Brand preference for mobile phones among students at a selected higher education institution

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Declaration

I, Tafadzwa Ndadziyira, hereby declare that this dissertation is original and that all materials used have been acknowledged and clearly referenced. A bibliography is included in this dissertation.

This work has not been submitted to any other institution, or to obtain any other degree.

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Dedication

I dedicate this work to my parents, Pepukai and Bright Ndadziyira, for their unfailing love and support.
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Abstract

It is widely evident that the mobile phone industry is facing rapid growth, with the increased introduction of cheaper mobile phones in South Africa intensifying competition between such companies. A number of studies have been conducted in other countries on brand preferences, but there remains a gap in knowledge with regard to the South African market. It was therefore warranted to academically research factors influencing consumer brand preferences when purchasing mobile phones, in order to understand these preferences, and what consumers consider when making such purchases. The rationale of the study was to provide new insights for local marketers into the factors consumers consider most when looking at mobile phone brands. The aim of this study was therefore to determine brand preferences for mobile phones amongst students at a selected higher educational institution in South Africa.

The study adopted a quantitative research approach, where the data obtained was descriptive and cross-sectional in nature. The research population was made up of students studying at the Durban University of Technology (DUT), where convenience sampling was performed on a target population of 378 students. The sample size was selected by giving questionnaires to those students most available to the researcher. The results were then analysed using the Statistical Package for Social Sciences (SPSS) Version 24.0 software. Validity was ensured by conducting a pre-test of the questionnaire, and the study’s reliability was measured using Cronbach’s Co-efficient Alpha test.

The study findings showed that brand popularity, prices, product attributes, social influences and marketing communications all affect mobile phone brand preferences amongst students. The study results also showed, however, that there were some product attributes and social influences that did not influence these preferences. Recommendations are given to industry players to increase their knowledge of these important factors, to aid with the improvement of their brands and increasing their market preference in this highly competitive industry.
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CHAPTER ONE
INTRODUCTION TO THE STUDY

1.1 Introduction
Mobile phones have become a necessity in the daily lives of consumers. However, due to advancements in technology the mobile phone industry has shown rapid growth, and this makes it important for marketers to obtain information on brand preferences for mobile phones. This chapter presents the background for mobile phone brand preferences in the target population, consisting of students at Durban University of Technology (DUT). The chapter states the research problem, and the aims and objectives of the study. It also looks at the rationale behind, and briefly explains the research methodology used for, the study. Finally, the study's limitations and a brief chapter outline are provided.

1.2 Background to the study
According to Henderson (2012:1), the mobile phone industry is experiencing a fast growth rate with many affordable and similar phones being introduced. This view is supported globally by the GSMA Mobile Economy Report (2014:1) which states that the mobile industry has increased dramatically over the last decade. The report reveals that, by the end of 2013, mobile phone subscribers had increased to 3.4 billion.

The South African retail environment for mobile phones is growing, with newer and cheaper versions being introduced to the market, leading to high levels of competition and innovation (Euromonitor International 2015:1). Due to the ease of communication and convenience brought about by mobile phones, they have become a necessity. The fact that this industry is rapidly growing leads to a high rate of competition amongst manufacturers and retailers of mobile phones. This study dwells mostly on university students, because they are young and are frequent users of mobile phones (Shahzad and Sobia 2013:370). The study targeted students at DUT, which is an institution of higher education. As a university of technology, DUT is a technologically-driven institution, and this is shown by some of the programmes they offer, such as Information Technology (IT) application development courses. In addition, students at
DUT are enthused by technology, which thus presented a platform from which the researcher could perform substantive and reliable research.

Brand preferences occur when consumers choose one available brand over others, because they have developed a habit or favourable past with that brand (Perreault, Cannon and McCarthy 2014:207). Brand preferences are closely linked to brand choices, and can influence consumer buying decisions. There are a number of factors which influence brand preferences, and these include brand popularity, price, product attributes, social influences and marketing communications. Social influences include roles, family, reference groups, opinion leaders, social classes, lifestyles, and culture or sub-cultures (Hult, Pride and Ferrell 2012:174). This study explored these factors and found ways they could assist manufacturers and marketers of mobile phones to improve their competitive advantages. The study provided new insights for local marketers on which factors consumers most considered when looking for a mobile phone brand, which will also be of benefit to manufacturers when they produce new brands of mobile phones.

1.3 Research problem
With the advent and rapid growth of the technological era, the demand for mobile phones has increased (Petruzzellis 2010:610). Mobile phones are useful for communication, and are convenient, especially for university students. Mobile phones are now a necessity in the lives of people. Due to rapid developments in technology, modernisation and new innovations, there is a short mobile phone lifecycle, which has a tremendous impact on the manufacturers and retailers of such products (Henderson 2012:1). Manufacturers are forced to upgrade and design new models of mobile phones on an ongoing basis. However, the rapid introduction of cheaper versions of mobile phones in South Africa has increased the rate of competition between companies in the mobile industry.

It is worth noting that many studies have been conducted in the area of brand preference and mobile phones across the world. Nevertheless, previous studies conducted by Petruzzellis (2010), Bhukya and Singh (2013), Shahzad and Sobia (2013), Karjaluoto, Karvon, Kesti, Koivumaki, Manninen, Pakola, Ristola and Salo (2005), and Dadzie and Boachie-Mensah (2011) do not provide a common answer
regarding the factors that influence brand preferences. Given also that most studies were conducted in other countries, these findings do not exactly reflect the situation in the South African market, which therefore leaves a gap with regard to brand preference on mobile phones in this country.

The purpose of the study was to explore and gain a clear understanding of the factors that influenced brand preferences in a specified group in a specific geographical location within the South African market.

1.4 Research aim
The aim of the study was to determine factors affecting brand preference for mobile phones among students at the selected higher education institution.

1.5 Research objectives
The following are the objectives of this research study:

- To determine the relationships between brand popularity and mobile phone brand preferences;
- To ascertain the influences of prices on student choices of mobile phone brands;
- To investigate the extent to which product attributes influenced student choices of mobile phone brands;
- To assess the extent to which brand preferences were affected by social influences; and
- To determine the influences that marketing communications had on mobile phone brand preferences.

1.6 Rationale
The rationale for the study was to provide new insights for local marketers into which factors consumers most consider when looking for mobile phone brands. This will be of benefit to manufacturers when producing new brands of mobile phones, since it will encourage them to design mobile phones which are customer-centric, thereby satisfying customer needs to the fullest.
1.7 Scope of the study
The scope of the study was confined to students at DUT, since it sought to determine brand preferences for mobile phones among students at a higher educational institution.

1.8 Delimitations of the study
The study focused only on DUT, and targeted specifically its student body. The study targeted students from only DUT because of the high costs involved in using a larger population.

1.9 Limitations of the study
The study had the following limitations:

- The study focused only on DUT students, and the results may not give a true reflection of the broader South African mobile phone market;
- Due to cost and time constraints, this study was limited to only students studying at DUT, and the study results cannot, therefore, be accurately generalised to students studying at other universities in KwaZulu-Natal; and
- The targeted population for the study (students) cannot be regarded as providing a true reflection of consumer brand preferences as to pricing, since students can only buy affordable mobile phones with functions they wish to use, such as WhatsApp.

1.10 Chapter outline
This dissertation contains five chapters, with a brief outline of each chapter below:

**Chapter 1: Introduction**
This chapter serves as an introduction to the research study. It covers the background to the research, research problem, research objectives, scope of the study and the study’s limitations.
Chapter 2: Literature review
The literature relevant to the study is reviewed in this chapter, investigating factors that influence brand preferences for mobile phones. It also provides the theoretical framework for the study.

Chapter 3: Research methodology
This chapter focuses on the research methodology, including methods of data collection, sampling methods, research instrument, and the procedures used to analyse the study’s results.

Chapter 4: Data analysis and interpretation
The study results are presented in this chapter using graphs, tables and charts. It also uses statistics to analyse the data collected during the study.

Chapter 5: Conclusions and recommendations
The chapter puts forward conclusions based on the findings for the study given in Chapter 4. Recommendations are also provided based on the study findings.
2.1 Introduction
While the previous chapter provided an introduction to this study, this chapter presents a review and synthesis of the researched literature. It begins by investigating the self-concept and stimulus-generalisation theories used as the basis for the study. The researcher then defines brand and brand preference, and discusses the dynamics of the mobile phone industry. Furthermore, the relationships between factors found to influence brand preferences are described and discussed, and finally, the conceptual framework on which the study was based is presented and examined.

2.2 Theoretical framework
A theoretical framework is a structure which describes the concept for the research study, and also explains why the research problem under study exists (Swanson 2013:350). For this study, self-concept and stimulus-response learning theories provided the underpinning framework for the research. These theories were selected based on their relevance to the study.

2.2.1 Self-concept theory
The self-concept theory is defined by Rosenberg (1979) as the entirety of an individual's thoughts and feelings having reference to themselves as objective beings, and is associated with behaviour and feelings. Other authors argue, however, that the self-concept theory is based on the perception and responses of other people, because the appraisals that individuals obtain from others greatly influence their behaviour (Solomon 2013:198).

In addition, Pride and Ferrell (2010:160) state that the self-concept theory defines the consumer within individuals, which can be a person with many images of themselves. This plays a significant role in identifying how consumers behave, since the way in which they perceive themselves influences the brands they prefer, since they wish their choices to be reflected in the products they purchase.
According to McCraken (1986 cited in Khare and Handa 2009), there is a relationship between consumer brands and the self-concept of individuals. Consumers usually prefer brands that match their self-concepts in order to express themselves to those around them, and show that they conform to the concept being emphasised by the brand’s usage. Moreover, consumers prefer certain brands to maintain or create self-images for either themselves or their group members. Consumers prefer brands matching their own self-images, thus the greater the relationship between self-images and brands, the stronger will be specific brand preferences (Escalas and Bettman 2005:378).

Self-concept is the way in which individuals see themselves, and includes the entirety of their thoughts and feelings when looking at themselves. Consumers define their own self-concepts, which change based on interactions between their psychological and social dimensions. Furthermore, consumers choose brands or products that match their own self-concepts, which therefore influences them in preferring certain brands, and can also affect the place where products are bought (Pride and Ferrell 2010:160). According to Hoyer, Maclnnis and Pieters (2013:48), the self-concept theory assists in defining who consumers are, which directly influences their behaviour, and also takes into account how consumers view themselves and how they consider others to view them.

In a similar context, Schiffman and Kanuk (2010:165) highlight that consumers are guided by different self-images, which the products that they buy depend on. Consumers choose different self-concepts to guide their buying behaviour. For example, with everyday household products, individuals might be guided by their actual self-images, whereas for societally appealing products, they might be directed by their social self-images. Individuals use different aspects of self-concept, depending on the product with which they are dealing, and the brand or product bought makes a statement about who individuals are. Consumers usually prefer brands viewed as relevant to their self-concepts, and this influences their brand loyalties and preferences (Hoyer et al. 2013:49).

Consumers have a number of self-images about themselves. These are closely related with personality, in that consumers are more likely to purchase brands or
products whose images relate to their own self-images or self-concepts. In essence, customers seek to represent themselves by their brand preferences. They have a tendency to purchase brands with images that develop their own self-concepts, and avoid those that do not (Schiffman and Kanuk 2010:163). Likewise, Solomon (2013:199) agrees that consumers choose brands with attributes similar to their personal self-concepts. According to Yusuf and Shafri (2013:6), self-concept has four different components, which are: the real self-image, which is an individual’s total real image; the perceived self-image, which is the way in which individuals view themselves; the looking-glass self-image, which is the way individuals think that people view them; and, lastly, the ideal self-image, which is what individuals aspire to be. Consumers usually prefer brands that align closely with their ideal self-images.

In addition, consumers usually use brands to communicate their personal self-concepts. Connections exist between consumer self-concepts and brand preferences. These connections begin at an early age, and increase as individuals grow, with brands becoming viewed as linked to personal self-concepts. Furthermore, consumers choose brands that present images corresponding to their own self-concepts. This association between brand preference and self-concept is considered natural, since consumers use brands to help them define themselves (Schiffman and Kanuk 2010:164). Marisa (2014:10), however, argues that consumers do not simply choose brands to inform others about their self-images, but because they increase their self-esteem and communicate a desirable social status.

Furthermore, Marisa (2014:2) mentions that there are four possible “selves” that individuals can portray. These are: the actual self, which is how individuals in fact see themselves; the second is the ideal self, which is how individuals would like to see themselves; the third is the social self, which is how individuals feel others see them; and, finally, there is the ideal social-self, which is how individuals would like others to see them. These three selves always influence purchasing decisions that consumers make, with buyers first considering what they think, see and wish to become before making choices. People buy brands that they think represent images similar to their own self-images in order to attain self-image congruence (O’Cass and Frost 2002:68).
Consumers prefer brands that have brand personalities closely related to their ideal self-concepts, which is how they would like to see themselves. Brand personalities may also match the ideal self-concepts of individuals, which is how they would like to be seen by others, or how they think others see them. The self-concept theory influences consumer brand preferences (Kotler and Keller 2009:198). It summarises the beliefs that individuals have about their own attributes, and how they assess themselves based on these. The self-concept theory also addresses social influences on individuals, because it deals with how people see themselves, or imagine others see them. They prefer brands that define who they and who others think they are. Consumers become attached to brands in order to maintain their personal self-concepts (Solomon 2013:198). Consumers maintain their own self-concepts through the products and brands they prefer and consume, which define, maintain and enhance their self-concepts (Marisa 2014:3).

Sincero (2015:1) argues, however, that the self-concept theory possesses a limitation that it is learned, organised and dynamic. This makes it difficult for marketers to see self-concepts as influencing brand preferences, because consumers are faced with different situations to which they react differently, and may switch from one brand to another depending on this. Self-concepts are therefore continuous development processes during which consumers may discard ideas, perceptions and behaviours that are not self-congruent.

### 2.2.2 Stimulus-Response theory

Stimulus-Response (S-R) is a classic psychological conditioning model used to explain how individuals behave (Sahnay 2007:3). Consumers react largely to external stimuli when faced with purchasing situations (Schiffman and Kanuk 2010:112).

S-R, also known as Classical Conditioning, involves the study of the connections between stimuli and the behaviour with which consumers respond. According to the S-R theory, certain stimuli trigger responses from consumers. In this case, stimuli such as brand popularity, prices, social influences and marketing communications affect the mobile phone brands consumers prefer. Stimuli are external objects, situations or cues that consumers perceive, whilst responses are behaviours by consumers in reacting to these (Sahnay 2007:3). Stimuli such as advertisements, brand prices, social
influences and marketing communications influence these consumer responses, which can lead to either negative or positive brand preferences evolving.

Similarly, Perreault et al. (2010:120) explain S-R theory as a learning process whereby stimuli encourage actions. These consumer actions depend on the types of stimuli to which they are exposed. Stimuli are cues which decide when, where and how individuals respond, and marketers influence consumer brand preferences by providing such cues to motivate them. This theory only focuses on external cues, however, and ignores internal cues which also influence mobile phone brand preferences.

Stimuli here refer to brand attributes, such as popularity, price, marketing communications and social influences that affect individuals in responding with specific behaviour. When consumers respond to stimuli, these therefore influence their behaviour.

2.3 Review of the mobile phone industry
According to Henderson (2012:1), the mobile phone industry is experiencing a rapid growth rate, with the introduction of many similar and affordable phones. Furthermore, the global mobile phone industry is identified as one experiencing the fastest growth, due to a number of elements, including the use of the Internet and the introduction of new technologies. Since 1994, mobile phones have become increasingly popular. This view is supported by the GSMA Mobile Economy Report (2014:1), which states that the mobile phone industry had grown dramatically over the previous decade. GSMA statistics revealed that by the end of 2013 mobile phone subscribers had increased to 3.4 billion.

Today’s ever-changing modernisations and countless emerging innovations have resulted in huge improvements in available mobile phone technology. We live in a world where everybody wants to remain abreast with the latest, most advanced gadgets and technology. As a result, the mobile phone industry keeps growing, since it provides essential everyday tools for all. Even parents want their children to carry cell phones, because of the convenience and ease of communication they allow. Moreover, mobile phones have become a necessity between parents and children to
facilitate communication, especially for emergencies, and situations when children live far from their parents. In addition, new features offered by wireless carriers under existing telecommunication plans easily allow adding children as new users to their parents’ plans. The addition of children and teenagers to parents’ plans has also resulted in an increase in the number of mobile phone users (Chris 2015:1).

The development of mobile phones has led the market to a position where the basic need for communication has now been extended to include many new perspectives. Many mobile phone companies aim to be the best in their industry, but since they generally offer the same products or services, this creates very intense competition between them. These companies seek ways to attract consumers to their brands, and include amongst their incentives the offering of low prices, more service features, better products, more giveaways, and so forth (Karjaluoto et al. 2005:61).

The South African mobile phone industry has undergone numerous changes, and has seen the rapid adoption of the Global System for Mobile Communications (GSM), in the past few years. There has also been an increase in new and cheaper mobile phones being introduced to the market, which has intensified both competition and innovation in the industry (Euromonitor International 2015:1). Moreover, due to the ease of communication and convenience provided by mobile phones, they have now become a necessity. This fact has led to accelerated market growth and heavier competition amongst mobile phone manufacturers and retailers. This growth has seen an increase in competitive rivalry, and as a result of the many offerings of reasonably priced mobile phones and similar devices, the industry has grown significantly within the last three years (Khan and Rohi 2013:370).

According to the South African Mobile Phone Report (2014:2), Blackberry is the major brand used by consumers in South Africa, followed by Nokia and Samsung. The use of the Apple brand is low in South Africa, due largely to its expensive pricing structure. The report shows that, with a high rate of technological adoption, consumers are constantly on the lookout for new mobile phone brands. The report market share records show, however, that there has been a decrease in market shares for Blackberry and Nokia, which sees Samsung assuming the position of market leader in the years ahead.
2.4 Branding and brand names defined

Brand names are signs or symbols used to identify products in one group from those in different groups. Brands create awareness and cause consumers to remember products (Keller 2013:4). According to Keegan and Green (2011:331), brands are packages for metaphors and experiences that consumers carry in their minds. Kotler and Armstrong (2010:255) support the idea that brands are names or words used to recognise products and differentiate them from those of competitors. Furthermore, Levy and Weitz (2012:400) explain brands as being different names, such as logos, that distinguish the products of one company from those of their competitors. Brand names not only identify manufacturers of products, but also provide consumers with a focus for their preferences, which gives them the assurance of certain levels of brand quality. Brands testify to those truths regarding mobile phones that are considered important by consumers when making brand preference decisions (Marumbwa 2013:148).

From the above definitions, a conclusion can be drawn that brands consist of different things, depending on what marketers or sellers provide. They are mainly used to differentiate similar products between sellers. In the mobile phone industry, many different brands, such as Nokia, Samsung and Apple, exist.

2.4.1 Characteristics of good brand names

According to Perreault et al. (2014:208) good brand names should have the following characteristics:

- They should be short and simple;
- They should be easy to spell and pronounce;
- They should be easy to remember; and
- They should be pronounced in the same way in all languages.

2.4.2 Roles of brands

Brands play important roles in assisting consumers to identify products. Brand names make it easier for consumers to quickly identify the products they wish to buy in the presence of numerous available instore products (Kotler and Keller 2012:129). Brands act as references that are used for identification, and can also become considered as
guarantees of quality and consistency by consumers over time (Heding, Knudtzen and Bjerre 2009:10). Similarly, Levy and Weitz (2012:140) agree that brand names play important roles in providing quality assurance, since consumers associate brands with product quality.

In addition, brands are the first things consumers notice when they see products, which is vital, because this creates excitement in consumers regarding their purchase and use. The attractiveness and meaning of brands influence the outcomes of decisions consumers make about their preferred brands (Basak 2013:1). If a brand name is not considered good, this negatively affects consumer brand preferences, even if its products are of good quality. Most consumers also associate brand names with specific products and companies (Laforet 2011:21).

As discussed by these different authors, the roles that brand names play are significant to customers, marketers, retailers and manufacturers. They all agree that brands are vital and serve significant purposes in the identification, association and differentiation of products. Brands can, however, also pass negative messages to consumers, especially if they are not known and not of good quality.

2.5 Brand preference
Brand preference is defined differently by many authors. According to Keller (2013:4), and Chang and Ming (2009:1688), brand preference is discussed as a factor in brand equity, whilst other authors use the term interchangeably with brand loyalty. Brand preference is a measure of brand loyalty whereby consumers select one brand over other competing brands, and only accept substitutes when those they want are not available on the market (Business Dictionary 2015:1). According to Hult et al. (2012:368), brand preference is a measure of brand loyalty where consumers choose to buy one available brand over any others. If consumers develop brand preferences, these become competitive advantages for brand marketers. A study by Khan and Rohi (2013:371) investigating factors affecting brand choices for mobile phone purchases amongst youth indicates that brand preference is the selective choice of consumers for certain brands over others that are available.
Moreover, brand preference indicates which brands consumers prefer amongst those having similar prices and availability. They show the perceived strengths of brands in the minds of consumers when giving them priority over others that are available (Dhital 2013:13). Brand preferences indicate those brands towards which consumers have positive attitudes, and which they remember more easily when compared to other brands. The brands that consumers prefer are given more consideration than those brands towards which they have negative attitudes (Hoyer et al. 2013:190).

Additionally, brand preferences occur when consumers select brands that have the greatest anticipated value in satisfying their needs from amongst other available brands. Brand preferences shows consumer choices from amongst the many options available, and are the result of behaviours shown during product purchase (Bhukya and Singh 2013:17). Furthermore, Hellier et al. (2003:148) conceptualise brand preference as the degree to which consumers favour their selected brand over competing brands due to their personal sets of considerations. Brand preferences begin with initial exposure to brands, which generates interest, and where consumers later discard certain brands based on what they are looking for. This leaves them choosing between certain brands falling within their consideration sets.

Understanding the concept of brand preference is important to marketers for establishing strong brands in the competitive mobile phone market. Brand preference is a key factor influencing consumer choices, and is thus crucial in understanding those factors which affect brand preferences. Brand preferences change when consumers are convinced to test new brands, however, and it therefore becomes important that marketers and manufacturers investigate factors affecting brand preferences in order to ensure that consumer confidence in their products is long-lasting (Marumbwa 2013:148).

2.6 The influence of brand popularity on brand preference

For the purposes of this study, brand popularity and familiarity are used interchangeably. Brand popularity concerns the number of consumers who know about a particular brand, and is increased by word of mouth. The more consumers become familiar brands, the more popular they become. Popular brands are widely sought after and purchased by consumers (Winther 2011:7). Brand familiarity is also
considered to be how well consumers recognise particular brands (Perreault et al. 2010:206).

According to Hult et al. (2012:367), brand popularity can be used as an external indicator of the quality of products available to consumers which influences their choices. According to Wood (2000:665), brand popularity provides value to consumers by raising their confidence levels in the brands they select or purchase. Popularity can provide consumers with assurance, especially where comparing the features of products is difficult. Mobile phones, for example, have very similar features, so it is difficult to compare the different phones, and brand popularity provides consumers with assurances about which brands to choose. Consumers can therefore reduce their perceived risk by selecting and preferring popular brands over those that are unpopular.

According to Schiffiman and Kanuk (2010:198), consumers rely mostly on well-known brands as an indication of their quality. This perceived quality, in association with their popularity, can add to the value of brands, and this positively influences the probability of a single brand being chosen from amongst the competitive brands available. Consumers therefore prefer well-known brands to unknown brands. This is supported by Ramesh (2013:11), and Khan and Rohi (2013:371) when they maintain that consumers view popular brands positively when choosing mobile phones. Negi and Pandey (2013:131) add that consumers filter out unknown brands and mostly, the known brands will be preferred when making such choices. Consumers prefer brands which they can associate with their self-concepts, and brand popularity is therefore also used to evaluate a brand’s prestige.

Consumers mostly use brands that come to mind first (Wang et al. 2009:68). The more popular a brand, the more consumers feel that they can trust that brand, which thereby influences consumer brand preferences (Lin, Cheng and Hung 2011:5911). Consumers mostly prefer well-known brands to those that are not popular (Saif et al. 2012:20). In addition, consumers associate brands with particular qualities, and brand names can be used to signify quality in products. Most consumers are not easily able to judge the quality of products, however, and so rely on brands as indicators of such
quality instead. Brand popularity influences brand preference in either a positive or negative way, depending on each brand of mobile phone (Pride and Ferrell 2010:331).

In the results of their study, Soomro and Ghumro (2013:512) show that a large number of respondents prefer mobile phone brands with which they are familiar. Moreover, consumers usually ignore brands which they do not consider popular. Consumers do not choose brands that are unknown to them, but prefer brands of whose popularity they are aware, especially where products are expensive (Ayanwale, Alimi and Ayanbimipe 2005:10). In addition, Rijal (2013:3) suggests that students do not choose unpopular brands because they want to create self-images, but because they believe that by choosing popular branded mobile phones, they reduce the risks they might otherwise encounter. Popular brands project images of quality, and many people therefore believe that brand names help to show consumers the quality and value of products. It is believed that if you were to show an individual two mobile phones, one having a popular brand name, and the other without, they would always choose the one with the popular brand, and always believe it to be of higher quality. Consumers, however, also therefore believe that unpopular or unbranded products are of poor quality, and that such companies are therefore hesitant to promote their brands.

A familiar brand is more likely to be selected by consumers than those brands with which they are unfamiliar. This is because consumers perceive familiar or popular brands to be reliable and of high quality. Consumers are more likely to choose brands that are popular over those that are unpopular (Pride and Ferrell 2010:331; Soomro and Ghumro 2013:512). In addition, Sardar (2012:432) asserts that unpopular and unbranded products are usually of uncertain quality, which consumers believe they cannot depend on when compared to popular and branded mobile phones. Branded products hold a great place in the minds of consumers when they make choices as to which brands they prefer. Consumers usually choose well-known brands that they are familiar with. They do not wish to purchase new or unpopular brands, because they have insufficient information about these lesser-known brands. People trust popular branded mobile phones, because they know how they function, and also may have had past experiences with such brands (Alamgir et al. 2010:150).
Chi, Yeh and Yang (2009:135) mention, furthermore, that when consumers wish to purchase products, and a particular brand name comes first to mind, this shows that they are familiar with that brand. Consumer behaviour can be influenced by how familiar they are with certain brands. Consumers have a propensity to prefer brands they are familiar with, and which are known to them. They can easily recognise brands with which they are familiar from the many brands of mobile phones available on the market. Brands with higher popularity levels therefore receive higher consumer preference levels.

Hoeffler and Keller (2003:425) suggest that when consumers have limited knowledge about products, brand names may be the most accessible cue available for them for making purchasing decisions. The more consumers are familiar with brands, the more such decisions will be influenced. The popularity of brands influences the decisions consumers make, since some consumers only prefer well-known brands. Therefore, the more a brand is known, the more this influences the formation and strength of brand associations with its brand image, thereby creating brand preference. Consumers, however, mostly use brand popularity to judge product quality when they have limited information, which they use as a strategy for dealing with risks and uncertainty. This reduces the risks involved in assessing the quality of brands (Faryabi, Fesaghandis and Saed 2015:167).

Similar studies indicate that consumers prefer internationally-known brands of mobile phones (Das, 2012; Zhou and Shanturkovska, 2011). Furthermore, marketers have realised that it is important to introduce new products with well-known brand names, since it is easier for consumers to accept these already-popular brands than to choose products with unknown or new brand names. This is because a transfer of beliefs to consumers occurs with known brands. This transfer, however, includes both positive and negative factors related to these brands (Faryabi et al. 2015:167).

In conclusion, brand popularity positively influences brand preference and loyalty. Therefore, brand popularity positively influences the way brands perform, and also how they are viewed by consumers in both the short and long terms. The popularity of brands creates favourable brand images, and consumers therefore prefer products having popular brand names to all other available competing brands.
2.7 The importance of pricing on mobile phones

Prices are the amounts of money charged for products. This includes the sum of values that consumers exchange for the benefits of owning certain products (Kotler and Armstrong 2014:230). Price is therefore the amount of money that consumers are willing to pay in exchange for products. The price of products should indicate their or their brand’s value to consumers. There are many forms of pricing used, such as mark-up pricing, perceived pricing, promotional pricing and target-return pricing (Kotler and Keller 2012:405). In addition, Hult et al. (2012:606), and Pride and Ferrell (2010:568), describe price as the value paid in exchange for a product. This is important because it relates directly to generating income for businesses, and is considered the amount that consumers can afford to pay.

Price is therefore what is exchanged in order to obtain products or services, which is usually a monetary value, and can also include the time individuals spend waiting for their delivery (Lamb et al. 2010:406). According to Blythe (2010:410) price is the amount retailers charge in return for the products or brands they offer. It is comprised of the total value of owning products, which includes the cost of using new products over older ones. Price is therefore that which consumers must offer to receive the benefits promised by the brand marketing mix (Perreault et al. 2010:408). According to Kotler and Keller (2012:405), price is the one ppppg6 bring costs. Price is therefore not simply a number, but is made up of many things.

2.7.1 Pricing strategies used in the mobile phone industry

Pricing strategies refer to the approaches that companies employ in pricing their products. Companies base their pricing strategies on various factors, for example marketing and advertising. A number of different pricing strategies are used, and these include: penetration pricing, price skimming, deferential pricing, product-line pricing, psychological pricing, promotional pricing and professional pricing. In addition, the specific strategies that companies use to price their products grow out of their marketing strategies. Companies may price their products to attract customers, to appeal to smaller groups within larger markets, and also to match the pricing of their competitors (Kurtz and Boone 2012:635).
2.7.1.1 Price skimming as a pricing strategy

Price skimming is a pricing strategy in which brands or products are charged for at the highest possible prices. This strategy is used mostly by innovative producers, where their products or brands are highly distinctive, and demand for their products is inelastic (Hult *et al.* 2012:606). Samsung uses price skimming for its mobile phone ranges, because its products are some of the best on the market and have many favourable features. Samsung therefore capitalises on its new product ranges before competitors can draw level, but drops its prices once models are old, or competitors have launched comparable products (Bhasin 2015:1).

Charging high prices for mobile phones helps to create good brand images for consumers, and this results in consumers preferring these brands over others that are available. Consumers who are prestige-conscious are attracted to and choose such brands, unlike price-conscious consumers who choose cheaper brands. If the price for an iPhone, for example, is reduced at the wrong time, this could negatively affect its brand name, and might affect consumer brand preference (Huimin and Hernandez 2011:389). Similarly, Spann, Fischer and Tellis (2015:236) indicate that products or brands priced using the skimming pricing method are perceived to be of high quality, with prestige-conscious consumers preferring such high-priced brands and products.

Nokia also uses the price skimming strategy, whereby it sets high prices when releasing new products, and then slowly reduces them over time. Prices are decreased following the introductory stages for products, but only once consumer surpluses have been captured. Nokia sets its prices higher than those of its competitors because it believes consumers are willing to pay a premium for the quality of their products (Zhou and Shanturkovska 2011:17).

When marketers and retailers use this strategy, there are both advantages and disadvantages. Due to charging high prices for their products, the incomes of companies are high, and the costs involved in producing and selling their products are also covered (Jobber and Chadwick 2013:470). In addition, Hult *et al.* (2012:606) state that the price skimming strategy makes it easy to gradually reduce prices when there is higher competition in the market. It is therefore effective for use where technologically-driven products quickly lose their value. Charging high prices also
represents status, with which most consumers, especially youth, wish to be associated (Spann et al. 2015:236).

There are, however, disadvantages involved when using the price skimming strategy. Setting high prices usually reduces sales, and brand loyalty may also suffer, since relatively few people will buy these products (Jobber and Chadwick 2013:470). Moreover, when using the price skimming strategy there is a risk of higher competition from cheaper brands entering the market (Rangwalla 2010:11).

2.7.1.2 Price penetration as a pricing strategy
This pricing strategy is used when setting prices below those of competing brands for easy market entry or penetration. This strategy allows marketers to gain larger market shares, since it can attract many customers. The price penetration strategy appeals to price-conscious consumers willing to use these cheaper brands (Hult et al. 2012:607). According to Kurtz and Boone (2012:637), price penetration is when companies set prices significantly lower than those of their competitors as a major marketing tool when entering new markets with dozens of competing brands. Marketers do this in order to later increase their prices to the levels of competing products, and so move new unknown brands to higher levels of brand recognition, or even to brand preference stage. Due to the perceived price-quality relationship, however, setting lower prices could affect the perceived quality of such products by consumers.

Using the penetration pricing strategy creates customer bases very quickly because of the low prices offered. It also eliminates competitors because they are unable to sell their products at the same or lower prices (Jobber and Chadwick 2013:473). Hult et al. (2012:607) argue, however, that the penetration pricing strategy does not create loyal customers, but attracts customers who are more price-sensitive than quality- or brand-consciousness. It is also not ideal for technologically-driven products, because its intention is to create long-term customer bases.

2.7.1.3 Differential pricing as a pricing strategy
A vital pricing issue is the use of either a single or different prices for the same products. Differential pricing is where marketers charge different prices to different customers for
the same services or products. When using this strategy, markets should contain a number of segments with customers having different price sensitivities, and a way must also be found not to confuse buyers when making such purchases. Differential pricing can be used in several ways, which include: negotiated pricing, secondary market pricing, periodic discounting and random discounting (Hult et al. 2012:604).

Similarly, Pride, Hughes and Kapoor (2015:344) state that price differentiation is a strategy whereby different prices for the same products and services are charged to different customers, with primary and secondary target markets being charged different prices. The price set for secondary target markets, however, is not always significantly lower. According to Han, Li and Peng (2013:136), differential pricing allows companies or marketers to charge different prices for the same products or brands to different customer groups. There are different reasons for price changes, which include: the location of customers, the time of the day, the season or the month of the year, and the brand type. Iphone uses this strategy when pricing the same mobile phone differently between targeted customer groups.

2.7.1.4 Product-line pricing as a pricing strategy
The product-line pricing strategy is used when companies take the price of new products into account to see where they fit into existing product lines. The prices of new product lines are increased, rather than reducing the prices of those that already exist. This strategy has the advantage of maintaining the images and profit margins of companies (Jobber and Chadwick 2013:479). In addition, Hult et al. (2012:607) define product-line pricing as establishing and adjusting the prices of multiple products within product lines. The reason for using this strategy is to maximise profits for entire product lines, rather than focusing on the profitability of individual products. Marketers use this strategy in several ways, which include: individual captive pricing, premium pricing, bait pricing and price-lining.

Kurtz and Boone (2012:646) furthermore state that product line pricing is a strategy for setting a limited number of prices for a selection of goods, and marketing different product lines at each of these price-levels. The problem with this strategy, however, is that once marketers have decided on a limited number of prices for use as price-lines, they may have to change prices for individual items, and this could force
marketers to change entire price-line structures, which might result in confusing their consumers.

2.7.1.5 Psychological pricing as a pricing strategy
Psychological pricing attempt to influence customer perceptions of price to make products seem more attractive. They are several psychological pricing methods, including: reference pricing, bundle pricing, multiple-unit pricing, everyday low pricing (EDLP), odd-even pricing, and prestige pricing (Hult et al. 2012:609). According to Kurtz and Boone (2012:644), psychological pricing uses the belief that certain price ranges make some products more appealing to customers than others. This pricing strategy is used to make customers believe that products are priced cheaply by using numbers slightly lower than full dollar figures. For example, pricing may be set at R 2 999 rather than R 3 000 to give the impression that a product is cheaper (Rangwalla 2010:16).

This can also be done by setting a single price for two or more products as a package rather than pricing each item separately. For example, mobile phone marketers could price a small tablet and a mobile phone together as one package with the same price, rather than charging for them separately (Pride, Hughes and Kapoor 2015:344). A mobile phone brand that uses psychological pricing as one of its pricing strategies is Apple, whose prices for iPhones are set using the odd-even numbers strategy (Han et al. 2013:136).

2.7.1.6 Promotional pricing as a pricing strategy
Promotional pricing is when product prices are co-ordinated with their promotion. Types of promotional pricing include: price leading, special event pricing and comparison discounting (Hult et al. 2012:612). In promotional pricing, lower prices are temporarily used as a marketing strategy. Using this pricing strategy requires marketers to be skillful, however, since some customers will then only wait for the next promotion to purchase products. This pricing strategy is most effective when used at either the introductory or declining stages of product life cycles (Kurtz and Boone 2012:646). This pricing strategy furthermore stimulates the early purchase of brands or products, and can take the form of special prices during special occasions. For
example, in September 2009, during the Diwali festival, Samsung offered discounts to customers on its Samsung Omnia mobile phones (Rangwalla 2010:16).

2.7.1.7 Reference pricing as a pricing strategy
Reference pricing is used by consumers when comparing and judging different product prices. Reference prices can be either external or internal, and play major roles in how consumers evaluate and perceive brands or products. Consumers usually have positive brand preferences when reference prices fall within what they perceive to be acceptable price ranges. If a great difference exists between actual prices and the prices consumers use for reference, negative brand preferences may arise (Schiffman and Kanuk 2010:194). Reference prices are therefore those against which consumers compare actual brand prices. Consumers compare the prices of brands with their reference prices, and this results in perceptions being created regarding the brands or products they wish to purchase (Levy and Weitz 2012:395). According to Solomon (2013:82), reference prices are those against which consumers compare real selling prices. Reference prices therefore communicate the worth of brands or products to consumers.

Moon and Voss (2009:31) state that reference pricing is where consumers compare actual product prices against either internal or external reference prices. Internal reference prices are shaped by past brand prices, whilst external reference prices are based on the current prices for focal brands. Customers use different reference prices to judge product attractiveness, and thereby choose certain brands over others. In addition, Lattin and Bucklin (2001:301) state that reference pricing shows consumer expectations, which are reflected in the past pricing of these brands. Consumer then compare past and current brand pricing, which enables them to make product choices. It provides consumers with a means to evaluate brands, and so influences their brand preferences. Choices are made using the differences between real prices and reference prices. So, if a difference between real prices and reference prices exists, this can have either a positive or negative impact on consumer brand preferences.

2.7.1.8 Perceived price as a pricing strategy
Perceived prices indicate the value consumers obtain from the products or brands they buy. How consumers perceive product prices is important, since this affects the
choices they make. Consumers compare the prices of brands from different producers and places, where these price differences are usually perceived as unfair, and therefore negatively influence customer brand preferences. The opinions that consumers hold regarding prices affect their perceptions of brands, and the purchasing choices they make (Schiffman and Kanuk 2010:193).

In addition, perceived pricing is implemented based on customer perceptions of companies and products. There are certain elements making up this strategy, which include: customer images of product performance, the channelling of product deliverables, the quality of products, and product warranties. For example, Apple uses perceived pricing for their iPhones based on their brand image. Apple sets high prices, since it feels that its customers are ready to pay for the perceived value of its products (Rangwalla 2010:13).

2.7.2 The relationship between price and brand preference
Price directly influences brand preference, especially when this is the only information available to consumers. Price is the first thing that consumers see, and creates an initial impression of quality in brands or products. In addition, consumers obtain their perceptions of the quality of products from their prices. The various pricing models used have different effects on consumer brand preferences, where unexpectedly low prices can trigger fears that brands are of low quality, whilst unexpectedly high prices cause buyers to question the true worth of brands (Yusuf and Shafri 2013:7). A study conducted by Sata (2013:8) on factors affecting consumer buying behaviour for mobile phone devices, explored six important factors: prices, social groups, product features, brand names, durability and after-sales services. The author concludes that price is the most important factor influencing the choices consumers make in purchasing mobile phones.

Ala’a and Yaser (2015:89) conclude that price is an issue with regard to brand preferences for mobile phones because of the economic situation in the country of their study. The researchers expected that price would appear in the first level of criteria affecting preferences for mobile phones in Jordanian consumers, but their results show that price is not as important as mobile phone design for these consumers when making such purchasing decisions. Juwaheer et al. (2013:326), in their study of factors
influencing the selection of mobile phones amongst young Mauritian customers, reveal that they are influenced by pricing as a major factor in mobile phone selection. Price is therefore also considered an important factor influencing the choice of mobile phones amongst young people (Karjaluoto et al. 2005:71).

Similarly, consumers of mobile phones consider price an important factor in showing perceived brand values and quality, where the high prices of products indicate advanced technology and improved features (Kabadayi, Aygun and Cipli. 2007:76). Furthermore, Mannukka (2008:190) highlights the positive relationships between consumer price perceptions and their purchasing choices or behaviour. According to Akhtar et al. (2013:388), in their study of mobile phone feature preferences and consumer patterns for students at the University of Sargodha, 68.8% of respondents preferred moderately-priced mobile phones, whilst 14.2% preferred high-priced phones. Park et al. (2014:9) also identify price as the most critical factor affecting choices for mobile phones, especially with regard to younger consumers.

Khan and Rohi (2013:371) furthermore emphasise that price is the most important factor affecting consumer mobile phone brand choices, especially amongst youth, for whom this is the key attracting factor. The prices of mobile phones may also vary due to economic conditions and consumer perceptions. Park et al. (2014:9) agree that price has an influence on the selection of mobile phone brands by young consumers, and Mack and Sharples (2009:1517) confirm that the cost of mobile phones is the most significant factor affecting consumer choices. Owusu-Prempeh, Antwi-Boateng and Asuamah (2013:26) conclude, however, that the cost of mobile phones has the least influence on the brands consumers prefer, with only 55.2% of respondents agreeing with the statement that cost influences consumer brand preferences. The price of mobile phones as a deciding factor also depends on the group of people, since students prefer reduced costs in phones, since they cannot afford those that are costlier.

Mokhlis and Yaakop (2012:208), in their study of consumer-choice criteria in mobile phone selection, also find that price is an important factor influencing student brand choices. This is because the spending power of students is limited, and they therefore prioritise how they spend their money. Students feel that they have insufficient funds
to cover both their own financial needs and expensive mobile phone brands. In addition, Owusu-Prempeh et al. (2013:30) assert that the prices of mobile phones should be taken into consideration when dealing with low-income consumers, who are usually more price-sensitive and for whom price therefore directly influences brand choices.

Pakola et al. (2010:4) investigate consumer behaviour in mobile phone markets in Finland. The authors reveal that the choice of mobile phones by consumers is affected mostly by price. The authors find, however, that this may have been the dominant factor because of low incomes in the sample population. Aidoo and Nyamedor (2008:20) in their study also highlight that the most popular brand is Nokia because of its affordable price ranges compared to other brands, which are more expensive.

According to Saif et al. (2012:17) price does not affect consumer choices or preferences of mobile phone brands, since it becomes less of a contributing factor as consumers change from being lower income earners to higher income earners. A recent survey carried out by Malasi (2012:12), however, describes price as an important factor in shaping or influencing the future habits of young consumers, since it does not affect current consumer preferences for mobile phones, but their preferences in the future.

Dziwornu (2013:160), in a study of factors affecting mobile phone purchases in the greater Accra Region of Ghana, finds no significant relationship between price and mobile phone purchasing decisions. The author suggests that consumers are rational, and always prefer lower priced mobile phone brands, even though they associate higher prices with better quality. Mobile phone users usually prefer lower priced mobile phone brands, which is supported by Kajaluoto et al. (2005:71), who find that consumers are price-sensitive, such that when their mobile phone brands increase in price, they may shift to cheaper competing brands.

According to Hult et al. (2012:570), if price is the main factor for consumer brand preferences, then price cuts will best influence consumers in purchasing certain brands. Although price exerts an important influence on consumer purchasing decisions, they nevertheless hold different views concerning its importance, since
some are price-sensitive whilst others are not. Price-sensitive consumers are affected by small changes in price, which affect their brand preferences, whilst price-insensitive consumers are willing to buy products, regardless of price (Hoyer et al. 2013:119).

Price is a simple way for consumers to compare brands or products (Aaker 1997). When retailers price their products, they should consider the quality perceptions of their brands in the minds of customers. High prices can be expected by consumers if this affects the relationship between brand price and quality. Price is, however, not the only factor used to influence consumer brand preferences and expectations (Lattin and Bucklin 2001:299). Additionally, Khan and Rohi (2013:372) assert that price affects the perceptions that consumers have of brands, and is used to indicate the quality of brands, which directly influences purchasing decisions that consumers make.

In addition, brand prices assist in reducing any doubts consumers may have associated with purchasing particular brands. These doubts are, however, mostly for brands that are not well known. Price is, however, not the only stimulus that consumers respond to when making brand preference choices (Casielles and Alvarez 2007:122). In addition, Moon and Voss (2009:33) state that internal price-reference consumers switch brands less frequently than external price-reference consumers, who have intermediate levels for brand preferences and respond less to promotions. Reference pricing plays an important role in influencing brand preferences. Some researchers argue that reference prices are based on past consumer experiences, whilst others say these develop when consumers see and compare the prices of their brands with those of other available brands (Casielles and Alvarez 2007:122).

Price is usually the first factor that consumers consider before choosing mobile phone brands. This is because consumers assess product affordability to establish if they are able to purchase such brands. Price also indicates levels of consumer income, where the higher the income, the higher is the purchasing value that consumers can afford, which hence allows them to afford expensive brands such as Apple (Yusuf and Shafri 2013:7).
2.8 The importance of product attributes on mobile phones
Zhang, Rau and Zhou (2015:2) define product attributes as the descriptive features of products or brands. In recent years, the number of mobile phone attributes has increased, with manufacturers introducing new features to distinguish their phones from others. This increase in product attributes makes it difficult for consumers to choose the brands they want, with mobile phones now having many attributes that increase their uses, and can make calls, send messages, access the internet, and so forth.

There are certain product attributes that consumers desire in preferring certain brands over available others (Hledik 2012:3). Product attributes are the descriptive components of products required for their functioning (Dadzie and Boachie-Mensah 2011:194). In addition, Hellier et al. (2003:149) state that product attributes are divided into either product-related or non-product-related features. These define the actual brands being offered, and determine how consumers accept and prefer these brands over other available products.

2.8.1 The influence of physical appearance on brand preference
The physical appearances of mobile phones, including sizes, colours, designs, weights and keyboards, influence the choices consumers makes (Park et al. 2014:9). In addition, Tallberg, Hammanen, Toyli, Kamppari and Rlvi (2007:653) agree that mobile phone appearance is one of the most important factors influencing consumer preferences. Karjualuoto et al. (2005:71) agree that mobile phone designs, in terms of appearances and sizes, influence the brands that consumers prefer. Uddin, Lopa and Oheduzzaman (2014:26) define physical attributes as being all the physical characteristics that mobile phones have, which include cameras, Bluetooth, colours and weights.

According to Sata (2013:13), mobile phone features are the second most important factors correlating with consumer decisions to buy or prefer particular devices. Mobile phone features include Internet access, Bluetooth, video, colours, FM radios, designs, media players, touch screens, stores, sizes, accessories, speakers and weights. All these factors are considered to have connections with the decisions consumers make in buying or preferring mobile devices. The results of this research study correspond
with previous research conducted in other countries by Pakola et al. (2010), Das et al. (2012), Saif et al., (2012), Malasi (2012), and Aidoo and Nyamedor (2008), who all consider mobile phone features as leading factors influencing consumer behaviour in brand preference.

The physical appearances of phones often influence the way consumers’ judge or perceive brands, and affect the impressions that consumers have of those brands, which they communicate to others, thereby influencing the choices they in turn make. These attributes communicate different messages to consumers, especially phone colours, since consumers prefer colours that match the messages they wish to pass to those around them (Schiffman and Kanuk 2010:185).

Physical appearances include the aesthetic features of mobile phones, which also impact on mobile phone brand preferences. Mobile phone brands possess different aesthetic aspects, and these differ from one brand to another. The manner in which screens display, and the quality of phones differs between brands, and factors such as these influence the purchasing choices consumers make (Juwaheer et al. 2013:332). Mack and Sharples (2009:1517) establish aesthetics as one of the most important factors influencing mobile phone brand preferences.

Malasi (2012:12), in a study of the influences of product attributes on mobile phone preferences amongst undergraduate university students in Kenya, indicates that various product and brand attributes, such as colours, visible name labels, and the designs of phones, exert important influences on student preferences. The author concludes that these attributes are considered by students when differentiating between different mobile phone brands, and choose those that have attributes which meet their needs.

Furthermore, Uddin et al. (2014:26), in their study of factors affecting customer buying decisions for mobile phones in the city of Khulna in Bangladesh, conclude that physical attributes are the most important factors influencing the choices consumers make with regard to purchasing mobile phones. These factors show a 30.99% variance in consumer decisions with regard to purchasing mobile phones.
The physical appearances of mobile phones communicate a great deal about these phones, and influence the brands that consumers want. Physical appearances should be meaningful and understandable to consumers, since they assist consumers in assessing the other attributes these products. If the physical appearances of mobile phones do not convey the required message, however, this negatively affects brand preferences (Blijlevens, Creusen and Schoormans 2009:27).

Additionally, in a study of 65 design features for 50 different mobile phones, Han et al. (2004:20) find that a number of these design features contribute to the brands consumers prefer. They find that features, such as phone sizes, weights, colours, materials, shapes and interfacing features are all influential. Furthermore, physical appearances impact on consumer brand preferences, because these are the first things buyers see when looking at brands or products. Physical appearances influence consumer perceptions of other mobile phone design features, such as colours, shapes and sizes. Physical appearances influence the overall impressions consumer form of brands, and also provide consumers with information that manufacturers are attempting to communicate. This information influences consumers in their brand preference decisions (Blijlevens et al. 2009:30).

2.8.2 The influence of product innovations on brand preference
Product innovation features are very important in the choice of mobile phone brands for students, because mobile phones are accepted as part of fashion by this group. For this reason, mobile phone innovations are considered the most important factors influencing their brand preferences (Mokhlis and Yaakop 2012:208). In addition, Karjaluoto et al. (2005:72) assert that innovative services and features on mobile phone are the most crucial factors influencing the purchasing choices consumers make in this regard. Innovations are the top factors influencing mobile phone preferences amongst youth, since they wish to remain current with the trends of society. Strong brands continually innovate, thus adding strength to their names, and making them attractive to consumers. Innovations are now requirements of the technological world, and consumers expect to experience new features in products, which therefore affect their preferences (Jainarain 2012:24).
In addition, a study by Liu (2002) conducted in the Philippines showed that changes in mobile phone brand preferences were caused more by the innovations provided by new technological features, such as SMS options and memory capacity, than by size. This result may be due to the fact that all competing brands have similarly sized phones.

2.8.3 The influence of mobile phone reliability and durability on brand preference

According to Aidoo and Nyamedor (2008:33), the reliability of mobile phones brands impacts significantly on the brands consumers prefer. Raj (2013:53) similarly asserts that when consumers make brand choices, they focus mainly on the reliable service given, and also the reputations for reliability of their manufacturers.

In addition, Ling, Hwang and Salvendy (2007:150) state that durability can be defined as how long devices last with regular use, or whether devices resist the impacts of irregular use. Ala’a and Yaser (2015:86) furthermore assert that mobile phones should have tough cases and be made of hardy materials (waterproofing devices, for example, which then allows them to be used in bathrooms), or contain applications and services that can be applied for educational purposes, by allowing devices to be used in classrooms for study purposes, since most students own mobile phones.

Other studies consider the durability of mobile phone batteries to be their most important characteristic (Zhou and Shanturkovska 2011:28). A study of consumer choice criteria for mobile phone selection indicates that mobile phone durability is the fourth most important factor influencing mobile phone brand preferences, with a mean scoring of 5.034 (Mokhlis and Yaakop 2012:208). Similarly, Wilhem (2012:19) states that durability is the second most important factor that influences consumer mobile phone brand preferences. In another study, durability is seen as one of the three most important mobile phone attributes, with 93.4% of respondents agreeing to this (Owusu-Prempeh et al. 2013:26).

According to Sata (2013:13), two factors that correlate equally and have reasonable relationships with decisions made to choose mobile phone brands are brand names and product durability, with Pearson correlation coefficients of 0.557 and 0.555 respectively. Both factors are heavily associated with the quality of given products.
Durability is linked to the use of mobile devices for long periods without any defects, and high-quality phones are considered to work well, with not faults, over long periods of time. In their study results, Ala’a and Yaser (2015:89) furthermore show that most respondents consider the durability of mobile devices to be their first priority when choosing brands. This finding is not surprising, since other factors are of similar importance between brands, and this therefore makes durability one of the most fundamental factors affecting these consumer choices.

2.8.4 The influence of mobile phone quality on brand preference

According to Hult et al. (2012:325), quality is considered to be made up of the overall characteristics of products which allow them to perform in certain ways. The issue of quality is diverse, depending on the products and types of consumers being targeted. Some consumers consider high quality products or brands to be reliable, durable and easy to maintain. The quality of products is therefore an important attribute that consumers consider when choosing or purchasing mobile phones. Consumers prefer mobile phone brands of high quality that last over lengths of time. The higher the quality of brands, the greater their chances of being preferred from amongst those available on the market (Dziwornu 2013:160).

This view is supported by Liu (2002:43), who maintains that consumers prefer mobile phone brands of perceived quality, which they have used before, or which are recommended by family or friends. Khan and Rohi (2013:374) establish in their study that quality is a significant factor influencing the choice of mobile phone brands in Peshawar, Pakistan. Moreover, Raj (2013:52), in a similar study of brand preferences, includes quality as one of the variables that assists consumers in making decisions about the brands they prefer. The author concludes that consumers make choices based on the quality of brands, and also on the services that manufacturers provide. In most cases, quality plays a major role for consumers in choosing brands, since they believe that this helps them to decide whether or not to buy particular products. Consumers usually believe that there is a link between quality and price, and consider that the higher the price of a brand, the higher is its quality (Yusuf and Shafri 2013:8).
2.8.5 The influence of mobile phone user-friendliness on brand preference
Aidoo and Nyamedor (2008:30) assert that consumers prefer user-friendly mobile phone brands. Owusu-Prempeh et al. (2013:30) furthermore conclude that ease of use is one of the factors that consumers consider when selecting mobile phone brands. According to Khan and Rohi (2013:374) user-friendliness is the ability of products to be easily used and understood. This includes the software with which phones are installed, and the ease of its learning and use. It is important for companies to produce mobile phones that are user-friendly, because the market is saturated with competing brands. Consumers usually prefer brands that are easy to use, and whose operations can be easily learned, and user-friendliness therefore has an impact on mobile phone brand preferences.

Hekkert (2008:19) agrees that user-friendliness exerts a great influence on whether consumers have negative or positive brand preferences. Furthermore, Aidoo and Nyamedor (2008:30), in a study of factors determining mobile phone brand choices in Kumasi metropolis, conclude that the user-friendliness of mobile phone brands affects consumer preferences.

2.8.6 The influence of mobile phone functionality on brand preference
Isiklar and Buyukozkan (2007:267) reveal that because the functionality of mobile phones is their most preferred factor, it therefore has an enormous impact on the purchasing choices consumers make. Wilhelm (2012:19) agrees that the manner in which mobile phones function and perform influences consumer brand choices most. In addition, Owusu-Prempeh et al. (2013:26) conclude that the factor of mobile phone performance saw 90.2% of respondents agreeing that this influences their brand choices. Zhang et al. (2015:3) furthermore assert that consumers make choices according to the functionality or performance of products, and the importance which these attributes has for them.

2.8.7 The relationship between product attributes and brand preferences
Zhang et al. (2015:2) state that product attributes are crucial, because they change the perceptions that consumers have of brands, and may change the brands that consumers prefer. The authors divide product attributes into three inter-related groups, which are: character-related, beneficially-related and image-related attributes.
Character-related attributes refer to the physical properties of products, whilst beneficially-related attributes are the benefits or risks that the use of products bring, and image-related attributes are those properties of products that have the ability to define the owners of such products in relation to other people.

Various product attributes influence mobile phone preferences in students. This is because students consider the attributes of brands before price when they choose mobile phones (Malasi 2012:13). Product attributes are the physical aspects of products, and when consumers select products or brands, they consider such characteristics. Product attributes are therefore used to compare product alternatives (Zhang et al. 2015:2). According to Gwin and Gwin (2003:32), product attributes are features that products either have or do not have, and which are either in-built or extrinsic. Attributes can have either positive or negative impacts on mobile phone brand preferences. In addition, Jandaghi and Hashemi (2010:960) state that mobile phone attributes are divided into two groups, which are either hedonic or applied features.

Knowing the product attributes that influence consumer mobile phone choices is important for marketers and manufacturers in new product development. A variety of mobile phone brands is available, and it is difficult to differentiate between these. Features which distinguish mobile phone brands from each other are: shapes, colours, sizes and production materials (Han et al. 2004:15).

Product attributes are important, because consumers look for particular attributes in mobile phones, and it is therefore important for manufacturers to know the features that consumers consider most when choosing their products. Consumer perceptions of these attributes can affect the formation of, or change, consumer attitudes towards products, thereby influencing which brands they prefer (Zhang et al. 2015:3). Moreover, product attributes are important in understanding the preferences that consumers have for particular brands of mobile phones, since these influence consumer perceptions of their products (Zhu et al. 2010:296).

When looking for mobile phone brands, consumers consider those having attributes which solve their problems. They usually associate brands with the attributes they
have, and it is therefore important for marketers to know which attributes most influence the purchasing decisions consumers make. If brands are wrongly associated with certain attributes, however, this can negatively influence the mobile phone choices consumers make (Malasi 2012:6).

2.9 The role of social influences on brand preference

Verkasalo (2010:243) defines social influences as the degrees to which people consider what others say to be important. According to Park et al. (2014:7), social groupings influence the products consumers choose from amongst competing brands. Hult et al. (2012:174), moreover, state that social influences are forces that people exert on the behaviour of others. These are grouped into reference groups, families, cultures, roles, opinion leaders, social classes and peers. Consumer behaviour is influenced by social factors, groups, families, social roles and their statuses (Kotler and Armstrong 2014:147).

Social influences are the degrees to which individuals perceive that others believe that they should use new systems. These influences are exerted when one person or group causes others to undergo changes in their feelings, attitudes, mind-sets, or in how they behave. This can take place either intentionally or unintentionally, and results from the interactions of individuals with others. Social influences include the influences of groups, parents and peers (Malviya, Saluja and Thakur 2013:16). Social influences are exerted when the information provided by groups and the media influences how individuals behave, and are therefore greatest when individuals are constantly in communication with others (Hoyer et al. 2013:298).

According to the results of a study conducted by Sata (2013:13), the least correlated, and most moderately related, determinants of consumer buying decisions are social influences, with a Pearson correlation coefficient of 0.461. These factors therefore only moderately influence consumer decisions in preferring particular mobile phone brands. This level of correlation is the least when compared to other factors included in the study. The Sata (2013) study results are confirmed by the results of a similar study conducted on factors affecting choices for mobile phones by Subramanyam and Venkateswarlu (2012), and Pakola et al. (2010).
Likewise, Yusuf and Shafri (2013:8) assert that social influences affect consumer decisions when purchasing mobile phones, because people always communicate with others in their daily lives. Such people are categorised as being families, friends, relatives, colleagues, and so forth. Discussed below are the social factors that influence consumer brand preferences for mobile phones.

2.9.1 Opinion leaders influences on brand preference

Opinion leaders are those who influence others in the decisions they make. Marketing managers usually attempt to persuade opinion leaders to purchase their brands first, so that they in turn influence others with their choices. Youths are generally key opinion leaders for technological products such as mobile phones (McDaniel et al. 2012:209). In addition, Schiffman and Kanuk (2010:282) state that opinion leaders are those who informally influence the attitudes, behaviours, preferences and values of those consumers categorised as being opinion seekers.

According to Hoyer et al. (2013:303), opinion leaders are special sources of social influence. These leaders act as conduits for information between mass media and the opinions and behaviours of people. Opinion leaders therefore behave as important sources of information, and can influence the choices that other individuals make. They influence people because they generally have no personal stakes in whether their opinions are heeded or not, and are therefore considered unbiased and credible. They also have experiences with products, and this makes them knowledgeable, which can influence the choices made by others.

Hult et al. (2012:177) moreover assert that opinion leaders are members of informal groups who provide information about specific brands to other group members when searching for information. They have knowledge about products, which makes the information they provide credible, and therefore exert strong influences on the behaviours and choices of others, especially regarding product adoption, brand preferences and product purchases. Opinion leaders are most influential when products are highly involved in nature, and where others have little knowledge on them. In this case, consumers share the attitudes and preferences of opinion leaders.
Opinion leaders are individuals who frequently influence the behaviours and attitudes of others. The recommendations of opinion leaders exert a great influence on the choices consumers make. They are considered valuable sources of information, because they have social power, and can therefore influence others (Solomon 2013:439).

In addition, opinion leaders are people who influence the decisions of others by their opinions. Word-of-mouth (WOM) from opinion leaders affects consumer brand preferences. By contrast, if opinion leaders are not satisfied with products, they spread negative WOM, and this affects the brand choices that others make (Perreault et al. 2014:127). Opinion leaders can, however, be celebrities, sports people or civic leaders, and their influence therefore depends on how popular, familiar and credibility they are (Nagarkoti 2009:11).

2.9.2 Reference groups influence on brand preference
According to Hult et al. (2012:176), reference groups are those with which individuals are identified, and whose values, attributes and behaviours they adopt. Reference groups are made up of people with whom individuals spend the most time, with individuals belonging to many different groups. There are three major types of reference group, which are: membership, aspirational and dissociative. Solomon (2013:429) agrees that reference groups are groups with which individuals are identified, and which can exercise important influences on their preferences and behaviours. Reference groups influence people in three distinct ways, which are: informational, utilitarian and value-expressive.

Reference groups are groups that serve as references for individuals when making decisions, and are therefore usually perceived as reliable sources of information (Schiffman and Kanuk 2010:281). In addition, reference groups are either actual or imaginary, and exert significant influences on the behaviours of individuals. Reference groups affect consumers in three ways, which are: informational, utilitarian and value-expressive. Reference groups can be large, formal, well-known organisations with frequent meetings, but can also be small, informal groups, for example, where friends are staying together. In the mobile phone industry, marketers directly influence these formal groups, because they are easy to identify and access (Mohan 2013:22).
McDaniel et al. (2012:207), moreover, describe reference groups as formal or informal groups that influence the decisions and behaviours of consumers. Consumers usually prefer brands that identify them with particular reference groups, and learn from the consumer choices of such groups, which influences the brands they prefer. The influences of reference groups can be either direct or indirect. Direct reference groups are face-to-face groups, which directly affect the lives of people, and these can be either primary or secondary groups, where primary groups consist of people who interact regularly in informal face-to-face ways, such as families and friends, and secondary groups are those in which people communicate less frequently, and in more formal ways.

According to Kotler and Keller (2009:194), reference groups are those that have either direct or indirect effects on consumer attitudes, behaviours or preferences. There are three types of reference group influences, which are: informational, utilitarian and value-expressive influences. Information influences occur where consumers seek information from professionals or others with knowledge regarding brands, whilst utilitarian influences are where consumer decisions are influenced by the preferences of people with whom individuals socialise, and finally, value expressive influences, which are where consumers feel that purchasing or preferring particular brands improves their self-images, and the respect they receive from others (Nagarkoti 2009:12).

Reference groups can serve as comparative groups that consumers use to benchmark the choices they make. Consumers may admire what other group members own, and may prefer certain brands for this reason (Schiffman and Kanuk 2010:282). Reference groups are sources of personal values and behaviours, and influence the behaviours of individuals in two ways, which are: levels of aspiration, and types of behaviour. Reference groups influence levels of aspiration when they cause individuals to be either satisfied or dissatisfied with the brands they prefer, by providing approval for the ways in which people behave as parts of groups (Hoyer et al. 2013:305).

Human beings belong to different reference groups in order to satisfy their various social needs. Consumers observe one another, and copy the behaviour of other members to fit in with their groups (Solomon 2013:439). In addition, Nagarkoti
(2009:11) asserts that reference groups have norms which individuals observe that affect how they behave, the brands they prefer, and the products they purchase. Group norms include habits, rules and values to which members need to adhere in order to remain as parts of these groups.

Reference groups can influence what consumers do and what they know (Hoyer et al. 2013:299). These groups therefore impact directly on the individuals belonging to them, and influence the brands group members prefer, since they feel obliged to match the preferences of other group members. For example, groups of university students may have the same mobile phone brands, which they prefer as group members (Nagarkoti 2009:11).

Reference group members additionally express their assessments of important issues, and ask other group members about their perceptions, which in turn affect the ways individuals behave, and the choices they make. Group members are often affected by evaluations of important issues from other members of their groups, and thereafter either alter or refrain from offering their own unique views, opinions or knowledge (Yusuf and Shafri 2013:9).

There are a number of ways in which reference groups influence brand preferences, which include, but are not limited to informational, utilitarian, value-expressive, socialisation and normative influences (Schiffman and Kanuk 2010:282). These are elaborated on in the discussions which follow.

**2.9.2.1 Informational influences**

Reference groups influence brand preferences when individuals seek information from other group members concerning the various available brands. Consumers seek brand-related knowledge and experiences from within their reference groups, which are therefore considered reliable in providing trustworthy brand information (Hult et al. 2012:431).

Informational influences are formed by information obtained to assist consumers in making decisions. Informational influences impact on the time and effort that consumers dedicate to searching for information. If consumers obtain information from
friends or reference groups, they can use this to make their own decisions (Hoyer et al. 2013:316). Individuals therefore use reference groups to obtain and compare information on products and brands. Consumers seek information on brands from their reference group members, and marketers use the influences of these groups in advertisements, which makes people prefer their brands of mobile phones (Hult et al. 2012:177).

Reference groups influence consumers because they serve as informational sources which affect the perceptions that consumers have. They provide consumers with information on brands, thereby influencing their aspirations. If the information provided is false, however, this negatively impacts on consumer perceptions (McDaniel et al. 2012:208).

### 2.9.2.2 Utilitarian influences

Consumer preferences for certain brands are influenced by the people with whom they associate, because they harbour longings to satisfy the expectations of others. This influences the brands that individuals prefer, and hence the choices they make. Consumers alter their behaviours to conform to that of other group members. Consumers prefer brands that are similar to those of other group members, and may change brands to be more like their reference group members (Hult et al. 2012:177). Furthermore, Schiffman and Kanuk (2010:260) state that consumers have certain attitudes towards brands because of their perceived utility. When brands have been useful to users in the past, their attitudes towards those brands tends to be good. Marketers can therefore show consumers that brands possess utilitarian influences, and consumers may then change their attitudes towards those brands. In addition, consumers may prefer brands because they wish to match the expectations of others for fear of punishment, or lack of rewards.

### 2.9.2.3 Value-expressive influences

Consumers feel that if they prefer particular brands that this enhances their images with others, since they feel people who prefer these brands exhibit characteristics they admire. They therefore choose the same brands in order to be perceived as sharing such characteristics. Consumers feel it appropriate to emulate those they admire by using the brands that they do, and therefore prefer such brands over others that are
available (Hult et al. 2012:431). Consumers wish to express their values, lifestyles and appearances through the brands they prefer, with most consumers having particular attitudes towards owning the latest brand models, and also associating with certain groups in order to improve their own self-images (Schiffman and Kanuk 2010:260).

2.9.2.4 Socialisation influences
Reference groups exert socialising influences on consumer choices. They include opinion leaders, who marketers should identify, because they influence the actions, brands and products that consumers prefer (Pham 2013:12). Reference groups affect the way consumers behave, and these buyers usually prefer brands that allow associations with these groups. Consumers may prefer particular mobile phone brands in order to be associated with other group members, but also sometimes wish to be disassociated from the brands that certain groups use, and avoid buying or preferring those (McDaniel et al. 2012:208).

Reference groups affect individuals through socialisation. Socialisation is a process in which consumers or individuals obtain knowledge or information that they use to behave in certain ways and function within communities. Through socialisation, consumers learn which brands they prefer to use over all other brands available (Hoyer et al. 2013:309).

2.9.2.5 Normative influences
Reference groups also exert normative influences on consumers. These are social pressures that encourage conformity with the expectations of others. Normative influences affect consumers brand choices, since the likelihood exists that consumers will prefer and buy brands that others in their groups have. These groups also encourage conformity in individuals to behave in the same ways as others in their groups. Consumers may therefore be confirmed to prefer and buy the same brands that others in their groups have (Hoyer et al. 2013:311).

Normative reference groups are the most influential, and define the values and behaviours of consumers. An example of a normative reference group is an individual's immediate family, which plays a major role in moulding the ways they
behave, and also what they value from early childhood onwards (Schiffman and Kanuk 2010:281).

Reference groups influence the choices and behaviours of consumers with the characteristics of the group. The characteristics of groups affect normative influences, and the level at which groups create rules and sanctions therefore impacts consumer behaviours (Perreault et al. 2014:315)

In conclusion, and as confirmed by the authors cited, reference groups can affect the brand decisions that consumers make. This influence depends, however, on the types of consumer products that group members choose. Mobile phones are products used in public, and their choice is therefore highly influenced by reference groups. This is because they give others opportunities to see which brands individuals have and prefer. Different brand images indicate different things to people, so reference groups influence brand choices that consumers make, especially where such products are publicly visible. Reference groups also influence preferences for luxury products, such as iPhones, because these products communicate status, which may be highly valued by other group members, and which are perceived to communicate the associations and values of individuals (Hoyer et al. 2013:312).

### 2.9.3 Family influences on brand preference

Families are where two or more people related by blood or adoption live together. Family members influence the choices and behaviours of consumers, and they are therefore very important and influential factors (Schiffman and Kanuk 2010:318). According to Hoyer et al. (2013:356), families are groups of individuals living together who are related by birth, adoption or marriage. People in families play different roles, which influences their choices and the brands they prefer.

Hong and McCullough (2010:148) agree that suggestions from family members have strong effects on the choices and decisions consumers make. Khan and Rohi (2013:372) further agree that recommendations by family are important factors influencing the mobile phone brands that consumers prefer. According to Mohan (2013:22), families are considered the most important groups in society that influence consumer choices and decisions. Family members play a number of different roles,
such as information gathering, decision making and purchasing. Therefore, families are the most influential primary social references for individuals, and have more direct effects on the behaviours of individuals, especially where students, for example, live with them. Families are less influential, however, when students live away from home (Kotler and Keller 2009:195).

Information gathering is when families influence how and where its members obtain information about products or brands. They provide such consumers with the information they need to make decisions regarding which brands to prefer. Influencing is where families play a role in influencing the evaluation of different brands by its members. Families play a role in influencing which brands consumers eventually prefer from the different brands available, and also affect when consumer purchases are made, since they buy the brands they prefer as they become available (Mohan 2013:22).

Families influence many aspects of consumer behaviour. Family members usually share attitudes, values and opinions, which affect how its members spend their money. Family members who make decisions also influence the brands that consumers prefer (Perreault et al. 2014:126). In addition, Lee (2014:309) asserts that the influence of families depends on the types of product being chosen. Moreover, youths and students are generally influenced in the brands they prefer by families, because most of them rely on their families financially. However, if students or youths no longer depend on families financially, then these have little or no influence on the choices they make.

Families can powerfully influence the behaviour of individuals, because they are the group with which individuals make the closest contacts. Families are the most important social institutions in the lives of consumers, and are responsible for socialisation, and the passing down of cultural norms from one generation to the next, thus influencing the brands which individuals prefer. Families also exert influences in the ways children learn by observing how their parents behave, and the brands they use, and then adopting these patterns. Families influence brand preferences, with the roles that its members play affecting what they prefer and purchase (Nagarkoti 2009:12). For example, if parents are the ones making decisions, then students have
to use the mobile phone brands that their parents prefer, since the parents are the ones with the roles of purchasing such products.

Families are primary reference groups for many consumers in their preferences and behaviours. Families affect how consumers behave, because their members socialise with each another, and through this socialisation adopt the values and behaviours of those surrounding them. Families influence preferences, because it is the economic providers whose preferences need to be in line with affordability for the family. The manner in which families are classified, and their stages in the family life cycle (FLC), therefore affect consumer choices (Schiffman and Kanuk 2010:360).

According to Sethi and Chawla (2014:98), families play very significant roles in impacting on the way in which consumers behave. Families exert influences primarily because their members spend most of their time together, and whatever consumers see, especially as children, they later emulate. Moreover, families are perhaps the most important groups influencing the behaviours of consumers, because family members form close relationships and have long-term interactions with each other. Most decisions are therefore made within family groupings (Yusuf and Shafri 2013:8).

From the arguments given, a conclusion can be drawn that families exercise great influences on brand preferences. Such influences are greater when consumers live with their families, and also depend on the types of products being chosen.

2.9.4 Cultural influences on brand preference

Cultures are accumulations of shared meanings, norms and traditions amongst people in societies. They can be considered as being those lifestyles passed on from one generation to the next, and are always changing (Mohan 2013:20). Hult et al. (2012:179) similarly assert that cultures are accumulations of values, beliefs and concepts that communities use to cope with their lives, and that are passed on to future generations. Cultures are the combined results of factors such as religions, languages, upbringings and educations. They are the traditions, values and attitudes of the societies in which consumers live. People acquire their preferences, perceptions and behaviours through their societal cultures, which are therefore essential factors affecting the preferences and behaviours of individuals (Kotler and Keller 2012:190).
The cultures of consumers determine the priorities they place on owning or using different products and brands. Brands that provide benefits similar to those required by the members of cultures stand better chances of being preferred over other available brands (Mohan 2013:20). In addition, cultures affect consumer behaviours and preferences. They influence communications, attitudes and values, which affect consumer preferences and behaviours, and determine how consumers rate certain brands over others available in the market. Consumers therefore usually prefer brands that resonate with their cultural priorities (Solomon 2013:550).

Cultures have enormous impacts on how and why consumers prefer certain brands and products. They influence behaviours, because they permeate the daily lives of consumer, and therefore determine which products or brands consumers use. Cultures also influence the levels of satisfaction obtained by consumers from the brands they use (Hult et al. 2012:180).

In their study of cultures and designs in emerging mobile phone markets in Russia, Salmi and Sharafutdinova (2008:384) show that cultures affect the designs of mobile phones consumers prefer. The authors state that family values also affect the choices consumers make when buying mobile phones. In addition, cultures play very important roles in influencing how consumers behave, and it is vital for mobile phone companies to consider their effects on consumer brand preferences in order to remain successful (Hossein and Hamed 2012:148).

The way consumers behave, and the brands they prefer, are very much influenced by their cultures, and studies agree that the usages and preferences of technological products such as mobile phones are therefore heavily influenced by them.

**2.9.5 Social class influences on brand preference**

Social classes are relatively standardised and stable divisions within societies made up of members who share the same principles and behaviours. Social classes possess different characteristics which allow for differentiation between them (Kotler and Keller 2009:193). According to McDaniel *et al.* (2012:204), social classes are groups of people who are similar in their behaviours and statuses, and who regularly socialise amongst themselves, both formally and informally.
Societies are made up of different social classes, which are determined by the incomes, occupations and residential locations of their members. All social classes have their own standards, which dictate the behaviours of the individuals belonging to them.

Social classes display separate product and brand preferences in many areas. People from different classes prefer different types of media, which influence their exposure to brands, and therefore affect which brands they prefer. Upper class consumers usually prefer reading magazines and books, whilst lower class consumers prefer watching television (Kotler and Keller 2009:194).

In conclusion, social classes indicate the social statuses of consumers, and are important factors in affecting their interests. Consumers usually prefer brands matching their social statuses and classes, which demonstrate differences in product and brand preferences, including lifestyles. Consumers differ in their lifestyles due to their social statuses, for example when an individual is a professional post-graduate, their preferences will be different from those of undergraduates (Schiffman and Kanuk 2010:285).

The authors cited agree that social classes are influential on the types of mobile phones that students prefer. This is because students wish to communicate certain social class statuses to those around them.

2.10 The impact of marketing communications on brand preference
Marketing communications are the ways in which marketers persuade, inform and remind consumers about the brands they sell, and show how and why their products are used. Marketing communications include advertising, sales promotions, personal selling, public relations (PR), WOM and direct marketing (Kotler and Keller 2012:509). McDaniel et al. (2012:472) additionally link marketing communications with the process of mass communication, where marketers publicise their products and brands to consumers using the various available media.
2.10.1 The impact of advertising on brand preference

Advertising is a form of impersonal paid communication, and is one of the ways in which well-known companies inform consumers about their products, since it can be used to communicate such messages to large numbers of people (McDaniel et al. 2012:479). Similarly, Perreault et al. (2010:322) agree that advertising is a paid, non-personal form of communication used to pass product information to consumers. Advertising is included in media such as television, radio, newspapers, signs and magazines. Pride and Ferrell (2010:469) add that advertising has a number of benefits and reaches a large number of people, which makes it cost efficient. Advertisements are also often repeated, which encourages the popularity and remembrance of brands or products.

Using similar arguments, Hult et al. (2012:482) state that advertising is paid impersonal communication to consumers about brands or products using television, radio, the internet, newspapers, magazines, direct mailings and signs. Advertising changes the habits and preferences of consumers, and supports the efforts of any companies wishing to market their brands, because it persuades consumers to buy these brands. There are many types of advertising that companies can use to market their brands and influence consumer behaviour. Television advertising is the most influential type, because almost all people watch television, which has the ability to communicate advertising messages through sights, sounds and motions (Yusuf and Shafri 2013:2).

Share and Salaimeh (2010:334) moreover agree that advertising plays an important role in influencing the decisions consumers make. These authors agree that television advertising helps consumers choose between the many brands available. Advertising influences brand preferences by creating brand awareness and stimulating brand choices. Kotwal, Gupta and Devi (2008:52) support the concept that television advertisements are the most effective in reaching the target markets of companies, with their study results showing that the largest number of respondents made their choices of given brands using the information provided by advertising.

Advertising is one of the four major tools companies use to persuade consumers. It is a non-personal, paid form of communication distributed through available media, and is used to improve consumer brand preferences. It provides information, and gives
consumers desires and reasons for preferring one brand over others available on the market (Kotler and Keller 2012:509). Advertising is a form of communication formulated to persuade consumers to prefer, choose or purchase one brand over others, and therefore influences consumer choices when selecting between brands. Marketers communicate their messages and try to connect with their consumers in order to influence them to prefer their brands (Akhtar et al. 2013:384).

Advertising is therefore a tool used to draw the attention of consumers to particular products, and is therefore used to popularise brands. It guides consumers in their brand choices, because they use advertising to obtain information and make choices. It provides detailed, up-to-date information on products, such as their benefits, prices and availability, which helps consumers learn more (Arshad et al. 2015:227). Advertising is a major tool used to develop product awareness and attract consumers to brands. Advertising alone, however, does not make consumers prefer brands, but only attracts their attention towards them (Ayanwale et al. 2005:10).

Advertising is, furthermore, a well-planned form of communication that uses both verbal and non-verbal elements to inform potential consumers of brands and products. If advertising is effectively performed, it leads to positive brand preferences by providing consumers with the knowledge of different brands they require when choosing products. It is a very important marketing tool that affects how consumers respond to mobile phones especially, because new brands of these are regularly being introduced to the market (Sethi and Chawla 2014:108).

Through advertising, consumers are led to believe that brands are magical, and this convinces them that owning such brands gives them power. Advertising provides simple, anxiety-reducing answers to consumer problems by providing them with information about brands, which therefore influences consumer brand preferences. Advertising provides consumers with information that helps reduce their search times for products or brands, and also communicates brand availability. If advertising is too often repeated, however, this may result in it becoming ineffective, whereby consumers become so used to adverts that they no longer pay them any attention (Solomon 2013:111).
Advertising plays an important role in creating brand preferences. It provides product awareness, and conditions the minds of consumers to certain brands. Advertising is very informative, and provides consumers with knowledge of brands and their important attributes, which thereby creates consumer brand preferences. It provides consumers with large quantities of information about brands which consumers obtain by the attractiveness, attention and awareness that advertising brings. However, for consumer to prefer brands, they need to have watched and understood their associated advertising (Vivekananthan 2013:17).

Chen and Lee (2005:23) agree that advertising has an influence on the behaviours of consumers. It affects their exposure to brands in seeing their advertisements, creates awareness if the advertising is interesting, and aids in consumer memory retention. In addition, advertising aims to improve brand awareness, and provides consumers with information that helps them in choosing a mobile phone brand over others available (Ayanwale et al. 2005:10).

Advertising provides information regarding the perceived lifestyles, cultures and personalities of consumers. This impacts on the choices consumers make, based on what advertising passes on about these brands or products (Tsai, Liang and Liu 2007:4). Furthermore, Uddin et al. (2014:27) in their study show that advertising affects the decisions that consumers make, and that the types of advertisements carried by the various available media channels also influences consumers.

Advertising has the potential to influence consumer brand choices (Latif and Abideen 2011:9). In addition, Akhtar et al. (2013:386) state that a major aim of advertising is to influence the behaviours of consumers, and this is achieved by strengthening their brand memories. Similarly, advertising plays an important role in the formation of brand preferences, because nearly all people are affected in some way by it. Advertising differs, however, with some forms being more attractive and creative, and this adds positively to consumer brand preferences (Moorthy and Madevan 2014:69). Advertising shapes consumer brand preferences for mobile phones, and causes individuals to choose certain brands over all others available on the market. It therefore provides consumers with information that shapes their brand preferences (Negi and Pandey 2013:130). Solanki (2015:20), in a study of brand preferences for mobile
phones amongst 100 sampled consumer respondents in Bardoli city, furthermore
concludes that advertisements are the main source of information that consumers use
when buying mobile phones.

From the observations studied, a conclusion can be drawn that advertising has an
impact on mobile phone brand preferences. Other authors argue, however, that
advertising only makes consumers aware of the availability of brands and does not
necessarily affect their brand preferences.

2.10.2 The impact of word-of-mouth (WOM) on brand preference
WOM is information obtained about brands or products that consumers communicate
verbally to others. WOM usually originates with people with whom individuals are
familiar, and this makes such information appear more reliable and truthful when
compared to the messages obtained from other channels. There are two forms of
WOM, and these are either negative or positive WOM. Negative WOM is the passing
on of negative experiences with brands or products by consumers to others which
affects their choices, whilst positive WOM is where consumers pass on favourable
information about such brands and products (Solomon 2013:445).

According to Pride and Ferrell (2010:476) WOM consists of personal information about
brands and products that consumers share with each other. Due to the increase in the
use of technology, WOM now takes place electronically, whereby information is posted
on websites, and in blogs and other online forums. Joubert, (2010:15) adds that, with
the growth in internet technology, WOM is no longer restricted to face-to-face
communications, but also occurs online, which impacts greatly on how consumers
behave.

In addition, WOM is an important component in creating publicity for brands and
products, and consumers are much influenced by what that they hear, where they stay,
where they work and the roles they play within their societies. The opinions consumers
obtain from those around them therefore influence the choices they make (Sethi and
WOM is powerful, and can influence many of the decisions consumers make. WOM is at its most powerful when the products or brands discussed are technological in nature, such as mobile phones (Solomon 2013:447). According to Pride and Ferrell (2010:477), marketers who know the importance of WOM communication, and its impact on consumer choices, look for opinion leaders who they encourage to test their products in the hope that they will then spread positive WOM to other consumers. Apple, for example, uses this form of marketing communication to promote its mobile phones and other products. WOM is therefore crucial, and the benefits associated with positive WOM include the uptake of brand preferences and purchases. Negative WOM should also, however, be taken into consideration to improve brand images.

WOM is, furthermore, an important factor affecting the choices consumers make with regard to mobile phone brands, where WOM is considered the most significant and effective marketing communication tool. It is noted that the influence of WOM is greater than that of other forms of communication, such as radio, television and newspapers. WOM is also perceived as an unbiased form of communication, which partly explains its great influence on consumer preferences (Pham 2013:12).

WOM is a desirable form of marketing communication which yields positive perceptions, and leads to the formation of brand preferences in the minds of consumers (Sweeney et al. 2008). In addition, Raj (2013:54) agrees that WOM communication is the most credible source of information for consumers. Marketers can therefore focus on initiatives to create talk which spreads WOM about their brands. The use of other advertising media, however, also adds to the information delivered to customers once the possibilities of WOM are exhausted.

Increased WOM leads to positive perceptions, and this influences brand preferences, mostly because consumers trust what they hear via WOM (Sweeney et al. 2008). Grace and O’Cass (2005:109) state, in addition, that many consumers depend mostly on WOM when forming brand preferences, because it strengthens brand positions in their own minds.

According to Mokhlis and Yaakop (2012:208), the second most important factor affecting student mobile phone brand preferences is WOM. The reason for this finding
is that the purchasing of mobile phones is characterised by a high degree of consumer risk aversion, due to their sought and experienced qualities. To manage the risks of buying high-risk products, consumers tend to rely on WOM recommendation as risk-releivers, or as risk-reduction strategies. The importance of WOM recommendations arises from their ability to assist consumers in making more informed choices.

2.10.3 The impact of celebrity endorsement on brand preferences
Celebrity endorsements have become a very popular marketing tool used by companies to deliver their brand messages. Companies use celebrities to communicate about their brands by making them present their products to the public. Due to the popularity and other characteristics of celebrities that consumers admire, they can influence the brand choices that consumers make (Khan and Rohi 2013:373). Celebrities are used to endorse brands, and the use of famous people and their personalities helps marketers create good brand images for their products, to which celebrities also add a measure of glamour (Smita 2006).

It is vital for marketers to select the correct types of endorsers to match their brands. Endorsers use their own popularity to create positive associations with brands in the minds of consumers. If brands are recognised as linked with particular endorsers, consumers may assume that some of the particular associations which characterise those celebrities may also be provided by these brands (Chedi 2008:3).

As already discussed, celebrity endorsements affect the mobile phone brands that consumers prefer. If celebrities exert negative influences on consumers, however, this can negatively influence brand choices, because brands are then associated with these bad endorsements by celebrities.

2.10.4 The impact of sales promotions on brand preference
Sales promotions are activities that directly encourage consumers to prefer brands by providing them with the incentives to do so. Marketers spend more on sales promotions than on advertising (Pride and Ferrell 2010:472). Furthermore, Chandranath (2015:27) agrees that sales promotions cost more money than advertising, and are now bigger business. Sales promotions include price reductions, free gifts, coupons, special displays and points of sale. Sales promotions tend to affect
the decisions consumers make, and increase the use of certain brands than advertising, which brings mostly product awareness. Sales promotions use incentives and rewards to induce consumers to buy or prefer particular brands. They are expedient publicity methods which yield better results than advertising. Sales promotions affect consumer decisions in the short term, by making them feel urgent needs to stop comparing brands and purchase those being promoted. This might only influence brand preference for limited periods, however, and marketers can return to other forms of publicity once promotions are over. Mondal and Samantaray (2014:8) agree that sales promotions may increase sales for in the short term, but have little impact in convincing consumers to develop lasting brand preferences for promoted brands. Sales promotions such as advertising promote brand familiarity rather than brand preferences.

Sales promotions have both short and long term effects on the brands being promoted. They may increase short term sales for retailers or marketers because products are promoted at lower prices, which might affect the perceived quality of brands in the long term, because products with low prices are associated with lower quality, and hence consumer brand preferences could also suffer. This, nevertheless, depends on the types of products, and also the kinds of sales promotions being used, which determine whether such promotions either positively or negatively affect consumer brand preference (Waanders 2013:10).

Similarly, DelVecchio, Krishnan and Smith (2007:160) add that the types of sales promotions used also affect consumer brand preferences. Unexpected price cuts impact negatively on brand preferences, whilst coupons and premiums impact positively on these preferences. Omotayo (2011:68) asserts that sales promotions influence consumer brand preference decisions on the types of mobile phones they choose. Achumba (2002) considers sales promotions to be marketing tools that can be used, instead of personal selling, advertising and publicity, to encourage consumers to prefer or purchase certain products. Sales promotions are therefore direct stimuli that add extra importance to brands.

Mondal and Samantaray (2014:8) argue that sales promotions do not influence brand preferences, but simply prompt brand switching amongst consumers, especially those
most affected by product prices. Chandranath (2015:11) agrees that sales promotions taking the form of price reductions present disadvantages, because they are damaging to brands in the long term. Brand values are thereby reduced and their images damaged, with some consumers only purchasing brands when they are promoted, and returning to their original brands when promotions are over.

Sales promotions cannot be conducted on an ongoing basis, because this would be unproductive, and should therefore be of short durations only. Sales promotions offer consumers reasons to prefer and purchase brands immediately, with their main aims being to inspire consumers to act now. Sales promotions provide consumers with incentives to make choices by increasing the value that brands offer. Some managers view sales promotions as ways of differentiating their brands from those of their competitors (Darko 2012:24).

DelVecchio et al. (2007:160), however, argue that sales promotions performed for unpopular brands are more harmful than for popular brands. Furthermore, discounted price sales promotions can lead to negative brand preferences and poor product confidence, because they redirect consumer attention to financial incentives in encouraging them to switch brands. They also increase consumer price sensitivities, and make quality criteria less significant for them when preferring brands. Sales promotions can lead to major decreases in brand preferences and loyalties by their double-edged influences on consumer behaviours, although this also depends on the levels of consumer dedication to mobile phone brands. Consumers who are dedicated to particular brands are less receptive to sales promotion efforts, which do not affect their brand preferences, whilst less dedicated consumers are highly affected by them (Omotayo 2011:69).

According to Montaner and Pina (2008:6), consumers think that products are of low quality, and therefore have negative attitudes towards them, because of discounted prices, especially where these prices are the only information available to make brand comparisons. Sales promotions are important tools for creating brand preferences and loyalties. They not only bring brands to the attention of consumers, but stimulate them to prefer such brands. Sales promotions therefore influence how consumers make their choices (Omotayo 2011:75). Sales promotions cannot take place on a continuous
basis, however, because they will become useless over time. Sales promotions provide direct incentives for consumers to make purchases, by offering value in addition to that already offered by brands or products at the same prices. These incentives include discounts, free gifts or free airtime if consumers purchase certain mobile phone brands during promotional periods.

Some researchers argue that sales promotions have no effect on brand preferences and loyalties. Even if brands are of high quality, and their competitors offer better products and support services, sales promotions will yield poor results. Consumers develop brand preferences and loyalties over time, and this is where the conclusion that sales promotions have little direct influence on product sales and brand preferences can be made (Sam and Buabeng 2011).

2.10.5 The impact of public relations on brand preference

PR includes forms of marketing communication that place value on public attitudes, and where programmes are implemented to gain public product or brand acceptance. The importance of PR to generate favourable publicity for products and brands is noted. Companies involve themselves in press relations, product publicity, public affairs and government lobbying. Press relations are where companies place positive newsworthy information in the media about their products or brands in order to attract consumer attention, product publicity is where particular products are publicised by marketers, public affairs are the building and maintaining of relations with communities, and lobbying is where producers attempt to influence governments to promote certain rules and regulations (McDaniel et al. 2012:526).

According Perreault et al. (2010:324), publicity is any form of non-personal communication that takes place between producers and consumers. It is conducted in the hope of generating public notice for brands and products in newspapers, television and magazines. Hult et al. (2012:483), and Pride and Ferrell (2010:485), express the sentiment that PR is a form of communication used to create and maintain good relations between organisations and their stakeholders. Having these healthy relationships can influence the extent to which brands and products are preferred by consumers.
2.11 Conceptual framework of the study

The review of literature, as discussed in the preceding sections, gave the basis for the conceptualisation of the research, which is presented diagrammatically in the conceptual framework (Figure 2.1). Two types of variables were discussed, namely dependent and independent variables. Brand preferences shows dependencies upon many independent variables, namely brand popularity, product prices and attributes, social influences and marketing communications. These are broken down further into different elements, as indicated.

![Conceptual framework for the study](image)

**Figure 2.1: Conceptual framework for the study**

2.12 Conclusion

In this chapter, the available literature on brand preferences and other aspects related to branding was reviewed. Factors influencing brand preferences were discussed, which include brand popularity, prices, product attributes, social influences and marketing communications. For each of these factors, certain variables were discussed and conclusions drawn based on literature from the different authors. For this study, both self-concept and stimulus-response learning theories formed parts of the theoretical framework that underpinned the research. These theories were selected based on their relevance to the study.

The next chapter focuses on the research methodology.
CHAPTER THREE
RESEARCH METHODOLOGY

3.1 Introduction
The previous chapter provided a review of the available literature on mobile phone brand preferences. This chapter describes the research methodology utilised for the study. The chapter also explains the steps followed in carrying out the research, and hence covers the study's type, its data sampling, collection and analysis, its delimitations and limitations, its validity and reliability, the anonymity and confidentiality of its respondents, and its ethical considerations.

3.2 Research design
Research design is the strategy which defines the structure of the study, and the way in which the research is organised. It explains and justifies the types and methods of data collection, sources of information and the form of sampling used (Reham 2013:108). For the purposes of this study, a quantitative approach was adopted. Quantitative research studies involve the use of structured questions in which response options are provided, and large numbers of respondents involved. The research conducted was quantitative in nature, because data was collected by administering questionnaires with pre-formulated response options to the study participants (Burns and Bush 2014:146).

The study was also descriptive and cross-sectional in nature. Descriptive studies use methods that involve observing and describing the behaviours of targeted populations, thereby establishing their characteristics (Welman, Kruger and Mitchell 2005:23). In addition, Lacobucci and Churchill (2010:79) define descriptive research as that which highlights the levels to which the variables being studied are correlated. The main aim of this research was to determine the factors affecting brand preferences for mobile phones amongst students at a selected higher educational institution in South Africa.

Cross-sectional studies are where research data is collected at a single time. They are quick and cheap to perform, and their results are easy to analyse. Cross-sectional studies cannot, however, measure changes that may occur over time (Leedy and
Ormrod 2014:194). This method was used because of its simplicity, and because it was considered most appropriate for the study’s subject matter.

Both primary and secondary sources of information were used for the study. Secondary data consisted of journals, text books, Internet sources and reports. Primary data was obtained using the study’s research instrument, which was a structured questionnaire that was distributed to respondents.

3.3 Target population

Hair et al. (2013:137) define populations as entire groups of elements in which researchers are interested, and which can be used in their studies. Elements within populations can take many forms, such as people, products or organisations. Study populations are defined by sets of common characteristics which their members share, and which are related to research problems and objectives (Zikmund and Babin 2010:301).

Populations include all units or elements of interest that are relevant to research studies (Hult et al. 2012:102). The target population for this study consisted of undergraduate and post-graduate students at DUT, where the total student population is approximately 23 000 (Durban University of Technology 2015:1).

3.4 Sampling technique

Sampling is a process which draws conclusions about entire populations based on the information gathered from smaller representative groups (Zikmund and Babin 2010:58). Smaller samples are thereby used to determine results for entire populations, since it is difficult to obtain information from the whole population.

The study used a sample of students from DUT, and a sample size calculator was utilised to establish its effective sample size. This stipulated that a sample size of 378 should be used when calculated at a 95% level of significance for a total population of 23,000 (Sample Size Calculator 2012:1). In support of this sample size, Sekaran and Bougie (2010:296) point out that for a population of 20,000, a sample size of 377 should be considered. The targeted sample size for this study was therefore set at 378.
A non-probability sampling method, namely convenience sampling, was used to select a group of respondents to participate in this study. Non-probability sampling involves selecting samples in non-statistical manners that are also not based on randomness or chance. Samples are selected rather by means of inherently biased selection processes based on the knowledge, intuition and convenience of researchers (Burns and Bush 2014:254). In addition, non-probability sampling is a method in which members of populations are not aware of the possibility of being selected (Hult et al. 2012:104). This was therefore the most appropriate sampling method for this study, because it gives a fair representation of the target population.

There are a number of non-probability sampling types, but for the purposes of this study convenience sampling was used. Convenience sampling is a method whereby researchers use those respondents most conveniently available to them. In this study, questionnaires were therefore distributed to students that were most conveniently available to the researcher.

3.5 Measuring instrument
A structured questionnaire was used in the collection of primary data for this study. According to Burns and Bush (2014:214), questionnaires are sets of questions and scales used to gather information. Questionnaires were therefore used because they are faster and cheaper than other methods when used for data collection.

The questionnaires were developed based on the study’s theoretical framework, research problem and objectives. The contents of the questionnaires were related to the theoretical framework used for the study, especially those questions using Likert-scale responses. These were measured on 5-point Likert scale values ranging from (1) “strongly disagree” to (5) “strongly agree”. In addition to the Likert scale questions provided, other questions related to student mobile phone brand participation, the price ranges of the mobile phones students purchased, and student rankings of brands in terms of their brand preferences and motivations for such preferences, were posed using multiple-choice answers in Section A of the questionnaires. To obtain personal data, direct questions regarding genders, ages and races were also included in Section A of the questionnaires.
To maintain the reliability and validity of the responses obtained, respondents all answered the same questions, and were given ample space and time in which to answer, with limited interference from the researcher. Respondents were provided with clarity whenever needed by research assistants who helped with questionnaire administration. Any assistance given, however, did not interfere with the original data obtained from respondents.

3.6 Data analysis
Data analysis is the first step taken following data collection. Data analysis is the process whereby researchers enter raw data into a data matrix to obtain information that can be used to address the research objectives. Raw data is of little use until it has been structured and summarised, and a range of conclusions drawn. The latest version of the Statistical Package for Social Sciences (SPSS) software was used to analyse the data collected, and to present this data as graphical representations. Frequency tables were also used to contribute to the accuracy and efficiency of data processing. Marketing researchers traditionally use SPSS more than any other statistical software tool, and it is viewed as being user-friendly (Zikmund and Babin, 2010:161).

3.6.1 Descriptive statistics
Welman et al. (2005:231) state that descriptive statistics are concerned with describing and summarising collected data. Descriptive statistics are the most efficient means of summarising the characteristics of large sets of data. Descriptive statistics, moreover, indicate the actual characteristics of samples. Thus, calculating mean and standard deviations to “describe” or profile samples is a commonly applied descriptive statistical analysis approach.

In this research, findings from the data analysed were presented using tables, charts and descriptive statistics, such as mean, percentage and response frequency graphs. Frequency counts are the number of times certain values occur in datasets, for example the number of respondents giving a particular answer.
3.6.2 Inferential statistics
Inferential statistics are concerned with the inferences that can be drawn about populations on the basis of corresponding indices obtained from randomly selected samples, which assist in determining the relationships and differences between variables (Walliman 2011:213). For the purposes of this study, inferential statistics that tested the relationships between dependent and independent variables, and Chi-square tests and their correlations, were used.

3.7 Pre-testing
A pre-test of the questionnaire was conducted in order to make any refinements required. Questionnaire pre-testing involves performing surveys on small, representative groups of respondents before final surveys are launched. Their purpose is to expose problems and errors, so that corrective changes and adjustments can be made before questionnaires are properly administered (Hair et.al. 2013:202). Furthermore, when new measuring instruments are developed, it is important to test them on small samples before being administered to larger populations (Welman et al. 2005:145).

A pre-test of the questionnaire for this study was conducted to ensure validity. Pre-testing the research measuring instrument was important in ascertaining if there were any problems with it before administering it to the larger sample. Pre-testing was conducted with a limited number of representatives from the targeted population, and any mistakes detected were corrected before final distribution of questionnaires. The pre-test for this study involved the administering of 10 questionnaires to five undergraduate and five post-graduate students.

3.8 Validity
Validity is the ability of the measuring instruments used to gauge what they are supposed to (Aaker, Kumar and Leone 2013:242). In addition, Leedy and Ormrod (2014:91) agree that the validity of measurement instruments is the degree to which they measure what is supposed to be measured. Researchers attempt to provide such validity in their measuring instruments in a variety of ways, which include:
Face validity is the extent to which the measuring instruments used are perceived to measure certain characteristics. Because this is a subjective form of judgement, researchers cannot rely entirely on its veracity (Leedy and Ormrod 2014:91). In addition, face validity is the logical scale used to reflect what is intended to be measured (Zikmund and Babin 2007:323);

Content validity is the extent to which measurement instruments represent samples in the areas of content being measured (Leedy and Ormrod 2014:91);

Criterion validity is the ability of measuring instruments to correlate results with the results of other similar measures made (Zikmund and Babin 2007:323). Similarly, Leedy and Ormrod (2014:92) state that this form of validity is the extent to which the results obtained from the use of measuring instruments correlate with those of other related measures; and

Construct validity, which is the level to which study instruments measure characteristics that cannot directly be observed, but are believed to exist based on how people behave (Leedy and Ormrod 2014:92).

Content validity was guaranteed for this study by ensuring that questions used in the questionnaires were in line with the research objectives and literature review. Face validity for the research was ensured by consulting a supervisor and statistician about the questionnaire before administering it to the sample population. This ensured that there were no mistakes, and that it measured what was supposed to be measured. In addition, the questionnaire was pre-tested to ensure that its questions were well-structured, and that all respondents could understand and answer them. This was intended to assist respondents in the actual survey to clearly see what was being asked and answer correctly.

3.9 Reliability
Reliability is the degree of consistency obtained from the results of measuring instruments (Aaker, Kumar and Leone 2013:243). Reliability for this study was provided by ensuring that the questionnaire was worded in a way that respondents could understand. A Cronbach coefficient alpha test was conducted with SPSS, which was therefore used to calculate reliability, since this is the most common measure of reliability for questionnaires (Welman et al. 2005).
The survey was carried out in a neutral environment, which was not manipulative for the participants towards the subject of brand preferences in any way. This was done to ensure that actual respondent opinions were not affected by factors in their external environments. Similarly, questionnaires were completed in the absence of the researcher, or an interviewer, so as to eliminate bias, the leading of answers to questions, or any form of cheating.

### 3.10 Anonymity and confidentiality

Anonymity and confidentiality are provided by researchers to safeguard respondent names and other information obtained from them during studies (Crow and Wiles 2008:1). This study ensured anonymity and confidentiality by not asking respondents for their names, and the researcher also kept the questionnaires locked away and inaccessible to the public. This made respondents feel free to participate in answering questionnaires in the knowledge that they would remain anonymous, and that the information given would be treated with utmost confidentiality.

### 3.11 Ethical considerations

Ethical considerations were followed in this study, with respondents not being forced to participate, and also retaining their rights to privacy. Ethical clearance and gatekeeper permission were obtained from the University Ethics Committee before the study was conducted, which thereby ensured that ethical concerns were taken into account. The ethical clearance letter is attached in appendix E. Respondents were informed (letter of information appendix A) about the research and its results if they wished to know these outcomes. The researcher informed participants that they could withdraw from the research process at any time. Respondents were apprised of the purpose of the research, and their anonymity was guaranteed when completing questionnaires. Consent forms (appendix B) were explained and signed by respondents, indicating that they clearly understood what was expected from them. Respondents signed these consent forms before participating to indicate that they agreed to voluntarily contribute towards the study.

### 3.12 Conclusion

This chapter presented an overview of the research methodology and processes used for this study. It also discussed the research design and explored the sampling
technique, and data collection and analysis methods employed by the researcher. The aspects of validity, reliability, anonymity, confidentiality and ethics were also discussed, indicating clearly how these were addressed.

The next chapter describes and explains the results obtained from the data gathered.
CHAPTER FOUR
FINDINGS OF THE STUDY

4.1 Introduction
The previous chapter presented the research approach used for this study. This chapter presents the study results and discusses the findings obtained from the questionnaires deployed for the study. The questionnaire was the main tool used to collect data, and was distributed to students at DUT. The data collected from questionnaire responses were analysed with the SPSS Version 24.0 software. The results for the quantitative data collected are presented as descriptive statistics in the form of graphs, cross-tabulations and other figures. Inferential analysis techniques included the use of correlations and Chi-square test values; which were interpreted using their p-values.

4.2 Response rate
A total of 378 questionnaires were administered to students at DUT campuses and residences for the purposes of this study, and all questionnaires were valid as completed. Therefore, a 100% response rate was achieved.

4.3 Research instrument
The research instrument consisted of 38 items, with measurements being made at nominal or ordinal levels. This questionnaire was divided into six sections (Table 4.1), which measured several different themes.

Table 4.1: Research instrument sections

<table>
<thead>
<tr>
<th></th>
<th>Biographical data</th>
<th>1-8</th>
</tr>
</thead>
<tbody>
<tr>
<td>2</td>
<td>Brand popularity</td>
<td>9-11</td>
</tr>
<tr>
<td>3</td>
<td>Prices</td>
<td>12-16</td>
</tr>
<tr>
<td>4</td>
<td>Product attributes</td>
<td>17-23</td>
</tr>
<tr>
<td>5</td>
<td>Social influences</td>
<td>24-31</td>
</tr>
<tr>
<td>6</td>
<td>Marketing communications</td>
<td>32-38</td>
</tr>
</tbody>
</table>

4.4 Reliability statistics
The two most important aspects for establishing the precision of study results are reliability and validity. Reliability is determined by making several measurements of
responses to the same subject. Reliability coefficients of 0.70 or higher are considered to be “acceptable” (Andrew, Pederson and McEvoy 2011:202). The Cronbach Alpha scores for all items presented in the questionnaires (Table 4.2) reflect that reliability scores for all sections approximated or exceeded the recommended Cronbach Alpha test value of 0.70. This indicates an acceptable degree of consistent scoring for these sections of the research instrument.

Table 4.2: Cronbach Alpha test values

<table>
<thead>
<tr>
<th></th>
<th>Number of Items</th>
<th>Cronbach's Alpha</th>
</tr>
</thead>
<tbody>
<tr>
<td>Brand popularity</td>
<td>3 of 3</td>
<td>0.790</td>
</tr>
<tr>
<td>Prices</td>
<td>5 of 5</td>
<td>0.683</td>
</tr>
<tr>
<td>Product attributes</td>
<td>7 of 7</td>
<td>0.850</td>
</tr>
<tr>
<td>Social influences</td>
<td>8 of 8</td>
<td>0.850</td>
</tr>
<tr>
<td>Marketing communications</td>
<td>7 of 7</td>
<td>0.701</td>
</tr>
</tbody>
</table>

4.5 Biographical data

This section summarises the biographical characteristics of respondents.

4.5.1 Age and gender

The ratio of male to female study respondents was approximately 1:1 (45.5% and 54.5% respectively). In the 26 to 28 year age category, 62.9% were male, and 37.1% were female. Within the male category, 10.7% were between the ages of 26 and 28 years, with this category also forming 5.8% of the total sample group. In the female category, 7.6% were between 26 and 28 years of age. The 17 to 19 year age category was comprised of 35.2% female and 64.8% male. The age category of 20 to 22 years held 53.7% female, and 47.6% male respondents, which therefore made it the category with the highest number of female respondents. The age groups 23 to 25, and 31 and over, made up 16.7% of male respondents, and 10.1% of the total sample size, respectively. Lastly, the 29 to 30 years of age category held the smallest number, of respondents, at 5.3%, where male and female respondents made up 2.9% and 2.4% of this group, respectively.
### Table 4.3: Gender and age distributions of respondents

<table>
<thead>
<tr>
<th>Age (years)</th>
<th>Gender</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Female</td>
<td>Male</td>
</tr>
<tr>
<td>17-19</td>
<td>31</td>
<td>57</td>
</tr>
<tr>
<td></td>
<td>35.2%</td>
<td>64.8%</td>
</tr>
<tr>
<td></td>
<td>18.0%</td>
<td>27.7%</td>
</tr>
<tr>
<td></td>
<td>8.2%</td>
<td>15.1%</td>
</tr>
<tr>
<td>20-22</td>
<td>72</td>
<td>62</td>
</tr>
<tr>
<td></td>
<td>53.7%</td>
<td>46.3%</td>
</tr>
<tr>
<td></td>
<td>41.9%</td>
<td>30.1%</td>
</tr>
<tr>
<td></td>
<td>19.0%</td>
<td>16.4%</td>
</tr>
<tr>
<td>23-25</td>
<td>33</td>
<td>30</td>
</tr>
<tr>
<td></td>
<td>52.4%</td>
<td>47.6%</td>
</tr>
<tr>
<td></td>
<td>19.2%</td>
<td>14.6%</td>
</tr>
<tr>
<td></td>
<td>8.7%</td>
<td>7.9%</td>
</tr>
<tr>
<td>26-28</td>
<td>13</td>
<td>22</td>
</tr>
<tr>
<td></td>
<td>37.1%</td>
<td>62.9%</td>
</tr>
<tr>
<td></td>
<td>7.6%</td>
<td>10.7%</td>
</tr>
<tr>
<td></td>
<td>3.4%</td>
<td>5.8%</td>
</tr>
<tr>
<td>29-30</td>
<td>11</td>
<td>9</td>
</tr>
<tr>
<td></td>
<td>55.0%</td>
<td>45.0%</td>
</tr>
<tr>
<td></td>
<td>6.4%</td>
<td>4.4%</td>
</tr>
<tr>
<td></td>
<td>2.9%</td>
<td>2.4%</td>
</tr>
<tr>
<td>31+</td>
<td>12</td>
<td>26</td>
</tr>
<tr>
<td></td>
<td>31.6%</td>
<td>68.4%</td>
</tr>
<tr>
<td></td>
<td>7.0%</td>
<td>12.6%</td>
</tr>
<tr>
<td></td>
<td>3.2%</td>
<td>6.9%</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>172</td>
<td>206</td>
</tr>
<tr>
<td></td>
<td>45.5%</td>
<td>54.5%</td>
</tr>
<tr>
<td></td>
<td>100.0%</td>
<td>100.0%</td>
</tr>
<tr>
<td></td>
<td>45.5%</td>
<td>54.5%</td>
</tr>
</tbody>
</table>

### 4.5.2 Race

The racial composition of the sample population is shown (Figure 4.1) as comprised mainly of Africans, at 77.2%, followed by Indians at 11.4%, Whites at 7.7%, and Coloureds at 3.7%.
4.5.3 Levels of study
The study results show (Table 4.4) that approximately half of the respondents, at 46.0%, were first-year students. This level of study constituted the majority of respondents, followed by second-year students at 18%, post-graduates at 17.4%, third-year students at 13%, and fourth-year students, who at 5.6%, made up the least respondents for the study.

<table>
<thead>
<tr>
<th>Level of study</th>
<th>Frequency</th>
<th>% (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>First year</td>
<td>174</td>
<td>46.0</td>
</tr>
<tr>
<td>Second year</td>
<td>68</td>
<td>18.0</td>
</tr>
<tr>
<td>Third year</td>
<td>49</td>
<td>13.0</td>
</tr>
<tr>
<td>Fourth year</td>
<td>21</td>
<td>5.6</td>
</tr>
<tr>
<td>Post-graduate</td>
<td>66</td>
<td>17.5</td>
</tr>
<tr>
<td>Total</td>
<td>378</td>
<td>100.0</td>
</tr>
</tbody>
</table>

4.5.4 Mobile phone brand ownership
The most owned brand was shown by the study results (Figure 4.3) to be Samsung, with a frequency of 38.4%, followed by 15.1% of respondents that owned other brands, indicating that most of the respondents owned mobile phone brands that were not included on the list provided. Blackberry and Nokia followed, with 13.0% and 11.9%,
respectively. Huawei, Sony and Alcatel held 9.3%, 6.6% and 2.4% respectively, whilst HTC and LG were the least owned brands, with 1.9% and 1.6% respectively.

![Figure 4.2: Mobile phone brand ownership](image)

### 4.5.5 Price ranges for mobile phones

Respondents were asked the price ranges of the mobile phone they purchased (Figure 4.3) The results indicated that most of the respondents, at 29.4%, purchased mobile phones with a price range between R1 001 and R2 000, 25.4% purchased mobile phones for less than R1 000, 29.1% purchased in the price range above R3 001, and the fewest, at 16.1%, purchased phones with price ranges between R2 001 and R3 000. This shows that most of the students were price-sensitive when buying mobile phones. This is supported by Riyath and Musthafa (2013:379), who maintain that price is a very important factor with regard to the brands of mobile phone that consumers purchase.

Teng (2009:15) suggests, in addition, that there are some customers who prefer lower prices, whilst others prefer higher prices. This is shown by the results of this study, where respondents indicated the various mobile phone price ranges in which they purchased.
4.5.6 Levels of mobile phone brand preferences

Of the brand preferences offered in the survey (Figure 4.4), Samsung was ranked the most preferred brand by students, with a 37% approval rate. Apple and Nokia scored 14 and 13% respectively, Blackberry was preferred by 11% of respondents, and 10% preferred other mobile phone brands that were not specified. HTC and LG held the least respondent approval, with only 1.5% and 1.7% respectively.

These results concur with the listings provided in the South African Mobile Phone Report (2014), which indicates, based on market share records that Samsung is the market leader, and there is also a significant decrease in the use of Blackberry and Nokia brands. The report shows that products carrying the Apple brand are not generally used in South Africa, because of their prices.
Figure 4.4: Levels of mobile phone brand preferences

4.5.7 Motivations for mobile phone brand preferences

More than half the respondents (52.4%), preferred mobile phone brands based on their own choices, 22.2% were motivated by brand advertising, 14.6% were referred brands by other people, and 10.8% had other reasons why they preferred certain mobile phone brands over the others available (Figure 4.6).

Figure 4.5: Motivations for mobile phone brand preferences
4.6 Factors influencing brand preferences

The section that follows analyses the scoring patterns of respondents across the variables investigated in each of the questionnaire sections. Levels of disagreement, or negative statements, were combined to show only a single “Disagree” category, and a similar procedure was followed for levels of agreement, or positive statements.

The results are presented first using summarised percentages for variables making up each section, and are then further analysed according to the importance of each of these statements.

4.6.1 Brand popularity

This section deals with the popularity of mobile phones, and whether it can be considered true that respondents associate their purchasing choices with product quality. The first objective of this study was to determine the relationships that existed between brand popularity and mobile phone brand preferences. According to Negi and Pandey (2013:131), consumers filter out unknown brands in their choices, and prefer mostly known brands. Consumers prefer brands they associate with their own self-concepts, and brand popularity is therefore also used to evaluate prestige.

The scoring patterns obtained for brand popularity as a factor influencing consumer brand preferences are presented (Table 4.5), displaying that the average level of brand popularity statement agreement from study participants was 56.1%, whilst approximately a quarter of the respondents, at 23.9%, disagreed with these statements. Responses for brand popularity statements therefore showed greater degrees of agreement than disagreement.
Table 4.5: Brand popularity scoring patterns

<table>
<thead>
<tr>
<th>Brand Popularity</th>
<th>Disagree</th>
<th>Neutral</th>
<th>Agree</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Count</td>
<td>Row N (%)</td>
<td>Count</td>
</tr>
<tr>
<td>I consider brand popularity when choosing a mobile phone.</td>
<td>109</td>
<td>28.8</td>
<td>84</td>
</tr>
<tr>
<td>I associate brand popularity with mobile phone quality.</td>
<td>74</td>
<td>19.6</td>
<td>67</td>
</tr>
<tr>
<td>I associate brand popularity with the choices I make.</td>
<td>77</td>
<td>20.4</td>
<td>87</td>
</tr>
</tbody>
</table>

**I consider brand popularity when choosing a mobile phone**

The majority (48.9%) of respondents agreed that they considered brand popularity when choosing mobile phones, whilst 28.8% disagreed with this statement. This concurs with the reviewed literature, which indicates that the more consumers are familiar with brands, the more they believe they can trust them, which thereby influences brand preference (Lin et al. 2011:5911). Consumers generally prefer well-known brands to those that are not popular (Saif et al. 2012:20).

**I associate brand popularity with mobile phone quality**

There was agreement from the majority (62.7%) of respondents that they associated brand popularity with mobile phone quality, whilst 19.6% disagreed (Table 4.5). Sardar (2012:432) asserts that unpopular and unbranded products are usually considered of insignificant quality, which consumers believe they cannot depend on, compared to those mobile phones that are branded and popular. In addition, Schiffiman and Kanuk (2010:198), state that consumers rely mostly on well-known brands as indications of quality.

**I associate brand popularity with the choices I make**

The study results (Table 4.5) indicate that 56.6% of the respondents agreed that they associated brand popularity with the choices they made, whilst 20.4% disagreed with this. Branded products have a greater place in the minds of consumers when making choices regarding which brands they prefer. Consumers usually choose well-known brands with which they are familiar, and do not want new or unpopular brands because
they have insufficient information regarding them. People trust popular and branded mobile phones because they know how they function, and also may have had past experiences with them (Alamgir et al. 2010:150).

4.6.2 Price of mobile phones

This section deals with the influences of prices on mobile phone brand choices, since the second objective of this study was to ascertain the influences of these prices on student mobile phone brand choices. In a study conducted by Sata (2013:8) on factors affecting consumer behaviour in buying mobile devices, which explored six important factors (prices, social groups, product features, brand names, durability and after-sales services), the author concludes that price is the most important feature influencing the choices in mobile phones that consumers make. The scoring patterns from study respondents for statements on mobile phone prices are indicated (Table 4.6).

The findings presented (Table 4.6) show the average level of agreement with statements in this section at 62.4%, whilst 19.3% of respondents disagreed with these statements regarding the influences of brand prices. These statements therefore showed higher levels of agreement than disagreement.

Table 4.6: Price scoring patterns

<table>
<thead>
<tr>
<th>Price</th>
<th>Disagree</th>
<th>Neutral</th>
<th>Agree</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Count (%)</td>
<td>Count (%)</td>
<td>Count (%)</td>
</tr>
<tr>
<td>Price affects the mobile phone brand I prefer.</td>
<td>76</td>
<td>56</td>
<td>246</td>
</tr>
<tr>
<td></td>
<td>20.1</td>
<td>14.8</td>
<td>65.1</td>
</tr>
<tr>
<td>Price is important when I choose a mobile phone.</td>
<td>71</td>
<td>62</td>
<td>245</td>
</tr>
<tr>
<td></td>
<td>18.8</td>
<td>16.4</td>
<td>64.8</td>
</tr>
<tr>
<td>The mobile phone is good value for the money paid.</td>
<td>43</td>
<td>68</td>
<td>267</td>
</tr>
<tr>
<td></td>
<td>11.4</td>
<td>18.0</td>
<td>70.6</td>
</tr>
<tr>
<td>I associate mobile phone price with quality of the phone.</td>
<td>45</td>
<td>69</td>
<td>264</td>
</tr>
<tr>
<td></td>
<td>11.9</td>
<td>18.3</td>
<td>69.8</td>
</tr>
<tr>
<td>Price of mobile phone has an impact on my ideal self-image</td>
<td>130</td>
<td>91</td>
<td>157</td>
</tr>
<tr>
<td></td>
<td>34.4</td>
<td>24.1</td>
<td>41.5</td>
</tr>
</tbody>
</table>

Price affects the mobile phone brand I prefer

Respondents were asked if prices affected the mobile phone brands they preferred, with the results (Table 4.6), indicating that 65.1% of respondents agreed, and 20.1% disagreed, with this statement. Akhtar et al. (2013:388), in their study of mobile phone
feature preferences and consumption patterns for students at the University of Sargodha, similarly conclude that 68.8% of respondents preferred mobile phones that were moderately priced, whilst 14.2% preferred those that were higher priced. Saif et al. (2012:17), however, argue that prices do not affect consumer choices or preferences of mobile phone brands, which become less contributing factors as consumers change from being lower to higher income earners.

Price is important when I choose a mobile phone
In response to the statement that price was important when choosing mobile phones, the study results showed that of the respondents, 64.8% agreed, and 18.8% disagreed, with this statement. Khan and Rohi (2013:371) emphasise that prices are the most important factors affecting the mobile phone brand choices that consumers make, especially for youths for whom these are key attracting factors. A study carried out by Malasi (2012:12), however, describes prices as important factors in shaping or influencing the future habits of young consumers, which do not affect current consumer mobile phone preferences, but their future preferences instead.

The mobile phone is good value for the money paid
As indicated (Table 4.6), 70.6% of the study respondents agreed, and 11.4% disagreed, that their mobile phones were good value for the monies paid. According to Schiffman and Kanuk (2010:193), consumers usually perceive prices as indicative of the value brands offer. The ways in which consumers perceive prices are therefore very important, and affect the choices they make. Consumers want to pay prices they feel are equivalent to the value offered by mobile phone brands. For example, Iphones are perceived to be highly priced, because consumers believe if they pay high prices, they will be receiving good value for their money.

I associate mobile phone price with quality of the phone
The study results (Table 4.6) show that 69.8% of respondents associated mobile phone prices with the quality of products, and 11.9% did not. Prices are the first things that consumers notice, and these can create initial impressions of the quality of brands or products. Consumers therefore deduce perceptions of quality from prices. Khan and Rohi (2013:372) assert that prices affect the perceptions consumers have of
brands, and that these are used to indicate the quality of brands, which influences the decisions that consumers make.

Teng (2009:15), however, states that some consumers prefer lower priced products, whilst others are more concerned about brand types and quality and are prepared to pay prices that are higher. The prices of products therefore impact on consumer perceptions of the quality of the technology mobile phones use. Dettmann (2011:27) furthermore states that prices affect the quality expected by consumers from products or brands.

The price of a mobile phone has an impact on my ideal self-image
As indicated by the study results (Table 4.6), 41.5% of respondents agreed, and 34.4% disagreed that the prices of mobile phones impacted their ideal self-images. This result contradicted the reviewed literature, which indicates that consumers prefer brands displaying brand personalities that match their ideal self-images, which are how we would like to be seen by others, and which also impact on the self-concepts of others, which are how we think others see us (Kotler and Keller 2009:198).

4.6.3 Product attributes
This section discusses the influence of product attributes on consumer choices. The third objective of this study was to investigate the extent to which product attributes influenced student choices of mobile phone brands. According to Gwin and Gwin (2003:32), product attributes are features that products either have or do not have, and which are either intrinsic or extrinsic. Attributes can have either lesser or greater impacts on mobile phone brand preferences. The scoring patterns for the influences of product attributes on student consumer choices are also illustrated (Figure 4.6).
Mobile phone features, size and colour influenced the choice I made

The study results (Figure 4.6) illustrate that 73.8% of respondents agreed that mobile phone features, such as sizes and colours, influenced the choices they made, whilst 9.8% disagreed. Uddin et al. (2014:27) confirm that mobile phone features influence the purchasing decisions that consumers make. According to Sata (2013:13), mobile phone features are the second most important factor correlating with consumer decisions to prefer and buy devices.

Mobile phone features include Internet connections, Bluetooth, video, colours, FM radio, media players, designs, touch screens, stores, sizes, available accessories, speakers and weight. All of these factors are considered to have connections with consumer decisions to prefer or buy mobile devices. The results of this research correspond with those of previous studies conducted in other countries (Pakola et al. 2010; Das 2012; Saif et al. 2012; Malasi 2012; Aidoo and Nyamedor 2008), which consider mobile phone features as leading factors influencing consumer brand preference behaviours.
I consider the durability and reliability of mobile phones
As shown (Figure 4.6), the study results illustrate that 78.8% of respondents agreed, and 6.1% disagreed, that they considered durability and reliability when choosing mobile phones. These results are in accord with the reviewed literature from Aidoo and Nyamedor (2008:33), who state that the reliability of mobile phones impacts on the brands consumers prefer.

Ala’a and Yaser (2015:89), in their study results, furthermore show that most respondents consider durability as their first priority when choosing mobile phone brands. This finding is not surprising, because other factors are also found to be common between brands, which makes durability one of the most important of these affecting mobile phone choices.

I consider the portability of mobile phone brands
The results showed that 66.7% of respondents agreed, and 9.0% disagreed, that they considered portability when choosing mobile phone brands. Karjualuoto et al. (2005:71) agree that mobile phone designs, in terms of appearances and sizes, influence the brands that consumers prefer, but that they consider other attributes, such as durability and reliability, to be more important. This was also shown to be the case by the results of the current study, whose results were 66.7% positive for portability, and 78.7% positive for durability and reliability respectively.

I consider the user-friendliness of mobile phone brands
A large number of respondents (67.7%), indicated agreement that they preferred the user-friendliness of mobile phone brands, whilst 11.1% disagreed (Figure 4.6). Owusu-Prempeh et al. (2013:30) conclude that ease of use is one of the factors that consumers consider when selecting mobile phone brands. Aidoo and Nyamedor (2008:30), in a study conducted on the factors that determine consumer choices of mobile phone brands in Kumasi metropolis, moreover conclude that user-friendliness affects consumer brand preferences.
I consider quality when choosing a mobile phone brand
Respondents were asked whether they considered quality when choosing mobile phone brands. The results (Figure 4.6) show that 83.6% agreed, and 5.8%, disagreed with this statement. The higher the quality of brands, the greater their chances of being preferred from amongst those available on the market (Dziwornu 2013:160). This is supported by Liu (2002:43), who states that consumers prefer the quality they perceive in mobile phone brands they have used before, or which have been recommended by families and friends.

I consider mobile phone appearance and battery life when selecting a brand
The findings (Figure 4.6) indicate that 79.1% of respondents agreed that they considered mobile phone appearances and battery life when selecting brands, whilst 8.7% disagreed. These results corresponded with those of Zhou and Shanturkovska (2011:28), which indicate that over three-quarters of respondents consider the durability of mobile phone batteries to be their most important characteristics. Physical appearances impact consumer brand preferences, since they are the first aspect seen, and also influence consumer perceptions of the other features of brand designs, such as colours, shapes and sizes. Physical appearances influence the overall impressions that consumers have of brands, and also provide consumers with information that manufacturers try to communicate, which influences their brand preference decisions (Blijlevens et al. 2009:30).

I consider mobile phone attributes when preferring a brand
As illustrated (Figure 4.6), the majority of respondents (72.2%) agreed that they considered mobile phone attributes when preferring brands, and 9.5% disagreed. The results of a study conducted by Owusu-Prempeh et al. (2013:26) concur with these findings, where attributes have 90.2% of respondents agreeing that they influence their choice of mobile phone brands. Zhang et al. (2015:3) furthermore assert that consumers make choices according to the functionality or performance of product attributes, and the importance that each these has to them. Product attributes are, moreover, important in understanding the preferences that consumers form for mobile phones, since they influence their product and brand perceptions (Zhu et al. 2010:296).
4.6.4 Social influences for mobile phone brand preference

This section examines the impacts of social influences on mobile phone brand preferences. The fourth objective of the study was to assess the extent to which brand preferences were affected by social influences. Figure 4.7 provides the scoring patterns for these study results.

As indicated by the results (Figure 4.7), the average level of agreement for statements in this section was 26.4%, whilst on average 50.1% of respondents disagreed with them. All statements that social influences affected their mobile phone brand preferences therefore showed higher levels of disagreement than agreement from respondents.

![Figure 4.7: Social influences scoring patterns](image)

<table>
<thead>
<tr>
<th>Statement</th>
<th>Agree</th>
<th>Neutral</th>
<th>Disagree</th>
</tr>
</thead>
<tbody>
<tr>
<td>Opinion leaders played an important role on the brand of mobile phone I prefer</td>
<td>22.3</td>
<td>31.5</td>
<td>52.7</td>
</tr>
<tr>
<td>Family influenced the brand of mobile phone I prefer</td>
<td>37.5</td>
<td>46.8</td>
<td>15.9</td>
</tr>
<tr>
<td>Culture had an impact on the choice of mobile phone</td>
<td>17.5</td>
<td>37.0</td>
<td>46.3</td>
</tr>
<tr>
<td>The role I play influenced the brand of mobile phone I prefer</td>
<td>27.5</td>
<td>35.7</td>
<td>37.3</td>
</tr>
<tr>
<td>My social status influenced the choice of brand I prefer</td>
<td>13.9</td>
<td>37.3</td>
<td>52.7</td>
</tr>
<tr>
<td>Social class influenced the brand I prefer</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Reference groups influenced the mobile phone brand I prefer</td>
<td>23.5</td>
<td>40.2</td>
<td>36.3</td>
</tr>
<tr>
<td>I prefer the mobile phone brand because my friends use the same brand</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Opinion leaders play an important role in the brand of mobile phone I prefer**

The study results (Figure 4.7) illustrate that 52.7% of respondents were in disagreement with the statement that opinion-leaders played important roles in deciding the brands of mobile phones they preferred, whilst 22.5% were in agreement. This diverges from the reviewed literature, which states that opinion-leaders informally
influence the attitudes, behaviours, preferences and values of those consumers who are opinion-seekers (Schiffman and Kanuk 2010:282).

**Families influence the brand of mobile phone I prefer**
As indicated by the study findings (Figure 4.7), the majority of respondents, with 46.3%, disagreed that families influenced the brands of mobile phones they preferred, whilst 31.5% agreed. Families have less impact on mobile phone preferences, especially if students live away from home (Kotler and Keller 2009:195).

In addition, families influence brand preference depending on the roles that their members play as consumers (Nagarkoti 2009:12). Some of the reviewed literature argues, however, that families are perhaps the most important factors influencing the behaviours of consumers, because family members have close relationships and long-term interactions, and most decisions are therefore made within family life cycles (Yusuf and Shafri 2013:8).

**Culture has an impact on the choice of mobile phone**
The majority (60.1%) of respondents disagreed with the statement that their cultures impacted on their choices of mobile phones, whilst 17.5% agreed (Figure 4.7). This finding differs from reviewed literature, which states that cultures impact on consumer mobile phone brand choices (Salmi and Sharafutdinova 2008:384). Cultures therefore determine the priorities consumers place on different products and brands, with brands that provide benefits similar to those required by the members of cultures at any point having better chances of being preferred from amongst all other brands available (Mohan 2013:20).

**The role I play influences the brand of mobile phone I prefer**
The study also evaluated if the roles played by respondents influenced the brands of mobile phones they preferred. These results illustrate (Figure 4.7) that 35.7% of respondents agreed, and 37.3% disagreed, that the roles they played influenced the brands of mobile phones they preferred. This result contrasts with the literature reviewed, however, which supports the notion that the roles played by respondents influence their mobile phone brand preferences. According to Nagarkoti (2009:12), the roles that consumers play affect what they prefer and purchase. For example, if
parents make purchasing decisions, then students have to prefer and use the mobile phone brands that their parents choose, since they are the ones with the roles of making such purchases.

**My social status influences the choice of brand I prefer**

As indicated by the study findings (Figure 4.7), 37.0% of respondents agreed, whilst 40.2% disagreed, that their social statuses influenced the choices of brands they preferred. This result does not concur with the reviewed literature, however, which states that consumers differ in their lifestyles due to their social statuses, so, for example, the decisions of post-graduate professionals will differ from those of undergraduates. Most authors of the literature reviewed agree that social classes influence the types of mobile phones that students prefer, because they wish to communicate certain lifestyles to those around them (Negi and Pandey 2013:151).

**Social class influences the brand I prefer**

More than a quarter (27.5%) of the respondents agreed, and 45.8% disagreed, that their social classes influenced brands they preferred (Figure 4.7). These results depart from the findings of Kotler and Keller (2009:194), however, which state that consumers from different social classes show independent product and brand preferences in many areas. People from different classes prefer different types of media, which influences their exposure to brands, and, in turn, affects the brands they prefer. Upper class consumers usually prefer magazines and books, whilst those in lower classes watch television. These results are true for students, because they have no clearly defined social classes, especially when staying at school residences (Khan 2012:27).

**Reference groups influence the mobile phone brand I prefer**

The study results (Figure 4.7) show that 46.8% of respondents disagreed, and 27.5% agreed, that reference groups influenced their mobile phone brand preferences. Consumers use reference groups to obtain information on and compare brands and products. Marketers can, however, use the influence of these groups in advertising which convinces consumers to prefer their mobile phone brands (Hult et al. 2012:177).

The extent of these influences depends, however, on the types of products being promoted. Mobile phones, for example, are products that consumers use publicly, and
their choices are therefore highly influenced by reference groups, because this gives others opportunities to see which brands they prefer or own. Brand images convey different things to people, so reference groups influence the brand choices that consumers make, especially where products, such as mobile phones, are publicly visible. Reference groups usually influence the choices of luxury products such as iPhones, because these communicate status to consumers, which may be highly valued by group members in communicating their associations and values to others (Hoyer et al. 2013:312).

I prefer the mobile phone brand because my friends use the same phone brand
Only a small number (15.9%) of respondents agreed, whilst 64.6% disagreed, that they preferred mobile phone brands because their friends used the same brands. These results (Figure 4.7) therefore show that the majority of students disagreed that the choices of their friends influenced their own brand choices. These results do not correspond with the study results of other authors on the influences of brand recommendations by friends. According to Khan and Rohi (2013:374), in a study to determine the factors which affect the brand choices of mobile phones for youths, the authors find that suggestions by friends are key variables which influence their brand choices. In addition, Liu (2002:17) also finds that consumers prefer brands that have been recommended by friends.

4.6.5 Marketing communications
This section investigates how marketing communications influence brand preferences. The final objective of this study was to determine the influences that marketing communications had on student mobile phone brand preferences. The findings (Figure 4.8) present a summary of these scoring patterns.

It is illustrated (Figure 4.8) that the average level of respondents agreeing with the influences of marketing communications was 51.5%, whereas 23.8%, on average, disagreed with the statements in this section. Most of the statements showed higher levels of agreement, whilst only one showed a higher level of disagreement.
Figure 4.8: Marketing communications scoring patterns

I prefer a mobile phone brand because of how I want people to see me
As indicated by the study findings (Figure 4.8), 46.3% of respondents disagreed with the statement that they preferred mobile phone brands because of how they wanted others to see them, whilst 31.5% agreed. This, however, differs from the findings of the literature reviewed, which states that respondents prefer brands that have personalities closely related to how they would like to be seen by others, or to the self-concepts of others, which are how they think others perceive them (Kotler and Keller 2012:198).

I use catalogues when choosing a mobile phone brand
The findings illustrate (Figure 4.8) that 54.5% of respondents agreed, whilst 20.6% disagreed, that they used catalogues when choosing mobile phone brands. This concurs with the literature reviewed, which states that advertising plays a vital role in changing consumer brand preferences. The advertising in catalogues is referenced by most customers, because of its content and the information it provides. Such advertising has an effect on the minds of consumers in persuading them to choose certain brands.
Catalogues also provide subconscious stimuli which influence consumer responses (Janiszewski 2012:57). In addition, Paunikar (2014:2) agrees that catalogues are indeed important media vehicles used by consumers to obtain information, but argues that television also supplies such important ingredients, due to its worldwide use.

**Word-of-mouth has an impact on the mobile phone brand I prefer**

As indicated by the study findings (Figure 4.8), 50.3% of respondents agreed, and 23.3% disagreed, that WOM had an impact on the mobile phone brands they preferred. This is in keeping with the literature from Solomon (2013:447), who postulates that WOM is powerful, and influences most of the decisions consumers make. WOM is most influential when products or brands are technological in nature, and is therefore an important factor affecting the choices consumers make regarding mobile phone brands.

In addition, WOM is also considered a significant and effective marketing communications tool, and it has been cited that the influence from WOM is greater than from other forms of communication, such as radio, television and newspapers. WOM is also seen as an unbiased form of communication, which therefore exerts a significant influence on brand preferences (Pham 2013:12).

**Promotions have an impact on the mobile brand I prefer**

Respondents were asked whether promotions had an impact on the mobile phone brands they preferred. These findings illustrate (Figure 4.8) that 56.6% of the respondents agreed, and 20.9% disagreed with this statement. These results are similar to the findings in the literature reviewed from Omotayo (2011:68), who finds that sales promotions influence consumer decisions, such as brand preferences, in the types of mobile phones they choose. Achumba (2002) considers sales promotions as marketing tools other than personal selling, advertising and publicity, used to stimulate consumer preferences in purchasing brands. Sales promotions are therefore direct stimuli that add importance to brands in the minds of consumers.

Mondal and Samantaray (2014:8), however, argue that sales promotions do not influence brand preferences, but only brand switching amongst consumers, especially those most affected by prices. Chandranath (2015:11) agrees that sales promotions
taking the forms of price reductions have disadvantages, because they can damage brands in the long term. The value of brands is thereby reduced, and their images damaged. Some consumers only purchase brands when promoted, and change preferences when promotions are finished.

**Advertising influences the brand I prefer**

The study findings (Figure 4.8) illustrate that 58.8% of respondents agreed, and 19.2% disagreed, that advertising influenced the brands they preferred. These results concur with Share and Salaimeh (2010:334) who agree that advertising plays an important role in influencing the purchasing decisions consumers make. The authors agree that television advertising assists consumers in making brand choices from amongst the many available.

Advertising therefore encourages brand preferences, since it creates brand awareness and stimulates brand choices. Kotwal *et al.* (2008:52) support the idea that television advertisements are the most effective in reaching the target markets of companies, with their study results showing that a large number of respondents make brand choices based on advertising. Advertising alone does not cause consumers to prefer brands, however, but only draws their attention to them (Arshad *et al.* 2015:227).

**Knowledge of the brand was through advertising**

The study results (Figure 4.8) show that 66.7% of respondents agreed, and 15.3% disagreed, that knowledge of brands was obtained through advertising. Solomon (2013:46) similarly states that advertising provides consumers with information that assists in reducing product or brand search times, and which also communicates brand availability. In addition, advertising plays an important role in forming brand preferences by creating brand awareness, which thus conditions the perceptions of brands in the minds of consumers. Advertising is very informative, and provides consumers with information on brands and their important attributes, which can then influence brand preferences.

It therefore provides consumers with much information concerning brands, which consumers obtain by the attractiveness, attention and awareness that advertising brings to such products. For consumers to prefer brands, the advertising to which they
are exposed should therefore be clearly understood (Vivekananthan 2013:17). Nevertheless, should advertising be repeated too often, this can result in it becoming ineffective, with consumers growing so accustomed to these advertisements that they no longer pay them any attention (Solomon 2013:111).

**Marketing communications are associated with the way people see themselves**

It is illustrated that 42.2% of respondents agreed, whilst 21.2% disagreed, that marketing communications are associated with the manner in which people see themselves (Figure 4.8). The ways in which consumers see themselves therefore influence the brands they prefer, since they wish their choices to be reflected in the products they own. Self-concepts are the ways in which individuals see themselves, and are totalities of the thoughts and feelings of individuals when looking at themselves.

Consumers form and change their self-concepts based on the interactions between their psychological and social dimensions. Consumers choose brands or products that match their self-concepts, which influence them in preferring certain brands, and can also impact on the places where products are bought (Pride and Ferrell 2010:160). According to Hoyer *et al.* (2013:48), the self-concept theory helps to define who consumers are, and how this influences their behaviour, since it takes into account how consumers view themselves and how they think others view them.

4.7 Chi-square tests

The traditional approach to reporting study results requires a statement of their statistical significance. Chi-square test p-values are generated from test statistics, where significant results are indicated by values of (p $\leq 0.05$). The Chi-square table is attached in appendix F and the values have been highlighted.

A Chi-square test was performed on the study results to determine whether any statistically significant relationships exist between variables (rows vs columns). The table given in Appendix F summarizes these Chi-square test results.

A significant relationship was found to exist between mobile phone brand popularity and brand preferences (p=0.0396). Should an individual wish to purchase a mobile
phone, they look at the brand popularity. This could be because popular brands are trusted, and considered reliable due to being used by many people.

It emerged that there was a significant relationship between brand prices and mobile phone brand preferences, with a result of (p=0.017). This means that if brand prices are high, then consumer choices of them will be low. It showed that prices exerted an influence on mobile phone brand choices. There was therefore a significant relationship between mobile phone brand preferences and their prices (p=0.016), which indicated that prices were important factors when consumers made mobile phones brand choices.

A significant relationship between mobile phone brand preferences and mobile phone attributes (p=0.001) was found to exist. This showed that mobile phone attributes influenced respondent mobile phone brand preferences, and that consumers therefore considered mobile phone attributes when choosing brands. It emerged that there was a significant relationship between mobile phone brand preferences and quality, based on the result (p=0.003). This indicated that the quality of mobile phones influenced the brand choices that consumers made.

There was also a significant relationship between mobile phone brand preferences and user-friendliness, with a result of (p=0.015). Students therefore tended to consider the user-friendliness of mobile phones in their choices. In addition, it emerged that a significant relationship existed between mobile phone brand preferences and their durability and reliability, based on the result (p=0.032), which indicated that students considered the durability and reliability of mobile phone brands.

The Chi-square test results showed no significant relationship between mobile phone brand preferences and mobile phone appearances, with a result of (p=0.198). This indicated that students did not necessarily consider mobile phone appearances when choosing mobile phone brands. It also emerged that no significant relationship existed between mobile phone brand preferences and product portability, based on the result (p=0.857). This showed that the portability of mobile phones did not have a significant effect on brand preferences. There was, in addition, no significant relationship between mobile phone brand preferences and mobile phone features, with a result of
(p=0.675). This showed that students preferred mobile phone brands without considering their attributes.

There was a significant relationship between mobile phone brand preferences and the influences of friends, with a result of (p=0.048). This implied that the choices which friends made influenced respondent brand preferences. It emerged that a significant relationship between mobile phone brand preferences and reference groups existed, based on the result (p=0.031). This indicated that students were influenced by their reference groups regarding the mobile phone brand choices they made.

The results also showed that there was a significant relationship between mobile phone brand preferences and the social statuses of respondents, with a result of (p=0.002). It furthermore emerged that a significant relationship between mobile phone brand preferences and the influences of families existed, based on the result (p=0.018). This indicated that families influenced the choices student made with regard to their mobile phone brand preferences.

Nonetheless, the results showed that other social influences have no significant relationships with mobile phone brand preferences. There was no significant relationship between mobile phone brand preferences and social classes, with a result of (p=0.763). It also emerged that there was no significant relationship between mobile phone brand preferences and consumer roles, based on the result (p=0.652). Moreover, no significant relationship between mobile phone brand preferences and consumer cultures was found to exist, with a result of (p=0.637). It also emerged that no significant relationship existed between mobile phone brand preferences and the influence of opinion-leaders, based on the result (p=0.246). This meant that these social influences were not significant in influencing student mobile phone brand preferences.

The Chi-square test results showed that the various marketing communications had significant relationships with mobile phone brand preferences. The results showed a significant relationship between mobile phone brand preferences and advertising, with a result of (p=0.006). It emerged that a significant relationship between mobile phone brand preferences and promotions existed, based on the result (p=0.003). There was,
Furthermore, a significant relationship between mobile phone brand preferences and WOM communications. A significant relationship between mobile phone brand preferences and the use catalogues was also discovered, based on the result (p=0.008). The reason for these significant relationships could be that student choices were influenced by marketing communications.

4.8 Correlation

Bi-variate correlation was performed on data obtained for the study (Appendix G).

Positive values indicated a directly proportional relationship between variables, and negative values indicated inverse relationships. All significant relationships are indicated using asterisks (*) or double-asterisks (**).

The results showed the following patterns:

A positive correlation was found between brand popularity and brand choices, with the results (r=0.539; p=0.000). Furthermore, there was a moderately positive correlation between prices, and whether prices were important, with the results (r=0.523; p=0.000). This indicated that prices were important when students were choosing mobile phone brands.

It emerged that there was a positive to moderately positive correlation between mobile phone attributes and mobile phone appearances and battery lives, with results of (r=0.515; p=0.000). There was also a moderately positive correlation between mobile phone attributes and the portability of phones, with results of (r=0.500; p=0.000). In addition, there was a moderately positive correlation between mobile phone attributes and their durability and reliability, with results of (r=0.520; p=0.000).

The results showed that there was weakly positive correlation between mobile phone attributes and their quality, with results of (r=0.354; p=0.000). It emerged that there was also a weakly positive correlation between mobile phone attributes and their user-friendliness, with results of (r=0.462; p=0.000). In addition, a weakly positive correlation between mobile phone attributes and mobile phone features was found to exist, with results of (r=0.407; p=0.000).
4.9 Conclusion

This chapter presented the results and findings for the study. The results were obtained using questionnaires administered to DUT students. These questionnaires were reliable, and achieved their testing objectives. The results of the descriptive statistics used showed that the majority of respondents were Africans in their first year of study. The gender ratio for respondents was approximately 1:1, and all respondents also owned certain mobile phone brands.

Chi-square tests and correlation analysis were carried out on the data gathered. The results for the inferential statistics tests showed both significant and non-significant relationships between mobile phone brand preferences and other variables. These results showed that factors, such as brand popularity, prices and other product attributes, social influences, and marketing communications all influenced mobile phone brand popularity, where both moderate and weak correlations were found to exist.

The final chapter looks at the conclusions drawn from the study, and offers recommendations for further studies to be conducted on brand preferences for mobile phones amongst students at selected higher educational institutions.
CHAPTER FIVE
DISCUSSION OF THE STUDY FINDINGS

5.1 Introduction
The previous chapter analysed the findings for the study. This chapter presents conclusions regarding these findings and gives further study recommendations.

5.2 Summary of the study
The aim of this study was to determine brand preferences for mobile phones amongst students at a selected higher education institution. The target population was made up of selected DUT students.

Chapter 2 presented a theoretical framework for the study, and also gave an overview of the available literature related to brand preferences, which explains factors influencing brand preferences. The study looked at what brand preferences are, from the perspectives of different authors, and also discussed the factors influencing brand preferences. These factors included brand popularity, prices, product attributes, social influences and marketing communications. For each of these factors, certain variables were investigated and conclusions drawn based on comparisons with the reviewed literature. Observations were furthermore made on how these factors influenced mobile phone brand preferences. The self-concept and stimulus-response learning theories formed the basis for the theoretical framework used in conducting this study, which were selected based on their relevance for the study.

Chapter 3 presented an overview of the research methods used to conduct the empirical research for the study, and also focused on research design, and data sampling, analysis and collection.

Chapter 4 analysed, interpreted and presented the results for the study. The study was quantitative in nature, with 378 questionnaires used to collect data from DUT respondents. The results showed that brand popularity and prices influenced brand preferences. They furthermore showed that certain product attributes and social
influences influenced brand preferences, whilst others did not. Finally, the results showed that marketing communications had a definite influence on brand preferences.

5.3 Achievement of the research objectives

Objective 1: To determine the relationships between brand popularity and mobile phone brand preferences.

The results showed that the majority of respondents agreed that brand popularity influenced their choices of mobile phones. This was supported by the Chi-square test results, which showed that a significant relationship existed between brand popularity and mobile phone brand preferences. According to Negi and Pandey (2013:131), consumers ignore unknown brands, and generally prefer those they know. Alamgir et al. (2010:150) also indicate that people trust famous and branded mobile phones, because they are familiar with how they function, and may also have had past experiences with them.

Rijal (2013:3) suggests, in addition, that students do not prefer unpopular brands, because they wish to create positive self-images, which they believe ownership of popular branded mobile phones will assist them in doing. This concurs with the theoretical framework, which stated that consumers chose brands that had images which corresponded with their self-concepts.

The relationship between brand preferences and self-concepts is seen as natural, since consumers prefer brands that help define themselves (Schiffman and Kanuk 2010:164). This shows that brand popularity plays a major role in mobile phone brand preferences, with consumers being more inclined to choose brands that are well known, due to their perceived quality and reliability, and also to consumer familiarity with these brands.
Objective 2: To ascertain the influences of prices on student choices of mobile phone brands.

The results showed that a significant relationship existed between prices and mobile phone brand preferences. This was shown by the Chi-square test results, with a value of $p<0.05$. It was indicated that the higher the price of brands, the greater was their influence on student choices. This was supported by an average of 62.4% of students who agreed that prices influenced their mobile phone brand choices. This supports the literature reviewed for this study by Park et al. (2014:9), and Khan and Rohi (2013:371), who identify prices as the most critical factors affecting mobile phone choices, especially with regard to young consumers. Similarly, Mack and Sharples (2009:1517) establish that the prices or costs of mobile phones are the most influential factors affecting consumer preferences.

The results furthermore revealed a significant relationship between mobile phone brand preferences and prices, which was considered important. The results implied that students considered prices to be important factors, because considering these assisted in determining the brands they chose. Mokhlis and Yaakop (2012:208), in their study of consumer choice criteria for mobile phone brand selections, also find prices to be important factors influencing student brand choices. This is because student spending power is limited, and also because of how students prioritise that on which they expend capital. Students felt that they had insufficient funds to cover both their own financial needs, and the costs of expensive mobile phone brands.

Owusu-Prempeh et al. (2013:26), however, find that the costs of mobile phones have the least influence on the brands consumers prefer, with the fewest respondents in their study agreeing to the fact that these costs influence their consumer brand preferences. The effects of these prices also depends on groups of people, where, for example, students prefer that the costs of phones be reduced, since they cannot afford those that are costly. The prices of the mobile phones should therefore be taken into consideration when dealing with lower income earners that are usually more price-sensitive, and where prices influence their brand choices.
Prices have an influence on students, because of the status of their disposable incomes. Most students have small disposable incomes, and this causes the prices of mobile phone brands to influence their choices.

**Objective 3:** To investigate the extent to which product attributes influenced student choices of mobile phone brands.

A significant relationship was found between mobile phone brand preferences and mobile phone attributes. The results showed that the majority of respondents agreed that they considered mobile phone attributes when preferring brands. Malasi (2012:13) states that various product attributes influence the mobile phone preferences of students, since they consider the attributes of brands before considering their prices. It was furthermore illustrated that a significant relationship exists between mobile phone brand preferences and brand quality. Khan and Rohi (2013:374), in their study, similarly establish that quality is a significant factor influencing the choices of mobile phone brands in Peshawar, Pakistan.

The findings further indicate a significant relationship between mobile phone brand preferences and user-friendliness, with the majority of respondents agreeing that they preferred mobile phone brands based on their user-friendliness. Heklert (2008:19) likewise agrees that user-friendliness greatly influences whether consumers have negative or positive brand preferences in selecting mobile phones. The study results, moreover, show a significant relationship between mobile phone brand preferences and their durability and reliability. Mokhlis and Yaakop (2012:208), in a study of consumer choice criteria for mobile phone selection, state that durability and reliability of mobile phones are amongst the key factors influencing mobile phone brand preferences, with a mean rating of 5.034.

Other mobile phone attributes that had no significant relationships with mobile phone brand preferences were also determined; these include mobile phone appearances, portability and features. However, these results differ from the reviewed literature, which states that mobile phone appearances do impact on consumer brand preferences, because they are what consumers see first when considering brands. Physical appearances influence consumer perceptions of other features that make up
the designs of brands, such as their colours, shapes and sizes (Blijlevens et al. 2009:30). Further, Sata (2013:13) states that mobile phone features are the second most important factor correlating with consumer decisions to buy or prefer devices.

In conclusion, therefore, mobile phone attributes are influential in the choices that consumers make. The extent of this influence differs, however, from one consumer to another, as shown by those study results which indicated that some attributes had significant relationships, whilst others did not. Those mobile phone attributes consumers used daily had significant impacts, whilst others, such as device appearances, did not. This does not mean, however, that these attributes are not important.

**Objective 4:** To assess the extent to which brand preferences are affected by social influences.

The study results show a significant relationship between consumer mobile phone brand preferences and the influence of their friends. This is supported by Liu (2002:17), who avers that consumers prefer brands recommended by friends. The results additionally show a significant relationship between mobile phone brand preferences and the influence of consumer reference groups. This agreed with the reviewed literature, which states that individuals use reference groups to obtain and compare information on brands and products, and therefore seek information from their reference group members on such brands (Hult et al. 2012:177).

The study results also show a significant relationship between mobile phone brand preferences and the social status of consumers. This concurs with the reviewed literature, which states that consumers differ in their lifestyles due to their social status, for example, the preferences of professional post-graduate professionals will differ from those of undergraduates (Negi and Pandey 2013:151). The results furthermore indicate a significant relationship between consumer mobile phone brand preferences and the influence of their families. This corresponds with the literature from Malyvia, Saluja and Thakur (2013:16), which states that families greatly influence brand preferences, but that this influence depends on the roles that respondents play within the family.
The study results nevertheless show that social influences existed which had no significant relationships with mobile phone brand preferences. These include social classes, family roles, cultures and the influences of opinion-leaders. The results indicate agreement by the majority of respondents that these social influences did not affect their mobile phone brand preferences. This corresponds with the results of a study conducted by Sata (2013:13), which indicates that the least-correlated and moderately-related determinants for consumer buying decisions are social influences, with a Pearson correlation co-efficient of 0.461.

These factors therefore only moderately influence consumer decisions in preferring mobile phone brands, since their levels of correlation were the weakest when compared to other factors included in this study. These result were justified when evaluated against the results from similar studies conducted on factors affecting the choices of mobile phones by Subramanyam and Venkateswarlu (2012) and Pakola et al. (2010).

Social influences are shown by the study results to affect consumer brand preferences, especially with regard to exchanges of brand information. Students are seen to be influenced mostly by their friends, reference groups, families and social status, depending on the nature of the groups to which they belong. Students are seen to behave in accordance with how their friends and reference groups express themselves or behave, due to their sharing similar social statuses. Families are also shown to have influenced students, because most were supported by their families. Other social influences did not, however, show significant relationships with consumer brand preferences, not because they were unimportant, but because students rarely use information from these types of influences, such as their cultures.

**Objective 5:** To determine the influence that marketing communications has on mobile phone brand preferences.

The study results show that marketing communications influences mobile phone brand preferences. This is demonstrated by the majority of respondents agreeing with the questionnaire statements on the effects of marketing communications. In addition, the
Chi-square test results for the study show significant relationships between mobile phone brand preferences and the different types of marketing communications. Chen and Lee (2005:23) agree that marketing communications affect consumer behaviours by providing them with exposure to brands through advertising, which creates awareness when interesting, and aids in the mental retention of brand information.

In addition, marketing communications endeavour to create brand awareness, and therefore provide consumers with information which helps them in choosing particular brands over others available (Ayanwale et al. 2005:10). When the methods of marketing communications used are ineffective, however, this negatively influences brand preferences, for example where negative WOM poorly influences brand preferences (Pride and Ferrell 2010:477).

The study results therefore indicate that marketing communications have significant positive influence on mobile phone brand preferences, and that students regularly sought out advertising and WOM from their friends and families as sources of information, which therefore influence their choices. Some students indicated, however, that the choices made were their own, but that marketing communications provided some information in creating awareness, and behaved as reminders. This highlights the importance of marketers working on the elements of their marketing communications.

5.4 Recommendations

Based on the findings of this study, the following recommendations are made:

- Marketers and retailers should use celebrities and well-known people to endorse their brands, thereby creating brand popularity, resulting in consumers' preference for such popular brands as Samsung, Blackberry and Nokia;
- Manufacturers should consider the quality, user-friendliness, durability and reliability of the mobile phones they produce, since these product attributes are shown by the results of this study to exert the greatest influences on brand preferences, although other mobile phone attributes, such as appearances, portability and features should also be seen as important;
• Mobile phone companies should produce phones that are easy to use, since the market is saturated with similar competing brands, and ease of use was shown to be considered an important influence by study respondents;

• Marketers should be aware of the forms of socialisation active in targeting certain population groups, since target markets possess different socialisation groups, such as the student respondents for this study, who were influenced mostly by friends and peers. Marketers should, when targeting such groups, employ people with whom consumers can relate in terms of age; and

• Manufacturers should produce mobile phones with attractive brand images, because most of the student respondents for this study wished to display their social status by the brands of mobile phone they chose.

5.5 Suggestions for further studies
The following are suggestions for further studies to be conducted, based on the findings:

• This study concentrated on only five factors that influence mobile phone brand preferences, and studies focusing on the influence of personal and psychological factors on these preferences should also be conducted, since these would assist mobile phone companies in better understanding their markets;

• The current study only focused on students at DUT, and could be replicated using students at other South African universities, or target groups not exclusively made up of students; and

• This study was specifically aimed at the mobile phone industry, whereas additional studies could focus on other industries that also face high levels of competition.

5.6 Limitations of the study
The following were found to be the limitations of this study:

• The study focused only on students from DUT, and its results may not have presented a true reflection of the South African mobile phone market in general;

• The study had more African respondents than those from other ethnic groups, which is not a true reflection of the proportions of DUT ethnicity;
Due to cost and time constraints, this study was limited to only students studying at DUT, and its results may therefore not be accurately generalised to students studying at other universities in KwaZulu-Natal; and

The targeted student population for the study cannot be considered a true reflection of consumer brand preferences with regard to pricing, because students only purchase mobile phones they can afford with functions they want to use, such as WhatsApp.

5.7 Conclusion
The aim of this study was to determine brand preferences for mobile phones amongst students at a selected higher educational institution in South Africa, with 378 students from DUT used as study respondents. The findings show that brand popularity, prices, product attributes, social influences and marketing communications all exert an influence on mobile phone brand preferences amongst these students. The results also indicate, however, that included in these product attributes and social influences were some that do not influence such preferences.

Conclusions and recommendations drawn from the findings for the study have been provided, enabling mobile phone industry stakeholders to improve their knowledge of factors considered important, and allowing them to improve on their brands, thereby increasing preferences for their products in the highly competitive mobile phone market.
List of references


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Dhital, M. 2013. Study on brand preference of mobile phone in Kathmandu. MBA. Pokhara University.


Waanders, K. 2013. The Effectiveness and Consequences of Price Promotion: Is there a different between store brands and high-end brands? University of Twente: Masters Communication Studies, 1-49.


Dear Respondent

I am pursuing a Master’s Degree in Marketing at Durban University of Technology. I am conducting a study on Brand preference for mobile phones among students at a selected higher education institution. As part of the requirements, I would like you to complete a questionnaire.

The questionnaire will not take more than 15 minutes of your time. Please provide your honest opinions. There are no risks involved and participation is voluntary a respondent can withdraw at any time. Your name will not be indicated in the study and anything you say will be kept confidential.

Please contact me for any questions related to the study. If you require further clarity with regards to the study you can contact my supervisor Prof J. P. Govender

Thank you for your time and participation

Yours sincerely

Tafadzwa Ndadziyira
Contact number: 0849037927

Prof J. P. Govender
Supervisor
Contact number: 0313735396
Appendix B: Consent letter

Statement of Agreement to Participate in the Research Study:

- I hereby confirm that I have been informed by the researcher, (Tafadzwa Ndadziyira), about the nature, conduct, benefits and risks of this study - Research Ethics Clearance Number: ____________.
- I have also received, read and understood the above written information (Participant Letter of Information) regarding the study.
- I am aware that the results of the study, including personal details regarding my sex, age, date of birth, initials and diagnosis will be anonymously processed into a study report.
- In view of the requirements of research, I agree that the data collected during this study can be processed in a computerised system by the researcher.
- I may, at any stage, without prejudice, withdraw my consent and participation in the study.
- I have had sufficient opportunity to ask questions and (of my own free will) declare myself prepared to participate in the study.
- I understand that significant new findings developed during the course of this research which may relate to my participation will be made available to me.

____________________  __________  __________  ___________
Full Name of Participant   Date   Time   Signature / Right Thumbprint

I, Tafadzwa Ndadziyira (name of researcher) herewith confirm that the above participant has been fully informed about the nature, conduct and risks of the above study.

Tafadzwa Ndadziyira

____________________
Full Name of Researcher   Date   Signature

____________________
Full Name of Witness (If applicable)   Date   Signature

____________________
Full Name of Legal Guardian (If applicable)   Date   Signature

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Appendix C: Questionnaire

Please put X in the appropriate box

Section A

1. Please indicate your gender.

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<td>Female</td>
<td>Male</td>
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2. Please indicate your age

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<tr>
<th>Age Range</th>
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<tr>
<td>17-19</td>
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<tr>
<td>20-22</td>
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<td>23-25</td>
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<td>26-28</td>
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<td>29-30</td>
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<td>31 and above</td>
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3. Please indicate your race.

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<tbody>
<tr>
<td>African</td>
<td>White</td>
<td>Coloured</td>
<td>Indian</td>
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4. Please indicate your level of study.

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<th>Year</th>
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<td>1st year</td>
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<td>2nd year</td>
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<td>3rd year</td>
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<td>4th year</td>
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<tr>
<td>Post graduate</td>
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</table>

5. Which mobile phone brand do you have?

<table>
<thead>
<tr>
<th>Brand</th>
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<tbody>
<tr>
<td>Nokia</td>
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<td>Samsung</td>
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<tr>
<td>Blackberry</td>
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<tr>
<td>HTC</td>
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<tr>
<td>LG</td>
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<tr>
<td>Alcatel</td>
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<tr>
<td>Sony</td>
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<tr>
<td>Huawei</td>
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<tr>
<td>Other</td>
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</table>

6. Price range of mobile phone you purchased.

<table>
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<tr>
<th>Price Range</th>
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<tr>
<td>1000 &amp; less</td>
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<tr>
<td>1000-2000</td>
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<td>2001-3000</td>
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<tr>
<td>3001 and above</td>
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7. Using numbers 1-11 rank the following mobile phone brands in terms of preference.

<table>
<thead>
<tr>
<th>Brand</th>
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<tbody>
<tr>
<td>Nokia</td>
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<td>Samsung</td>
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<td>Blackberry</td>
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<td>HTC</td>
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<td>LG</td>
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<td>Alcatel</td>
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<tr>
<td>Sony</td>
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<tr>
<td>Huawei</td>
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<tr>
<td>Apple</td>
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<td>Other</td>
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</table>

8. What motivated you to prefer the above mobile phone brand?

<table>
<thead>
<tr>
<th>Motivation</th>
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<tbody>
<tr>
<td>Advertisement</td>
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<tr>
<td>Referrals</td>
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<td>Own choice</td>
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<td>Other</td>
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Section B

Please mark the appropriate box with an X for the following statements.
<table>
<thead>
<tr>
<th><strong>Brand Popularity</strong></th>
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<tbody>
<tr>
<td>9. I consider brand popularity when choosing a mobile phone.</td>
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<tr>
<td>10. I associate brand popularity with mobile phone quality.</td>
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<tr>
<td>11. I associate brand popularity with the choice I make.</td>
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<tr>
<td><strong>Price</strong></td>
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<tr>
<td>12. Price affects the mobile phone brand I prefer.</td>
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<tr>
<td>13. Price is important when I choose a mobile phone.</td>
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<tr>
<td>14. The mobile phone is good value for the money paid.</td>
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<tr>
<td>15. I associate mobile phone price with quality of the phone.</td>
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<tr>
<td>16. Price of mobile phone has an impact on my ideal self-image.</td>
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<tr>
<td><strong>Product attributes</strong></td>
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<td>17. I consider mobile phone attributes when preferring a brand.</td>
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<td>19. I consider quality when choosing a mobile phone brand.</td>
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<td>20. I consider the user friendliness of the mobile phone.</td>
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<td>22. I consider durability and reliability of the mobile phone.</td>
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<td>23. Mobile phone features, size and colour influence the choice I make.</td>
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<td><strong>Social influence</strong></td>
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<td>29. Culture had an impact on the choice of mobile phone.</td>
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<td>30. Family influenced the brand of mobile phone I prefer.</td>
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<td><strong>Marketing Communication</strong></td>
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<td>32. Marketing communication were associated with the way people see themselves.</td>
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33. Knowledge of the brand was through advertising.
34. Advertising influenced the brand I prefer.
35. Promotions had an impact on the mobile brand I prefer.
36. Word of mouth had an impact on the mobile phone brand I prefer.
37. I use catalogues when choosing a mobile phone brand.
38. I prefer a mobile phone brand because of how I want people to see me.

*Thank you for your time and participation.*
Helen Richter  
Advanced Editing, Proofreading  
& Copy writing  
feetjieding@gmail.com  
072 9538169  
30 December 2016  
To whom it may concern:  

CERTIFICATE OF EDITING & AUTHENTICATION  
I have proofread and edited the following thesis according to DUT parameters as advised and certify that the contents are, to the best of my knowledge, the author’s own work:  
“Brand preference for mobile phones among students at a selected higher education institution”  
By Tafadzwa Ndadziyira  

With thanks.  

H. S. Richter
Appendix E: Ethical clearance letter

16 September 2016

IREC Reference Number: REC 68/15

Ms T Ndadziyira
18 Heswall Road
Corio Court
Durban

Dear Ms Ndadziyira

Brand preference for mobile phones among students at a selected higher education institution

The Institutional Research Ethics Committee acknowledges receipt of your notification regarding the piloting of your data collection tool.

Kindly ensure that participants used for the pilot study are not part of the main study.

In addition, the IREC acknowledges receipt of your gatekeeper permission letter.

Please note that FULL APPROVAL is granted to your research proposal. You may proceed with data collection.

Yours Sincerely,

[Name Redacted]
Professor J K Adam
Chairperson: IREC
### Appendix F: Chi-square test results

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<td>.011*</td>
<td>.010*</td>
<td>0.637</td>
<td>0.250</td>
</tr>
<tr>
<td><strong>Family influenced the brand of mobile phone I prefer.</strong></td>
<td>Chi-square</td>
<td>9.686</td>
<td>23.863</td>
<td>20.259</td>
<td>25.352</td>
<td>50.916</td>
<td>30.857</td>
</tr>
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<td>20</td>
<td>12</td>
<td>16</td>
<td>32</td>
<td>12</td>
</tr>
<tr>
<td></td>
<td></td>
<td>.046*</td>
<td>0.248</td>
<td>0.062</td>
<td>0.064</td>
<td>.018*</td>
<td>0.002*</td>
</tr>
<tr>
<td><strong>Opinion leaders played an important role on the brand of mobile phone I prefer.</strong></td>
<td>Chi-square</td>
<td>2.798</td>
<td>33.421</td>
<td>7.280</td>
<td>25.131</td>
<td>37.097</td>
<td>4.173</td>
</tr>
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<td>12</td>
<td>16</td>
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<td>12</td>
</tr>
<tr>
<td></td>
<td></td>
<td>0.592</td>
<td>.030*</td>
<td>0.839</td>
<td>0.068</td>
<td>0.246</td>
<td>0.980</td>
</tr>
<tr>
<td><strong>Marketing communication</strong></td>
<td>Chi-square</td>
<td>1.009</td>
<td>16.110</td>
<td>14.583</td>
<td>20.980</td>
<td>34.099</td>
<td>13.526</td>
</tr>
<tr>
<td>were associated with the way people see themselves.</td>
<td>Df</td>
<td>4</td>
<td>20</td>
<td>12</td>
<td>16</td>
<td>32</td>
<td>12</td>
</tr>
<tr>
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<td>----</td>
<td>----</td>
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<td>----</td>
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</tr>
<tr>
<td>Sig.</td>
<td>0.908</td>
<td>0.71</td>
<td>0.265</td>
<td>0.179</td>
<td>0.367</td>
<td>0.332</td>
<td>0.691</td>
</tr>
<tr>
<td>Knowledge of the brand was through advertising.</td>
<td>Chi-square</td>
<td>7.330</td>
<td>35.012</td>
<td>19.426</td>
<td>17.204</td>
<td>24.291</td>
<td>10.603</td>
</tr>
<tr>
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<td>12</td>
<td>16</td>
<td>32</td>
<td>12</td>
<td>12</td>
</tr>
<tr>
<td>Sig.</td>
<td>0.119</td>
<td>.020*</td>
<td>0.079</td>
<td>0.373</td>
<td>0.834</td>
<td>0.563</td>
<td>0.122</td>
</tr>
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<td>32</td>
<td>12</td>
<td>12</td>
</tr>
<tr>
<td>Sig.</td>
<td>.014*</td>
<td>0.199</td>
<td>0.274</td>
<td>0.233</td>
<td>0.006*</td>
<td>0.071</td>
<td>.019*</td>
</tr>
<tr>
<td>Promotions had an impact on the mobile brand I prefer.</td>
<td>Chi-square</td>
<td>3.675</td>
<td>20.855</td>
<td>21.482</td>
<td>19.528</td>
<td>57.969</td>
<td>15.087</td>
</tr>
<tr>
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<td>12</td>
<td>16</td>
<td>32</td>
<td>12</td>
<td>12</td>
</tr>
<tr>
<td>Sig.</td>
<td>0.452</td>
<td>0.406</td>
<td>0.242</td>
<td>0.003*</td>
<td>0.237</td>
<td>0.010*</td>
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</tr>
<tr>
<td>Word of mouth had an impact on the mobile phone brand I prefer.</td>
<td>Chi-square</td>
<td>8.585</td>
<td>26.214</td>
<td>8.957</td>
<td>23.750</td>
<td>52.999</td>
<td>3.041</td>
</tr>
<tr>
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<td>20</td>
<td>12</td>
<td>16</td>
<td>32</td>
<td>12</td>
<td>12</td>
</tr>
<tr>
<td>Sig.</td>
<td>0.072</td>
<td>0.159</td>
<td>0.707</td>
<td>0.095</td>
<td>0.011*</td>
<td>0.995</td>
<td>0.380</td>
</tr>
<tr>
<td>I use catalogues when choosing a mobile phone brand.</td>
<td>Chi-square</td>
<td>0.288</td>
<td>16.954</td>
<td>12.785</td>
<td>14.421</td>
<td>54.464</td>
<td>20.419</td>
</tr>
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<td>Df</td>
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<td>12</td>
<td>16</td>
<td>32</td>
<td>12</td>
<td>12</td>
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<tr>
<td>Sig.</td>
<td>0.991</td>
<td>0.656</td>
<td>0.385</td>
<td>0.567</td>
<td>0.008*</td>
<td>0.060</td>
<td>0.052</td>
</tr>
<tr>
<td>I prefer a mobile phone brand because of how I want people to see me.</td>
<td>Chi-square</td>
<td>4.276</td>
<td>27.015</td>
<td>8.832</td>
<td>38.100</td>
<td>56.732</td>
<td>7.532</td>
</tr>
<tr>
<td>Df</td>
<td>4</td>
<td>20</td>
<td>12</td>
<td>16</td>
<td>32</td>
<td>12</td>
<td>12</td>
</tr>
<tr>
<td>Sig.</td>
<td>0.370</td>
<td>0.135</td>
<td>0.717</td>
<td>.001*</td>
<td>.005*</td>
<td>0.821</td>
<td>0.199</td>
</tr>
</tbody>
</table>
### Appendix G: Bi-variate correlation results

| Brand popularity | Mobile phone appearance | Marketing communication | Quality | Price of phone has good value | Price of phone has good quality | Size of phone battery | Quality of mobile phone services | Price of phone has good quality | Size of phone battery | Quality of mobile phone services |
|------------------|-------------------------|-------------------------|--------|-----------------------------|-------------------------------|-------------------------|-----------------|-----------------------------|------------------------|-------------------------|------------------------|
| 0.80             | 0.80                    | 0.80                    | 0.80   | 0.80                        | 0.80                          | 0.80                    | 0.80            | 0.80                        | 0.80                   | 0.80                    | 0.80                    |
| 0.80             | 0.80                    | 0.80                    | 0.80   | 0.80                        | 0.80                          | 0.80                    | 0.80            | 0.80                        | 0.80                   | 0.80                    | 0.80                    |
| 0.80             | 0.80                    | 0.80                    | 0.80   | 0.80                        | 0.80                          | 0.80                    | 0.80            | 0.80                        | 0.80                   | 0.80                    | 0.80                    |
| 0.80             | 0.80                    | 0.80                    | 0.80   | 0.80                        | 0.80                          | 0.80                    | 0.80            | 0.80                        | 0.80                   | 0.80                    | 0.80                    |
| 0.80             | 0.80                    | 0.80                    | 0.80   | 0.80                        | 0.80                          | 0.80                    | 0.80            | 0.80                        | 0.80                   | 0.80                    | 0.80                    |
| 0.80             | 0.80                    | 0.80                    | 0.80   | 0.80                        | 0.80                          | 0.80                    | 0.80            | 0.80                        | 0.80                   | 0.80                    | 0.80                    |
| 0.80             | 0.80                    | 0.80                    | 0.80   | 0.80                        | 0.80                          | 0.80                    | 0.80            | 0.80                        | 0.80                   | 0.80                    | 0.80                    |
| 0.80             | 0.80                    | 0.80                    | 0.80   | 0.80                        | 0.80                          | 0.80                    | 0.80            | 0.80                        | 0.80                   | 0.80                    | 0.80                    |
| 0.80             | 0.80                    | 0.80                    | 0.80   | 0.80                        | 0.80                          | 0.80                    | 0.80            | 0.80                        | 0.80                   | 0.80                    | 0.80                    |

*Correlation is significant at the 0.05 level (2-tailed)*