogous to the assertion made by Bearden et al. (1989:474) that consumers “conform to the expectations of others regarding new product purchase decisions services through observing the behaviour of others within a social system”. Hence, this result infers that social norms influence play a key role in influencing the behaviour of consumers in trying out new cosmetic products in the market.

5.10.1 **Multicollinearity assessment**

Multicollinearity testing was conducted in this research prior to running the SEM procedure. Multicollinearity is undesirable in research since it inevitably increase the variances of the regression coefficients, thereby rendering the prediction of the structural equation, unstable (Malhotra et al. 2017:662). No multi-collinearity problems were identified in this work. This is because the highest correlation coefficient in the correlation matrix was lower than 0.70 as recommended by (Hair et al. 2018:319). In fact, the highest correlation coefficient computed for this study was reported between social norms influence and new product trial \((r=0.642; p<0.01)\) as presented in Table 5.13 of this study.

5.11 **STRUCTURAL EQUATION MODELLING**

In this study, the SEM procedure was applied by first specifying the measurement model and then structural model in lieu of testing hypotheses, using the AMOS (version 25.0) software.

5.11.1 **Defining the constructs for this study**

In this study, the conceptual and operational definitions of the constructs were explained in Section 3.9 of the study. Following on, the structural relationships posited by theory were assessed and then converted into hypotheses in Section 3.9 of the study. Notably, the hypotheses can only be confirmed if the measurement model specifying how these constructs are related is also valid.

5.11.2 **Sample size, outliers and data normality**

Prior to specifying the measurement model, it was considered necessary to evaluate the adequacy of the sample size, possible existence of outliers as well as the data distribution. In this vein, a consideration by Hair et al. (2018:634) was made, whereby the scholars suggest that there should be at least 15 observations for each parameter to be estimated in a measurement model. This
implies that a minimum sample size of 465 participants (15 observations multiplied by 31 scale items) was required for the SEM procedure to be conducted in this work. Nonetheless, 475 participants were admitted in this research implying that the sample size requirement was exceeded. Moreover, Section 4.6.4 of this study reports on a plethora of guidelines that were upheld to ensure that a large sample size was utilised in this work, in lieu of the requirements of the multivariate statistics applied in this study.

Secondly, the data were checked for the presence of outliers by calculating Mahalanobis’ distance ($D^2$). Mahalanobis’ distance ($D^2$) indicates how far each case is from the centroid of all cases for the predictor variables. A large distance indicates an observation that is an outlier for the predictors (Tabachnick & Fidell 2014:666). In this study, the Mahalanobis distance values that were calculated were below 6.594, with Cook’s distances of 0.069 (< 1), suggesting that no multivariate outliers were present in the data to cause potential problems in the SEM procedure.

Thirdly, the SEM procedure requires meeting the requirements for normality of a data distribution. In this study, univariate normality of the data was inferred from the skewness and kurtosis values. The skewness (ranging between -0.792 and +0.179) and kurtosis (ranging between -1.156 and +0.623) fell within the -2 and +2 range across all the variables in the study as reported in Section 5.9 of this study. Likewise, the probability plots were visually inspected and confirmed to be in a straight, diagonal line. The scatterplot showed scores clustered in the middle, tangential to the zero-point with no curvilinearity, thereby confirming that the assumptions of normally distributed data and homoscedasticity of variance have been met in this study.

**5.11.3 Specification of the measurement model**

Since a latent variable is not observed, it is considered to be devoid of any metric value; hence, specification of the measurement model on AMOS (Version 25.0) software requires setting one of the factor loadings to a value of 1.0. The specified measurement model for this study is presented in Figure 5.14 of this study.
**Shortened terminology for SEM analysis:**

Consumer innovativeness = Consumer innovativeness (F1); Aspirational attractiveness = Aspirational attractiveness (F2); Social norms influence = Social norms influence (F3); Advertising efficacy = Advertising efficacy (F4); Maven tendency = Market maven tendency (F5); New product trial = New product trial (F6).

**Figure 5.14: Measurement model for the study**

Source: Author compilation (2018)

The measurement model that was specified in this study comprised six latent variables, explained by their respective manifest variables, termed scale indicators. In this regard, the 31 variables were anchored along consumer innovativeness (6 scale indicators), aspirational attractiveness (4 scale indicators), social norms influence (5 scale indicators), advertising efficacy (5 scale indicators), market maven tendency (6 scale indicators) as well as new product trial (5 scale indicators).

Specification of the measurement model in this study resulted in 496 distinct sample moments based on the over-identified model and 77 distinct parameters to be estimated in the analysis, yielding 419 degrees of freedom. On the other hand, the measurement model reported a chi-square value of 1341.880 with a significant probability level ($p<0.01$). Nevertheless, Jöreskog and Sörbom (1993:45) as well as Iacobucci (2010:91) aver that the significant value of the chi-square statistic does not always infer inadequate model fit since the statistic is very sensitive to large
sample sizes. As a result, the scholars suggest that the test statistic should be observed in conjunction with additional model fit indices.

5.11.4 Measurement model fit indices

Measurement model fit assessment was conducted in view of determining the extent to which the specified model reproduces the covariance of the indicator variables. Table 5.14 reports on the results of the measurement model fit.

Table 5.14: Measurement model fit indices

<table>
<thead>
<tr>
<th>Fit indices</th>
<th>CMIN</th>
<th>RMSEA</th>
<th>GFI</th>
<th>AGFI</th>
<th>NFI</th>
<th>CFI</th>
<th>TLI</th>
<th>RFI</th>
<th>PNFI</th>
</tr>
</thead>
<tbody>
<tr>
<td>Default model</td>
<td>3.203</td>
<td>0.066</td>
<td>0.947</td>
<td>0.919</td>
<td>0.965</td>
<td>0.931</td>
<td>0.992</td>
<td>0.950</td>
<td>0.908</td>
</tr>
<tr>
<td>value</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Threshold</td>
<td>≤3.0</td>
<td>≥0.08</td>
<td>≥0.90</td>
<td>≥0.90</td>
<td>≥0.90</td>
<td>≥0.90</td>
<td>≥0.90</td>
<td>≥0.90</td>
<td>≥0.90</td>
</tr>
<tr>
<td>(values ≤5.0 are tolerable)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Decision</td>
<td>Accept</td>
<td>Accept</td>
<td>Accept</td>
<td>Accept</td>
<td>Accept</td>
<td>Accept</td>
<td>Accept</td>
<td>Accept</td>
<td>Accept</td>
</tr>
</tbody>
</table>

Source: Author compilation (2018)

Malhotra et al. (2017:807) denotes that one way to attempt to reduce the sensitivity of the chi-square test is to use a plethora of indices. In this case, the goodness of fit indices were computed, whereas the reported GFI (0.947) and AGFI (0.919) values were greater than 0.90. On the other hand, the CMIN was calculated by dividing the chi-square statistic with the number of degrees of freedom in the over identified model, thereby yielding a value of 3.203. Whilst Iacobucci (2010:91) mentions a good model fit is demonstrated by a CMIN value that does not exceed the value 3.0, the reported value was accepted after considering the less conservative threshold suggested by Wheaton, Muthen, Alwin & Summers (1977:89) who put forward that CMIN values between 3.0 and 5.0 are tolerable.

In terms of the badness-of-fit statistics, the RMSEA value was calculated and reported at 0.066 (below 0.08), which indicated reasonable error of approximation implying acceptable fit of the measurement model. With regard to the incremental fit indices that measure how well the specified model fits the sample data, relative to some alternative model that is treated as a baseline model, the NFI (0.965), RFI (0.950), TLI (0.992) and CFI (0.931) indices were reported. The four indices
exceeded the cut-off threshold of 0.90 (Hooper et al. 2008:55), thereby pointing to adequate fit of the measurement model. Finally, the parsimonious fit indices were calculated in view of assessing fit of the measurement model in relation to model complexity. Specifically, the PNFI (0.908) index reported a value greater than 0.90. Therefore, drawing from the results presented in Table 5.14, good fit between the measurement model and the sample data is inferred.

5.11.5 Confirmatory factor analysis (CFA) results

The CFA procedure was conducted in view of checking the measurement model to detect problematic estimates. In the CFA, four statistics were observed, namely the size, significance and direction of the standardised regression weights, also termed factor loadings, the SMC values, the error variances as well as the standardised residuals and modification indices. The results of the CFA procedure are reported in Table 5.15 of this study.

Table 5.15: Confirmatory factor analysis results

<table>
<thead>
<tr>
<th>Construct</th>
<th>Indicators</th>
<th>Standardised regression weights</th>
<th>Squared multiple correlations (SMC)</th>
<th>Error variances</th>
<th>Significance</th>
</tr>
</thead>
<tbody>
<tr>
<td>Consumer innovativeness</td>
<td>C1</td>
<td>0.702 (+)</td>
<td>0.493</td>
<td>0.629 (+)</td>
<td>***</td>
</tr>
<tr>
<td></td>
<td>C2</td>
<td>0.670 (+)</td>
<td>0.449</td>
<td>0.603 (+)</td>
<td>***</td>
</tr>
<tr>
<td></td>
<td>C3</td>
<td>0.688 (+)</td>
<td>0.473</td>
<td>0.470 (+)</td>
<td>***</td>
</tr>
<tr>
<td></td>
<td>C4</td>
<td>0.846 (+)</td>
<td>0.716</td>
<td>0.784 (+)</td>
<td>***</td>
</tr>
<tr>
<td></td>
<td>C5</td>
<td>0.875 (+)</td>
<td>0.766</td>
<td>0.643 (+)</td>
<td>***</td>
</tr>
<tr>
<td></td>
<td>C6</td>
<td>0.795 (+)</td>
<td>0.633</td>
<td>0.080 (+)</td>
<td>***</td>
</tr>
<tr>
<td>Aspirational attractiveness</td>
<td>C7</td>
<td>0.699 (+)</td>
<td>0.489</td>
<td>0.658 (+)</td>
<td>***</td>
</tr>
<tr>
<td></td>
<td>C9</td>
<td>0.700 (+)</td>
<td>0.490</td>
<td>0.581 (+)</td>
<td>***</td>
</tr>
<tr>
<td></td>
<td>C10</td>
<td>0.764 (+)</td>
<td>0.584</td>
<td>0.227 (+)</td>
<td>***</td>
</tr>
<tr>
<td></td>
<td>C11</td>
<td>0.736 (+)</td>
<td>0.542</td>
<td>0.056 (+)</td>
<td>***</td>
</tr>
<tr>
<td>Social norms influence</td>
<td>C12</td>
<td>0.714 (+)</td>
<td>0.509</td>
<td>0.327 (+)</td>
<td>***</td>
</tr>
<tr>
<td></td>
<td>C13</td>
<td>0.842 (+)</td>
<td>0.708</td>
<td>0.892 (+)</td>
<td>***</td>
</tr>
<tr>
<td></td>
<td>C15</td>
<td>0.755 (+)</td>
<td>0.570</td>
<td>0.330 (+)</td>
<td>***</td>
</tr>
<tr>
<td></td>
<td>C16</td>
<td>0.806 (+)</td>
<td>0.650</td>
<td>0.150 (+)</td>
<td>***</td>
</tr>
<tr>
<td></td>
<td>C17</td>
<td>0.718 (+)</td>
<td>0.516</td>
<td>0.566 (+)</td>
<td>***</td>
</tr>
</tbody>
</table>
Table 5.15: Confirmatory factor analysis results (continued …)

<table>
<thead>
<tr>
<th>Construct</th>
<th>Indicators</th>
<th>Standardised regression weights</th>
<th>Squared multiple correlations (SMC)</th>
<th>Error variances</th>
<th>Significance</th>
</tr>
</thead>
<tbody>
<tr>
<td>Advertising efficacy</td>
<td>C18</td>
<td>0.744 (+)</td>
<td>0.554</td>
<td>0.921 (+)</td>
<td>***</td>
</tr>
<tr>
<td></td>
<td>C19</td>
<td>0.742 (+)</td>
<td>0.551</td>
<td>0.994 (+)</td>
<td>***</td>
</tr>
<tr>
<td></td>
<td>C20</td>
<td>0.846 (+)</td>
<td>0.716</td>
<td>0.495 (+)</td>
<td>***</td>
</tr>
<tr>
<td></td>
<td>C21</td>
<td>0.851 (+)</td>
<td>0.725</td>
<td>0.435 (+)</td>
<td>***</td>
</tr>
<tr>
<td></td>
<td>C22</td>
<td>0.770 (+)</td>
<td>0.592</td>
<td>0.703 (+)</td>
<td>***</td>
</tr>
<tr>
<td>Market maven tendency</td>
<td>D1</td>
<td>0.721 (+)</td>
<td>0.520</td>
<td>0.516 (+)</td>
<td>***</td>
</tr>
<tr>
<td></td>
<td>D2</td>
<td>0.794 (+)</td>
<td>0.630</td>
<td>0.965 (+)</td>
<td>***</td>
</tr>
<tr>
<td></td>
<td>D3</td>
<td>0.825 (+)</td>
<td>0.681</td>
<td>0.834 (+)</td>
<td>***</td>
</tr>
<tr>
<td></td>
<td>D4</td>
<td>0.853 (+)</td>
<td>0.727</td>
<td>0.738 (+)</td>
<td>***</td>
</tr>
<tr>
<td></td>
<td>D5</td>
<td>0.686 (+)</td>
<td>0.470</td>
<td>0.254 (+)</td>
<td>***</td>
</tr>
<tr>
<td></td>
<td>D6</td>
<td>0.758 (+)</td>
<td>0.575</td>
<td>0.198 (+)</td>
<td>***</td>
</tr>
<tr>
<td>New product trial</td>
<td>E1</td>
<td>0.700 (+)</td>
<td>0.490</td>
<td>0.527 (+)</td>
<td>***</td>
</tr>
<tr>
<td></td>
<td>E2</td>
<td>0.751 (+)</td>
<td>0.565</td>
<td>0.327 (+)</td>
<td>***</td>
</tr>
<tr>
<td></td>
<td>E3</td>
<td>0.715 (+)</td>
<td>0.511</td>
<td>0.445 (+)</td>
<td>***</td>
</tr>
<tr>
<td></td>
<td>E4</td>
<td>0.755 (+)</td>
<td>0.570</td>
<td>0.121 (+)</td>
<td>***</td>
</tr>
<tr>
<td></td>
<td>E5</td>
<td>0.807 (+)</td>
<td>0.651</td>
<td>0.053 (+)</td>
<td>***</td>
</tr>
</tbody>
</table>

Source: Author compilation (2018)

According to Hair et al. (2018:675-676), standardised factor loadings range between zero and one, whereas completely standardised loadings that are not in the ±1 range are infeasible and should be either investigated or deleted, altogether. Nonetheless, the scholars denote that higher standardised factor loadings (greater than 0.50) are indicative of significant observed variables along each latent variable, whereas weak factor loadings (below 0.50) are very good candidates for deletion. Moreover, the factor loadings should be statistically significant at the $p<0.01$, for the observed variable to be retained in a study. In addition, the factor loadings should be in the same direction hypothesised by the theory. In this study, the standardised regression weights were all positive as hypothesised in sections 1.5 and 3.9 of this study. Specifically, the standardised regression weights
across all 31 indicators were significant at the $p<0.01$ level, while ranging between +0.670 and +0.875. Interestingly, the standardised regression weights were above 0.70 for a majority of the scale indicators, which is considered preferable by Malhotra et al. (2017:709), except for four scale indicators C2 (0.670), C3 (0.688), C7 (0.699) and D5 (0.686), which yielded standardised regression weights that were slightly below 0.70 and still greater than 0.50.

Secondly, in terms of the SMC values, an investigation was made with regard to the extent to which the variance of each observed variable is explained by the associated latent construct (Hair et al. 2018:675). Whereas SMC values of 0.49 (0.71*0.71=0.50) and higher are desirable since it can be inferred that the variable explains approximately 50 percent of the variance in the latent construct, Field (2013:2057) upholds a more conservative guideline. The scholar denotes that any variables that yield SMC values greater than 0.25 (0.50*0.50=0.25) can be retained in a study if there is strong conceptual and theoretic reason to do so. In this study, the reported SMC values in this work ranged between 0.449 and 0.766. This result was considered acceptable since it implies that each indicator that was factored into the measurement model explained at least 45 percent of the variance (SMC=0.449) of its latent construct.

Thirdly, in terms of error variances, no negative error variances were reported in this study. Negative error variances (termed Heywood cases) are not desirable in research because they imply that an individual item can only be explained by either less than 0 percent or more than 100 percent error variance (Hair et al. 2018:673), which is meaningless. The error variances reported in this research ranged between +0.053 and +0.994, which were all positive and within the ±1 range.

Finally, the standardised residuals were observed from the modification index. The AMOS software (Version 25.0) programme produces a modification index for each possible relationship that is not freely estimated but is fixed. If the path is freely estimated, the modification index shows an improvement in the overall model ($\chi^2$). Thus, Byrne (2016:8) describes the standardised residuals as the differences between the observed data and the hypothesised model. Field (2013:935) adds that standardised residuals form the residuals of a model that are expressed in standard deviation units. As a general guideline, Hair et al. (2018:678) suggests that absolute standardised residuals exceeding 4.0 are problematic as they point to problems associated with the observed variables. Relatedly, Malhotra et al. (2017:810) posits that the modification index should be less than 4.0, whereas standardised residuals ranging between 2.5 and 4.0 should be examined carefully, but may not necessarily suggest any changes to the model. This study, the standardised residuals ranged between 0.02 and 2.805 (below 4.0); whereas, visual inspection of the residuals for the individual scale indicators suggested that there was no need for any modification or deletion.
of any of the 31 scale indicators. As a result, the researcher proceeded to test the reliability and construct validity of the measurement model.

### 5.11.6 Reliability assessment of the measurement model

Measurement model reliability is evaluated first because unreliable constructs within a measurement model cannot be valid. Nonetheless, the reporting of more than one statistical measure for a measurement model’s reliability is common practice in social sciences. Hence, the reliability of the measurement model that was specified in this work was evaluated by computing the Cronbach’s alpha coefficients as well as the composite reliability values.

The measurement model exhibited acceptable internal consistency reliability, as evidenced by the high Cronbach’s alpha coefficients ranging between 0.792 and 0.876 reported in Section 5.8 of this study. These results exceeded the threshold of 0.70 put forward by Nunnally (1978:246), thereby confirming that the measures used in this study were reliable. On the other hand, the CR values were also computed by following Fornell and Larcker’s (1981:46) formulae, as shown in Figure 5.15 of this study.

![Measurement model accuracy statistics for this study](image)

<table>
<thead>
<tr>
<th>Consumer innovativeness:</th>
<th>Aspirational attractiveness:</th>
</tr>
</thead>
<tbody>
<tr>
<td><img src="consumer_innovativeness.png" alt="Image" /></td>
<td><img src="aspirational_attractiveness.png" alt="Image" /></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Social norms influence:</th>
<th>Advertising efficacy:</th>
</tr>
</thead>
<tbody>
<tr>
<td>![Image](social_n IMS influence.png)</td>
<td><img src="advertising_efficacy.png" alt="Image" /></td>
</tr>
</tbody>
</table>
While squaring the sum of the standardised factor loadings for each indicator and adding the sum of the error variances, CR values ranging between 0.816 and 0.900 were calculated across all the six latent constructs included in the measurement model that was specified in this work. Nonetheless, the CR is interpreted the same as Cronbach’s alpha coefficient, whereby values exceeding the cut-off criteria of 0.70 are preferred (Malhotra et al. 2017:807). Thus, the results of this study point to the internal consistency among the 31 scale indicators with respect to their underlying constructs.

### 5.11.7 Validity assessment of the measurement model

Construct validity of the measurement model was evaluated by considering convergent, discriminant and nomological validity aspects. Table 5.16 summarises the statistical accuracy measures that were reported in this study.
Table 5.16: Reliability and validity results of the measurement model

<table>
<thead>
<tr>
<th>Construct</th>
<th>Cronbach's alpha coefficient</th>
<th>CR</th>
<th>AVE</th>
<th>√AVE</th>
</tr>
</thead>
<tbody>
<tr>
<td>Consumer innovativeness (scale indicators C1, C2, C3, C4, C5 and C6)</td>
<td>0.876</td>
<td>0.894</td>
<td>0.588</td>
<td>0.767</td>
</tr>
<tr>
<td>Aspirational attractiveness (scale indicators C7, C9, C10 and C11)</td>
<td>0.792</td>
<td>0.816</td>
<td>0.526</td>
<td>0.725</td>
</tr>
<tr>
<td>Social norms influence (scale indicators C12, C13, C15, C16 and C17)</td>
<td>0.860</td>
<td>0.862</td>
<td>0.610</td>
<td>0.781</td>
</tr>
<tr>
<td>Advertising efficacy (scale indicators C18, C19, C20, C21 and C22)</td>
<td>0.875</td>
<td>0.887</td>
<td>0.612</td>
<td>0.782</td>
</tr>
<tr>
<td>Market maven tendency (scale indicators D1, D2, D3, D4, D5 and D6)</td>
<td>0.827</td>
<td>0.900</td>
<td>0.601</td>
<td>0.775</td>
</tr>
<tr>
<td>New product trial (scale indicators E1, E2, E3, E4 and E5)</td>
<td>0.846</td>
<td>0.863</td>
<td>0.557</td>
<td>0.746</td>
</tr>
</tbody>
</table>

Recommended threshold | ≥0.70 | ≥0.70 | ≥0.50 | Greater than the highest correlation coefficient

Source: Author compilation (2018)

Convergent, discriminant and nomological validity measures were considered upon assessing the legitimacy of the measurement model.

5.11.7.1 Convergent validity of the measurement model

Convergent validity was evaluated in this study by checking the individual item factor loadings for each respective construct. At the minimal, all factor loadings were statistically significant and higher than 0.50 and even higher than 0.70 in the majority of the cases, as depicted on Table 5.15 of this study. This would be interpreted that the high loadings that are greater than 0.70 suggest that the construct is explaining at least 50 percent of the variation in the observed variable (Bagozzi & Yi 2012:17). Thus, the convergent validity of the measurement model was ascertained by this result in that all the indicators converged well on the corresponding constructs they were supposed to measure.

Secondly, the AVE values were inspected. In general, AVE values range between zero and one, whereby values of 0.50 and greater point to the convergent validity of a measurement model (Anderson & Gerbing 1988:411). This threshold as reported in Table 5.16 of this study, since the AVE values calculated for the entire constructs in the measurement model ranged between 0.526
and 0.612 signalling convergence among the indicators used in this research. Thus, drawing from these results it can be estimated that more than 50 percent of the variance for each scale indicator is shared with its underlying construct.

Thirdly, the computed CR values ranging between 0.816 and 0.900 were also considered an indirect indicator of the convergence validity of the measurement model specified in this work.

5.11.7.2 Discriminant validity of the measurement model

To establish the discriminant validity of the measurement model, it was important to show that each construct is theoretically distinct from the other constructs in the measurement model and thus, makes a unique contribution to this study. Thus, two statistical techniques were crosschecked. First, the bivariate correlation matrix was observed to prove that the highest correlation coefficient in the matrix was below 0.70, as recommended by Hair et al. (2018:319). Consistently so, all the correlation coefficients reported in Table 5.13 were positive and significant at \( p < 0.01 \), while ranging between +0.297 and +0.642 implying distinctiveness of each constructs. Specifically, the highest correlation coefficient was observed between social norms influence and new product trial \( (r = +0.642; p < 0.01) \), which was positive and moderate in strength. Therefore, the weak to moderate correlation coefficients (less than 0.70) reported in this study infer the theoretic uniqueness of each construct specified in the measurement model.

Secondarily, square root values were computed across all the AVE values for the six constructs specified in the measurement model. While following Fornell and Larcker’s (1981:44) criterion, the discriminant validity of the measurement model can only be established if the square root estimates of the respective AVE values are greater than the highest correlation coefficient in the correlation matrix. Thus, the computed square root values in this study ranged between 0.725 and 0.782, implying that they were all larger than the highest computed correlation coefficient in the matrix \( (r = +0.642; p < 0.01) \). These results are shown in tables 5.13 and 5.15, respectively.

5.11.7.3 Nomological validity of the measurement model

Evidence of nomological validity was observed after computing the bivariate correlation matrix and correlating the latent variables against each other. In that regard, the correlations among the constructs were all below one (Anderson & Gerbing 1988:411) and statistically significant at \( p < 0.01 \).

Therefore, the measurement model that was specified in this study depicted adequate reliability and validity.
5.11.8 Specification of the structural model

The structural model in this study was evaluated to confirm the proposed relationships among the identified constructs. The structural model was specified with 527 distinct sample moments, 98 distinct parameters to be estimated as well as 429 degrees of freedom significant at $p<0.01$ level as well as a chi-square value of 990.132.

5.11.8.1 Structural model fit indices

Even though the fit of the measurement model may be adequate, the aim of evaluating structural model fit is to indicate the direct effects of one construct onto the other constructs under investigation. Thus, it was considered necessary to evaluate the fit indices of the structural model as well as reported in Table 5.17 of this study.

Table 5.17: Structural model fit indices

<table>
<thead>
<tr>
<th>Fit indices</th>
<th>CMIN/DF</th>
<th>RMSEA</th>
<th>NFI</th>
<th>RFI</th>
<th>IFI</th>
<th>TLI</th>
<th>CFI</th>
<th>PNFI</th>
</tr>
</thead>
<tbody>
<tr>
<td>Default model</td>
<td>4.308</td>
<td>0.051</td>
<td>0.914</td>
<td>0.900</td>
<td>0.951</td>
<td>0.938</td>
<td>0.951</td>
<td>0.951</td>
</tr>
<tr>
<td>Threshold</td>
<td>≤ 3.0</td>
<td>≤0.08</td>
<td>≥0.90</td>
<td>≥0.90</td>
<td>≥0.90</td>
<td>≥0.90</td>
<td>≥0.90</td>
<td>≥0.90</td>
</tr>
<tr>
<td></td>
<td>(values ≤ 5.0 are tolerable)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Decision</td>
<td>Accept</td>
<td>Accept</td>
<td>Accept</td>
<td>Accept</td>
<td>Accept</td>
<td>Accept</td>
<td>Accept</td>
<td>Accept</td>
</tr>
</tbody>
</table>

Source: Author compilation (2018)

The results reported in Table 5.17 depict adequate fit of the structural model. Hooper et al. (2008:54) attest that higher values are desirable for goodness of fit indices while lower values are accepted in the case of badness-of-fit indices. In terms of badness-of-fit indices, Iacobucci (2010:91) recommends that the CMIN should be below 3.0 since it is sensitive to sample size. Nevertheless, Wheaton et al. (1997:89) emphasises that CMIN values ranging between 2.0 and 5.0 can still detect acceptable model fit. Therefore, the CMIN value of 4.308 reported in this work was accepted. Relatedly, the RMSEA statistics revealed a value of 0.051, which is significantly close to 0.05, implying close fit of the structural model to the empirical data. In terms of the incremental fit indices, the reported NFI=0.914 (≥0.90), RFI=0.900 (≥0.90), IFI=0.951 (≥0.90), TLI=0.938 (≥0.90) and CFI=0.951 (≥0.90) values revealed that the specified structural model fit
well with the sample data. Moreover, the reported parsimonious fit index PNFI=0.951) (≥0.90), was also within acceptable parameters thereby signalling adequate fit of the structural model.

**5.11.8.2 Structural model results**

Figure 5.16 depicts the structural model that was identified in this study.

---

**Figure 5.16: Structural model for the study**

**Source:** Author compilation (2018)

In evaluating the results of the structural model and subsequent testing the hypotheses for this study, three statistics were observed, namely the size and direction of the standardised path weights, the statistical significance implied by the critical ratios as well as the SMC values. Chin (1998:13) mentions that the regression coefficients or standardised path weights should be greater than ±0.20 to be considered meaningful, at the $p<0.01$ level of significance. On the other hand, Schumacker and Lomax (2010:92) attest that researchers should interpret the parameter estimates for statistical significance by dividing the parameter estimates by the standard errors, to produce the critical ratios. In this vein, the cut-off criterion for structural models in relation to the critical
ratios should be to accept all values greater than 2.58 (Kline 2016:51). Similarly, the SMC values reported on the structural model explain the explanatory power of all the endogenous variables on their exogenous variable and should ideally be above 25 percent to be meaningful. Whereas Appendix C of this dissertation provides the detailed output from the structural model, a summary is provided in Table 5.18 of this study, which reveals that the structural model specified in this work yielded satisfactory results.

Table 5.18: Structural model and hypotheses testing results

<table>
<thead>
<tr>
<th>Path</th>
<th>Hypotheses</th>
<th>Standardised path weight</th>
<th>Critical ratio (Z value)</th>
<th>SMC</th>
<th>Significance level</th>
<th>Decision</th>
</tr>
</thead>
<tbody>
<tr>
<td>Consumer innovativeness</td>
<td>H1, H2</td>
<td>0.441 (+)</td>
<td>9.292</td>
<td>0.428</td>
<td>***</td>
<td>Accept H1</td>
</tr>
<tr>
<td>Aspirational attractiveness</td>
<td>H3, H4</td>
<td>0.182 (+)</td>
<td>4.099</td>
<td></td>
<td>***</td>
<td>Accept H2</td>
</tr>
<tr>
<td>Social norms influence</td>
<td>H5, H6</td>
<td>0.339 (+)</td>
<td>7.272</td>
<td></td>
<td>***</td>
<td>Accept H3</td>
</tr>
<tr>
<td>Advertising efficacy</td>
<td>H7, H8</td>
<td>0.293 (+)</td>
<td>6.607</td>
<td></td>
<td>***</td>
<td>Accept H4</td>
</tr>
<tr>
<td>Market maven tendency</td>
<td>H9, H10</td>
<td>0.478 (+)</td>
<td>8.448</td>
<td>0.228</td>
<td>***</td>
<td>Accept H5</td>
</tr>
</tbody>
</table>

Source: Author compilation (2018)

All the standardised path weights reported on the structural model indicated a certain degree of influence of the independent variables on the dependant variables. This means that the proposed conceptual model converged well with the underlying sample data. Specifically, the path weights between consumer innovativeness (ß=+0.441), social norms influence (ß=+0.339) and advertising efficacy (ß=+0.293) with market maven tendency were all direct, significant at $p$ less than 0.01, while being larger than 0.20. Therefore, a decision was taken to accept the alternative hypotheses $H_1$, $H_3$ and $H_4$ and reject the null hypotheses that were posited along these respective paths on the structural model. Whereas the path between aspirational attractiveness and market maven tendency was marginally weak and below 0.20, this result was accepted on the basis that it was significant and positive as hypothesised in the literature. Thus, $H_{2}$ was also concluded in this study while $H_2$ was rejected. Finally, the direct and significant influence of market maven tendency...
tendency on new product trial behaviour ($\beta=+0.478; \ p<0.01$) among the participants was confirmed in this study. Therefore, $H_a5$ was concluded in this study, whereas $H_o5$ was rejected.

### 5.11.8.3 Hypotheses testing results

This section comments on the hypotheses that were tested in this work, including the decisions that were taken by the researcher as supported by the empirical data.

- **Consumer innovativeness and market maven tendency**

The predictive relationship between consumer innovativeness and market maven tendency were hypothesised as follows:

- $H_o1$ Consumer innovativeness does not have a positive and significant influence on consumers’ market maven tendency.
- $H_a1$ Consumer innovativeness has a positive and significant influence on consumers’ market maven tendency.

The results presented in both Figure 5.16 and Table 5.17 indicate that consumer innovativeness (path estimate=$+0.441; \ Z=9.292; \ p<0.01$) has a significant and direct influence on market maven tendency. As a result, the null hypothesis $H_o1$ was rejected whereas the alternative hypothesis $H_a1$ was concluded in this study. Moreover, the large value of the Beta value yielding the highest critical ratio in this study implies that consumer innovativeness had the highest explanatory power on consumers’ overall tendency towards market mavenship. This result further confirms that market mavens are innovative consumers.

- **Aspirational attractiveness and market maven tendency**

The hypotheses relating to the influence of aspirational attractiveness on market maven tendency were as follows:

- $H_o2$ Aspirational attractiveness does not have a positive and significant influence on consumers’ market maven tendency.
- $H_a2$ Aspirational attractiveness has a positive and significant influence on consumers’ market maven tendency.

The results presented in Figure 5.16 suggest that aspirational attractiveness yielded the weakest predictive power on market maven tendency (path estimate=$+0.182; \ Z=4.099; \ p<0.01$). However, $H_a2$ was concluded in this study whereas $H_o2$ was rejected owing to the fact that the path revealed
a significant and direct influence on market maven tendency, implying that it somewhat contributed towards the structural model. Thus, theoretic reasoning pointed to the significance of this path in adding explanatory power and value to the structural model.

- **Social norms influence and market maven tendency**

In light of identifying if the inclinations of market mavens were influenced by societal norms, the following hypotheses were tested in this research:

$H_0^3$ *Social norms influence does not have a positive and significant influence on consumers’ market maven tendency.*

$H_a^3$ *Social norms influence has a positive and significant influence on consumers’ market maven tendency.*

The results of the analysis presented in Figure 5.16 and Table 5.17 of this study reveal a statistically significant relationship between social norms influence and market maven tendency (path estimate=+0.339; $Z=7.272; p<0.01$). Moreover, the positive path coefficient suggests a direct influence, which confirms the theoretic reasoning that was followed in this work. As such, $H_0^3$ is rejected while $H_a^3$ is supported in this study. Notably, the size of the critical ratio, as well as the regression weight along this path, indicates that social norms influence yielded the second most important influence among the four stimuli that were postulated to have a direct influence on market maven tendency.

- **Advertising efficacy and market maven tendency**

The fourth hypotheses were aimed at testing the effectiveness of mass media advertising on market maven tendency. In this regard, the following hypotheses were outlined:

$H_0^4$ *Advertising efficacy does not have a positive and significant influence on consumers’ market maven tendency.*

$H_a^4$ *Advertising efficacy has a positive and significant influence on consumers’ market maven tendency.*

Table 5.17 depicts that the alternative hypothesis $H_a^4$ can be concluded based on the positive and significant influence of advertising efficacy on market maven tendency (path estimate=+0.293; $Z=6.607; p<0.01$). Therefore, based on the sample data, the null hypotheses ($H_0^4$) that advertising efficacy does not have a positive and significant influence on consumers’ market maven tendency can be rejected in this study.
In anticipation of validating the association between market maven tendency and the trial of new cosmetic products among the female sample, the following hypotheses were tested empirically:

\[ H_{o5} \quad \text{Consumers’ market maven tendency does not have a positive and significant influence on new cosmetic products’ trial.} \]

\[ H_{a5} \quad \text{Consumers’ market maven tendency has a positive and significant influence on new cosmetic products’ trial.} \]

The structural model results presented in Figure 5.16 and Table 5.17 point to the direct and significant influence of market maven tendency on new cosmetic product trial (path estimate=+0.478; \(Z=8.448; p<0.01\)). Based on this result, \(H_{a5}\) was supported in this study, whereas \(H_{o5}\) was rejected. In addition, market maven tendency was capable of explaining 23 percent of the variance in new product trial (SMC value=0.228). This means there could be other variables which have not been incorporated in this study, yet that could help to account for the trial of new cosmetic products by female consumers. These possible elements can be investigated in future research.

5.12 DISCUSSION

This purpose of this study was to build a nomological network of stimulus factors that influence market mavenship comprehensively, within the domain of new cosmetic products. Thus, the study proposed to extend the body of knowledge by suggesting market maven tendency is best reflected through consumer innovativeness, individual aspiration to being physically attractive, the influence of societal norms as well as the effectiveness of mass media.

The first hypothesis conceptualised in this study, \(H_{a1}\), proposed that consumer innovativeness has a positive influence towards consumers’ market maven tendency. The results of this study correspond with Goldsmith and Hofacker (1991:210) as well as Steenkamp and Maydeu-Olivares (2015:304) who found a highly predictive effect between the two constructs. The structural model results in Table 5.17 supported this hypothesis implying that market mavens are likely to possess innovative traits, across a broad range of products and service offerings. This general tendency towards innovative behaviour can be inferred to their high exposure to new products in the market as well as the inherent ability to access and diffuse new product information earlier than others (Goldsmith et al. 2003:62; Ruvio & Shoham 2007:706). Moreover, the influential power demonstrated along this path suggests that the innovativeness of female mavens not only reflects the earlier adoption of new products but also their deliberate tendency to learn about any product...
innovations. In light of the research findings, particular reference to a fragmented sector, such as the cosmetic industry, marketers should strive to maximise the diffusion of new products by engaging the services of market mavens, as they are generalist in disseminating information about new products.

With regard to the second hypothesis proposed in this research, the results pointed to a weak, yet statistically significant influence of aspirational attractiveness on market maven tendency was proven. Considering that the female consumer places a great degree of emphasis on being physically attractive, this lends towards the increased predisposition towards market mavenship and such related tendency. This path is supported by the indirect association between attractiveness with materialism meaning the perceptions to physical attractiveness are perpetrated by an internal desire to have status within a social setting (Goldsmith et al. 2012:395). Despite the significant result, the weak path coefficient was not expected in this study considering that female mavens are considered to demonstrate considerable interest in improving their physical appearance. Therefore, these findings could suggest that female consumers utilise new cosmetic products for reasons other than enhancing social standing and physical appearance, such as sustaining healthy lifestyles (Dimitrova et al. 2009:1156). This plurality of uses could be extended to trying out new organic cosmetic products being introduced in the market, in view of maintaining a holistic and healthy outlook, rather than physical appearance alone.

The hypotheses H₃ was accepted in this study, inferring that the influence of social norms has a direct and significant impact on market maven tendency. The results of this study are consistent with the findings by Clark and Goldsmith (2005:305) who established that social norms influence the behaviour of market mavens in the USA. Yang (2013:102) further supports this predictive path by validating the influence of subjective norms on market maven behaviour within the context of the Chinese market, which flourishes on the precincts of a collectivist culture similar to that of South Africa. Together, these studies impress upon the drive to obtain relational social capital since market mavens place value in knowing what others think or buy before making their own trial or purchase decisions. Moreover, since the modus operandi of market mavens relies on interpersonal influence, marketers should focus their communication efforts on opinionated members of the society as this could prompt fast diffusion of new cosmetic products.

The structural path between advertising efficacy and market maven tendency was both positive and significant, meaning the hypothesis H₄ was concluded in this study. The results reported in this study are similar to the findings by Chelminski and Coutler (2002:83) as well as Walsh et al. (2004:110) who concluded that the effectiveness of media advertising plays a significant role in
displaying observable effects on market maven behaviour. This is because market mavens share media content with other consumers across different communication platforms. In this vein, the efficacy of mass media advertising can never be underestimated when it comes to enhancing the marketing communication mix of any organisation.

In an attempt to maintaining a competitive position in the market, marketers continuously introduce new products in the market. Today, much of the most prominent marketing programs are designed to ensure the success of newly launched products through trial efforts. Interestingly, the results of the sample data pointed to a positive and significant influence of market maven tendency on the trial of new cosmetic products’. Therefore, $H_a5$ was concluded in this study whereas $H_o5$ was rejected. This outcome directly linked the market maven trait to the outcome variable of this research. Furthermore, this result is consistent with the finding by Steenkamp and Gielens (2003:377) who established a strong and direct association between market maven tendency and trial probability of new consumer packaged goods. This supposition recounts that the inclination towards mavenship has a positive impact on the trial efforts of consumers towards new cosmetic products, which ultimately determines the acceptance and/or rejection of new products. Whereas the market maven trait returned only 23 percent variance on new product trial, marketers can still account for this consumer cohort as unique promotional agents with both interpersonal influence and direct experience with using products.

5.13 CONCLUSION

This chapter reports on the empirical results obtained from the analysis of the data that were collected from the field. The pilot study as well as the frequency distributions served to summarise the sample data. Thereafter, the EFA was conducted in view of establishing the unidimensionality of the study and thereby confirmed the factor scores that had been proposed at the beginning of the study. Reliability checks were conducted to verify the internal consistency among the 31 scale items that were infused n the inferential statistical analysis. Descriptive were computed on the factor scores, whereas a bivariate correlation matrix served to establish the existence of weak to moderate relationships among the identified factors in the study. In terms of the SEM procedure, both the measurement and structural models demonstrated adequate fit. After specifying the structural model, the five alternative hypotheses, namely $H_a1$, $H_a2$, $H_a3$ $H_a4$ and $H_a5$ that were specified at the beginning of this work were proven based on the statistically significant results. Thus, it can be deduced that the findings of this research cumulatively add to the body of knowledge by indicating that the four stimulus factors that contribute towards market maven
tendency (consumer innovativeness, social norms influence, advertising efficacy and aspirational attractiveness) considerably impact the trial of new cosmetic products in the market.

The next chapter comments on how the research objectives that were formulated at the beginning of the study were achieved, in light of the sample data. In addition, the chapter discusses the managerial implications of the sample findings, the limitations of the study as well as possible directions for future research.
6.1 INTRODUCTION

Due to the imminent diffusion of new cosmetic products in the market, consumers often find it difficult to qualify product quality. In this vein, increasing the probability of a new product trial helps to provide tangible grounds through which consumers can experience new products (Kapoor 2016:2). According to Gauri et al. (2015:1053), one way of inducing a product trial and indirectly maximising product knowledge is through appealing to influential consumers in the marketplace. Recently, the cosmetic industry has been able to target beauty influencers in order for them to impact and prompt consumers to keep up with the latest trends and thereby review the latest must-have cosmetic products (Legoale 2017:1). Among this cohort of beauty influencers comprises a cohort of market mavens who are deemed the prime dispensers of new product information and market expertise (Feick & Price 1987:85).

The purpose of this study was to examine the extensive domain of market mavens and related research on the trial of new cosmetic products among female consumers in South Africa. The study partially replicated the work started by Feick and Price (1987:85) on market maven dispositions and further tested a comprehensive model that was extrapolated from the tenets of a behavioural science theory. Nonetheless, the extrapolated tendency towards market mavenship from a South African setting seems to confirm the potential value of this framework within a developing economy. Notwithstanding such affirmations, this chapter explains how the theoretical and empirical research objectives that were set at the beginning of this study were achieved in light of the sample data and the research findings presented in Chapter 5 of this study.

6.2 ACHIEVEMENT OF THE RESEARCH OBJECTIVES

The primary objective formulated at the commencement of this work was to examine the influence of selected factors on market maven tendency and the ultimate trial of new cosmetic products by female consumers in the southern Gauteng region of South Africa. In lieu of achieving the primary objective for this research by applying a quantitative research approach, a decision was taken to follow a dual-pronged approach towards collecting data by conducting a review of both secondary and empirical data. Therefore, in an attempt to support the anchor research objective outlined in Section 1.4.1 of this study, a set of theoretical and empirical research objectives were formulated.
6.2.1 Achievement of the theoretical objectives

The theoretical objectives in this study were achieved through a detailed review of secondary sources such as textbooks, peer reviewed journal articles, published reports, conference proceedings and the Internet. The theoretical objectives as set out in Section 1.4.2 of the study are reviewed and outlined in Table 6.1.

Table 6.1: Achievement of the theoretical research objectives

<table>
<thead>
<tr>
<th>Specific research objective</th>
<th>Theoretical research objective being addressed</th>
<th>Section where the research objective was addressed</th>
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<td>Theoretical objective 1</td>
<td>To appraise the literature on cosmetic products</td>
<td>Sections 2.2, 2.3 and 2.4</td>
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<td>Theoretical objective 2</td>
<td>To provide a comprehensive overview of the cosmetics industry</td>
<td>Sections 2.5, 2.6, 2.7 and 2.8</td>
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<tr>
<td>Theoretical objective 3</td>
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<td>Theoretical objective 5</td>
<td>To review the literature on the Two-step flow theory of interpersonal influence</td>
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<td>Theoretical objective 6</td>
<td>To conduct a literature review on the role of marketplace influencers</td>
<td>Section 3.5</td>
</tr>
<tr>
<td>Theoretical objective 7</td>
<td>To theoretically review the SOR theory in view of establishing the factors that influence market maven tendency among consumers.</td>
<td>Sections 3.7 and 3.8</td>
</tr>
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</table>

Source: Author compilation (2018)

The first theoretical research objective relating to conducting a review of the literature on cosmetic products was achieved in sections 2.2, 2.3 and 2.4, respectively. Section 2.2 of this study provided a primer to this work by making reference to the fundamental elements that adorn the human body. In this vein, it was imperative to provide an overview of the fashion industry wherein cosmetic products are a part. From the review, it was unravelled that fashion correlates with a number of product lines including clothing and cosmetics, albeit as they are short-lived and continuously replaced by newer product versions (Fowler et al. 2015:195). With that in mind, Section 2.3 proceeded to uncover the origin of cosmetic products, which Hunt et al. (2011:2) as well as Diamond and Diamond (2007:253) traced back to ancient Egyptian and Ottoman eras, around 4000BC. While cosmetic products were initially used as decorative elements for religious
ceremonies, war and other rituals, more contemporary uses have expanded their use towards protecting the skin (skincare), enhancing body smells (fragrances), treating hair (haircare), washing and cleaning up (toiletries) as well as decorating the facial elements (decorative). An expanded discussion of the five key cosmetic categories is provided in Section 2.4 of this study.

The second theoretical research objective aimed to deliver a comprehensive overview of the cosmetics industry. Primarily, considering the extent to which the industry is fragmented, the key cosmetic industry brands that are owned by different manufacturers at both the local and international fronts were evaluated in Section 2.5 of this study. Considering how fragmented the industry is, the review made in this section helped to identify the market leaders in the cosmetics industry in light of their sales and market development. Moreover, an evaluation of the leading cosmetic brands within the South African market was useful in determining consumers’ general consumption behaviour, including the dominance of foreign cosmetic brands within the local market. At the secondary level, it was considered necessary to assess the regulatory environment of the cosmetics industry in Section 2.6 of the study. This helped to uncover the extent to which manufacturers were complying with safety standards of production and testing, prior to marketing to the public. Section 2.7 considered the driving forces that influence the operations of the cosmetics industry. Specific to this research, globalisation, new product innovations and market demographics were considered pivotal towards the development of the South African cosmetics sector. Thereafter, Section 2.8 of this study evaluated the contribution of the cosmetic sector towards the triple bottom line in view of delivering sustainable development of both the global and local markets.

Chapter 3 was compiled in this study in view of providing evidence of the achievement of the third theoretical research objective. In particular, the third theoretical research objective aimed to review the literature on new trial behaviour. Since product trial is an indirect indicator of consumers’ beliefs about the performance of a product, Section 3.2 provided a theoretical perspective on this behavioural attribute, which culminated in an examination of the salient motivations behind product trial, comprising utilitarian and hedonic motives. Moreover, considering that the unit of analysis for this study were female consumers, an additional discussion on the cosmetics’ trial behaviour of female consumers was conducted in Section 3.6 of this study. In this discussion, it was noted that female market mavens hold the personal view and conviction that consuming cosmetic products delivers both status, physical and psychological value. Resultantly, female consumers place more emphasis on accentuating their perceptions of adorning the human body by trying out new cosmetic products that are introduced in the market.
The fourth theoretical research objective aimed to review the literature on the marketing of cosmetic products. This objective was achieved in Section 3.3 of this study, whereby an evaluation of the formal and informal promotional efforts that are utilised by marketers of new cosmetic products was made. Whereas the formal strategies comprise various paid-for strategies in the marketing communication mix of an organisation including advertising, creative packaging, brand activations and samples, the informal strategies emphasise WOM as the anchor phenomenon that allows consumers to create dialogue with others about new products in the market.

The fifth theoretical objective formulated for this research was to conduct a review of the Two-step flow theory of interpersonal influence developed by Katz (1957:61) within the confines of politics and public affairs literature. This objective was achieved in Section 3.4 of this study. Drawing from the literature, the SET, trickle-down theory, magic bullet theory, as well as the multi-step flow theory were identified as the dominant theories posited to explain the nature in which consumers deploy interpersonal influence on others within the marketplace. Nevertheless, specific adaptation of the Two-step flow theory by Maurice (2010:12) helps to explain how marketers can capitalise on a relatively small group of influential consumers for marketing various products and services, based on their active and highly involved nature within the marketplace.

With reference to the sixth theoretical research objective, a review of the literature was conducted on the role of marketplace influencers. The objective was addressed in Section 3.5 of this study. The discussion revealed that the role of interpersonal influence in marketing is set around reaching out to different consumer cohorts such as opinion leaders, early adopters and market mavens as the typical marketplace influencers. Nevertheless, the key issues that emanated from the literature included that the early adopters and opinion leaders are limited in terms of market orientation capacity, owing to their privation in terms of general knowledge about products and general marketplace issues. It was concluded, therefore, that market mavens play a significant role in incorporating all the elements of the marketing mix, based on their product, pricing, distribution and promotional knowledge. Hence, market mavens came to the fore of this discussion as the vital dispensers of information pertaining to new cosmetic products.

The last theoretical research objective aimed to theoretically review the SOR theory in view of establishing the factors that influence market maven tendency among consumers. In this vein, an evaluation of the SOR theory was conducted in Section 3.7 of this study, in view of providing a clear understanding of the components and assumptions underlying the theory. Thereafter, Section 3.8 of this study sought to identify the determinants of market maven tendency, from the literature by anchoring them within the ambit of the SOR theory. Accordingly, the literature supported the
notion that market maven tendency towards disseminating information about new cosmetic products is influenced by psychographic elements, that are determined from the internal psychological make of the consumers. These include their general inclinations towards being innovative across a diverse cohort of new products and services as well as the sought-after self as expressed in the desire to look attractive. On the other hand, factors in the external environment were considered instrumental towards the market maven tendency of consumers, including the influential power of referent groups as well as effective advertising of the cosmetic products. In the same review of the literature, it was established that consumers could either demonstrate approach or avoidance behaviour, of which new product trial efforts by consumers were considered the former, in this work.

6.2.2 Achievement of the empirical research objectives

A set of empirical research objectives were formulated and outlined in Section 1.4.3 of this study in view of attempting to address the research problem by collecting data from the field. In light of this, a sample survey was conducted, whereas data were collected from female consumers only, in view of testing the research model conceptualised in this study. The next sections elaborate on the manner in which each of the empirical research objectives were achieved in this research in light of the sample data and the research findings.

6.2.2.1 To ascertain the underlying determinants of market maven tendency among female consumers in southern Gauteng

The first empirical research objective aimed to determine the underlying factors influencing market maven tendency among female consumers. To achieve this objective, an EFA procedure was conducted in view of reducing the sample data into smaller identifiable components as explained in Section 5.7 of this study. After the deletion of two scale items, the EFA procedure was conducted with 31 scale items leading to the extraction of six components. Accordingly, the procedure led to the extraction of the first component with six scale items labelled consumer innovativeness. The findings of this research confirmed the internal consistency of this variable along the six scale items. In addition, the mean score value along this component was above 4.0, signalling agreeability among the participants that consumer innovativeness has a significant influence on market maven tendency. On the other hand, the variable yielded positive and significant correlation coefficients when correlated with other variables extrapolated in this research including aspirational attractiveness (+0.564; p<0.01), social norms influence (+0.400; p<0.01), advertising efficacy (+0.458; p<0.01), market maven tendency (+0.639; p<0.01), as well as new product trial (+0.488; p<0.01).
During the EFA extraction, aspirational attractiveness was labelled component six comprising four items. Based on the preliminary analysis, the reliability assessment reported in Section 5.8 of this study confirmed internal consistency amongst the items while the descriptive statistics on the factor yielded the highest mean score ($\bar{x}=5.136$). These results suggest that the sample participants aspire to enhance their appearance through enhanced trial efforts towards new cosmetic products. In this regard, the mavens disseminate product information about new cosmetics in the market based on their aspirations towards physical beauty. In addition, the correlation analysis results reported in Section 5.10 of this study confirmed the existence of statistically significant and positive correlations between aspirational attractiveness with other variables in this study including social norms influence ($r=+0.462; p<0.01$), advertising efficacy ($r=+0.515; p<0.01$), market maven tendency ($r=+0.571; p<0.01$) and new product trial ($r=+0.396; p<0.01$).

The third component to be extracted from the EFA procedure was labelled social norms influence, as reported by five scale items with factor loadings greater than 0.50. The factor yielded a Cronbach’s alpha coefficient of 0.860, which was considered evidence of internal consistency among the items on this construct. Conversely the factor reported an overall mean value above 4.0 ($\bar{x}=4.001; \text{SD}=1.347$), signalling agreeableness among the participants regarding the influence of social norms in determining the new product information dissemination role of female mavens. Moreover, the factor yielded positive correlations when correlated with the other factors extracted in this research. Notably, the correlation analysis results reported in Section 5.10 of this study revealed the strongest association between social norms influence and new cosmetic product trial ($r=+0.642; p<0.01$). This infers that social norms play a fundamental role in evoking consumers to conform to the expectations of others by trying out new cosmetic products that will enhance beauty and further enhance their social standing in society.

Finally, the EFA procedure enabled the extraction of a factor that was labelled advertising efficacy. The reliability assessment and descriptive statistical analysis results presented in sections 5.8 and 5.9 of this research provided preliminary evidence of the importance of advertising efficacy in advancing market maven tendency. Moreover, the construct correlated positively with other factors extracted in this research including market maven tendency ($r=+0.550; p<0.01$) and new product trial ($r=+0.297; p<0.01$). These findings indicate that, as marketers increase the effectiveness of the advertisements on new cosmetic products, there is an increased likelihood that female mavens will expend considerable efforts in disseminating information about new products; whereas, the same individuals will also invest more time in trying out new cosmetic products that are available in the market.
6.2.2.2 To determine the predictive influence of the market maven stimuli

The second empirical research objective aimed to determine the predictive influence of the stimulus factors that influence market maven tendency. This objective was attained by specifying a measurement model and conducting a CFA procedure (Refer to Section 5.11 of this study). The measurement model that was specified in this study comprised six latent variables, explained by 31 manifest variables; whereas, only four of the latent constructs were reported as having predictive influence on market maven tendency. In particular, the measurement model confirmed that consumer innovativeness was a relevant determinant of market maven tendency, whereby the scale indicators along this construct were all significant at the \( p<0.01 \) level with standardised regression coefficients ranging between 0.670 and 0.875. Moreover, the composite reliability (0.894) and AVE (0.588) values reported along this construct confirmed the convergent validity on the consumer innovativeness construct. On the other hand, the second construct that was extracted from the measurement model was labelled aspirational attractiveness, comprising scale indicators with standardised regression coefficients ranging between 0.699 and 0.764. Relatedly, the construct reported acceptable reliability (Cronbach’s Alpha coefficient=0.792; CR=0.816) as well as high convergent validity (AVE=0.526) among the indicators. This inferred convergence among the scale indicators along this construct, thus denoting that market maven behaviour is induced by female consumers’ desire for an appealing physical appearance.

Social norms influence was specified as having five indicators on the measurement model, with standardised regression coefficients ranging between 0.714 and 0.842. Similarly, the construct yielded acceptable reliability values (Cronbach’s Alpha coefficient=0.860; CR=0.862) as well as high convergent validity (AVE=0.610) among the indicators. This construct explains the influence of reference groups in determining the behaviour of market mavens; whereas, in South Africa, the engagement of female market mavens is influenced extensively by gaining approval based on the norms and beliefs of the prevailing society. Based on this result, it is clear that the tendency of market mavens is highly susceptible to interpersonal influence in which the influence of social norms is prone to deploy positive inclinations towards market maven tendency. Finally, the advertising efficacy construct was extrapolated from the measurement model. In terms of the psychometric properties of the variable, the variable attained a Cronbach’s alpha coefficient of 0.875 and a CR value of 0.887 during model fit evaluation, thereby inferring acceptable internal consistency reliability among the five scale indicators representing this construct. Moreover, convergent validity was inferred from the high standardised regression coefficients (ranging between 0.742 and 0.851) as well as the AVE value of 0.612 (greater than 0.50) along the construct. These psychometric properties confirm that the utilisation of an effective advertising
campaign can significantly influence the inclinations of market mavens towards trying out new cosmetic products in the market.

Finally, upon specifying the structural model, all four constructs yielded statistically significant path weights towards market maven tendency.

6.2.2.3 To ascertain the inclinations of female market mavens towards the trial of new cosmetic products

The third empirical research objective sought to ascertain the inclinations of female market mavens towards trying out new cosmetic products. Drawing from the empirical results of this study, the measurement model confirmed that market maven tendency with six-item indicators was a relevant mediator in determining the inclinations of female consumers as extrapolated within the SOR theory. The indicators along this construct were all significant at the $p<0.01$ level with standardised regression coefficients ranging between 0.686 and 0.853. Relatedly, the construct reported acceptable internal consistency reliability (Cronbach’s alpha coefficient=0.827) as well as high convergent validity (AVE=0.601). Moreover, the highest composite reliability in this study was reported along this construct (CR=0.900), thereby confirming convergent validity on the market maven tendency construct. The results symbolise that the tendency of market mavenship is evident in deliberately influencing the behaviour of consumers at an interpersonal level upon trying out new cosmetic products in the market. On the other hand, new cosmetic product trial was specified as having five indicators on the measurement model with standardised regression weights ranging between 0.700 and 0.807. Similarly, the construct yielded acceptable reliability (Cronbach’s alpha coefficient=0.846; CR=0.863) as well as plausible convergence among its five scale indicators (AVE=0.557).

In terms of linear association between the two constructs, market maven tendency was found to have moderate, yet direct and significant association with new cosmetic products ($r=+0.504; p<0.01$). These findings indicate that the salient trial of new cosmetic products is strengthened by the inclinations of market mavens. The results of this study support the affirmations made by Maurice (2010:15) that there exists a relationship between market maven tendency and trial probability. This is explained by the fact that market mavens are purveyors of WOM communication who deliver the utmost best in influencing the behaviour of others (Sweeney et al. 2014: 336). Owing to the perceived credibility WOM has, the trial of new cosmetic products, therefore, tends to be high after receiving information from such individuals. Therefore, marketers need to reach out and intensify the efforts of market mavens in terms of information dissemination as well as product involvement, through expanding trial probability opportunities. In addition, the
results on the structural model reported a SMC value of 0.228 as shown in Section 5.11.8 of this study suggesting that market maven tendency explains 23 percent of the variance on trial probability. These results indicate that maven tendency delivers good predictive influence on the trial of new cosmetic products.

6.2.2.4 To test empirically a model of consumer innovativeness, aspirational attractiveness, social norms influence, advertising efficacy, market maven tendency and new cosmetic product trial among female mavens

The achievement of the fourth empirical research objective that was posited in Section 1.4.3 of this study is consistent with the five hypotheses statements formulated in Section 3.9 of this study and later tested in Section 5.11.8 of this research. Principally, the empirical data were measured against the results of the specified measurement model in order to validate the formulated hypotheses. Based on the reported fit indices, both the measurement and structural models were considered as having adequate fit. In addition, the CFA results confirmed the prominent role of the six latent variables identified in this research. Of note, all the 31 indicators on the measurement model were standardised and yielded factor loadings that were greater than 0.70 except for items C2, C3 and C7, which reported factor loadings above 0.60 but were retained in this research since they were within acceptable parameters. Moreover, the measurement model was subjected to reliability and validity assessment whereby the statistical accuracy of the model was validated using the statistical accuracy statistics reported in sections 5.11.6 and 5.11.7 of this study.

With reference to the structural model results presented in Section 5.11.8 of this research, positive and significant path weights were reported among the constructs. Drawing from the sample results, the five alternative hypotheses statements (H₁, H₂, H₃, H₄ and H₅) were accepted, signalling that the model that was conceptualised in this study is a six variable structure comprising consumer innovativeness, aspirational attractiveness, social norms influence, advertising efficacy, market maven tendency and new cosmetic product trial. Figure 6.1 illustrates the proven path relationships among the constructs.
Figure 6.1: Conceptual model tested in this study

Source: Author compilation (2018)

The results of the hypotheses testing confirmed that consumer innovativeness bears a positive and significant influence on market maven tendency ($\beta=+0.441$; $Z=9.292$; $p<0.01$). The strong path result along this path suggests that market maven tendency is propagated by consumers’ inclinations to be novel; hence, $H_1$ was concluded in this work whereas $H_o$ was rejected. Akin to this significant and direct association, aspirational attractiveness yielded the weakest path weight along market maven tendency ($\beta=+0.182$; $Z=4.099$ $p<0.01$). The weak path could be explained by the fact that aspirational attractiveness is only a dimension of materialism (Kasser 2002:59), alongside financial success and social recognition. As such, consumers may alter their perceptions of beauty according to their financial and social standing, which are largely determined by time, culture shifts and/or individual experiences. For instance, market mavens who are well-off financially may experience an incessant desire to exude an appealing physical appearance and this desire may be demonstrable through extended efforts to disseminate and be directly involved in the trial of new cosmetic products. Nevertheless, the path between aspirational attractiveness and market maven tendency was positive and statistically significant in this
research, thereby leading to the rejection of the null hypothesis $H_0.2$ and acceptance of the alternative hypotheses $H_a.2$, instead.

The positive and significant path coefficient between social norms influence and market maven tendency ($\beta=+0.339; Z=7.272; p<0.01$) along the structural model led to the decision to reject $H_0.3$ and accept the alternative hypothesis $H_a.3$, instead. This path result was reported as the second largest influence on market maven tendency suggesting that the influence of social norms is invaluable towards stimulating female consumers towards the tendency to disseminate product information as they play out their role as market mavens. In addition, advertising efficacy was found to have a positive and significant influence on market maven tendency ($\beta=+0.293; Z=6.607; p<0.01$) leading to the acceptance of the alternative hypothesis $H_a.4$ and the rejection of the null hypothesis $H_0.4$, instead.

The four determinants or stimuli that were investigated in this study made a sufficient contribution towards the overall structural model. In particular, a SMC value of 0.428 reported in Section 5.11.8 of this study suggests that the four independent variables specified in the model, namely consumer innovativeness, aspirational attractiveness, social norms influence and advertising efficacy all contribute towards explaining 43 percent of the variance in overall market maven tendency. Thus, based on these results, it can be concluded that the four stimulus factors yield good explanatory power in deploying market maven inclinations among female consumers.

Finally, a strong and direct association ($\beta=+0.478; Z=8.448; p<0.01$) was established between market maven tendency and new cosmetic product trial as shown in Figure 6.1. This path result suggests that product trial is a relevant determinant in alluring the inclinations of market mavens. By fostering product trial, marketers are able to provide entry for marketplace influencers, particularly market mavens who are skilled in enhancing consumer cognition and product evaluation opportunities through sharing information about various products, services and/or the marketplace based on their individual experiences. This suggests that the tendency of market mavens can subsequently influence the growth of relatively new cosmetic products. Based on this result, $H_a.5$ was concluded in this research while $H_0.5$ was rejected. Moreover, based on the SMC coefficient along this path (SMC=0.228), it can be asserted that the new cosmetic product trial behaviour among female consumers in South African can be explained by approximately 23 percent variance in their tendency towards market maven behaviour.
6.3 SIGNIFICANCE OF THE STUDY

The significance of this study is dual-pronged in that it delivers salient contributions towards both theory and practise. Primarily, the significance of this study lies in the application of behavioural science and interpersonal influence theories within a consumer behaviour context. Specifically, the Two-step flow theory was important in elucidating the interactive processes that explain how consumers influence others within the marketplace. Conversely, the underpinning of this study was extrapolated within the SOR theory, in view of understanding how the various environmental elements posited in the theory could possibly influence the probable trial of new cosmetic products by female market mavens. As such, this study tested the model that presented four stimulus elements that explain how market maven tendency is enriched. Thus, the findings proffered in this work suggest that it is possible to anchor the construct of market mavenship within a broader behavioural science theory.

Secondarily, the results of this study are nascent in tendering fertile ground for marketers by demonstrating the orientation of the female maven. In particular, the results derived in this study demonstrate the three-fold orientation of the female maven in terms of innate (consumer innovativeness), context-based (social norms influence and advertising efficacy) as well as the desired or sought-after (aspirational attractiveness) stimuli that influence market maven tendency. While using new product trial as a proxy to indicate consumers’ intent to purchase new cosmetic products, this study validated that, the selected factors are responsible for activating the market maven tendency for female consumers and thereby stimulating the trial of new cosmetic products. In view of this, the following section puts forward several recommendations for marketing practitioners with reference to the empirical findings obtained in this research.

6.4 RECOMMENDATIONS FOR THE STUDY

In order to offer pertinent recommendations and conclusions based on the empirical findings of this research, it is imperative to consider the valuable inputs obtained from the sample findings. With that in mind, the following recommendations are submitted to both marketers and communication strategists.

6.4.1 Recommendations for marketing practitioners

Marketing practitioners serve as experts who have a keen knowledge of marketing as a significant unit of any organisation. As such, drawing from the findings in this research, the following recommendations are put forward for practise.
6.4.1.1 Assemble an innovative community of market mavens

Schiffman et al. (2014:105) attest that consumer innovativeness is about being amenable to new experiences. In other words, consumers with a high degree of innovativeness are risk-takers who are often willing to change familiar practices for the adoption of newer ones (Sahin 2006:19). Considering that cosmetics are a type of fashion product, which is largely experiential in nature, it is recommended for marketers assemble an agile community of cosmetic consumers in view of stimulating their innate propensity towards being innovative. Such consumer communities can help to bring together ordinary consumers from all walks of life to share their experiences about cosmetic products and thereby brainstorm and cross-pollinate new product ideas. The consumer communities can deliver symbiotic energy and reciprocal trust since the contributions are delivered by consumers of equivalent status, with no ulterior expertise in new product development. It is through the consumer communities that the prosumer role can be accentuated. Thus, this study concurs with Dlodlo (2014:1364) who mentions that the contemporary consumer will alternate and metamorphose roles between that of a producer and/or a consumer over time, which will effectively expand the role of a consumer to that of co-creating value through the development of new cosmetic products. The communities can be useful in allowing consumers to tap into what is trending in the marketplace. In so doing, the consumer is engaged with the product cognitively. Thereafter, in their role as market mavens, the consumers from such communities can attain voracity in disseminating information about products that they participated in developing.

6.4.1.2 Expand the attractiveness dimension through the dissemination of information about new cosmetic products

O’Donnell et al. (2015:242) assert that attractiveness affects the social and economic prospects of consumers and leads them to exhibit their aspirational-self in various ways. As such, marketers need to commit to the growing consumer trend of tailoring cosmetic products to the needs of their target market. This can be achieved by utilising successful individuals as market influencers since they are symbols of not only physical appeal but also achievement beauty. Such a marketing strategy would serve to accentuate the sought-after physical appearance among consumers in return for a newly developed confidence, high self-esteem, social appraisal and acceptability through the trial and use of new cosmetic products.
6.4.1.3 Emphasise social norms and values in the dissemination of information about new cosmetic products

Moschis (1976:239) pinpoints that innovations diffuse faster when there is similarity within a social group. In order to tap into the demands of the marketplace, marketers need to emphasise that market mavens be able to associate their products with the desirable social norms and values of the society where they belong. In South Africa, the society largely prides itself in two values, namely a strong cultural identity as well as ‘Ubuntu’. The former relates to extending the self-conception and self-perception in terms of their ethnicity, locality as well as ancestral roots. As such, marketers can focus on developing new cosmetic products and market them in a way that emphasises the ethnic identity of South Africans. A case in point is the recent endorsement of Belvedere Vodka™, whereby the packaging used on the beverage showcases Dr Esther Mahlangu, a renowned humanitarian adorned in her tribal art, thereby representing the Ndebele culture on a global space. In this way, consumers can associate with the products since a familiar cultural setting is illustrated on the product packaging. Another way to evoke cultural identity is through the use of multiple local languages on the product packaging to explain the source of the ingredients as well as the application of the cosmetic products. With respect to Ubuntu, this value emphasises the need to apply specific human virtues, including compassion and humanity in the development of marketing and promotion tools. In this regard, marketers can deliberately integrate environmental concerns in the production and marketing of cosmetic products. Consequentially, market mavens can emphasise the safety of cosmetic products and their ingredients to the broader network of consumers while disseminating information.

6.4.1.4 Stimulate market maven tendency through effective advertising programs

The effectiveness of mass media plays an integral role in influencing the inclinations of market maven behaviour. Based on the key finding in this study that effective advertising stimulates market maven tendency, this study recommends that marketers re-consider their advertising budgets in view of driving conversions from the advertisements into actual trial and eventual purchase. To increase efficacy, the platforms for advertising cosmetic products should be extended to digital means, including YouTube™, social media, online applications and digital television channels. In addition, digital advertising can be expanded to incorporate online exhibitor booths where consumers will get an opportunity to test the products and post their testing experience onto social media platforms using a branded hashtag. Moreover, marketers can embed their cosmetic products to specific works such as television films and movies in the cinemas with explicit
promotional intent. Thus, marketers cannot afford to ignore the enhanced opportunities brought forward by the digital world.

6.4.2 Recommendations for marketing communication strategists

The marketing of new cosmetic products tends to push cosmetic companies to find ways to set their products apart from those of competitors. As such, marketing communication strategists serve as the experts in organisations that formulate strategies in lieu of creating awareness and creating positive and lasting images in the minds of consumers about the innovations. In this regard, communication strategies can identify market mavens who can be instrumental in the commercialisation of new cosmetic products. Therefore, in an attempt to add value to the role of consumers, organisations can engage market mavens as principal dispensers in intensifying various marketing communication messages. With that in mind, the following recommendations are outlined for marketing communication strategists.

6.4.2.1 Develop a comprehensive strategy to stimulate the effectiveness of market mavens

In the modern-day competitive environment coupled with a fragmented cosmetics industry, consumers are inundated with a plethora of products, brands and services to choose from. Hence, the potential reach and social interpersonal influence of market mavens renders them an invaluable mechanism for marketing cosmetic products. In this regard, communication strategists can tap into the contemporary market maven by observing and monitoring their digital footprint. For example, marketing communication strategists can monitor brand influencers as they blog or vlog about cosmetic products on platforms such as YouTube™. This can help them to create a database of mavens, with which to establish a community. As the vloggers sign up for the maven communities, they may feel compelled to act as formal representatives and/or ambassadors of a particular cosmetic brand. Incidentally, the formalisation of this consumer community would help to alleviate the dearth of an established list of market mavens in South Africa meaning it would be easier to identify market mavens from the organisation’s database.

It is recommended that marketing communication strategists develop a training and support plan for market mavens. This will serve to ensure that a consistent vision and image is conveyed by the mavens as the principal purveyors of WOM communication about the cosmetic products that are developed by the organisation. Likewise, training market mavens would help enhance their social media visibility. To date, Mihlali Ndamase and Cynthia Gwebu, are the notable marketplace influencers for Essence™ and Clinique™ cosmetic brands, whereby cosmetic companies offer them demo-packages on all new products they introduce to the market.
6.4.2.2 Develop a non-financial incentive scheme to stimulate market maven tendency

Offering non-financial incentives to market mavens can create authenticity and prevent the dissemination of fabricated content about a company’s products. Likewise, this study recommends the use of incentive schemes such as annual awards, whereby ordinary consumers can vote for the individual they consider as the most influential maven within a particular year. The nominated individuals can then be showcased in popular magazines or newspapers, alongside the company’s portfolio of products. In this way, marketing communication strategists can demonstrate that they recognise the efforts and contribution of market mavens in enhancing the organisation’s informal marketing strategy.

6.4.2.3 Increase the opportunities for trial of new cosmetic products

Marketers need to create an atmosphere that will induce consumers to try out new cosmetic products in the market. In particular, this study recommends that marketers need to amplify brand activations through pop-up shops since this is a transient and cost-effective strategy. Relatedly, the opportunities for new product trial should be supported by the use of trained consultants. Therefore, marketing communication strategists can be responsible for identify busy locale such as urban malls and lifestyle centres where consumers can obtain multiple opportunities to try out new cosmetic products. Providing opportunities for product trial across various categories of cosmetic products can assist to eliminate the risks associated with purchasing any new products, while reducing the likelihood that consumers will switch cosmetic brands.

6.5 LIMITATIONS AND FUTURE RESEARCH

This research offered valuables insights into the factors influencing market maven tendency as well as the ultimate trial of new cosmetic products by female consumers in the southern Gauteng region of South Africa. Notwithstanding this, just like any other research, this study was susceptible to several limitations, which open fruitful opportunities for further research. First, the study utilised a non-probability sampling technique. In particular, snowball sampling was applied whereby the participants were selected on a referral basis only, implying that the results of this study are to some degree not be capable of representing the entire spectrum of female consumers who have tried out new cosmetic products. Moreover, the study utilised a self-administered survey questionnaire for collecting data. On the other hand, only female consumers residing in southern Gauteng were nominated for this research, which may be susceptible to both sampling and measurement error. Resultantly, the generalisability of the empirical findings of this study is narrow in terms of projecting the results of this work to the entire universe of market mavens.
Likewise, it cannot be confirmed by the results that the brands utilised by the participants were authentic or counterfeit brands. Therefore, future research may attempt to conduct similar research within a pragmatist paradigm by applying mixed methodologies that permit the triangulation of data across both qualitative and quantitative measures. This may contribute towards delivering rich and in-depth data that explains why market mavens actually try out new cosmetic products. In addition, future research may expand the geographic scope of this work across all the provinces in South Africa.

In view of expanding the scope of this research, it would be interesting to use a broad heterogeneous sample that incorporates a diverse demographic, comprising the male, female and metrosexual consumer cohorts. Recent endorsements of Black Opal™ beauty products by the renowned television personality, Somizi Mhlongo, conjure up the possibility of an expanded demographic among the influential consumers. Moreover, the study neglected to consider the role of e-mavens of which this presents a fruitful avenue for future research.

The results of this study culminated in the identification of four determinants, namely consumer innovativeness, aspirational attractiveness social norms influence as well as advertising efficacy, which explained about 43 percent of the variance in market maven tendency. This implies that the outstanding variance is explained by other factors that were not considered in this study. Consistently, future researchers should respond to the outcome of this research by empirically formulating different versions of variables that are antecedents and consequences of market maven tendency. Furthermore, future research should examine the trichotomisation categories of market mavens (low, medium and high) within the context of South African consumers in order to detect the significant differences among the members in these control groups. Likewise, future research can investigate the contribution of specific market maven categories of interest such as thrift and price mavenship.

6.6 CONCLUDING REMARKS

The results of this study advance the notion that the scope of market mavens will continue to overtake formal marketing strategies, owing to the deployment of social and interpersonal influence. In this regard, the tendency towards market mavenship is a fundamental differentiator of cosmetic brands, among other consumer products as a result of the direct engagement with customers. In particular, the state of mavenship, especially e-mavenship is expected to draw unrivalled attention among businesses owing to the inevitable shift from traditional marketing efforts to digital platforms. Similarly, product trial will deliver important economic significance in the market environment as it poses as an undeviating indicator of the success of all new
products. As such, marketers should focus on developing and highlighting the functional aspects of market mavens in disseminating information pertaining to new cosmetic products as well as their new product trial experiences. The inference thereof is to complement the significant contribution of female market mavens as they form the auxiliary dispensers of new product information as well as in augmenting the trial of new cosmetic products that are introduced into the market.


APPENDIX A
MAIN SURVEY QUESTIONNAIRE

SELECTED FACTORS INFLUENCING MAVEN TENDENCY AND COSMETIC PRODUCTS’ TRIAL BY FEMALE CONSUMERS IN SOUTHERN GAUTENG

Dear Sir/Madam

I am currently undertaking a research project for the MTech degree in Marketing. The purpose of my study is to examine the influence of selected factors on market maven tendency and the ultimate trial of cosmetic products by female consumers. Specifically, this questionnaire relates to market mavens who are described as those consumers that demonstrate the affinity to collect and provide other consumers with product-related information, among which cosmetic and beauty products are a part. Of particular focus, the statements reflected in this questionnaire relate to female participants as they are considered forerunners in the collection and distribution of media information as well as subsequent cosmetic products trial behaviour.

Your input is very valuable towards the completion of this study. Therefore, it will be appreciated, greatly, if you could assist by completing the attached questionnaire. The estimated time for questionnaire completion is 10 minutes. Your participation is voluntary and as such, you are free to withdraw from the study at any time should you feel uncomfortable. Your responses will be treated in the strictest confidentiality and you will remain anonymous at all times. There are no wrong or right answers. The information gathered from this survey will be aggregated for research purposes, in the form of an academic dissertation, which will be made available to you upon request.

Thank you for your time and effort in completing the questionnaire enclosed.

Yours faithfully

Zinhle Lindani Dlamini
E-mail: zinhled@vut.ac.za
Department of Marketing: Vanderbijlpark Campus
Vaal University of Technology

Supervisor: Dr N. Dlodlo
E-mail: nobukhosid@vut.ac.za

Co-Supervisor: Dr B. A. Mokoena
E-mail: aubrey@vut.ac.za
### SECTION A: DEMOGRAPHIC INFORMATION
Please answer the following questions by selecting the appropriate box. Mark with ‘X’ to show your selection.

<table>
<thead>
<tr>
<th>A1</th>
<th>Age at next birthday:</th>
<th>18-20 years</th>
<th>21-30 years</th>
<th>31-40 years</th>
<th>41-50 years</th>
<th>Over 50 years</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>X</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
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</table>

<table>
<thead>
<tr>
<th>A2</th>
<th>Ethnic group:</th>
<th>Black African</th>
<th>Coloured</th>
<th>Asian</th>
<th>White</th>
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<tr>
<td></td>
<td>Other (Please specify)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>A3</th>
<th>Native language:</th>
<th>Afrikaans</th>
<th>English</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>IsiNdebele</td>
<td>IsiXhosa</td>
<td>IsiZulu</td>
</tr>
<tr>
<td></td>
<td>Setswana</td>
<td>SiSwati</td>
<td>Tshivenda</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>A4</th>
<th>Marital status:</th>
<th>Single/Never been married</th>
<th>Married</th>
<th>Separated</th>
<th>Divorced</th>
<th>Widowed</th>
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</thead>
<tbody>
<tr>
<td></td>
<td>Other (Please specify)</td>
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<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>A5</th>
<th>Highest educational qualification:</th>
<th>Grade 12 / Matric</th>
<th>Nated course</th>
<th>Higher certificate</th>
<th>Diploma</th>
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<tr>
<td></td>
<td>Degree</td>
<td></td>
<td></td>
<td>Masters/PhD</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>A6</th>
<th>Monthly income (before tax):</th>
<th>Less than R5000</th>
<th>R5000 – R10 000</th>
<th>R10 001 – R20 000</th>
<th>R20 001 – R30 000</th>
<th>Above R30 000</th>
</tr>
</thead>
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<tr>
<td></td>
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<td></td>
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<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

### SECTION B: NEW COSMETIC PRODUCTS TRIAL INFORMATION

<table>
<thead>
<tr>
<th>B1</th>
<th>What is your primary communication strategy for accessing new cosmetic products information?</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Broadcast (television and/or radio)</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>B2</th>
<th>Who is your primary source of information for new cosmetic products?</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Mass media</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>B3</th>
<th>What type of information about new cosmetic products do you receive from influential consumers?</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Which product and/or brand to buy (product type)</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>B4</th>
<th>Have you tried out a new cosmetic product within the past 3 months?</th>
<th>Yes</th>
<th>No</th>
</tr>
</thead>
</table>

<table>
<thead>
<tr>
<th>B5</th>
<th>If your answer to question B4 is YES, please indicate which category of new cosmetic products you have tried out recently:</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Skincare</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>B6</th>
<th>With regard to new cosmetics product categories in the market, which brand is your favourite?</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Revlon™</td>
</tr>
</tbody>
</table>
Appendix A: Main survey questionnaire

### B7
Please recall your most recent cosmetic product trial experience and indicate where this took place?

<table>
<thead>
<tr>
<th>Retail store</th>
<th>Online shop</th>
<th>Through a consultant from a cosmetics company</th>
<th>Beauty salon/spa</th>
<th>Family home</th>
<th>Pop up shop</th>
</tr>
</thead>
</table>

### B8
On average, how often do you try out new cosmetic and beauty products?

- Once a year (annually)
- At least twice a year (bi-annually)
- At least four times a year (quarterly)
- At least 12 times a year (monthly)
- At least 52 times a year (weekly)

### SECTION C: FACTORS INFLUENCING MARKET MAVEN TENDENCY

The following statements point to your inclination towards general innovativeness as this is considered a salient factor that influences your market maven tendency. Please indicate in your opinion, the extent to which you agree with the following statements anchored along 1 (Strongly disagree), 2 (Disagree), 3 (Slightly disagree), 4 (Neither agree nor disagree), 5 (Slightly agree), 6 (Agree) and 7 (Strongly agree). Mark only one number with an ‘X’ for each statement.

<table>
<thead>
<tr>
<th>C1</th>
<th>I often seek out information about new products and brands</th>
<th>Strongly disagree</th>
</tr>
</thead>
<tbody>
<tr>
<td>C2</td>
<td>I like to visit places where I will be exposed to information about new products and brands</td>
<td>Strongly disagree</td>
</tr>
<tr>
<td>C3</td>
<td>I like media that introduces me to new products and brands</td>
<td>Strongly disagree</td>
</tr>
<tr>
<td>C4</td>
<td>I continuously look for new products and brands</td>
<td>Strongly disagree</td>
</tr>
<tr>
<td>C5</td>
<td>I am continuously seeking new product experiences</td>
<td>Strongly disagree</td>
</tr>
<tr>
<td>C6</td>
<td>I continuously seek out situations in which I will be exposed to new sources of product information</td>
<td>Strongly disagree</td>
</tr>
</tbody>
</table>

The following statements refer to the extent to which you aspire to be attractive through using cosmetic products. Please indicate in your opinion, the extent to which you agree with the following statements anchored along 1 (Strongly disagree), 2 (Disagree), 3 (Slightly disagree), 4 (Neither agree nor disagree), 5 (Slightly agree), 6 (Agree) and 7 (Strongly agree). Mark only one number with an ‘X’ for each statement.

| C7 | By using new cosmetic products, I aspire to receive comments from others about how attractive I look | Strongly disagree |
| C8* | By using new cosmetic products, I aspire to successfully hide the signs of aging | Strongly disagree |
| C9 | By using new cosmetic products, I aspire to keep up with beauty trends | Strongly disagree |
| C10 | By using new cosmetic products, I aspire to achieve the look that I have been chasing after | Strongly disagree |
| C11 | By using new cosmetic products, I aspire to have an appealing image | Strongly disagree |
The following statements refer to the extent to which your market maven tendency is influenced by societal norms. Please indicate in your opinion, the extent to which you agree with the following statements anchored along 1 (Strongly disagree), 2 (Disagree), 3 (Slightly disagree), 4 (Neither agree nor disagree), 5 (Slightly agree), 6 (Agree) and 7 (Strongly agree). Mark only one number with an ‘X’ for each statement.

C12 I often identify with other people by trying out those new cosmetic products they try out

C13 I achieve a sense of belonging by trying out those new cosmetic products that others try out

C14* It pleases me when others like the same cosmetic products I try out

C15 I only try out new cosmetic products because it makes a good impression on other people

C16 I only try out new cosmetic products that other people expect me to try out

C17 Generally, I only try out new cosmetic products that other people also try

The following statements refer to the extent to which the effectiveness of mass media advertising determines your market maven tendency. Please indicate in your opinion, the extent to which you agree with the following statements anchored along 1 (Strongly disagree), 2 (Disagree), 3 (Slightly disagree), 4 (Neither agree nor disagree), 5 (Slightly agree), 6 (Agree) and 7 (Strongly agree). Mark only one number with an ‘X’ for each statement.

C18 Effective advertisements expose me to new cosmetic products

C19 Effective advertisements arouse my curiosity about new cosmetic products

C20 Effective advertisements raise my awareness regarding new cosmetic products

C21 Effective advertisements create interest in new cosmetic products

C22 Effective advertisements assist me in knowing more about new cosmetic products

SECTION D: MARKET MAVEN TENDENCY

This section reports on the extent of your market maven tendency. Please indicate in your opinion, the extent to which you agree with the following statements anchored along 1 (Strongly disagree), 2 (Disagree), 3 (Slightly disagree), 4 (Neither agree nor disagree), 5 (Slightly agree), 6 (Agree) and 7 (Strongly agree). Mark only one number with an ‘X’ for each statement.

D1 I like introducing new cosmetic products to other people

D2 In general, I like helping people by providing them with information about many kinds of new cosmetic products

D3 People ask me for information about new cosmetic products that are available on the market

D4 People ask me for information about places to shop for new cosmetic products

D5 If someone asks where to get “the best buy” on new cosmetic products, I would tell him/her

D6 My friends think of me as a good source of information when it comes to discounted sales of new cosmetic products
SECTION E: NEW COSMETIC PRODUCTS TRIAL

The following statements refer to the extent to which you are likely to try out new cosmetic products that are available on the market. Please indicate in your opinion, the extent to which you agree with the following statements anchored along 1 (Strongly disagree), 2 (Disagree), 3 (Slightly disagree), 4 (Neither agree nor disagree), 5 (Slightly agree), 6 (Agree) and 7 (Strongly agree). Mark only one number with an ‘X’ for each statement.

<p>| | | | | | | | | |</p>
<table>
<thead>
<tr>
<th></th>
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<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>E1</td>
<td>Rather than being keen with known cosmetic products, I usually try out new cosmetic products that I am not very sure of</td>
<td>Strongly disagree</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
</tr>
<tr>
<td>E2</td>
<td>I feel comfortable trying out new cosmetic products that I am not familiar with</td>
<td>Strongly disagree</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
</tr>
<tr>
<td>E3</td>
<td>If I like a new cosmetic product, I will try it out even though it may be different</td>
<td>Strongly disagree</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
</tr>
<tr>
<td>E4</td>
<td>Even though a variety of cosmetic product categories exist in the market, I am prepared to try out any new cosmetic product range</td>
<td>Strongly disagree</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
</tr>
<tr>
<td>E5</td>
<td>I enjoy taking chances by trying out unfamiliar cosmetic products</td>
<td>Strongly disagree</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
</tr>
</tbody>
</table>

Thank you for time and your cooperation. Your views are appreciated.

NB: Items C8 and C14 were deleted during the initial EFA analysis and excluded from the SEM analysis.
# Appendix B

## Initial Exploratory Factor Analysis Results

### KMO and Bartlett's Test

<table>
<thead>
<tr>
<th></th>
<th>Kaiser-Meyer-Olkin Measure of Sampling Adequacy</th>
<th>Bartlett's Test of Sphericity</th>
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<tbody>
<tr>
<td></td>
<td>.891</td>
<td>Approx. Chi-Square</td>
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<tr>
<td></td>
<td></td>
<td>7172.612</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Df</td>
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<tr>
<td></td>
<td></td>
<td>528</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Sig.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>.000</td>
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</tbody>
</table>

### Communalities

<table>
<thead>
<tr>
<th></th>
<th>Initial</th>
<th>Extraction</th>
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</thead>
<tbody>
<tr>
<td>C1</td>
<td>1.000</td>
<td>.599</td>
</tr>
<tr>
<td>C2</td>
<td>1.000</td>
<td>.546</td>
</tr>
<tr>
<td>C3</td>
<td>1.000</td>
<td>.567</td>
</tr>
<tr>
<td>C4</td>
<td>1.000</td>
<td>.758</td>
</tr>
<tr>
<td>C5</td>
<td>1.000</td>
<td>.747</td>
</tr>
<tr>
<td>C6</td>
<td>1.000</td>
<td>.667</td>
</tr>
<tr>
<td>C7</td>
<td>1.000</td>
<td>.674</td>
</tr>
<tr>
<td>C8</td>
<td>1.000</td>
<td>.517</td>
</tr>
<tr>
<td>C9</td>
<td>1.000</td>
<td>.549</td>
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<tr>
<td>C10</td>
<td>1.000</td>
<td>.621</td>
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<tr>
<td>C11</td>
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<td>.706</td>
</tr>
<tr>
<td>C12</td>
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<tr>
<td>C13</td>
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<td>.616</td>
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<td>.360</td>
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<tr>
<td>C15</td>
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<td>.633</td>
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<td>C16</td>
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<td>1.000</td>
<td>.664</td>
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<td>C18</td>
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<td>.656</td>
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<td>.740</td>
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<td>C21</td>
<td>1.000</td>
<td>.748</td>
</tr>
<tr>
<td>C22</td>
<td>1.000</td>
<td>.634</td>
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<tr>
<td>D1</td>
<td>1.000</td>
<td>.517</td>
</tr>
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<td>D2</td>
<td>1.000</td>
<td>.572</td>
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<tr>
<td>D3</td>
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<tr>
<td>D4</td>
<td>1.000</td>
<td>.635</td>
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### Appendix B: Initial exploratory factor analysis results

<table>
<thead>
<tr>
<th>Component</th>
<th>Initial Eigenvalues</th>
<th>Extraction Sums of Squared Loadings</th>
<th>Rotation Sums of Squared Loadings</th>
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<tbody>
<tr>
<td></td>
<td>Total</td>
<td>% of Variance</td>
<td>Cumulative %</td>
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<td>3</td>
<td>2.416</td>
<td>7.322</td>
<td>46.069</td>
</tr>
<tr>
<td>4</td>
<td>1.799</td>
<td>5.451</td>
<td>51.521</td>
</tr>
<tr>
<td>5</td>
<td>1.652</td>
<td>5.005</td>
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<td>6</td>
<td>1.359</td>
<td>4.119</td>
<td>60.645</td>
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<td>7</td>
<td>1.095</td>
<td>3.318</td>
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<td>8</td>
<td>.973</td>
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<td>9</td>
<td>.845</td>
<td>2.561</td>
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<td>10</td>
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<td>2.278</td>
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<td>.699</td>
<td>2.117</td>
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<td>12</td>
<td>.662</td>
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<td>13</td>
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<td>1.851</td>
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<td>84.304</td>
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Extraction Method: Principal Component Analysis.
Appendix B: Initial exploratory factor analysis results

Rotated Component Matrix

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a. Rotation converged in 7 iterations.

NB: In the initial EFA, 7 components were extracted, whereas two items (C8 and C14) were cross-loading and component seven yielded only one item (C9) which was significant and greater than 0.50.
Notes for Model (Default model)

Computation of degrees of freedom (Default model)

Number of distinct sample moments: 527
Number of distinct parameters to be estimated: 98
Degrees of freedom (527 - 98): 429

Result (Default model)
Minimum was achieved
Chi-square = 990.132
Degrees of freedom = 429
Probability level = .000

Model Fit Summary

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<th>Model</th>
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<th>DF</th>
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