

MODELLING THE FACTORS THAT INFLUENCE BLACK GENERATION Y STUDENTS' ATTITUDES TOWARDS MOBILE ADVERTISING

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of the
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Promoter: Prof A.L. Bevan-Dye

Vanderbijlpark

2013

DECLARATION

I declare that:

“Modelling the factors that influence black Generation Y students’ attitudes towards mobile advertising”

is my own work, that all the sources used or quoted have been indicated and acknowledged by means of complete references, and that I have not previously submitted this thesis for a degree at any other university.

Kirsty-Lee Sharp

2013

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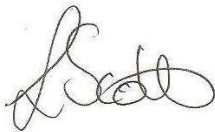
26 November 2013

To whom it may concern

This is to confirm that I, the undersigned, have language edited the completed research of Kirsty-Lee Sharp for the Philosophiae Doctor thesis entitled: *Modelling the factors that influence black Generation Y students' attitudes towards mobile advertising*.

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

Yours truly,

A handwritten signature in black ink, appearing to read 'Linda Scott', with a stylized, cursive script.

Linda Scott

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A special word of thanks to the following persons for their assistance in completing this study:

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Kirsty-Lee Sharp

Vanderbijlpark

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ABSTRACT

MODELLING THE FACTORS THAT INFLUENCE BLACK GENERATION Y STUDENTS' ATTITUDES TOWARDS MOBILE ADVERTISING

Keywords: attitudes towards advertising, mobile advertising, black Generation Y

The rapid growth in mobile communication in South Africa makes it an important new advertising medium, and that is why an understanding of attitudes towards mobile advertising is important. As the most technologically astute generation, the Generation Y cohort (individuals born between 1986 and 2005) represents an important current and future market segment for digital media, including mobile media. In South Africa, black African make up the majority of the Generation Y cohort (hereinafter referred to as black Generation Y). Given the size of the black Generation Y market segment in South Africa, and the potential earning power and influential role of those with a tertiary qualification, a need was identified to propose and empirically test a model of possible antecedents that may determine attitudes towards mobile advertising amongst black Generation Y students.

The sampling frame for the study included black Generation Y students aged between 18 and 24 who were registered at South Africa's 23 public registered higher education institutions (HEIs). This sampling frame was narrowed down, using judgement sampling, to three HEI campuses situated in the Gauteng province – one from a comprehensive university, one from a traditional university and one from a university of technology. Lecturers at each of the campuses were contacted and asked if they would allow a questionnaire to be distributed to their students during class time. A convenience sample of 600 students across these three campuses was taken in 2013. Self-administered questionnaires, designed to measure the antecedents influencing black Generation Y students' attitudes towards mobile advertising, were hand delivered to students during class time at each of the three campuses. The statistical analysis of the collected data included exploratory factor analysis, descriptive statistical analysis, correlation analysis and structural equation modelling.

The findings of the study suggest that South African black Generation Y students have a strong positive attitude towards advertising in general, and towards communicating using the SMS function. Moreover, they have a positive attitude towards the value of mobile advertising. It appears that they find mobile advertisements to be intrusive, and do not perceive mobile advertisements to have much entertainment value, which may account for them not having an overall positive attitude towards mobile advertising.

Attitude towards advertising and credibility were found to have a significant direct influence on black Generation Y students' perceived value of mobile advertising, which in turn has a significant direct influence on black Generation Y students' overall attitude towards mobile advertising. Personalisation and informativeness have a significant positive influence on credibility. Entertainment, attitudes towards advertising, control and credibility have a significant positive influence on the perceived value of mobile advertising. Intrusiveness has a significant negative influence on overall attitudes towards mobile advertising, while trust and perceived value have a significant positive influence.

This study will contribute to developing a profile of the consumer behaviour of the black Generation Y student in South Africa concerning their attitude towards mobile advertising. This research study aimed to develop a conceptual model to illustrate the antecedents that influence black Generation Y students' attitudes towards mobile advertising. The findings of this study will act as marketing strategy guidelines for marketers seeking to reach this segment through mobile advertising. The findings of this study will be of value to South African marketers, as well as international advertisers, seeking to target this lucrative market segment.

OPSOMMING

MODELLERING VAN DIE FAKTORE WAT SWART GENERASIE Y STUDENTE SE HOUDINGS TEENoor MOBIELE ADVERTENSIE BEÏNVLOED

Sleutelwoorde: houdings teenoort advertensie, mobiele reklame, swart Generasie Y

Die rasse groei in mobiele kommunikasie in Suid-Afrika maak dit 'n belangrike advertensie-medium. Daarom is begrip van die houdings teenoor mobiele reklame ook belangrik. Die Generasie Y groep (individue wat tussen 1986 en 2005 gebore is) is die mees tegnologies-geletterde generasie en verteenwoordig dus 'n belangrike huidige en toekomstige marksegment vir digitale media, insluitende mobiele media. Swart Suid-Afrikaners vorm die meerderheid van die Generasie Y groep (hierna swart Generasie Y). As die grootte van die swart Generasie Y marksegment en die potensiele verdienste en die invloedryke rol van diegene met 'n tersiële kwalifikasie as gegewe beskou word, is daar 'n behoefte geïdentifiseer om 'n empiriese model te ontwikkel en te toets wat die moontlike invloede op die houdings teenoor mobiele reklame onder swart Generasie Y studente beskryf.

Die steekproefraamwerk van die studie het geregistreerde swart Generasie Y studente tussen 18 en 24 jaar aan Suid-Afrika se 23 openbare geregistreerde hoër onderwys instellings ingesluit. Hierdie raamwerk is verklein deur van oordeel-steekproefneming gebruik te maak, na drie hoër onderwyskampusse in Gauteng – een kampus van 'n omvattende universiteit, een van 'n tradisionele universiteit en een van 'n universiteit van tegnologie. Dosente op elkeen van die kampusse is geskakel om toestemming te verkry dat vraelyste gedurende klastyd aan hulle studente versprei kan word. 'n Geriefsteekproef van 600 studente oor al drie kampusse is gedurende 2013 gedoen. Self-geadministreerde vraelyste, wat ontwikkel is om die moontlike invloede op die houdings teenoor mobiele reklame onder swart Generasie Y studente te meet, is per hand afgelewer op die drie kampusse gedurende klastyd. Die statistiese ontleding van die versamelde data het verkennende faktor-analise, beskrywende statistiek, korrelasie-analise en struktuurmodellering ingesluit.

Die bevindings van die studie dui daarop dat swart Generasie Y studente in Suid-Afrika 'n sterk positiewe houding het teenoor advertensie in die algemeen en teenoor SMS as medium van kommunikasie. Verder het hulle ook 'n positiewe houding jeens die waarde van mobiele reklame. Dit blyk dat hulle mobiele advertensies as indringend beleef en dat hulle nie dink dat dit baie vermaaklikheidswaarde het nie. Dit kan verklaar waarom hulle nie 'n algehele positiewe houding jeens mobiele reklame het nie.

Die houding jeens reklame en geloofwaardigheid het 'n statisties beduidende direkte invloed gehad op swart Generasie Y studente se waarde wat hulle heg aan mobiele reklame. Verpersoonliking en insiggewendheid het 'n beduidende positiewe invloed op geloofwaardigheid. Vermaak, houdings jeens reklame, beheer en geloofwaardigheid het weer 'n beduidende positiewe invloed op die persepsie van die waarde van mobiele reklame. Indringing het 'n beduidende negatiewe invloed op die algehele houding jeens mobiele reklame, terwyl vertrouwe en waargenome waarde 'n beduidende positiewe invloed het.

Hierdie studie sal 'n bydrae lewer tot die ontwikkeling van 'n profiel vir verbruikersgedrag van die swart Generasie Y studente in Suid-Afrika ten opsigte van hulle houding jeens mobiele reklame. Hierdie navorsingstudie is daarop gerig om 'n konseptuele model wat die inloede op swart Generasie Y studente se houdings jeens mobiele reklame beskryf, te ontwikkel. Die bevindings van hierdie studie kan as riglyne vir 'n bemarkingstrategie gebruik word deur bemarkers wat hierdie segment deur mobiele reklame wil bereik. Die bevindings van hierdie studie sal dus waardevol wees vir Suid-Afrikaanse bemarkers, maar ook vir internasionale adverteerders wat hierdie winsgewende marksegment teiken.

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CHAPTER 1

INTRODUCTION AND PROBLEM STATEMENT

1.1 INTRODUCTION

In a world that is witnessing rapid advances in mobile technologies and a proliferation of mobile phones and mobile devices (Tsang *et al.*, 2004:65), marketers are increasingly appreciating the significance of mobile technology as an advertising medium (Jayawardhena *et al.*, 2009:474). Muk (2007:177) defines mobile advertising as the communication of messages or media content to one or more potential consumers who use mobile devices. Mobile telephony offers marketers several advantages over traditional media. Mobile devices enable the delivery of highly personalised, interactive content, relatively inexpensively to large target audiences, regardless of their location (Jayawardhena *et al.*, 2009:475).

Kotler (2003:590) defines advertising as “any paid form of non-personal presentation and promotion of ideas, goods, or services by an identified sponsor”. In line with this definition, this study defines mobile advertising as any paid form of personal or non-personal presentation and promotion of ideas, goods, or services by an identified sponsor, via short message service (SMS) or multi-media service (MMS) sent to mobile devices. The SMS or text messaging is the most widely used mobile application and the one that marketers are readily integrating into the media mix as a form of direct advertising (Okazaki, 2005:177). The SMS function allows the sending of text messages of up to 160 characters from one user to another, through a combination of push strategy and text formats, enabling marketers to deliver messages to the mobile phones of their target consumers (Muk, 2007:179). The MMS is a messaging format that enables the sending of text, sound, images, videos or a combination thereof from one person to another. Collectively, SMS and MMS advertising represent the rapidly emerging platform of mobile advertising (Cheng *et al.*, 2009:505).

Wei *et al.* (2010:33) suggest that with mobile advertising, timely and location-specific mobile advertisements can be delivered to consumers based on their geographic

information and demographic characteristics due to the increased frequency, accessibility, and speed of communication via mobile phones, which enhances the efficiency and spontaneity of advertisements. Schwiderski-Grosche and Knospe (2002:229) add that this has led to an increase in the use of mobile devices to deliver advertisements for products and services to existing and potential consumers.

Between the beginning of 2011 and September 2011, 3.2 billion mobile advertisements were sent, an increase of 135 percent compared to 2010. South Africans were responsible for 595 million of these mobile advertisements, making South Africa the largest African mobile advertisements market (Maake, 2011a:4). Owing to South Africa being one of the largest mobile markets in the world, organisations view South Africa as one of the most effective and accessible mobile advertising markets (Mashego, 2011:4). According to Shapshak (2011:4), the telecommunications market in Africa has been growing by 20 percent every year for the past five years, and the projection is to have 735 million subscribers by the end of 2012. Not only will these connections provide endless opportunities and resources for the users but also every person, village and town that is connected to the telecoms infrastructure will be seen as one more economically active citizen and one less point of darkness on the continent. Maake (2011a:4) indicates that South Africa is readily embracing mobile broadband, which is viewed as the technology at the heart of the next wave of global economic growth, with more mobile connections in South Africa than there are people (Watkins 2011:25). Pater (2011:1) indicates that at the end of 2010 there were 2.45 million broadband subscriptions in South Africa, with a projected increase of up to 3.44 million by the end of 2011. Shapshak (2011:4) adds that as a result, the large telecommunications and broadband user base will provide a very powerful foundation for the uptake of smartphones across Africa.

Smartphones have led to a substantial increase in the number of Internet users in South Africa due to cheaper Internet access, which is expected to become even cheaper once the Worldwide Interoperability for Microwave Access (WiMAX) spectrum licenses have been awarded and more national transmission networks are deployed. By the end of 2010, there were 5.88 million smartphones in South Africa, which was an 80 percent increase from 2009 (Pater, 2011:1). Shapshak (2011:4) adds that with the advent of the smartphone, a new, more connected user demographic has been created, and that while the majority of data traffic on networks is through mobile

broadband devices, the growth rate in data traffic via the use of smartphones is currently ten times higher than that of other modems and dongles (Pater, 2011:1). Prinsloo (2011:4) proposes that with the entry of smartphones into the market, at four times the rate of any other data device, the current 12 million data users should increase to approximately 265 million data users by 2015. According to Shapshak (2011:4), by 2015, Africa will see one-fifth of its Internet traffic being via cellular networks, which is much higher than the global average of 3 percent.

Haghirian and Madlberger (2012:2) propose that if marketers wish to use the communication channels that mobile media provide in an efficient way, they need to understand how consumers perceive and evaluate mobile devices as a source of advertising. Tsang *et al.* (2004:67) postulate that consumers' attitudes towards mobile advertisements are related positively to their intentions to receive mobile advertisements. This significantly affects their behaviour in terms of how and when they read the mobile advertisement messages they receive. Choi *et al.* (2008:766) argue that the perceived entertainment, informativeness, irritation and credibility of mobile advertisements directly affects consumers' intentions to purchase the products presented in mobile advertisements and the perceived value of mobile advertisements, which in turn directly affects consumers' attitudes towards mobile advertising. Xu (2006-2007:9) adds that personalisation is also one of the antecedents influencing consumer attitudes towards mobile advertising.

Haghirian and Dickinger (2005) state that the number of advertisements received via mobile devices is an important factor that may influence the perceived value of mobile advertisements. Ha (1996:77) concludes that as the quantity of mobile advertisements increase and exposure becomes more frequent, it will influence consumers' attitudes towards mobile advertising.

According to Zhou (2010:536), privacy concerns, which include collection, improper access, errors, and secondary use of personal information, will have a significant effect on consumers' trust of and perceived risk associated with mobile advertising. This assists in determining mobile consumers' usage behaviour intentions. Jayawardhena *et al.* (2008:473,492) suggest that in order to ensure the success of mobile advertising and marketing campaigns, marketers need to know what factors affect consumers' willingness to grant permission to receive advertising messages via

mobile devices. Where individuals have positive perceptions of trust in mobile advertising, they are more likely to grant permission. Perceived control plays a significant role as a substitute or complement to trust; therefore, in the context of mobile advertising, the higher the perceived control, the less trust is required to gain permission to engage in mobile advertising. In addition, if consumers perceive that they have control over the number and type of mobile advertisements they receive, it is most likely that they will be more willing to grant permission. Tsang *et al.* (2004:66,67) conclude that if consumers grant permission to receive mobile advertisements, it will directly influence their attitudes towards mobile advertising.

Masote and Shevel (2012:7) propose that there are now more Subscriber Identity Module (SIM) cards and mobile devices per household and indicates that there is significant growth in the youth segment. Ferguson (2008) highlights that the youth, referred to as Generation Y, is the most Internet-savvy group of individuals alive today, and lead the way in technology adoption. According to Markert (2004:21), Generation Y encompasses individuals born between 1986 and 2005. These individuals have grown up with computers at home and in a multi-channel television universe, surrounded by the Internet, which has resulted in them expecting to obtain information at exceedingly rapid speeds (Leung, 2009). As a result, they are plugged-in citizens of a worldwide community and are multi-taskers with mobile phones, music downloads and instant messaging on the Internet. Globally, nine out of ten individuals in this cohort own a computer, and 82 percent own a mobile phone (Ferguson, 2008). Generation Y members are characterised as the confident, passionate, strong-willed, optimistic, self-expressive and liberal youth, who are open to change (PewResearch Centre, 2010). Their level of expectations exceed any previous generation, making them known as demanding and expecting to get what they want. There are many terms used to label this generation, namely “Echo Boomers” for being the echo of the Baby Boomers (Leung, 2009), the “Millennials” (Theilfoldt & Scheef, 2004), the “Net Generation” (Roos, 2007), the “Dot-com Generation”, “Trophy Kids” and “Generation Y Not” (Krayewski, 2009).

In South Africa, approximately 38 percent of the population may be categorised as being part of Generation Y (Statistics South Africa, 2013). Bevan-Dye and Surujlal (2011) argue that the African portion of South Africa’s Generation Y cohort (hereafter referred to as black Generation Y) is a particularly attractive market segment given its

sheer size, representing 32 percent of the total South African population and 83 percent of South Africa's Generation Y cohort (Statistics South Africa, 2013). Those black Generation Y members engaged in tertiary education represent an especially important segment, given that higher education often translates into higher future earning potential and a higher social status within a community (Bevan-Dye & Surujlal, 2011). Studies that focus on students at tertiary institutions typically define them as individuals between the ages of 18 and 24 (Steel, 2012; Wolburg & Pokrywczynski, 2001:34).

Black South Africans who are wealthy, well educated, have well-paying occupations and who are credit-worthy are labelled the Black Diamonds of South Africa. In all likelihood, black Generation Y individuals with a tertiary education will one day become Black Diamonds. Black Diamonds are driven, goal-oriented individuals who are climbing the corporate ladder quicker (Comins, 2007; Herman, 2006), and as a result have increased spending power and hold tremendous buying power (Goyal, 2010), making Black Diamonds important opinion leaders in South African markets.

1.2 PROBLEM STATEMENT

The rapid growth in mobile communication in South Africa makes it an important new advertising medium and that is why an understanding of attitudes towards mobile advertising is important. Given the size of the black Generation Y market segment in South Africa, and the potential earning power and influential role of black Generation Y students, a need was identified to propose and empirically test a model of possible antecedents that may determine attitudes towards mobile advertising amongst black Generation Y students.

The model outlined will be tested empirically on the black Generation Y student population in South African, as research indicates that black Generation Y individuals with a tertiary qualification are expected to have a higher earning potential and, consequently, a higher consumption potential and social influence, making them the future consumers for marketers. Owing to this belief, an understanding of the student portion of this cohort should offer particularly valuable insight into the attitudes of black Generation Y members' towards mobile advertising. This will assist marketers in developing mobile advertisements that reach the intended target markets in order to advertise their products effectively and ensure future success.

1.3 STUDY OBJECTIVES

The following objectives were formulated for the study:

1.3.1 Primary objective

The main purpose of this study was to propose and empirically test a model of antecedents that influence black Generation Y students' attitudes towards mobile advertising.

1.3.2 Theoretical objectives

In order to achieve the primary objective, the following theoretical objectives were formulated for the study:

- Review the literature on advertising and advertising strategy
- Review the literature on the antecedents that influence attitudes towards advertising
- Review the literature on mobile advertising
- Review the literature on the growth in mobile advertising internationally, as well as in South Africa
- Conduct a review of the literature regarding Generation Y, the characteristics of its members and the impact that technology has had on this generation
- Review the literature on the antecedents that influence attitudes towards mobile advertising.

1.3.3 Empirical objectives

In accordance with the primary objective of the study, the following empirical objectives were formulated:

- Determine black Generation Y students' attitudes towards using the SMS to communicate with friends and family
- Determine black Generation Y students' attitudes towards advertising in general

- Empirically test the extent to which attitudes towards using the SMS to communicate, attitudes towards advertising in general, perceived entertainment, informativeness, credibility, personalisation, control, invasiveness, privacy, trust and value of mobile advertisements influence black Generation Y students' attitudes towards mobile advertising
- Propose a model of the factors influencing black Generation Y students' attitudes towards mobile advertising.

1.4 HYPOTHESES

A hypothesis refers to a “statement that stipulates how two or more variables, which are measurable, are related. When hypotheses are stated, the characteristics of the population involved are explored. The information obtained is then compared against the supposition in the hypotheses, which will, in turn, be accepted or rejected according to the probability that it is true” (Churchill, 1995:109). The results are used to determine the relationships that may exist between two or more variables in a sample, which may then be generalised to a population (Marshall, 1998). Hypothesis testing conclusions may be related to either an examination of differences, or associations, and must be delineated in a manner that addresses the marketing research problem (Malhotra, 2010:493).

The hypotheses set out below were formulated in Chapter 5, following a review of the literature in Chapters 2 and 3, and the construction of a matrix of construct correlations to assess the nomological validity between each pair of constructs identified.

Ho1: Attitude towards mobile advertising is a nine-factor structure composed of attitude towards advertising, entertainment value, informativeness, credibility, personalisation, perceived control, intrusiveness, trust and perceived value.

Ha1: Attitude towards mobile advertising is not a nine-factor structure composed of attitude towards advertising, entertainment value, informativeness, credibility, personalisation, perceived control, intrusiveness, trust and perceived value.

Ho2: Entertainment value (+), informativeness (+), personalisation (+), perceived control (+), invasiveness (-) and trust (+) do not have a significant direct

influence on black Generation Y students' perceived credibility of mobile advertising.

Ha2: Entertainment value (+), informativeness (+), personalisation (+), perceived control (+), invasiveness (-) and trust (+) have a significant direct influence on black Generation Y students' perceived credibility of mobile advertising.

Ho3: Attitude towards advertising (+) does not have a significant direct influence on black Generation Y students' perceived value of mobile advertising.

Ha3: Attitude towards advertising (+) has a significant direct influence on black Generation Y students' perceived value of mobile advertising.

Ho4: Credibility (+) has a significant direct influence on black Generation Y students' perceived value of mobile advertising.

Ha4: Credibility (+) does not have a significant direct influence on black Generation Y students' perceived value of mobile advertising.

Ho5: Perceived value of mobile advertising (+) does not have a significant direct influence on black Generation Y students' overall attitude towards mobile advertising.

Ha5: Perceived value of mobile advertising (+) has a significant direct influence on black Generation Y students' overall attitude towards mobile advertising.

The following section outlines the research design and methodology employed in the study.

1.5 RESEARCH DESIGN AND METHODOLOGY

The study comprised a literature review and an empirical study. Quantitative research, using the survey method, was used for the empirical portion of the study. The study followed a descriptive single cross-sectional research design.

1.5.1 Literature Review

In order to support the empirical study of this research study, a review of South African and international literature was conducted. Secondary data sources included

relevant textbooks, the Internet, journal articles, business articles, academic journals, newspaper articles, and online academic databases.

1.5.2 Empirical study

The empirical portion of this study comprises the following methodology dimensions:

1.5.2.1 Target population

The target population relevant to this study were the full-time black Generation Y undergraduate students, between the ages of 18-24, registered at South African registered public higher education institutions (HEIs). The target population is defined as follows:

- Element: Full-time black Generation Y undergraduate students between the ages of 18-24
- Sampling unit: South African registered public HEIs
- Extent: South Africa, Gauteng
- Time: 2013

1.5.2.2 Sampling frame

The sampling frame comprised the 23 registered South African public HEIs (Higher Education in South Africa, 2009). A non-probability judgment sample of three HEIs located in the Gauteng province was selected from the sampling frame – one comprehensive university campus, one traditional university campus and one university of technology campus. The reason Gauteng province was chosen for this study is that it comprises the largest share of the South African population. According to Statistics South Africa (2013), approximately 12.7 million people, equivalent to 24 percent of the South African population, live in Gauteng. The reason for selecting these HEIs is the high student enrolment figures and the high ratio of black students compared to other HEIs.

1.5.2.3 Sample method

A non-probability convenience sample of 600 full-time undergraduate black Generation Y students between the ages of 18-24 was used to conduct the final study.

The lecturers at each of the three campuses were contacted requesting them to ask their students to complete the questionnaire. The lecturers were informed that the questionnaire was to be completed on a voluntary basis only and that no student was to be coerced into completing the questionnaire. Once permission was obtained from the lecturer, a self-administered questionnaire was distributed to the full-time black Generation Y undergraduate students during class time at each of the three campuses in 2013.

1.5.2.4 Sample size

In accordance with the study conducted by Barutcu (2007:31), Cui *et al.* (2003:315) and Tsang *et al.* (2004:70), a sample size of 600 full-time undergraduate students is considered sufficiently large. The sample size of 600 full-time undergraduate students was split equally between the three HEI campuses, thereby allowing a sample size of 200 full-time black Generation Y undergraduate students per HEI.

1.5.2.5 Measuring instrument and data collection method

The measuring scale used in this study included the adapted scales used by Brackett and Carr (2001:29), Ducoffe (1996:28), Jayawardhena *et al.* (2009:498), Li *et al.* (2002:42) Merisavo.*et al.* (2007:49), Pollay and Mittal (1993:112,113) and Xu (2006, 2007:13). The questionnaire included five sections, namely Section A, Section B, Section C, Section D and Section E.

Section A was designed to gather demographic data. Section B consisted of one construct, with four items, which was used to measure black Generation Y students' attitudes towards the use of the SMS to communicate with friends and family. Section C constituted one dimension with three items, adapted from the scale of Pollay and Mittal (1993:112,113), which was formulated to measure black Generation Y students' attitudes towards advertising in general. Section D comprised 33 items divided into nine constructs designed to measure the extent to which the perceived entertainment (five items), informativeness (seven items), credibility (three items), personalisation (three items), control (three items), invasiveness (five items), privacy trust (three items) and value of mobile advertisements (three items) influence black Generation Y students' attitudes towards mobile advertising (one item). These scales were adapted from Brackett and Carr (2001:29), Xu (2006-2007:13), Jayawardhena *et*

al. (2009:498), Li *et al.* (2002:42) and Merisavo *et al.* (2007:49). Section E was designed to determine how often black Generation Y students were prepared to receive mobile advertisements, how often they read those advertisements and how much of the advertisement they read.

All scaled responses in the questionnaire were measured using a six-point Likert scale (1= strongly disagree to 6= strongly agree).

The questionnaire included a cover letter describing the nature and purpose of the study and requesting participation. The questionnaire was piloted on a convenience sample of 50 black Generation Y students, who did not form part of the sampling frame, in order to ascertain its reliability. Results of this pilot test were duly coded and tabulated.

1.5.3 Statistical analysis

The captured data was analysed using the Statistical Package for Social Sciences (SPSS) and AMOS, Version 21.0 for Windows. The following statistical methods were used on the empirical data sets:

- Frequency analysis
- Exploratory factor analysis
- Reliability and validity analysis
- Descriptive analysis
- Correlation analysis
- Structural equation modelling

1.6 CONTRIBUTION OF THE STUDY

This study is part of a larger research project labelled ProGenY at the North-West University (Vaal Triangle Campus), that seeks to profile the consumer behaviour of the South African Generation Y cohort in general, and the black Generation Y cohort in particular. This study will contribute to developing a profile of the consumer behaviour of the black Generation Y students in South Africa concerning their attitude towards mobile advertising. This research study aims to develop a conceptual model

to illustrate the antecedents that influence black Generation Y students' attitudes towards mobile advertising. The findings of this study will act as marketing strategy guidelines for marketers seeking to reach this segment through mobile advertising. The findings of this study will be of value to South African marketers, as well as international advertisers seeking to target this lucrative market segment.

1.7 ETHICAL CONSIDERATIONS

The research study complies with the ethical standards of academic research, which among other things, protects the identities and interest of participants and guarantees confidentiality of information provided by the participants. Participation in the survey was voluntary and no one was forced to participate.

1.8 CHAPTER CLASSIFICATION

Chapter 2 provides a detailed discussion on advertising, the developments and changes that have led to the introduction and use of mobile advertising, including the use of the SMS as a media channel, and its impact on mobile phone advertising, as well as mobile advertising usage rates and growth rates, both internationally and in South Africa. The advent of smartphones and their impact on society and the marketing environment are also discussed.

Chapter 3 provides a thorough literature review on the Generation Y cohort, which includes a discussion on how the individuals of Generation Y have grown up surrounded by technology, and the impact this has had on this generation. The antecedents influencing attitudes towards mobile advertising as well as the proposed model are also provided within this chapter.

Chapter 4 discusses the population, sample frame, sampling method and data collection method. Data analysis, statistical techniques and the problems experienced are outlined and the data analysis and statistical procedures used in the study discussed.

In Chapter 5, the research findings are analysed, interpreted and evaluated. The statistical methods used to analyse the research data are presented, and the results for the different hypotheses tests explained.

Chapter 6 comprises a review of the entire study and provides conclusions drawn from the study. Recommendations emanating from the study are made and suggestions for further research given.

1.9 GENERAL

- Annexures are placed at the back of the thesis.
- Tables and figures are placed on the relevant pages in the thesis.
- Where no source reference appears for figures and tables, it refers to own research.
- Referencing is based on the NWU Referencing guide (2012).

1.10 CONCLUSION

The rapid advances in mobile technologies and the proliferation of mobile devices, particularly mobile phones, has contributed to the adoption of mobile technology as an advertising medium. In comparison to traditional media, this newfound advertising medium offers several advantages. Owing to the increased accessibility, frequency and speed of communication via mobile phones, marketers are now able to deliver advertisements to consumers based on their geographical information and demographic characteristics, which has enhanced the spontaneity and efficiency of advertisements. Statistics indicate that South Africa is one of the most accessible and effective mobile advertising markets. This highlights the importance of developing an understanding of consumer attitudes towards mobile advertising.

As such, this chapter provided an overview of this study's problem statement, study objectives, research design and methodology, and chapter classification. In the following chapter, Chapter 2, a review of the literature pertaining to mobile advertising is provided.

CHAPTER 2

ADVERTISING AND THE MOBILE PHONE MEDIA PLATFORM

2.1 INTRODUCTION

Potgieter (2007:4) suggests that with the rapid rate at which wireless and mobile technology are changing, society is feeling the pressure to adapt to and utilise these new technologies, especially mobile technologies. Cleff (2007:264) and Dey *et al.* (2011:51) argue that the effective use of mobile technologies depends on a user's particular purpose. If the use of mobile technology assists users in achieving their aims, and in so doing they derive benefits from that technology, then there is an increased likelihood of them adopting that technology. However, if users experience numerous usability difficulties with the technology, they may choose to either reject the technology or participate in an "appropriation process". This process involves adapting to the use of the technology or finding ways and means of "integrating the technology into their daily lives".

Although mobile devices have certain technical limitations, their widespread adoption means that there is significant potential for the development of a variety of services that are based on mobility, such as mobile instant messaging, mobile games, search services, short message services and multimedia message services (Chtourou & Souiden, 2010:336). Consequently, the emergence and widespread adoption of mobile communication technologies, combined with the Internet, makes the exchange of information with anyone at any time or place possible (Cleff, 2007:262). As such, these technologies, particularly mobile devices, provide a means to facilitate the delivery of advertisements, which makes mobile devices and networks a feasible advertising platform (Soroa-Kaura & Yang, 2010:103).

According to Chtourou and Souiden (2010:340), the ease and usefulness of mobile devices are important predictors of attitudes towards their usage. Typically, individuals view their mobile phones as a reflection of themselves and as a status-based accessory, which they use to convey their personal identities (Gao *et al.*, 2010:580). Vatanparast and Butt (2009:1) conclude that as a result, mobile devices

and technologies have become common place in the everyday lives of individuals, which has not only increased the speed, frequency and accessibility of communication but has also significantly changed the way individuals communicate, access and share information.

As stated in Chapter 1, the purpose of this study is to propose and empirically test a model of factors that influence black Generation Y students' attitudes towards mobile advertising. Section 2.2 provides an overview of advertising. Section 2.3 outlines the changes brought about by developments in mobile communication. In Section 2.4, the focus is on mobile commerce. In Section 2.5, mobile advertising is discussed, with a closer look at SMS advertising. Section 2.6 discusses the growth in mobile advertising internationally, and Section 2.7 the growth in mobile advertising in South Africa.

2.2 OVERVIEW OF ADVERTISING

According to Priya *et al.* (2010:151), advertising is an effective tool associated with integrated marketing communications. Kotler (2000:569) and Smith (2013) theorise that an integrated marketing communication strategy is an element of the marketing mix that involves the coordinated use of advertising, personal selling, direct marketing, sales promotion and publicity to communicate an advertisement message to a target market. Lamb *et al.* (2010:350) stipulate that, in essence, an integrated marketing communication strategy involves producing a message which, when delivered to target consumers, whether it is via a salesperson, coupon in a newspaper insert, a magazine article or an advertisement is the same.

Kotler (2003:590) and Waarts *et al.* (1997:212,347) define advertising as the use of media to promote the selling of products and services or ideas publically, with the intention to inform and persuade consumers, paid for by an "identified sponsor". Simply put, the word advertising means "drawing attention to something, or notifying or informing an individual of something" (Dyer, 1982:2). In addition, advertisements are used to advance and perpetuate the ideas and values of a society, which are indispensable to a particular economy system (Dyer, 1982:1-2; Tdiindia, 2012:48).

Belch and Belch (2001:15) propose that marketers want individuals to purchase goods, use them, dispose of them and then replace them in a cycle of continuous consumption. As such, for organisations that have products and services targeted at

mass consumer markets, there is a need to understand the importance of advertising as a marketing tool, which may be used to introduce and promote a wide range of consumer goods to the public, in turn lending support to the free market economy. Consequently, advertising must reflect changes in consumer preferences and needs. Moreover, advertising may be viewed as the effective communication between marketers and their target market(s) (Puranik, 2012).

Tdiindia (2012:48) indicates that prior to developing advertising strategies marketers need to set advertising objectives, which not only need to be measureable, timely, specific and attainable, but also be designed to achieve the overall goals of an organisation. Kotler (2000:578) suggests that advertising objectives emanate from the decisions made concerning the target market, marketing mix and market positioning. Brookins (2012) and Moore *et al.* (2008:428) indicate that the main objectives of advertising are to inform, persuade, remind or reinforce.

Kotler (2000:578,579) and Schoell and Guiltinan (1995:476) point out that advertising with the objective of informing is used primarily in the pioneer stage of a product's life cycle, where marketers need to build primary demand for the product. Some of the advertising strategies that may be used include the introduction of new products, price increase announcements or explanations on product improvements. According to Tatum (2013), advertising used to persuade is of great importance in the growth stage of the product life cycle, where marketers need to build selective demand for a particular product or brand. This includes building brand preference or encouraging product trade-ins. Kotler (2000:578,589) suggests that advertising with the objective of reminding consumers is used in the mature stage of a product's life cycle. Marketers may aim to ensure that the brand remains dominant in the product category or to summarise the brand's benefits for the consumers. It may also include reinforcement advertising, which aims to assure current consumers that they have made the correct purchase decision, thereby helping to overcome any potential cognitive dissidence. Consequently, research shows that advertisements play a major role in influencing the purchase decisions of consumers throughout the product lifecycle (Priya *et al.*, 2010:156).

Schoell and Guiltinan (1995:484) suggest that marketers may target their advertisements at their current and potential consumers through a wide variety of

advertising media platforms. According to Lamb *et al.* (2010:375), advertising media are mass communication platforms. Schoell and Gultinan (1995:484) define advertising media platforms as “the communication platforms that carry messages from advertisers to their advertising targets”. Lamb *et al.* (2010:375) indicate that deciding what advertising media platforms to use to ensure a successful advertising campaign is a complex decision and depends on a number of factors.

Kotler (2000:586) postulates that marketers base their choice of advertising media platforms on the media habits of the particular target market, the product being advertised, the message, and the cost involved. As such, the selection of the appropriate advertising media platforms involves “finding the most cost-effective media” which may be implemented to ensure the delivery of the desired message and “number of exposures to the target audience”. Schoell and Gultinan (1995:484) indicate that, traditionally, there were four types of advertising media platforms, namely print, broadcast, out-of-home and direct media.

2.2.1 Traditional advertising media platforms

According to Manohar (2011), “print media are communication channels that sell advertising space” to marketers. These platforms include newspapers, magazines, newsletters and brochures. Newspapers appear advantageous in terms of flexibility, timeliness as well as being accessible to local markets; however, they may be expensive, have a short life-span and may be found to have limited or no pass-along audience (Kotler, 2000:588). Lamb *et al.* (2010:375) add that because newspapers are a mass-market medium, they may not be the best choice for marketers wishing to target a narrow target market. Schoell and Gultinan (1995:489) theorise that magazines offer audience selectivity, excellent colour reproduction and high pass-along readership, although they require long lead times, where marketers have to submit their advertisements for production weeks before the issue date of the magazine. Similarly, clutter may also pose a threat. Kotler (2000:588) theorises that newsletters offer interactive opportunities, full control, high selectivity and relatively low costs; however, if not monitored correctly, costs could escalate at a rapid rate. Brochures may also be beneficial in that they offer the benefits of flexibility, full control and the ability to dramatise advertisement messages, although if production is not monitored it could result in runaway costs.

Schoell and Guiltinan (1995:489) suggest that compared to print media, where marketers purchase space, broadcast media involves the selling and purchasing of time. Kotler (2000:588) and Perreault and McCarthy (2006:377) highlight television as a branch of broadcast media, which combines sight, sound and motion. With the use of television, marketers can demonstrate their products and services to their target audiences and, combined with the wide reach, gain vast amounts of attention. However, television, as a media platform, may include a less-selective audience, clutter and high expenses, which may limit the use of it as an effective advertising platform. Lamb *et al.* (2001:469-470) postulate that radio as an advertising platform offers marketers low costs, the immediate delivery of advertisements, short scheduling and lead times, relatively stable audiences, high portability, entertainment carryover and relatively long advertising life. Radio does have some limitations such as no visual treatment, significantly shorter life spans for advertisements, commercial clutter and background noise, which may pose as a distraction. In addition, in order to generate comprehension and retention, high frequency is required.

Out-of-home media assists marketers in exposing sales messages to their target audiences who find themselves away from home and close to the marketplace (Schoell & Guiltinan, 1995:491). Lamb *et al.* (2001:471) suggest that out-of-home media includes billboards, skywriting, mini-billboards in shopping malls, signs at sport arenas, giant inflatables, advertisements painted on the side of cars, and the like. Perreault and McCarthy (2006:377) postulate that although limited by very short exposure time and the mass-market phenomenon, it provides marketers with flexibility and repeat exposure at relatively low costs.

The last traditional advertising platform is that of direct response media, which is the term given to the “communication platforms through which marketers can communicate directly with the target audience” (Schoell & Guiltinan, 1995:492). Kotler (2000:588) indicates that it may include direct mail, the Yellow Pages and the telephone. Direct mail provides marketers with audience selectivity, flexibility, personalisation and limited advertisement competition from within the same medium; however, marketers need to be cautious of creating a junk mail image, and of the relatively high costs associated with direct mail. Perreault and McCarthy (2006:377) indicate that although the Yellow Pages provide a means to reach local consumers seeking purchase information, many other competing organisations are listed in the

same place, which makes it difficult to stand out against competitors. Kotler (2000:588) highlights that the telephone not only provides access to many consumers but it also gives marketers an opportunity to give a personal touch. However, due to the manpower it requires it could be expensive, unless volunteers are used.

Schoell and Guiltinan (1995:484) highlight that as traditional media platforms become increasingly saturated, marketers need to create and explore new places to advertise. In South Africa, there are approximately 425 newspapers, 1300 magazine titles, 120 radio stations and 74 television stations. In 2009, over a period of eight months, from January to August, South African organisations spent R20 billion on advertising, which constituted R4.18 billion on print media, R3.83 billion on television, R1.83 billion on radio, R489 million on outdoor advertising, R300 million on cinema, R96 million on the Internet and R78 million on direct mail (Lamb *et al.*, 2010:375). However, due to the vast amounts of clutter experienced with these traditional advertising media platforms, and the development and increased use of the Internet, marketers are finding new ways to advertise their products, services or ideas, which has led to the move to a variety of new advertising media platforms (Davidi, 2013), including that of mobile advertising.

2.2.2 New advertising media platforms

Perreault and McCarthy (2006:380) suggest that the new advertising media platforms available include Web advertising, social networking site advertising and mobile advertising. Scott (2010) theorises that as consumers embrace these new advertising media platforms and all they have to offer, organisations need to find new and innovative ways to keep their advertising and brand communication relevant. Asr (2011) and Lamb *et al.* (2010:378) postulate that by making use of these new advertising media platforms, marketers can facilitate direct communication with their target audiences, without having to consider time or distance as well as develop new ways to reach their target audiences in the right places and at the right times, with the most appropriate advertisements.

Perreault and McCarthy (2006:379-380) indicate that the Internet is an advertising media platform which may be highly targeted. Although Web advertising accounted for a small portion of advertising expenditure in the past, which even declined further when there was a plummet in technology stocks, it started to make a comeback in

2003 when marketers began to increase the advertising expenditure via the Internet platform. Kotler (2000:591) theorises that there will be significant growth in advertising via the Internet due to the profoundly different experience it offers both marketers and consumers in comparison to that of any other advertising media platform.

With the use of the Internet, marketers may expand consumers' awareness of an organisation, assisting in the creation of an entirely new set of potential consumers. In addition, marketers can use Web advertising to develop more personalised relationships with current and future consumers. Furthermore, Web advertising offers various low-cost advertising options, allowing marketers the opportunity to include all the information necessary to ensure a successful and viable advertisement, as well as links to a frequently asked questions page. When designing Web advertisements, it is important to ensure that the advertisement has a combination of a usable design, intellectually interesting message, intelligently networked digital marketing elements and data-driven efficient media reach (Joseph, 2013; Measures, 2013).

By mid-2012, it was estimated that there were 2 405 518 376 Internet users around the world, making the Web an advertising media platform that possesses no geographical limitations and allows the purchasing of products and services by consumers from all around the world (Internet World Stats, 2013). Consequently, the majority of marketers are now creating their own home pages and Websites on the Internet, with the view of this 'information superhighway' becoming the "next mass medium" (Lamb *et al.*, 2010:378). As such, the estimated expenditure of Web advertising in South Africa was R271 million in 2007, R375 million in 2008, R419 million in 2009, R565 million in 2010 and R760 million in 2011 (World Wide Worx, 2012).

The increased usage of social networking sites, such as Facebook and Twitter, has led to brand owners and marketers valuing these sites as a channel of communication, which has led to a new and exciting platform upon which to advertise (Bax, 2012; Kumar, 2012b). The degree of newness associated with these social networking sites as advertising media platforms, indicates that there will be significant growth and development in their method of implementation and use (Martins, 2010).

With the use of social networking sites, marketers may take advantage of the free advertising they offer by implementing it into their organisations as a means to

socialise with their target audiences. This will assist in bridging the communication gap that exists between marketers and their consumers, contributing to the building of lasting consumer relationships (Bax, 2012; Kumar, 2012b). Martins (2010) adds that with the use of social network sites, marketers will be able to reach many more consumers, as opposed to if they only made use of Web advertising. Moreover, not only does the creation of a profile on a social network site require very little time or effort, but it is easy and requires no cost to customise a profile page to fit in with an organisation's image. Similarly, these sites do not require constant attention, and allow marketers the opportunity to decide how often they wish to update the content. Many social networking sites allow the posting of bulletins or blogs, providing marketers with a medium to advertise weekly sales, specials or new products or services. As such, social networking sites may be viewed as an avenue that marketers could use to explore the possibilities of targeting consumers and requesting feedback at the same time. Furthermore, social networking sites enable marketers to advertise their brands globally (Bax, 2012; Kumar, 2012b).

Another exciting new advertising media platform, and the one that is the focus of this study, is mobile advertising. Johnston (2013) and Frost (2013) highlight that with the use of mobile advertising marketers have 24/7 access to consumers, providing a means to target consumers almost anywhere and at any time. Lafler (2013) suggests that with the use of mobile advertising marketers are able to target potential consumers with the use of keywords and geographical locations. Johnston (2013) postulates that mobile advertising offers an effective tool to reach large numbers of individuals, which has highlighted the need for organisations to consider implementing it into their marketing communication mix. Furthermore, mobile advertising costs are significantly lower than those associated with television and radio advertising, allowing marketers to reach more consumers at lower costs, as well as allowing them to send repeat advertisements to remind consumers about the products or services they are offering. Marketers may also use mobile advertising to convey a sense of intimacy, assisting in creating relationships with consumers to ensure repeat purchases. As such, to understand how mobile advertising works, and to ensure its future success, it is important to explore the changes brought about by the developments in mobile communication.

2.3 CHANGES BROUGHT ABOUT BY DEVELOPMENTS IN MOBILE COMMUNICATION

Potgieter (2007:3) and Mayhew (2013) highlight that the most significant changes in the technology industry are happening in homes, in schools and in the work place, spurred on by the conversion of knowledge into digital form through increasingly inexpensive means of performing the conversion of information, combined with the speed and ease at which information can be processed and transmitted. As such, technology that can support computing on the move, using mobile devices through wireless networks, has emerged as the next wave in the information technology revolution. This includes technological infrastructure for connectivity such as wireless application protocol (WAP), bluetooth, third generation (3G), general packet radio service (GPRS), and mobile information applications such as mobile phones, personal digital assistants (PDAs) and laptop computers.

Bamba and Barnes (2007:815) stipulate that the development and introduction of mobile computing, distributed networking and mobile telecommunications has opened up significant commercial opportunities. As such, mobile technology is gaining in importance and popularity among many organisations (Potgieter, 2007:9; Mayhew, 2013).

Liang *et al.* (2007:1155) postulate that when organisations adopt these mobile technologies and services, their operations may be influenced in two distinct ways, namely through the re-vitalisation of business processing by altering data access patterns, and through the facilitation of communication between employees, consumers and suppliers, which may contribute to the enhancement of information timeliness and communication efficiency. This in turn will increase organisational productivity and profitability. Some examples of the application of mobile technology in organisations include mobile access to organisation intranets, mobile brokerage services, mobile payment and banking services and electronic procurement application systems, which are based on WAP with the use of mobile phones and devices (Potgieter, 2007:9).

O'Doherty *et al.* (2007:262) and Mayhew (2013) indicate that through creating business opportunities, improving competitiveness, reducing costs and increasing the accessibility and availability of information and systems, wireless and mobile

communications and technologies have the ability to improve the quality of life of all individuals who make use of them, all over the world. As such, the significant growth in wireless and mobile communications and technologies have changed the way individuals communicate, as well as how they access and share information (Gao *et al.*, 2010:575).

In the past, individuals did not associate the mobile phone with the possibility of accessing information and applications anytime and anywhere. However, the advent of the smartphone has rapidly altered this conception (O'Doherty *et al.*, 2007:264; Paterson & Low, 2011:412). Whereas in the past individuals used to have to go to a phone to communicate telephonically, they now carry their phones around with them. This mobility, coupled with the increasing number of functions that mobile phones offer, means that mobile telephony is permeating an increasing range of areas in individuals' lives (Cleff, 2007:268). The popularity of mobile devices, and the fact that individuals carry them around wherever they go, opens up many marketing opportunities such as advertising, developing customer relationships and obtaining direct responses from consumers (Bulander *et al.*, 2005; Li & Du, 2012:7; Merisavo *et al.*, 2007:43).

According to O'Doherty *et al.* (2007:262), the role of mobile devices is a distinguishing factor in the lives of consumers before and after entering the workforce, becoming a marker for an important development phase in modern day life. Moreover, the mobile phone has become indispensable in the working lives of an increasing number of individuals. Mobile technologies have increased society's effectiveness, efficiency and productivity through the instant and unlimited provision of information, access to organisational tools, and applications and resources from around the globe, which has not only changed the way individuals communicate but also the way they conduct business, shop and socialise (Potgieter, 2007:4).

Concerning the influence of mobile phones on consumer shopping behaviour, one study conducted in Kenya found that 65 percent of consumers indicated being influenced by their mobile phones when deciding whether to purchase certain products and services, and that 31 percent used their mobile phones to enhance their shopping experience when in shopping malls or department stores. In addition, 34 percent made use of their mobile phones when shopping in speciality stores or

boutiques to add to their shopping experience, and 29 percent made use of their mobile phones when shopping at street traders to compare prices to those of retailers, check availability, or look for ingredients in products (Rubadiri, 2012). This suggests that not only do Internet-enabled mobile phones allow consumers to purchase market offerings without having to visit the physical location, but also that the easy accessibility of market-related information transfers the power of choice to the consumer. This provides consumers with the means to improve their consumption-related decisions regarding what, when, where and at what price to purchase a particular product or service (Potgieter, 2007:11).

Since 2005, researchers have been developing a wireless advertising system to support wireless service organisations and publishers to accept, deliver and present wireless advertisements as well as to allow the interaction between marketers and publishers, both online and via a mobile user interface (Gao & Ji, 2008:166-167). Researchers and developers are starting to take advantage of the available technology, in order to create the next generation of readers, which will include the use of larger screens, better quality resolution and wireless updating. The colour and video capabilities will also contribute to the attractiveness of advertising on these mobile devices (Anon., 2009:26).

Potgieter (2007:165) theorises that with the broad technology spectrum available, there are many powerful players pushing wireless technologies and solutions into a variety of directions, which means that marketers need to decide on the most appropriate technology to get their particular advertisements across to their target audiences. Vatanparast and Butt (2009:4) postulate that all these advancements and developments in mobile technologies will significantly enhance the lines of communication through the mobile medium, from the basic SMS to more creative forms of communication such as MMS and Java-based applications.

Jayawardhena *et al.* (2009:479) and Mafe *et al.* (2010:69) indicate that the development of mobile devices and networks have provided the users of these devices and networks with advanced communication services, such as presence, location and multimedia functionalities, which assist with communication and interaction between consumers and marketers. Therefore, the increase in device capabilities, cost efficiency, familiarity, productivity, and efficiency has led to significant investment in

wireless and mobile technologies. By extending computing and the Internet into a wireless medium, mobile technology now allows consumers access to information and applications anytime and anywhere. This provides greater flexibility in communication, collaboration and information sharing (Potgieter, 2007:61). Consequently, Rubadiri (2012) suggests that although organisations may already have a variety of advertising campaigns in place they need to augment their existing campaigns with mobile advertising.

The wide development of wireless networks and mobile technologies, and the significant increase in the number of mobile devices available have created a strong demand for emerging mobile commerce applications and services (Gao *et al.*, 2010:574,575). As such, Mafe *et al.* (2010:70) suggest that mobile services are becoming increasingly important for both organisations and consumers, which has led to these services being described as the new service frontier.

O'Doherty *et al.* (2007:257) highlight that mobile services develop a wide spectrum of marketing opportunities. In comparison to traditional systems, mobile services are portable, ubiquitous and may be used to disseminate and receive personalised and localised information (Mafe *et al.*, 2010:70). As such, technology is creating organisations based on the flow of information and empowered, knowledgeable workers (Potgieter, 2007:4). This presents an opportunity for organisations to build their brands on an entirely new platform, independent from traditional means of advertising, such as broadcast and print media platforms (Rubadiri, 2012).

Mafe *et al.* (2010:70, 81) postulate that the adoption of mobile data services and usage may be imputed to the range of mobile commerce services on offer, differences in mobile telecommunication infrastructure or the underlying culture of mobile users. Some of these mobile data services include communication services such as SMS, MMS, mobile chatting and emails, information content services, which may include headlines, news and location-based information, transaction services such as booking movie tickets and performing financial transactions and, entertainment services, which may include such things as mobile gaming and daily horoscopes. Therefore, mobility is beginning to play a key role in an increasing set of business processes in today's world (Potgieter, 2007:150).

2.4 MOBILE COMMERCE

Taking on the form of direct or indirect transactions used to buy and sell services and products through wireless handheld devices such as mobile phones, mobile commerce is a form of wireless electronic commerce, believed to be the next generation of electronic commerce (Kumar, 2012a; Liang *et al.*, 2007:1154; Rouse, 2005).

Bruner and Kumar (2003:553) and Liang *et al.* (2007:1155-1156) highlight that a consumer's decision to adopt mobile commerce is significantly influenced by the degree of exposure that consumer has had to mobile devices, such as trials of new devices, observation, communication and the like. In turn, consumers' willingness to adopt this new technology and interact with the applications it provides will determine the success of mobile commerce. In light of the potential of mobile commerce, most major mobile handset manufacturers are developing WAP-enabled smartphones and providing maximum wireless Internet and Web facilities, which will not only cover official, personal and commerce requirements, but also pave the way for mobile commerce (Kumar, 2012a).

Whereas mobile commerce was originally made possible through the use of wireless point of sale (POS) swipe terminals, the developments and improvements in technology have led to it slowly progressing into mobile devices such as mobile phones and PDAs. At first, mobile-commerce enabling technologies such as i-mode mobile Internet service and WAP were built and introduced on second and a half generation (2.5G) digital phone technologies, and were an attempt to provide consumers with a means to browse the Internet. The more recent application of 3G mobile communication technologies has had a significant influence on the development of mobile commerce. Currently there are numerous experiments underway striving to upgrade the current version of mobile commerce with the hope of developing and introducing fourth generation (4G) mobile technology, depicting an extremely bright future for mobile commerce (Kumar, 2012a; Zhou, 2011b:527).

Okazaki and Taylor (2008:5) highlight that due to mobile commerce being able to provide a unique environment where an organisation's message may lead to consumers visiting certain websites, seeking out specific information from different mediums, sending text messages and making purchases, it has become widely accepted throughout the world. Furthermore, Kumar (2012a) argues that the more

mobile commerce is introduced and implemented into sectors such as services, finance, telecommunication, retail and information technology services, the more useful it will become as a means to conduct business.

Consequently, Murphy (2012) indicates that in 2009 mobile commerce generated worldwide sales of US\$ 1 billion, which is expected to increase to US\$ 100 billion by the year 2015. Kumar (2012a) theorises that compared to its fixed counterparts, mobile commerce has several distinguishable advantages due to its specific inbuilt characteristics, namely personalisation, ubiquity, flexibility and distribution, exceptional business market potential, greater efficiency and higher productivity. Moreover, as content delivery via wireless devices becomes more secure, scalable and faster, so mobile commerce will surpass wireline e-commerce as the preferred method for digital commerce transactions (Oricha, 2013).

The significant growth in the mobile market, combined with the developments of new technologies and their convergence, has provided marketers with a large number of new opportunities for advertising and marketing promotions (Bamba & Barnes, 2007:815). Gao and Ji (2008:164) explain that with the use of these valuable wireless communication platforms marketers can send out advertisements that may be accessed by any wireless device, via a wireless connection, at any place or time. Since a single user predominantly uses a wireless device, the device holds the assigned user's identity, enabling marketers to send personalised advertisements. In addition, tracking technologies enable marketers to send consumers location-based advertisements based on their physical locations Cleff (2007:269). Section 2.5 provides an overview of mobile advertising, taking a closer look at SMS advertising in particular.

2.5 MOBILE ADVERTISING

Drossos and Giaglis (2006:1) postulate that one of the most well-known applications of mobile commerce is mobile advertising. In comparison to conventional advertising, where consumers often receive advertisements for products and services that they are not interested in, the capabilities of mobile terminals provide marketers with a tool to address consumers individually. It also allows marketers to analyse their call patterns in order to send target-orientated and personalised advertisements to their mobile

phones (Bulander *et al.*, 2005; Carroll *et al.* 2007:80; Lee *et al.*, 2006; Tsang *et al.*, 2004:65).

Lee *et al.* (2006) point out that due to the different mobile advertising formats available and the rapid rate at which these are developing, the mobile platform is emerging as an interactive media, which, if implemented correctly, will enable marketers to target specific audience groups and provide instant feedback on whether their message attracts a consumer or not. This suggests that mobile advertising is a highly targeted form of advertising, as well as a two-way dialogue between the brand and consumer, which may assist in building a personal relationship between the two. Consequently, even though mobile advertising adoption and acceptance is increasing, marketers need to obtain a clear understanding of the fundamentals influencing consumers' attitudes towards mobile advertising in order to ensure that they generate positive and effective yields from their mobile-based advertising campaigns (Sorao-Kauru & Yang, 2010:105,111-112).

A mobile advertisement may be presented in a text, image, message, link, video or audio format, which may be posted in a variety of advertisement spaces on mobile devices based on selected advertisement templates and spaces. This allows consumers who receive these mobile advertisements an opportunity to engage in discussions and transactions with marketers (Gao & Ji, 2008:167; Komulainen *et al.*, 2007:374).

Given that mobile advertising involves the use of push- or pull-orientated advertisements, a distinction must be made between advertisements based on a push, as opposed to a pull, advertising campaign. Push advertising may be unsolicited, which involves the sending of advertisements to consumers in the context of an existing relationship, or solicited, which occurs when consumers have agreed to receive advertisements on their mobile device. Pull advertising involves sending any advertisement to consumers on their mobile device on a once-off basis, upon request (Cleff, 2007:264,265; Keser, 2011:362).

Okazaki and Taylor (2008:7) indicate that even though there has been a significant increase in the ownership of mobile devices, there is no guarantee that consumers will readily accept mobile advertising. Gao and Ji (2008:165) suggest that certain technical challenges exist, which significantly affect consumers' acceptance of mobile advertisements. These technical challenges range from limited user interface, small

screens, the absence of a full keyboard, as well as the low wireless Internet download speeds. As such, marketers need to create effective advertisements that are able to overcome these technical challenges.

Bulander *et al.* (2005) indicate that mobile advertising includes a number of communication modes that may be used to send out mobile advertisements, such as broadcasting, making use of mobile *ad hoc* networks and peer-to-peer communication platforms. Broadcasting involves the sending of the same data to all the terminals present on the whole network, or just a segment of it. Mobile *ad hoc* networks (MANETs), which do not require installed infrastructure like base stations, routers or cables, provide a means for SMSs and MMSs to be sent to a particular mobile terminal. These mobile terminals are identified by a phone number or on request of a WAP-page, where information about a particular product or service is embedded. If the distance between two devices is short enough, a peer-to-peer communication channel, using a standard like Wifi or bluetooth, may be established. The reason behind this is that when consumers receive mobile advertisements from fellow consumers, they tend to have a more positive response compared to if the mobile advertisement was received directly from the advertiser. Therefore, mobile advertising is an important platform for reaching and interacting with consumers directly (Kats, 2012).

Cleff (2007:263,264) and King and Jessen (2010:461) suggest that in order to ensure successful mobile advertising, and to provide more location-specific and personalised mobile advertisements, marketers need to profile consumers more precisely. This will allow for the creation of profiles, which could define and analyse consumers at any given time. With the use of profiling, marketers will be able to monitor when a consumer responds to a mobile advertisement, and update these profiles with the specific content related to a consumer's actions at any given time, making the managing of consumer profiles an ongoing process.

According to Hudson (2013), these consumer profiles may be created on both individual devices and multiple devices by making use of various criteria, such as user, platform and location. Citrix (2013) adds that with all the developments in mobile technologies and the significant increase in the ownership of mobile devices, consumers are now able to access their desktops and applications from almost any

device or location, indicating the need for the profiling of consumers to ensure they receive a consistent experience every time.

Swallow (2010) explains that options such as SMS, MMS, WAP, search aids, videos, push notifications, rich media and mobile application display advertisements make the landscape of mobile advertising complicated. Therefore, if not implemented correctly, mobile advertising may become a burden to consumers (Cleff, 2007:263). As such, marketers must pay special attention to the relevancy and utility of mobile advertisements to ensure that they provide consumers with useful information, and in a way to save them both time and money based on their personal profiles, situations and locations (Merisavo *et al.* 2007:46).

According to Okazaki and Taylor (2008:6,10), mobile advertising has considerable potential to contribute to brand building, which when applied under the appropriate conditions, will generate action and excitement. The use of celebrity endorsers or reference groups may also be a good tool to increase the effectiveness and adoption of mobile advertising (Soroa-Kaura & Yang, 2010:111). Consequently, the success of mobile advertising largely depends on consumers' receptiveness towards it and, at present, research indicates that in comparison to older generations, the youth are more accepting of mobile advertisements (Muk, 2007:180).

2.5.1 Short message service (SMS) advertising

Gao and Ji (2008:164) indicate that SMS advertising involves the sending of advertisements to consumers via their mobile phones, using short message alerts, in an attempt to meet the requests of consumers. Muk (2007:178,179) and Swallow (2010) highlight that the SMS allows text messages, with a maximum of 160 characters, to be sent from one user to another without having to download or install a specific program, making it the most widely used mobile application, which marketers are readily integrating into the marketing communication mix as a form of direct marketing.

The uniqueness of SMS advertising lies in its potential to target consumers in a specific context as well as a means for marketers to simultaneously advertise their product or service offering, execute a sale and collect payment (Drossos & Giaglis, 2006:2; Muk, 2007:178). Okazaki (2005:164) adds that the technologies associated

with mobile communications provide the necessary infrastructure that consumers require to send and receive these SMS-based messages.

Swallow (2010) argues that although SMS advertising does not receive as much attention as flashing applications, it is still effective due to the one-on-one dialogue it provides between marketers and consumers. Drossos and Giaglis (2006:3) highlight that because of the interactive nature of mobile communication, the flow of real time information and continuous feedback from consumer responses is possible, providing marketers with a tool to customise their product or service offerings, while collecting information regarding consumer preferences, to improve future products and services.

SMS advertising is the fastest growing advertising medium platform in South Africa, reaching more than 27 million subscribers in over 60 percent of South African households (Savvy Cell, 2010). The introduction and use of SMS advertising has opened up a world of new products and services to the South African mobile consumer. Consumers are now able to SMS the word weather in order to receive an update of the weather forecast on their mobile phones, or SMS the word traffic to a short code and get a traffic update of the road ahead. Some of the other services available include pre-paid meter payment, examination results, mobile dictionary, claims, lottery results, sport results, market indicators and daily news (Potgieter, 2007:33).

As is the case in print media advertisements, the headings used in SMS advertisements can be used to create a positive mood and increase the probability that consumers will read the actual body of the advertisement (Drossos & Giaglis, 2006:3). Approximately 90 percent of all text messages sent to consumers are read within three minutes of being delivered, and the intended recipient reads over 99 percent of the text messages delivered (Swallow, 2010).

Although SMS advertising represents the largest portion of mobile data revenue, with an estimated 60 percent in 2011, its share has declined in recent years since the advent of mobile broadband services (Lange, 2011). This may also be attributed to the fact that although mobile devices are viewed as the communication lifeblood of consumers in South Africa, marketers only spend 2 to 3 percent of their digital media budgets on these new digital media platforms (Amorphous, 2013).

2.6 GROWTH IN MOBILE ADVERTISING INTERNATIONALLY

Daniells (2012) postulates that not only are mobile devices constantly reshaping how individuals interact in their daily lives, but with six billion mobile subscribers, the growth of the mobile market is relatively large throughout the world. Stamford (2011) suggests that as more consumers begin to make use of mobile devices such as smartphones and the media table, so the audience for mobile advertising will expand and become easier to segment and target, contributing to the growth of mobile advertising expenditure. Therefore, whether marketers are in search of direct responses or are in the process of building a brand, the reach and responsive nature of mobile advertising makes it an essential part of any media plan (Microsoft, 2013).

Research indicates that due to the cost effectiveness and highly personalised nature of mobile advertising more and more organisations are recognising the benefits of implementing a mobile advertising campaign as part of their advertising strategy (Peacock, 2011:1). Consequently, 70 percent of mobile marketers use text messages, 31 percent use video advertisements, 36 percent use mobile search and 45 percent intend on implementing mobile search in the near future, resulting in approximately 55 percent of all marketers re-evaluating their budgets and changing their focus to increasing mobile advertising expenditure (Stamford, 2011).

Lai (2011:4) indicates that at the beginning of 2011 more than 23.2 billion mobile advertisement banners were delivered across the entire network, representing a 38 percent increase from the end of 2010. Furthermore, research indicates that by the third quarter of 2011 more than 33.6 billion advertisement banners were delivered across the entire network, which housed over 8 100 publisher sites, targeting over 300 million unique consumers per month (Pater, 2011:1). By the end of the first quarter of 2012, more than 45 billion advertisement banners had been delivered across the network, housing more than 10 000 publisher sites (GoMo News, 2012).

The top 20 ranked mobile advertising countries generated approximately 79 percent of all these served mobile advertisement banners, with India, Indonesia, the United States, Korea and South Africa dominating the top five positions. As the top country, India experienced an increase of 44 percent in advertisement banners served, with Indonesia retaining second place with an increase of 31 percent and the United States

coming in at third position with an increase of 72 percent due to the expansion of online affiliate programmes into mobile. In addition, with over 740 million mobile advertisement banners served to Korean audiences, Korea experienced a growth rate of 92 percent from the end of 2010, putting them in fourth place, and even with a decrease of 31 percent in mobile advertisement banners served, South Africa still featured in fifth place (Lai, 2011:4). In comparison to 2010, where 98 million advertisement banners were served, Poland witnessed an increase of 69 percent in 2011, where 370 million advertisement banners were served. In addition, 2011 also saw Turkey delivering more than 350 million advertisement banners per quarter (Peacock, 2011:1).

Hallerman (2012) postulates that while the majority of world regions will find it difficult to spend even US\$1 on mobile advertisements per mobile Web user, Asia-Pacific will spend US\$4, Western Europe US\$19 and North America, which is leading the game, US\$30 per mobile Web user, which is projected to increase to US\$46 in 2013. Stamford (2011) theorises that although Asia-Pacific and Japan will remain the leaders in the market, with 49.2 percent of the mobile advertising expenditure in 2011 and 33.6 percent of it by 2015, North America and Western Europe are believed to be the two regions that will see the most growth in their mobile advertising budgets, representing 28 percent and 25 percent of the global market respectively by 2015. Hallerman (2012) concludes that the total amount spent on mobile advertising has grown from US\$2.34 billion in 2010 to US\$4 billion in 2011 and US\$ 8.41 billion in 2012. Furthermore, North America, especially the United States, has experienced the fastest growth rate, with a 220 percent increase in mobile search and advertisement expenditure followed by China with a growth rate of 138 percent and Indonesia with a growth rate of 110 percent. The Middle East and Africa witnessed a doubling in their total expenditure, whereas the rest of the globe experienced below average growth.

2.7 GROWTH IN MOBILE ADVERTISING IN SOUTH AFRICA

In terms of the technology deployed and the mobile services provided, the South African telecommunication sector currently represents the continent's most advanced networks, with MTN, 8ta, Cell C and Vodacom all competing for market share in the

mobile service market (Budde, 2013). Masote and Shevel (2012:7) indicate that in 2011 MTNs market share was 50 percent by the second half of the year, with the total number of mobile subscribers increasing from approximately 18.8 million to 22 million. By the end of September, 8ta had 11 million mobile subscribers, which was preceded by Cell C with 8.2 million and Vodacom with 31.7 million by the end of December. Furthermore, even though MTN may find it difficult to surpass Vodacom in the consumer segment, they have an upper hand in the business segment, particularly in the data sphere, and aim at increasing their consumer base to 29 million in 2012.

The introduction of smartphones into South Africa has seen the number of South African mobile Internet users significantly increase as a direct result of cheaper Internet access, which has in turn provided marketers with an opportunity to create interactive mobile advertising campaigns, which will reach out to these particular individuals (Pater, 2011:1). By the end of 2011, there were approximately 8.5 million Internet users in South Africa, with more than 2.48 million of these individuals primarily using their mobile phones to gain access to the Internet. This, combined with the more affordable smartphones and cheaper data rates, is believed to be the most influential force behind the significant growth in mobile and mobile advertising in South Africa (Joss, 2012).

The response rate for mobile advertising campaigns in South Africa ranges from between 10 percent to 25 percent (Swallow, 2010). The possibilities of increased brand awareness, boosted revenue and improved customer loyalty, combined with the cost effectiveness and the affordability of mobile advertising campaigns, highlight the importance for marketers to allocate a portion of their digital advertising budgets to mobile advertising (Hallerman, 2012). As such, research indicates that 52 percent of brands are expected to commit 5 to 25 percent of their budgets to mobile advertising within the next five years (Nixon, 2013). Consequently, the mobile phone is considered the most exciting advertising medium in South Africa, with the total worth of mobile advertising in South Africa estimated to reach R 1.5 billion in 2013 (EZmobile, 2011).

Prabhudesai (2011) highlights that with 52 percent of all mobile users accessing the Internet being between the ages of 20 to 24 years, and a further 23 percent being

between the ages of 25-29, it is evident that, compared to any other age cohort, the youth, known as Generation Y, use the mobile Internet and its various applications considerably more. Masote and Shevel (2012) add that due to the substantial growth in the youth market there are now more sim cards and phone handsets per household. As such, mobile advertising is an effective avenue to this lucrative generation of young, urban and single consumers with substantial spending power (Baburajan, 2011).

By May 2009, South Africa was serving more than 150 million mobile advertisement impressions per month (Peacock, 2011:1). Maake (2011a:4) indicates that from the beginning of 2011 to the end of September 2011, 3.2 billion mobile advertisements were served across continental Africa, which was a 135 percent increase from 2010, with South Africa holding the position of the largest African market with a total of 595 million of those mobile advertisements. As such, in South Africa mobile advertisements are leading the way, with 35 million branded Please Call Me messages sent out daily, and 1.6 billion advertisement impressions served annually (Swanepoel, 2011). As part of its strategy to move into multimedia and broadcasting, Vodacom has now started selling text advertisements on its free call-back service, and banner advertisements on its mobile Internet portals. These text advertisements are believed to generate up to 20 million messages per day and are able to reach both high- and low-end markets. Banner advertisements will be sold on Vodacom4me and Vodafone Live, which reportedly draw approximately 1.4 million users per month. These advertisements will offer consumers an optional click-through to a mobile website, allowing them to decide if they want to engage further with the brand (France-Presse, 2013).

2.8 CONCLUSION

From the evolution of mobile communication devices into full-scale Internet-enabled mini computers, to the emergence and widespread adoption of mobile communication technologies and the Internet, advertisers are now able to exchange advertising information between themselves and their consumers at any time or place, illustrating the effectiveness of mobile devices and networks as feasible advertising platforms. Moreover, the traditional advertising media platforms available to advertisers include print, broadcasting, out-of-home and direct response, which advertisers may use to

carry advertisements between themselves and their current and potential consumers. As such, advertising may be viewed as the effective communication between consumers and advertisers. In addition, the increasing expenditure on and usage of the Internet as an additional advertising platform has led to a significant improvement in connectivity, contributing to the development of numerous new advertising platforms, such as social networking site advertising, Web advertising and mobile advertising.

Research indicates that mobile advertising may be viewed as one of the most well-known applications of mobile commerce. It is affordable, interactive and may be integrated with print, radio, billboard, television and online advertising campaigns. Although mobile advertising appears to work differently for different products, services and consumers, it provides advertisers with a means to advertise and promote brands, products or services to a significantly larger consumer base. Consequently, mobile advertising has become very popular in recent years, and SMS advertising is incorporated readily into organisations as an advertising medium. In conclusion, the introduction of smartphones into South Africa has seen the number of South African mobile Internet users significantly increase due to cheaper Internet access, in turn providing advertisers with an opportunity to create interactive mobile advertising campaigns, which may be used to reach out to these particular individuals.

Advertisers wishing to use the communication platforms that mobile media provide in an efficient way need to understand how consumers perceive and evaluate mobile devices as a source of advertising. As such, the main aim of this study is to propose and empirically test a model of factors that influence black Generation Y students' attitudes towards mobile advertising. The following chapter, Chapter 3 discusses the Generation Y cohort and the proposed model, together with the factors that influence attitudes towards mobile advertising.

CHAPTER 3

GENERATION Y AND THE FACTORS THAT INFLUENCE ATTITUDES TOWARDS MOBILE ADVERTISING

3.1 INTRODUCTION

Haghirian and Madlberger (2005:2) indicate that the significant developments in, and rapid adoption of, mobile technologies have led to the development and introduction of mobile advertising, which has altered the world of marketing in many ways. Vatanparast (2007:3) theorises that when implementing or making use of mobile advertising, marketers need to ensure that their advertisements contain attractive ideas, that the idea is conveyed in a concise manner, that the target audience understands the language and images, and that the space and characters available are used effectively. Haghirian and Madlberger (2005:9) propose that the characteristics of advertisements play an influential role in the formation of consumer attitudes towards mobile advertising, making it vital for marketers to ensure the careful development of their advertisement characteristics. Marketers cannot rely on the assumption that advertisements sent via mobile devices will be automatically read and remembered. This highlights the need for marketers to determine the factors influencing the attitudes of consumers towards mobile advertising.

Bamba and Barnes (2007:819) propose that, based on the theory of reasoned action (Ajzen & Fishbein, 1980), there are several major factors influencing consumer attitudes towards mobile advertising. These factors include consumers' attitudes towards advertising in general, the perceived utility of mobile advertisements such as entertainment, information and social features, the perceived risk, which constitutes privacy and data security, consumers' knowledge about the technologies being implemented and used, and the social norms that influence the behaviours of consumers. It is worth noting that the measure of consumers' attitudes towards mobile advertising is not based on their exposure to one specific advertisement but rather on their attitudes towards this type of advertising in general (Haghirian & Madlberger, 2005:3).

As stated in Chapter 1, the purpose of this study is to propose and empirically test a model of factors that influence black Generation Y students' attitudes towards mobile advertising in the South African market. Section 3.2 provides an in-depth look at the Generation Y cohort, and the importance of the black Generation Y cohort in the South African market. Section 3.3 is concerned with attitude models, specifically attitudes towards advertising models. Section 3.4 outlines the proposed model of factors influencing consumer attitudes towards mobile advertising, and Section 3.5 is concerned with the factors of consumer attitudes towards advertising via mobile phones.

3.2 GENERATION Y

Generation Y was a term first used in 1993 by the magazine, *Advertising Age*, whose main focus was on media and advertising data and analysis (Schlitzkus *et al.*, 2010:108). According to Kane (2012) and Markert (2004:21), Generation Y constitutes all the individuals born between 1986 and 2005 and consists of more than 70 million individuals.

Wolburg and Pokrywczynski (2001:33) indicate that the individuals in the Generation Y cohort have unique characteristics that make them different from preceding generations. Kane (2012) and Sheahan (2005:59) postulate that these individuals are independent, ambitious, individualistic, self-reliant, achievement orientated, confident, entrepreneurial and socially and culturally aware. In addition, they are optimistic about what the future has to offer them and have big plans, particularly where their careers are concerned (Wilson & Gerber, 2008:31).

Globally, approximately 70 percent of the individuals of this cohort finish high school, of which 30 percent will go on to study at universities, and an additional 40 percent will obtain some form of post-secondary training or qualification. Consequently, this generation will become the most formally educated generation in history and the fastest growing portion of today's workforce (Sheahan, 2005:10; Schlitzkus *et al.*, 2010:108). Raised by workaholic parents, in an economy where highly skilled labour was a requirement, has taught these individuals to build strong resumes at a rapid pace (Wilson & Gerber, 2008:31). As such, more than one third of this generation have worked part-time while still at school and, as a result, none have

experienced a workplace without the Internet and networked computers (Sheahan, 2005:10).

Being the first generation to have grown up in a world where computers, mobile phones, electronic devices and the World Wide Web have been integral elements of everyday life has led to these individuals thriving on technology and its innovations. With the use of laptops, mobile phones and a range of other gadgets, these individuals can be plugged in 24 hours a day, seven days a week, causing them to learn, process information at rapid speeds, perform well in their jobs, and lead intense social lives (Ellis-Christensen, 2013; Kane, 2012; Schlitzkus *et al.*, 2010:108; Schwalbe, 2009:59,60; Sheahan, 2005:59,60).

On average, an individual from this cohort spends five hours every day in front of a screen, and by the time they reach university age they will have spent less than 5000 hours reading books, compared to an estimated 10 000 hours playing video games, 10 000 hours talking on their mobile phones and 20 000 hours watching television. Furthermore, these individuals will have sent and received more than 200 000 text messages and emails (Sheahan, 2005:64). Consequently, text messaging and email are becoming the preferred choice of communication, as opposed to face-to-face communication, with the preferred tool for searching for information being the Internet (Kane, 2012; Schwalbe, 2009:61).

Growing up in a more media saturated, brand conscious world has enabled these individuals to stay abreast of the rapid rate of technological and social change, which has led to the dubbing of them as the elusive new youth market segment. As such, organisations will need to embrace these individuals to ensure future success, highlighting the importance of connecting with this new generation of consumers on their own turf. This has created the need for marketers to rethink their advertising strategies and avenues geared towards these individuals (Sheahan, 2005:5; Smith, 2012:89, 90; Wolburg & Pokrywczynski, 2001:33,34).

Although their resistance towards advertising efforts remains very similar to that of Generation X, the individuals of the Generation Y cohort respond differently towards the advertisements they receive (Wolburg & Pokrywczynski, 2001:33). These individuals prefer images and graphics as opposed to text, they crave interactivity, and are more responsive to personalised advertisements (Schwalbe 2009:61,63; Smith

2012:87). In addition, these individuals are visual and contextual, and process information on an emotional level, forming opinions about products and services been advertised based more on what the product or service can do and its appearance, rather than on what marketers say about the product or service (Aquino, 2012). Therefore, although this cohort plays an important role in the advertising economy, the degree of difficulty involved in communicating with this cohort poses a threat to the success of many organisations' marketing efforts. This highlights the need for marketers to learn that it is not "how to reach consumers where they are" that is important, but rather "how to understand their mindset and where they are going" (Martins, 2013).

Many organisations view the Generation Y cohort as a homogenous market segment; however, the literature indicates that it is more of a heterogeneous market segment (Foscht *et al.*, 2009:224). Moreover, marketers are becoming aware that the purchasing habits of these individuals will have a significant impact in the years to come (Wolburg & Pokrywczynski, 2001:35). The purchasing behaviours of these individuals are very computer-oriented, which may suggest that by implementing and using digital media, organisations may create a more appealing overall image and product or service offering (Malarchy, 2006).

Owing to their short attention spans and strong desire for complete information, marketers need to ensure that their advertising campaigns, targeted at the Generation Y cohort, do not prolong the facts in an attempt to create a sense of drama or omit information to generate mystery or consumer interest. Moreover, individuals in this cohort respond to advertisements that are "hip", with "edgy statements that cut through media clutter and push the boundaries of style and taste" (Markiewicz, 2003). As such, marketers should gear their advertising strategies towards anything that appears to be "new, advanced and computerised" (Malarchy, 2006).

3.2.1 Generation Y in South Africa

In 2013, approximately 38 percent of the South African population were categorised as forming part of the Generation Y cohort. In South Africa, the majority of this cohort (an estimated 83%) is made up of black Africans, rendering the country's black Generation Y cohort a significantly sized market segment (Statistics South Africa, 2013). As such, Bevan-Dye and Surujlal (2011) indicate that given its sheer size, the

black Generation Y cohort is an attractive market segment, particularly those engaged in tertiary education. The reason for this is that higher education often leads to higher future earning potential, which, in turn, often contributes to a higher social status within a community. Moreover, this higher earning potential will contribute to greater future spending power. Furthermore, a willingness to spend and purchasing power will add to the attractiveness of this market segment (Gurau, 2012:113). The combined effects of the higher earning potential and higher social status substantially increases the probability of black Generation Y members with a tertiary qualification joining the prestigious ranks of South Africa's growing black middle-class – the Black Diamonds (Bevan-Dye *et al.*, 2012:5578).

Herman (2006) and Comins (2007) indicate that black South Africans who are well educated, have well-paying occupations, and who are credit-worthy are labelled the Black Diamonds of South Africa. Goyal (2010) highlights that these individuals are goal-orientated, driven individuals who are climbing the corporate ladder at a rapid pace, contributing to increased spending power and purchasing power, making these individuals important opinion leaders in South African markets. As the first generation to grow up in post-apartheid South Africa, these individuals have enjoyed several advantages compared to previous African generations, such as education, employment and wealth accumulation opportunities (Bevan-Dye, 2013:158). In the last eight years, the Black Diamond segment in South Africa has increased from 8 percent to 16 percent of the population segment, and its spending power has increased to R400 billion (Radebe, 2013). As such, Herman (2006) describes Black Diamonds as the group of individuals characterised by a certain amount of education, wealth, and other middle-class determining factors. Higher education levels, credit, black economic empowerment (BEE) and economic growth have all contributed to the growth in the black middle class (Radebe, 2013). Shevel (2013) postulates that at present 95 percent of the black middle class own mobile devices, which is a significant increase from the 65 percent in 2004.

The following section discusses the literature pertaining to attitude models.

3.3 ATTITUDE MODELS

Waarts *et al.* (1997:37) define attitude as an “acquired, relatively long-term stance”, which an individual may take in relation to a particular person, product, activity or

organisation. According to Kirchheimer (2013), attitudes are a combination of values, beliefs and perceptions. Schiffman *et al.* (2010:246) add that attitudes refer to the particular way an individual acts towards an object.

Individuals are not born with attitudes. Rather, attitudes develop during the growing and learning periods of individuals' lives (Himansu, 2009). As such, "attitudes are learned" (Schiffman *et al.*, 2010:246). Moreover, attitudes are formed on the basis of learning, information, upbringing, education, knowledge, lifestyle, thinking, experience and the like (Himansu, 2009). Not only are attitudes learned, they are also motivational in nature and may drive consumers toward a particular behaviour or against a particular behaviour (Schiffman *et al.*, 2010:247).

Although attitudes take time to develop, they are usually consistent. Even so, certain external factors may change consumers' attitudes (Hanna & Wozniak, 2001:175). Consequently, whilst attitudes are enduring, they may be changed (Schiffman *et al.*, 2010:247). Himansu (2009) suggests that this has led to many marketers altering certain aspects of their marketing strategy in an effort to ensure that consumer attitudes towards their organisation and its products are favourable, as opposed to unfavourable. Schiffman *et al.* (2010:260) suggest that changing consumer attitudes is "a key strategy consideration for most marketers".

Given that attitudes are central to understanding consumer behaviour (Himansu, 2009), several models have been developed in an attempt to explain, interpret and predict the relationships between attitudes and behaviour in various consumption-related situations, and these include attitude towards advertising models (Schiffman *et al.*, 2010:249).

For the purpose of this study, attitude towards advertising models will be discussed in the next section.

3.3.1 Attitudes towards advertising models

Marketers use various forms of advertising and various advertising platforms, and the attitudes that consumers develop towards these advertisements may influence their attitudes towards the advertised brand (Mowen, 1993:318). This influence of attitude towards advertising on attitude towards brand has resulted in several studies focusing on developing attitude towards advertising models (Brackett & Carr, 2001; Ducoffe,

1996; Lutz *et al.*, 1983; Mitchell & Olson, 1981 Moore & Hutchinson, 1983; Park & Young, 1986; Pollay & Mittal, 1993; Tsang *et al.*, 2004). According to Pollay and Mittal (1993:100), most research into general attitudes towards advertising is rooted in the seminal work undertaken by Bauer and Greyser in the late 1960s.

Belch and Belch (2001:161) postulate that attitudes towards advertisements represent consumers' overall like or dislike of a particular advertisement. However, attitudes towards advertising in general may influence attitudes towards particular advertisements (Pollay & Mittal, 1993:100). In addition, consumers' attitudes towards an advertising platform may influence their attitudes towards a particular advertisement (Ducoffe, 1996:21). Therefore, attitudes towards advertising in general, together with attitudes towards advertising through mobile telephony, are likely to influence attitudes towards specific mobile advertisements and, consequently, attitudes towards the advertised brand. Given the recent growth in mobile advertising, this research study focuses on determining the factors that influence black Generation Y students' attitudes towards mobile advertising.

3.4 FACTORS INFLUENCING ATTITUDES TOWARDS MOBILE ADVERTISING

Compared to other advertising platforms such as traditional advertising platforms like print and broadcast media, and even the more recent advertising platforms such as the Web advertising platform, the mobile advertising platform has its own unique characteristics, advantages and disadvantages. Consequently, the factors influencing attitudes towards advertising through mobile telephony are likely to differ to those influencing attitudes towards advertising on other media platforms. This section reviews the potential factors influencing attitudes towards mobile advertising.

3.4.1 Attitude towards short message service (SMS)

The primary use of mobile phones is to enable users to communicate with each other, which has led to the significant rise in the use of SMS in recent years (Jayawardhena *et al.*, 2009:474). The SMS function allows the exchange of text messages of up to 160 characters between users of mobile devices (Muk, 2007:179). Although SMS is limited to text, it is able to reach almost any individual who has a mobile phone (Coursaris *et al.*, 2010:198). As such, Bamba and Barnes (2007:815) define an SMS

as a text message, which acts as a store-and-forward communication system for a mobile phone.

According to Potgieter (2007:20), the sending and receiving of SMS messages has a 66 percent satisfaction rating. Merisavo *et al.* (2007:41) indicate that approximately 49 percent of European Internet users send SMS messages to their friends and family. In 2004, it was estimated that 2.13 billion person-to-person SMS messages were sent in the United Kingdom, and in Finland, the average number of SMS messages sent per single mobile phone subscription was 37. According to Hubbman (2012), 86 percent of mobile users, throughout the world, indicated that they receive at least one text message per week, and that in 2012 alone, more than 9.6 trillion SMS messages were sent.

Muk (2007:183) indicates that the beliefs consumers have concerning SMS are developed through cognitive learning. Al Khasawneh and Shuhaiber (2013:3) postulate that consumers make use of SMS messaging services based on perceived levels of fun and entertainment. Carroll *et al.* (2007:81) suggest that the cost effectiveness and interoperability of the wireless infrastructure, combined with the relatively low costs associated with the SMS service, and high mobile phone penetration rates, has contributed to the success of SMS messaging.

Not only has SMS messaging become popular between younger individuals but also these individuals have developed their own SMS language and abbreviations in an attempt to make the SMS messages they send almost unintelligible to outsiders (Mort & Drennan, 2007:303). In addition to the development of new languages in relation to the adoption and use of SMS, SMS has had a cultural and social impact. As such, when communicating with the individuals in the Generation Y cohort, messages should be entertaining and show familiarity with the abbreviations and language that they use in their SMS communication (Drossos & Giaglis, 2006:3).

According to Tsang *et al.* (2004:70), individuals use SMS messages for a variety of reasons such as sending quick notes, conversing and sending intimate messages. Moreover, the use of SMSs to remind consumers of certain aspects can assist in changing the behaviour of the individuals making use of them (Gombachika & Monawe, 2011:240). In addition, short textual messages may take the form of advertisements, which may be delivered to the mobile phones of consumers (Tsang *et*

al., 2004:65). According to Mobile Marketing Association (2006), more than 350 billion SMS messages are sent across the world's mobile network every month, with more than 15 percent of these being termed as commercial or marketing messages. As such, SMS messages sent to mobile phones are now viewed as one of the latest modes of advertising (Bamba & Barnes, 2007:815).

Although SMS messaging is continually growing, and its potential as an advertising tool is becoming more prevalent, its success largely depends on consumers' acceptance of this form of communication (Al Khasawneh & Shuhaiber, 2013:3). Tsang *et al.* (2004:65) and Salo *et al.* (2008:501) speculate that because of consumers' familiarity with the SMS service, its viral capabilities, and the fact that SMSs can be sent relatively cheaply, SMS advertising has become the most widely- and readily-used form of mobile advertising. As such, many marketers believe that it will develop into an active direct marketing medium, and become a salient part of the marketing communication mix of many organisations (Jayawardhena *et al.*, 2009:474).

According to Al Khasawneh and Shuhaiber (2013:1), the entertainment, informativeness, credibility, personalisation, clarity, relevancy, incentive and subjective norms of SMS messages have a significant positive influence on consumer attitudes and acceptance of mobile advertising. However, brand familiarity, message irritation and consumer control have a significant negative influence on consumer attitudes and acceptance of mobile advertising. Li and Du (2012:7) propose that to make better impressions with their SMS messages, marketers need to ensure that their advertisements match the personal preferences of their targeted audience. Consequently, to ensure the highest possible level of acceptance and the most positive attitudes towards mobile advertising, marketers need to ensure that they develop SMS messages which are high in entertainment value and information content, do not cause any irritation, are personalised and relevant to the intended consumer, as well as clear and incentive based. In addition, the messages should be time and location relevant (Al Khasawneh & Shuhaiber, 2013:1).

The next section provides some background literature on consumer attitudes towards advertising in general.

3.4.2 Attitudes towards advertising in general

Consumers are exposed to a large number of advertisements on a daily basis in a variety of media, which may cause consumers to feel bombarded, thereby influencing their attitudes towards advertising. This makes the study of consumer attitudes towards advertising in general important (Chan & Cui, 2004:11; Evans, 2013; Shavitt *et al.*, 1998:7). Lutz (1985:53) defines attitudes towards advertising as the “learned predisposition to respond in the consistently favourable or unfavourable manner to advertising in general”. Tan and Chia (2007:353) indicate that consumers’ attitudes towards advertising in general is an important factor because of its possible influence on the manner in which a consumer may respond to a particular type of advertising.

Ashill and Yavas (2005:340) suggest that attitudes towards advertising consist of social and economic dimensions. According to Shavitt *et al.* (1998:7), consumer attitudes towards advertising will most likely influence consumer exposure and attention to advertisements, political and regulatory activities and other outcomes that may have a significant influence on the advertising industry. Mehta and Purvis (1995:1) add that consumers’ attitudes towards advertising in general may influence the effectiveness of specific advertisements.

Tsang *et al.* (2004:66) theorise that consumer attitudes towards advertising in general have been found to be negative. However, Eze and Lee (2012:94) propose that consumer attitudes towards advertising are in fact mixed. Pollay and Mittal (1993:99) postulate that these attitudes may range from “amusement and admiration to cynicism and condemnation”. Sandage and Leckenby (1980:29) state that consumer attitudes towards advertising in general appear to be more positive than attitudes towards actual advertisements, with consumers being more critical concerning the social effects of advertising rather than the economic effects. Eze and Lee (2012:105) argue that the economic situation within a particular society may significantly influence consumer attitudes. Consequently, the more positive perceptions consumers have with regards to a specific society’s economic conditions, the more likely they will be to have positive attitudes towards advertising.

Owing to the behavioural changes and consumer lifestyles, the attitudes of consumers towards advertising have become relevant points of interest when analysing consumer markets (Petrovici & Marinov, 2007:308). This has shown that not only can the

attitude of a consumer towards advertising influence the effectiveness of a particular advertisement, but also it may influence the way the consumer feel about a particular brand, and the features of a product or service (Berkers, 2013; Mehta & Purvis, 1995:1). Furthermore, consumers' attitudes towards advertising may change or influence the purchasing behaviour and intentions of consumers (Petrovici & Marinov, 2007:310). Therefore, marketers need to monitor consumers' attitudes towards advertising continuously (Yoon, 1995:455).

Petrovici and Marinov (2007:311) suggest that the institution of advertising, and the instruments used to advertise, may be viewed as direct factors of consumers' attitudes towards advertising. Eze and Lee (2012:97) and Yoon (1995:456,457) indicate that the perceived level of entertainment and informativeness of advertisements are also believed to influence consumers' attitudes towards advertising. According to Ashill and Yavas (2005:346), consumers strongly believe that advertising should be regulated and controlled. As such, control may be viewed as one of the significant predictors of overall consumer attitudes towards advertising. Petrovici and Marinov (2007:311) add that the hedonic value of advertising may also have a significant influence on consumers' attitudes towards advertising.

Haghirian *et al.* (2005:5) suggest that the large volumes of advertisements, and the wide range of alternative advertising media platforms now available to consumers, provide consumers with the opportunity to choose the advertisement messages they respond to, and how and when to interact. Shavitt *et al.* (1998:9) indicate that younger consumers have a more positive attitude towards advertising in general, which may result in these individuals holding positive attitudes towards mobile advertising.

Where consumers feel that the advertisement messages they receive are intrusive they tend to ignore or refuse advertising, which may have a significant influence on consumer attitudes towards advertising (Shavitt *et al.* 1998:7).

With regards to advertising, consumer privacy has always been a concern for marketers. Al Khasawneh and Shuhaiber (2013:8) theorise that consumers wish to control the amount and type of advertisement messages they receive. As such, consumers' perceived control over the amount and type of advertisement messages they receive, is believed to influence their attitudes towards advertising. Zhang and Wang (2005:4) state that when consumers perceive advertising as valuable, the

presumption is that they will show positive attitudes towards advertising. As such, advertising value may be deemed as a factor influencing the attitudes of consumers towards advertising.

3.4.3 Entertainment

The perceived entertainment value of advertising relates to the concept of the hedonic or pleasure principle, whereby advertisements are viewed as amusing, enjoyable and, at times, even more enjoyable than other media content (Pollay & Mittal, 1993:102). Coursaris *et al.* (2010:199) explain entertainment as the extent to which an advertisement appeals to consumers' needs for passing time, emotional release and/or aesthetic enjoyment, which are fundamentally of "hedonic value". O'Donohoe (1995:250) was the first to introduce entertainment as a factor influencing consumer attitudes towards advertising within a specific medium, rather than towards advertising in general. According to the Ducoffe (1996:31) study, perceived entertainment has a significant positive influence on the perceived value of advertising within the Web environment. Brackett and Carr (2001:29), in a replication of the Ducoffe (1996) study, also found that entertainment demonstrated a significant positive influence on attitude towards Web advertising. Wang and Sun (2010:99) report similar results pertaining to the influence of perceived entertainment on attitudes towards advertising in the online environment. In a comparative study designed to measure the level of perceived entertainment, information and irritation of Web advertising, email advertising, SMS advertising and MMS advertising, Cheng *et al.* (2009:501) found that while individuals considered Web and MMS advertising to be entertaining, they had a less positive attitude towards the entertainment value of email and SMS advertising. Focusing on the mobile telephony environment, Tsang *et al.* (2004:71) identified entertainment as being a significant positive predictor of overall attitude towards mobile advertising. Bauer *et al.* (2005:181) also identified entertainment as a significant positive factor influencing consumer attitudes towards mobile advertising.

The perceived entertainment of mobile phone advertisements constitutes how entertaining the advertisement is, as well as how it provides "experiential satisfaction through aesthetic pleasure, emotional stimulation or social experience" (Vatanparast, 2007:2). As such, the value of entertainment may be attributed to its ability to realise

the needs of consumers for “escapism, diversion, aesthetic enjoyment or emotional release” (Ducoffe, 1996:23).

Priya *et al.* (2010:163) identify that consumers of all ages welcome the entertainment capabilities of advertisements. This suggests that the more entertaining advertisements are the more receptive consumers will be towards them. Furthermore, the higher the level of perceived entertainment of an advertisement, the more likely consumers are to pass it on to other consumers (Yang *et al.*, 2012:61). As such, advertisements that are humorous, striking or thought provoking are seen as entertaining and will be forwarded at the touch of the send button (Davhana, 2009:35).

Haghirian and Madlberger (2005:4) suggest that with the use of entertaining advertisements marketers add value and increase consumer loyalty, and by introducing elements such as games and prizes, they may also contribute to higher participation levels. Choi *et al.* (2008:766) concur and suggest that a possible strategy for increasing the entertainment value of mobile advertisements is to promote products and services through games, referred to as an “advergame”.

Although the entertainment capabilities of advertisements are welcome by consumers of all ages, the entertainment value of advertisements vary between age groups, indicating the need for marketers to carefully select the entertaining aspects of their advertisements for each of the age groups they plan on targeting (Priya *et al.*, 2010:165). As such, entertainment is an important factor for consumers’ attitudes towards mobile advertising, making it vital for marketers to ensure that their advertisements are humorous and concise, so as to capture the attention of consumers with immediate effect (Xu, 2006-2007:11).

Tsang *et al.* (2004:71) indicate that the ability of advertisements to entertain consumers is the most influential factor to the overall attitudes of consumers towards mobile advertising. Consequently, the ability of mobile phone advertisements to entertain consumers may contribute to the development of favourable attitudes towards mobile advertising (Priya *et al.*, 2010:151). Therefore, entertainment is an important factor for mobile advertising (Xu, 2006-2007:11). Moreover, Choi *et al.* (2008:765) postulate that the reason why entertainment may be viewed as one of the most important factors influencing consumers’ attitudes towards mobile advertising is the smaller user interface on mobile phones, which creates the need for mobile

advertisement messages to be shorter than non-mobile advertisements, such as newspaper advertisements.

3.4.4 Informativeness

Informativeness is the term given to the rational element of advertisements, where marketers attempt to communicate information, which is important for consumers to know about the product or service being advertised (Currie, 2012). The informational value of advertising is viewed as a primary factor influencing attitudes towards advertising, both in general (Pollay & Mittal, 1993:101), and in specific media (Ducoffe, 1996:23; Tsang *et al.*, 2004:71; Wang & Sun, 2010:87; Taylor *et al.*, 2011:261). Pollay and Mittal (1993:101) indicate that information imparted through advertising aids is creating greater market efficiency in that it keeps consumers up to date concerning what products and/or services are available, and the features thereof.

The findings of several studies (Ducoffe, 1996:29; Brackett & Carr, 2001:30; Wang & Sun, 2010:99) confirm that informativeness is a significant positive predictor of attitude towards advertising in the Web environment. Taylor *et al.* (2011:267) also found the informativeness dimension to be a significant positive predictor of attitudes towards advertising in the social networking environment. Wang and Sun (2010:102) indicate that providing information remains the most salient function of advertising, and that advertisements perceived as being informative are more likely to be favoured.

In terms of the mobile telephony environment, Tsang *et al.* (2004:67) found that the perceived informativeness of mobile advertising has a direct positive effect on consumers' overall attitude towards mobile advertising. Haghirian *et al.* (2005:6), whose findings confirm those of Tsang *et al.* (2004:67), indicate that as long as mobile advertisements provide information, they are perceived as valuable in that they create benefits for the target audience. Choi *et al.* (2008:762, 765) found that informativeness of advertising messages influences the consumers' attitudes towards mobile advertising in low-context cultures, such as the USA, but that it did not have a significant influence on attitudes in high-context cultures, such as Korea.

According to Davhana (2009:2), the introduction of mobile technologies has contributed to the delivery of enhanced direct communication and information. Although the use of laptops and desktop computers are becoming increasingly well

known as mediums of information, mobile devices still hold the top position with a ratio of 5:1, indicating that mobile devices are a more convenient instrument on which to conduct advertising (Mobile Ad Networks, 2013).

When using the mobile channel for advertising purposes, marketers need to consider the perceived usefulness of the channel, not only as a means to provide discount messages or alerts, but also as a source of up-to-date information, ensuring that target audiences are kept up to date regarding available products, their features and special offers (Merisavo *et al.*, 2007:46). In addition, the information sent via mobile phone advertisements must be accurate, useful and sent at the correct time, allowing consumers to access the information they require in the correct content and at rapid speeds (Haghirian *et al.*, 2005:4). Davhana (2009:2) suggests that marketers combine the context situations and user profiles of the target audience to send the most informative mobile phone advertisements in relation to the needs, wants and requests of consumers. Informative advertising may also be used to highlight an advantage that an organisation's product or service may have over that of a competitor (Currie, 2012).

Ducoffe (1996:31) highlights that in order to optimise the value of advertising for consumers, marketers need to create advertisement messages that communicate the most informative claims marketers are able to deliver, while ensuring that they are as entertaining as possible. Consequently, through the delivery of informative advertisements via mobile devices, marketers are able to build deeper and more beneficial relationships with their consumers (Davhana, 2009:21).

3.4.5 Credibility

In terms of marketing, Watts and Wyner (2011:266) define credibility as a consumer's perception of how dependable and trustworthy the information is within an advertisement. Moreover, Vatanparast (2007:3) postulates that credibility is the degree to which consumers believe that marketers have the necessary experience, combined with honesty, to perform the task of advertising efficiently and reliably. As such, credibility is believed to influence the way consumers evaluate advertising (Tsang *et al.*, 2004:67). Prendergast *et al.* (2009:321,325) opine that the perceived credibility of advertising relates to both the claims made in the message about a brand and the channel through which the message is delivered. Their findings indicate that

advertisements delivered via broadcast media are perceived as more credible than those delivered via print media, and that the least credible media included the Internet and direct mail.

In terms of Web-based advertising, Brackett and Carr (2001:29) found that credibility has a significant positive influence on the perceived value of advertising on the Web. In a more recent study, Wang and Sun (2010:99) also found credibility to be a significant positive predictor of attitudes towards advertising in the Web environment.

Concerning the influence of credibility on attitudes towards mobile advertising, Tsang *et al.* (2004:71) found that it had a significant positive influence on individuals' overall attitude towards advertising. Similarly, Haghirian *et al.* (2005:7) found a strong positive correlation between the perceived credibility of mobile advertising and the perceived value of mobile advertising. This suggests that mobile advertisements that are more credible will be perceived as being more valuable. Keser (2011:372) also indicates that the credibility of advertising has an impact on attitudes towards mobile advertising. Yang *et al.* (2012:3) suggest that credibility is an independent determinant of attitudes and intentions towards mobile advertising. As such, credibility positively affects attitudes towards mobile advertising, suggesting that credibility may assist in reducing uncertainty and vulnerability in consumer decisions.

Credible communications include the dimensions of believability and trustworthiness (Brackett & Carr, 2001:32). Vatanparast (2007:3) argues that although a variety of factors exist that may influence the perceived credibility of an advertisement, the most important factors include the organisation's credibility and "the bearer" of the advertisement. Prendergast *et al.* (2009:321) indicates that the claims made concerning a brand, influence credibility, which suggests that the informational value of an advertisement influences its perceived credibility. Other factors thought to influence the credibility of interactive digital forms of advertising include the degree of personalisation (Rietbergen, 2013:18), privacy trust (Watts & Wyner, 2011:266), and perceived control over the number and frequency with which advertisements are received (Jayawardhena *et al.*, 2009:479). In addition, the advertising medium used may also significantly influence the level of perceived credibility (Prendergast *et al.*, 2009:321); which suggests that attitude towards SMS communication may also influence the perceived credibility of mobile advertisements. Trust in advertising in

general is another factor that is likely to influence the perceived credibility of advertising (Pollay & Mittal, 1993:99), including the credibility of mobile advertising. Drawing on the literature pertaining to source credibility that indicates that source likeability, in terms of a target audience's favourable or unfavourable feelings towards an information source (Mowen, 1993:343), influences credibility, this study proposes that the perceived entertainment value will positively influence the credibility of mobile advertising, whilst the perceived intrusiveness will negatively influence the credibility of mobile advertising.

3.4.6 Personalisation

The interconnectivity of digital technologies enable marketers to build increasingly complex databases of information on consumers' personal characteristics and consumption-related patterns, which facilitates their ability to target more narrowly-defined segments, and personalise their marketing messages. The personalisation of advertising messages entails tailoring messages to the needs of individual consumers, and addressing the message personally to them (Schiffman *et al.*, 2010:3,295).

Xu (2006-2007:16) found that personalisation is a significant positive predictor of attitudes towards mobile advertising. According to Gurau and Ranchhod (2009:504), the personalisation of mobile advertisements not only provides additional value to mobile consumers, but also may significantly enhance consumers' adoption and use of mobile advertising. Keser (2011:361) also found that personalisation has a positive effect on a consumer's attitudes towards mobile advertisements. Al Khasawneh and Shuhaiber (2013:8) indicate that personalised SMS messages have a significant positive influence on consumer attitudes towards SMS advertising. Rietbergen (2013:18) suggests that the personalisation of mobile advertisements directly influences the credibility of mobile advertisements. This suggests that a failure to personalise mobile advertising messages may negatively influence the credibility of those messages.

Vassilev (2011) proposes that although advertisements based on location are still important in terms of the delivery of mobile phone advertisements, the personalisation of mobile phone advertisements holds even greater potential for marketers, believed to have the potential to increase response and conversion rates significantly. As such, personalisation is an important factor influencing consumers' attitudes towards mobile

advertising (Xu, 2006-2007:16). Leslie (2013) and Sinisalo *et al.* (2007:774) postulate that when using a mobile medium, such as mobile advertising, to communicate with consumers, marketers need to ensure that the advertising messages they send are personalised and not randomly targeted. Vassilev (2011) who highlights that 59 percent of consumers with feature phones and 60 percent of consumers with smart phones prefer personalised advertisements substantiates this. Furthermore, 92 percent of mobile marketers believe that mobile advertising needs to be personalised to ensure success (Kim & Jun, 2008).

Not only does the implementation of personalisation into advertisements increase a consumer's loyalty towards the organisation itself (Smith, 2012:87), it also allows marketers to target their potential consumers in an individualised manner, which will contribute to the strengthening of their customer relationships. Similarly, marketers may make use of personalisation to offer consumers individualised content (Kim & Jun, 2008). As such, when designing mobile advertising strategies, marketers will need to consider the implementation of personalisation carefully (Xu, 2006-2007:9). Kim and Jun (2008) suggest that through the use of consumer and location tracking technologies, marketers can bring the personalisation characteristics of mobile advertising to life.

There are indications that individuals in the Generation Y cohort not only respond to personalised advertisements, they thrive on the personal touch and the opportunity to network with marketers. Moreover, there is evidence that personalised advertisements are an effective way to capture the attention of the individuals in the Generation Y cohort (Smith, 2012:87). As such, personalisation may be viewed as important factor influencing the attitudes of Generation Y consumers towards mobile advertising (Xu, 2006-2007:9).

3.4.7 Perceived control

Wallston *et al.* (1987:5) define perceived control as “the belief that one can determine one's own internal states and behaviour, influence one's environment, and/or bring about desired outcomes”. Boyd (2006) suggests that perceived control is the degree to which an individual believes he/she can control the outcome of a particular event or situation. According to Honegger and Appelbaum (1998:429), a consumer who perceives that he/she has some measure of control is more likely to become involved

in a particular situation, activity or event, compared to one who feels that he/she has little or no control at all. Parker and Price (1994:911) suggest that when perceived control is high, individuals both feel and perform better due to the enhanced confidence it bestows upon them. Moreover, it is viewed as a tool to increase task persistence, commitment, concentration, motivation and performance.

Ashill and Yavas (2005:346) found that perceived control is one of the significant predictors of overall attitudes towards advertising. Hoffman *et al.* (1999:81) postulate that where advertising practices are involved, consumers who perceive that they have little or no control may not be willing to participate.

Merisavo *et al.* (2007:43) state that the personal nature of mobile devices may cause some hesitation in the adoption of mobile advertising. This is due to the level of perceived control consumers believe they have concerning granting permission to marketers and their mobile advertising campaigns. When consumers receive mobile phone advertisements that are relevant, and where they perceive they have control over the opt-in conditions, they are more likely to grant permission to mobile advertising. However, the opposite remains true, which results in consumers not being willing to grant permission to receive mobile advertising (Bamba & Barnes, 2007:27). Jayawardhena *et al.* (2009:473) highlight that the more experienced consumers become with mobile advertising, the less perceived control will contribute to consumers granting marketers permission to send them mobile advertisements. Consequently, perceived control is considered an important factor influencing a consumer's attitude towards mobile advertising (Merisavo *et al.*, 2007:43).

Jayawardhena *et al.* (2009:478,479) indicate that although a vast majority of the studies in the literature show that perceived control has a positive influence on attitudes towards and acceptance of mobile advertising, there are some studies that suggest otherwise. Al Khasawneh and Shuhaiber (2013:16) and Merisavo *et al.* (2007:46) indicate that perceived control has little or no association with consumers' intentions to receive mobile phone advertisements. Jayawardhena *et al.* (2009:479) add that perceived control over receiving mobile advertisements influences consumers' trust in those mobile advertisements. This suggests that perceived control also influences the perceived credibility of mobile advertisements.

3.4.8 Intrusiveness

Li *et al.* (2002:39) define intrusiveness as “a perception of psychological consequence that occurs when a target audience’s cognitive processes are interrupted”. Edwards *et al.* (2002:84) postulate that intrusiveness is the term used to explain why some advertising is viewed as irritating by consumers, and other advertising is not. Similarly, the perceived intrusiveness of advertising may be seen as the degree to which advertisements interrupt a consumer’s goals when using a particular medium (Edwards *et al.*, 2002:85).

Ducoffe (1996:22) highlights that when consumers criticise advertising, they are not necessarily criticising the domain of advertising, but rather, they are denouncing the manipulative tactics employed by certain marketers. As such, marketers need to develop a better understanding of the tactics that contribute to the perceived intrusiveness of advertising (Edwards *et al.*, 2002:84).

Studies conducted by Ha (1996) and Li *et al.* (2002) conceptualised and applied the intrusiveness of advertising to traditional and online advertising. In the case of traditional media, often, advertisements are embedded in editorial content such as television and radio programming, or newspaper and magazine articles. The introduction of the Internet and improvements in digital media have made way for a number of new advertising media platforms, such as mobile advertising, which have been employed to allow the placement of advertisements in non-editorial content (Cleff, 2007:265). The growth of advertising, using digital media, has resulted in consumers developing negative perceptions associated with advertisement intrusiveness, which is believed to be challenging the claimed added value of these new advertising media over traditional advertising media (Truong & Simmons, 2010:239). Consequently, in comparison to other means of communication, the perception of intrusion and invasion in the private sphere is greater on mobile devices (Cleff, 2007:265).

Li *et al.* (2002:39) postulate that the more advertisements interfere with the cognitive processing of consumers, the more likely it will be that consumers perceive advertisements as intrusive. Edwards *et al.* (2002:85) postulate that when consumers perceive advertising as intrusive, their possible emotional reaction may be that of irritation, and their potential behaviour may be that of avoidance. Moreover, based on

the “content, execution, or placement”, the degree to which these advertisements interrupt consumers’ goals or “their perceived intrusiveness”, consumers may refuse the advertisements they perceive as intrusive (Haghirian *et al.*, 2005:6; Li *et al.*, 2002:39).

Advertisements that are excessively stimulating, overly exaggerated, confusing or derogatory may lead to feelings of irritation among consumers (Edwards *et al.*, 2002:84). Moreover, Li *et al.* (2002:39) highlight that where consumers perceive advertisements as intrusive, “feelings of irritation are likely to occur”. Tsang *et al.* (2004:67,71) suggest that consumer irritation caused by advertisements may influence consumers’ attitudes towards advertising. Consequently, irritation is correlated negatively to the overall attitudes of consumers towards mobile advertising. As such, the intrusiveness of advertising leads to consumers’ irritation, which negatively influences consumers’ attitudes towards advertising, (Davhana, 2009:23-24; Taylor *et al.*, 2011:264).

Li *et al.* (2002:39) suggest that with mobile advertising marketers are able to target consumers with mobile advertisement messages when they are least expecting them, which may cause consumers to view it as intrusive, which in turn influences the effectiveness of mobile advertising. Similarly, the increased use of mobile advertising has led to many consumers becoming weary of all the intrusions, resulting in them experiencing a need to increase their control over the mobile phone advertisements they “view and filter” (Bamba & Barnes, 2007:32). Therefore, owing to the importance of intrusiveness as the force behind the development of negative emotional reactions to advertisements and the avoidance of advertisements, the measurement of this factor is clearly needed (Li *et al.*, 2002:39).

Tsang *et al.* (2004:68) indicate that when consumers are interrupted by an advertisement, they “often impatiently ignore the advertisement”. It may be assumed that the reason why advertisements seek to interrupt editorial content is due to marketers using advertising to get noticed (Cleff, 2007:265). Consequently, marketers need to create mobile phone advertisements that are both relevant and persuasive, but not perceived as irritating by consumers (Salo *et al.*, 2008:501). As such, marketers are beginning to concentrate on reducing the irritation of advertising by using permission-based advertising to obtain permission from the target market before

sending out advertisements (Tsang *et al.*, 2004:68). Edwards *et al.* (2002:92) suggest that by targeting consumers when their cognitive effort is low, marketers will be able to increase the relevancy of advertising and provide value to consumers, limiting consumers' perceptions of intrusiveness.

3.4.9 Privacy trust

King and Jessen (2010:461) highlight that consumer expectations regarding how their personal information will be used influence trust. Consumer's trust is a significant factor influencing consumer participation in electronic commerce, which creates an atmosphere where consumers are willing to provide marketers with their personal information. Merisavo *et al.* (2007:43) postulate that the levels of trust consumers bestow upon marketers, in terms of how their personal information is used and the laws protecting them may influence their acceptance of mobile advertising. Zhou (2011:218-219) suggests that consumers who own mobile phones are concerned about the improper access and use of their personal information, which directly influences their trust in mobile advertising. Okazaki *et al.* (2009:78) add that consumers' concerns concerning the collection of personal information influence their trust in mobile advertising, as well as their intention to adopt and use mobile advertising. As such, Davis *et al.* (2011:243) suggest that one of the main reasons why consumers are hesitant in adopting mobile advertising is because of their lack of trust.

Owing to the uncertainty of mobile advertising and the question of whether it is secure, consumers are sensitive to receiving advertisements via their mobile devices from unknown organisations or individuals (Vatanparast, 2007:3). According to Yang *et al.* (2012:3), if consumers deem the mobile phone advertisements they receive as untrustworthy, they may avoid or not respond to them. Jayawardhena *et al.* (2009:476, 477) theorise that the formation of consumer trust influences the likelihood of consumers granting organisations permission to send them mobile advertisement messages.

The perceived credibility of a mobile advertisement is based on a consumer's perception of how dependable and trustworthy the information is within an advertisement. Therefore, consumers' trust in mobile advertising may directly influence their perceptions of the credibility of mobile advertising (Watts & Wyner, 2011:266). In addition, Zhou (2011:218) suggests that mobile consumers' privacy

concerns directly influence their perceived trust in mobile advertising, which will not only influence their intentions to adopt and use this medium, but also their attitudes towards this medium.

Jayawardhena *et al.* (2009:477) propose that privacy trust consists of two components. The first component is a consumer's relationship with the organisation making use of mobile advertising. This relationship is based on the consumer's direct experiences with the organisation's products and services, and their interactions with the sales personnel. The second component is the social influence, whereby known others, such as family members, friends and colleagues, share their experiences concerning their interaction with the organisation in question. As such, Okazaki *et al.* (2009:63) indicate that due to the rise of unfair information practices in many countries, consumer privacy concerns are becoming an important issue for many organisations and marketers. Similarly, the adoption of communication and information technologies has also contributed to privacy concerns gaining unprecedented attention between consumers, who are beginning to realise the extent of their electronic prints, and just how much personal data can be gathered about them through their use of mobile technologies (Cleff, 2007:263). Consequently, the more concerned consumers become about their privacy, the more they perceive negative consequences resulting from their adoption and use of mobile advertising (Okazaki *et al.*, 2009:66).

Since mobile devices are normally used and owned by individuals, it may be assumed that the way a device is used, the kind of data downloaded, and the phone numbers called, represent the interests and activities of that particular individual (Cleff, 2007:264). Moreover, the convenience of mobile devices results in consumers using them for work and personal purposes; consequently, mobile devices store significant amounts of personal information, regardless of whether consumers wish to use their mobile devices to store the information (MediaSmarts, 2012). King and Jessen (2010:459) indicate that when consumers use the Web browsers on their mobile devices to communicate personal information and data, this data can be automatically collected and stored, either as personally identifying or anonymous data in the databases of marketers, carriers or data warehouses. As such, the development of mobile devices has provided organisations with a convenient means to collect personal information (Cleff, 2007:265; Li & Du, 2012:2). Consequently, the perceived ubiquity of mobile devices has increased mobile consumers' concerns

regarding the collection of personal information without their awareness (Okazaki *et al.* 2009:65). Therefore, it is important for marketers to take the protection of private information in these databases seriously (Bulander *et al.*, 2005).

Cleff (2007:264) highlights that while in one situation the use of private information may be acceptable, in another it may be unacceptable, making privacy a complex concept. Although privacy is clearly compromised when personal information in databases is used without the consent of individuals, consumer profiling is continuously taking place in the background while consumers make use of their mobile devices, the Internet, multiple Websites and databases, making it difficult to obtain consent from consumers and provide them with sufficient notice. For this reason, mobile service providers should ensure that only authorised users can access the personal information on these databases (Zhou, 2011:215,219,221). Similarly, mobile service providers must adhere to their promises regarding the use of personal information and post privacy statements to inform mobile consumers about their privacy practices on information collection (Cleff, 2007:265).

Okazaki *et al.* (2009:64) postulate that when consumers provide mobile service providers with their personal information in exchange for particular services, they expect their rights to their personal information to be respected by the users of that information. Therefore, mobile service providers may not share the personal information in their databases with third parties, sell it for a profit, or use it for anything other than its intended purpose, without the consumers' knowledge (Zhou, 2011:219).

According to Zhou (2011:220), mobile service providers can prevent the unauthorised access to the personal information in their databases by making use of certifications and encryptions. As such, organisations require certain elements in their operations to protect consumer privacy. These elements may include a combination of consumer education, a legal framework and privacy-enhancing technologies (Cleff, 2007:265). Furthermore, when collecting personal information from consumers for advertising purposes, organisations must ensure that they are licensed with a government agency (Okazaki *et al.*, 2009:67). In addition, organisations are starting to invest in tools that provide them with a means to collect and analyse customer relationship information.

These tools will assist in collecting information about consumers such as their most recent requests and instructions (Potgieter, 2007:35).

Security issues and privacy concerns make trust both a crucial and complex factor of consumers' attitudes towards mobile advertising. As such, mobile marketers should aim to establish trust between themselves and their consumers (Okazaki *et al.*, 2009:73). This may be achieved by presenting consumers with mobile advertisement messages based on the consumer's terms and not on those of the marketer. In addition, marketers should ensure that their advertisement messages are decent, honest, legal and that they fill the advertisement promises they make (Vatanparast & Butt, 2009:5).

Furthermore, marketers can offer consumers an opt-out option in the mobile context, which may be seen as a preliminary sign of trustworthiness that may lead to faster personal trust development, compared to mobile advertising without the control mechanism in place (Jayawardhena *et al.*, 2009:479).

3.4.10 Mobile advertisement value

The perceived value of advertising is a product of the extent to which it meets or exceeds consumers' expectations, and is conceptualised of the overall worth of advertising from the target audience's perspective (Ducoffe, 1996:22). Wolburg and Pokrywczynski (2001:47) suggest that the more consumers relate to the advertising medium being used, the higher their perceived advertising value will be concerning that particular medium. Ducoffe (1996:32) found that the perceived value of Web advertising is a significant positive influence on consumers' attitudes of towards Web advertising. Tsang *et al.* (2004:66) indicate that in the case of mobile phone advertisements, the perceived entertainment and informativeness of a particular mobile phone advertisement may influence how consumers judge the perceived value of a particular mobile phone advertisement.

Advertising value may be used to measure the general effects of advertising as well as more specific forms of advertising, such as Web advertising (Haghirian & Madlberger, 2005:3). In addition to the practical value consumers derive from the functional elements of advertising, they may also derive value from their previous experiences with advertising (Taylor *et al.*, 2011:262).

Vatanparast (2007:2) states that mobile advertising provides consumers with time and location sensitive and personalised information regarding a marketer's goods, services or ideas, which generates value for both marketers and consumers. Gao and Ji (2008:165) illustrate that the content of mobile phone advertisements has the greatest impact on consumers' perceived mobile advertisement value. Moreover, Haghirian and Madlberger (2005:8) found that attitude value and attitude toward mobile advertising strongly relate to message content due to entertainment, informativeness and credibility having a positive effect and irritation has a negative effect. Al Khasawneh and Shuhaiber (2013:4) theorise that when a mobile phone advertisement causes a consumer some degree of irritation, it may reflect negatively on consumer attitudes and the perceived advertising value of mobile advertising.

Consumers' perceived value of mobile advertising is one of the strongest factors influencing consumers' attitudes towards mobile advertising. Consequently, the higher the perceived value of mobile advertising, the more positive consumers' attitudes towards mobile advertising will be. As such, the perceived value of mobile advertising directly influences consumers' overall attitudes towards mobile advertising.

3.5 PROPOSED MODEL OF THE FACTORS OF BLACK GENERATION Y STUDENT ATTITUDES TOWARDS MOBILE ADVERTISING

Based on the preceding literature review, Figure 3.1 illustrates a proposed model of the factors of black Generation Y students' attitudes towards mobile advertising.

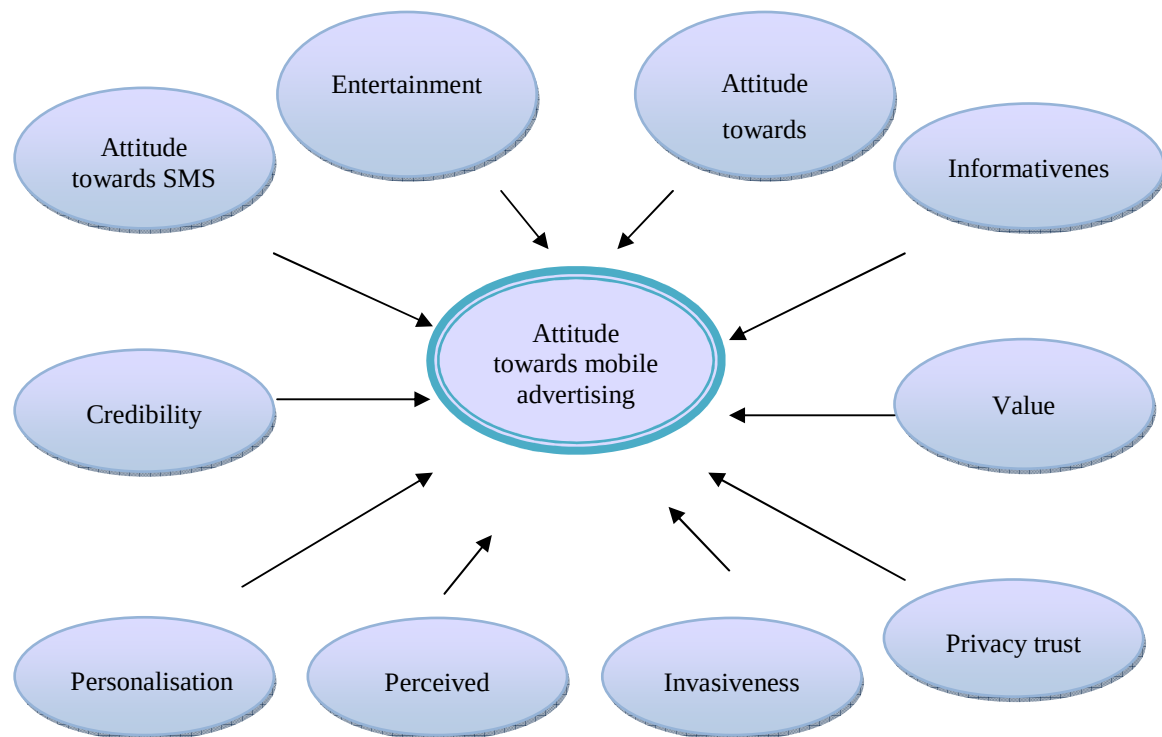


Figure 3.1: Proposed model of the factors of attitudes toward mobile advertising

3.6 CONCLUSION

This chapter included a review of the literature on the Generation Y cohort and the possible factors that determine attitudes towards mobile advertising.

Growing up in a more media-saturated, brand-conscious world has enabled the individuals of the Generation Y cohort to stay abreast of the rapid rate of technological and social change, which has led to them being dubbed the elusive new youth market segment. As such, organisations will need to embrace these individuals to ensure future success, highlighting the importance of connecting with this new generation of consumers on their own turf. This has created the need for marketers to rethink their advertising strategies and avenues geared towards these individuals.

The characteristics of advertisements play an influential role in the formation of consumer attitudes towards mobile advertising, making it vital for marketers to ensure that their advertisement characteristics are developed carefully. Marketers cannot rely on the assumption that advertisements sent via mobile devices will be read and remembered automatically. This highlights the need for marketers to understand the

factors influencing the attitudes of consumers towards mobile advertising. Consequently, attitudes towards SMS, attitudes towards advertising in general, entertainment, informativeness, credibility, personalisation, perceived control, intrusiveness, privacy trust and mobile advertisement value are believed to be the factors that influence consumer attitudes and acceptance of mobile advertising.

As such, the research methodology used in this study to empirically test the extent of attitudes towards using SMS to communicate, attitudes towards advertising in general, perceived entertainment, informativeness, credibility, personalisation, control, intrusiveness, privacy trust and value of mobile advertisements influence black Generation Y students' attitudes towards mobile advertising, is discussed in the following chapter, Chapter 4.

CHAPTER 4

RESEARCH METHODOLOGY

4.1 INTRODUCTION

Waarts *et al.* (1997:96) define marketing research as a process of systematically and objectively seeking for and analysing data, which is paramount for determining and solving marketing-related problems. The information obtained through marketing research may be used by marketers to identify marketing opportunities and threats, assist in generating, fine-tuning and evaluating marketing decisions and activities, as well as contribute not only to the chronological follow-up of the results accomplished by marketing, but to the understanding of marketing as a process. The primary objective of this study was to propose and empirically test a model of factors that influence black Generation Y students' attitudes towards mobile advertising. The following aspects were investigated from the literature:

- advertising and advertising strategy
- factors that influence attitudes towards advertising
- mobile advertising
- the growth in mobile advertising internationally, as well as in South Africa
- the factors that influence attitudes towards mobile advertising
- Generation Y – the characteristics of its members and the impact that technology has had on this generation.

Based on the literature review that was provided in the previous chapters, a proposed model of factors influencing black Generation Y students' attitudes towards mobile advertising was developed, which was then empirically tested.

This chapter illustrates the research methods used in this study and justifies the selection of the chosen methods. Furthermore, the research design, as well as the sampling procedure and data collection process, including the techniques implemented to analyse the data are discussed in this chapter. The issues of validity

and reliability are also addressed. The following sections describe the design of the research, which was used to ensure that the study made use of sound procedures and methods of enquiry.

4.2 RESEARCH DESIGN

A study's research design provides the framework for conducting the research project. There are three major research designs, namely exploratory research, which primarily involves qualitative data, and causal research and descriptive research, both of which primarily involve quantitative data (Malhotra, 2010:103). The three research design categories are discussed as follows:

- Exploratory research involves acquiring insight into the problem of the subject that is to be researched. This allows marketers to outline clearly the often wide and vague problem at hand, to demarcate openly the issues and hypotheses applicable to the research. Exploratory research involves qualitative research methods such as focus group discussions, in-depth interviews and projective techniques.
- Causal research, also known as testing research, is a conclusive research design that involves testing, either to confirm or reject, the assumed relations between variables and to measure the size of the effect or the strength of the relation. In the case of this type of research it is assumed that not only are the relevant variables known but the correlation between the variables is specified clearly (Cherry, 2011; Galagali, 2011; Waarts *et al.*, 1997:83,87,89-90).
- Descriptive research is a form of conclusive research with the main objective being the description of something, such as market functions or characteristics. Typically, this research design involves large samples, is pre-planned and structured and clearly specifies the who, what, when, where, why and way of the research. A descriptive research design may be cross-sectional in nature, which involves the once off collection of data from a sample of the target population, or longitudinal, which involves the repeated collection of data from a fixed sample of a target population (Malhotra, 2010:106). This study followed the descriptive research approach using a single cross-sectional design.

The sampling strategy used in this study is discussed next.

4.3 SAMPLING STRATEGY

The following sampling procedure was utilised in this study:

4.3.1 Target population

The target population is the term given to the collection of elements about which assertions are to be made within a framework of a sample survey (Waarts *et al.*, 1997:102). Swanepoel *et al.* (2006:13) highlight that a sample, also known as a subset of a population, is a group of elements from the target population from which data are gathered. In order to ensure that the results obtained from a sample may be generalised to the population, the sample needs to be representative of the target population. Herek (2009) postulates that sampling is necessary given that typically it is not feasible to gather data from every element in a target population.

The target population relevant to this study comprised full-time black Generation Y undergraduate students, between the ages of 18-24, enrolled at South African public registered HEIs during 2013.

4.3.2 Sampling frame

Waarts *et al.* (1997:106) define the sampling frame as the concrete list of elements, such as a listing of companies, persons, households and the like, from where the sample will be drawn.

The sampling frame for this study constituted the 23 public registered HEIs in South Africa (Higher Education in South Africa, 2011). From the original sampling frame of these 23 public registered HEIs, a non-probability judgement sample of three HEIs, located in the Gauteng province, was taken to narrow the sampling frame. The final sampling frame included one traditional university campus, one comprehensive university campus and one university of technology campus.

4.3.3 Method of sampling

There are two types of sampling methods, known as probability and non-probability sampling (Nel *et al.*, 1998:97). Trochim (2006a) defines probability sampling as any method of sampling that makes use of some type of random selection, which ensures that each element in the target population has an equal probability of being chosen for

inclusion in the sample. Non-probability sampling does not involve random selection. Malhotra (2010:376) theorises that non-probability sampling involves sampling techniques that rely on the personal judgement of researchers, instead of the use of chance selection procedures. Many researchers view probability sampling as superior to non-probability sampling due to its accuracy and rigour; however, in some circumstances probability sampling may not be feasible, practical or theoretically sensible, which then results in the use of non-probability techniques.

Castillo (2009) indicates that probability sampling encompasses simple random, stratified and cluster sampling, whereas non-probability sampling involves judgement sampling, convenience sampling, snowball sampling or quota sampling. Convenience sampling provides a means of selecting subjects on the basis of proximity and convenient accessibility. Owing to the speed, ease and low expense associated with this form of sampling as well as the availability of the subjects, it is often the preferred choice of researchers.

Although the sampling method and sampling frame go hand-in-hand, the choice of sampling method is made based on a variety of factors, ranging from the objectives of the research study to the financial resources available, the time constraints and the nature of the problem under investigation (McDaniel & Gates, 1999:411). Taken from the sampling frame of 23 public registered HEIs in South Africa, the final sampling frame included three HEI campuses located in Gauteng. From this final sampling frame, a non-probability, convenience sample of 600 full-time black Generation Y students, enrolled in the three HEIs campuses was taken between May 2013 and August 2013. The study was conducted without replacement sampling.

4.3.4 Sample size

A sample size is defined as the number of elements in a study's sample. The sample size depends on factors such as the variation of the characteristics found within the population to be researched, as well as the desired reliability and accuracy of the outcome (Waarts *et al.*, 1997:107).

Based on the studies undertaken by Barutcu (2007:31), Cui *et al.* (2003:315) and Tsang *et al.* (2004:70), a sample size of 600 full-time black Generation Y undergraduate students was considered sufficiently large. The sample size of 600 full-

time black Generation Y undergraduate students was split equally between the three HEIs campuses, thereby allowing a sample size of 200 full-time black Generation Y students per HEI campus.

4.4 DATA COLLECTION METHOD

Chisnall (1992:27) identifies data collection as the cornerstone of all research activities within any research study. Gathering quantitative data in a descriptive research study typically involves the survey method and/or the observation method. Struwig and Stead (2001:41-42) postulate that whereas the observation method involves the observation of individuals or phenomena, the survey method makes use of self-administered or fieldworker-administered questionnaires, whereby participants are asked questions about a variety of variables in order to elicit responses.

The survey approach was used to collect the necessary data for this study. Warren and Kann (2013) highlight that survey methods involve the use of structured questionnaires, with the objective being to extract specific data from participants. In this study, the survey was conducted by means of a self-administered questionnaire.

The questionnaire design is discussed in the following section.

4.4.1 Questionnaire design

Lucid (2013:1) defines a questionnaire as a device that is used to obtain data, and may include questions or statements that the participants are requested to respond to, often anonymously.

O'Connor (2005) postulates that sound research necessitates that the questionnaire design addresses the specific needs of the research study. The needs of the research study should be clear and concise to ensure that the questionnaire is designed in such a manner that it addresses the needs of the research study in the most effective and efficient way possible. Williams (2003) adds that a successful questionnaire is one that is designed to attain the highest possible response rate. This necessitates ensuring that the questionnaire is as short as possible, and that the questionnaire has a meaningful title, which will contribute to its credibility. In addition, the language used in the questionnaire should be easy for participants to understand and interpret.

Churchill (1995:433) suggests that when using a questionnaire in a research study, it is vital to include a well-written cover letter, which will not only be used to introduce the research study but will also be influential in encouraging participants to participate in the study. The questionnaire should be designed to be as convenient as possible for the participants to complete and should include clear and concise instructions on how to complete the questionnaire, thereby ensuring the highest likely response rate, which will improve the quality of the research study.

For the purpose of this research study, the following aspects were taken into account to ensure that the most appropriate questionnaire design was used. The needs and goals of the questionnaire were clear and concise, the questionnaire was concise and the language used in the questionnaire was easy for the participants to understand and interpret. In order to explain the purpose of the research study and request the participation of the participants, a cover letter was attached to the front of the questionnaire. The questionnaire was handed out to the participants during their lectures, where they were given the necessary amount of time required to complete the questionnaire, which assisted in ensuring convenience for the participants.

4.4.2 Questionnaire content

Prior to designing the questionnaire, the needs of the research study were determined by reviewing the empirical objectives of the study. In accordance with these objectives, the questionnaire included the adapted scales of Bracket and Carr (2001:29), Ducoffe (1996:28), Jayawardhena *et al.* (2009:498), Li *et al.* (2002:42), Merisavo *et al.* (2007:49), Pollay and Mittal (1993:112-113), and Xu (2006-2007:13). These scales were included to measure attitudes towards SMSs (four items), attitudes towards advertising (three items), perceived entertainment (five items), informativeness (seven items), credibility (three items), personalisation (three items), and perceived control of mobile advertising (three items), as well as the perceived invasiveness (five items), trust (three items), value (three items) and overall attitude towards mobile advertising (one item).

In addition, the questionnaire contained demographic questions, such as province of origin, mother tongue language, age and gender, to ascertain the representativeness of the sample. There were also three questions designed to measure willingness to receive mobile advertisements, frequency with which mobile advertisements are read,

and extent to which mobile advertisements are read. A cover letter was included in the questionnaire outlining the nature and purpose of the study.

The items in the scale address the different research objectives set out at the beginning of the study, as presented in Section 1.3.3. Table 4.1 indicates which items were used to address each of the objectives set out in this study.

Table 4.1: Items answering the empirical research objectives

EMPIRICAL RESEARCH OBJECTIVES	ITEMS
Determine black Generation Y students' attitudes towards using the SMS to communicate with friends and family.	B1-B4
Determine black Generation Y students' attitudes towards advertising in general.	C1-C3
Empirically test the extent to which the perceived entertainment of mobile advertisements influences black Generation Y students' attitudes towards mobile advertising.	D1-D5
Empirically test the extent to which the perceived informativeness of mobile advertisements influences black Generation Y students' attitudes towards mobile advertising.	D6-D12
Empirically test the extent to which the perceived credibility of mobile advertisements influences black Generation Y students' attitudes towards mobile advertising.	D13-D15
Empirically test the extent to which the perceived personalisation of mobile advertisements influences black Generation Y students' attitudes towards mobile advertising.	D16-D18
Empirically test the extent to which perceived control over mobile advertisements influences black Generation Y students' attitudes towards mobile advertising.	D19-D21
Empirically test the extent to which the perceived invasiveness of mobile advertisements influences black Generation Y students' attitudes towards mobile advertising.	D22-D26

Table 4.1: Items answering the empirical research objectives (continued ...)

EMPIRICAL RESEARCH OBJECTIVES	ITEMS
Empirically test the extent to which perceived privacy trust of mobile advertisements influences black Generation Y students' attitudes towards mobile advertising.	D27- D29
Empirically test the extent to which the perceived value of mobile advertisements influences black Generation Y students' attitudes towards mobile advertising.	D30- D32
Determine black Generation Y students' overall attitude towards receiving mobile advertisements	D33

The following section discusses the question structure.

4.4.3 Questionnaire structure

Structured-undisguised questions were used throughout the questionnaire. Section A of the questionnaire included dichotomous and multiple-choice questions. Section E included structured multiple-choice questions.

Sections B, C and D used Likert scales. Malhotra (2010:308-309) explains that a Likert scale is a rating scale where data is treated as interval that requires participants to indicate their level of agreement/disagreement to a series of statements. In this study, a six-point Likert scale was utilised that ranged from 1= strongly disagree, 2= disagree, 3= slightly disagree, 4= slightly agree, 5= agree, 6= strongly agree. Chisnall (1992:170) indicates that the Likert scale is highly reliable and allows for fast and efficient data collection, making it a popular choice for many quantitative research studies. Malhotra (2010:309) adds that the Likert scale offers the advantages of being “easy to construct and administer” and easy for participants to complete.

4.4.4 Pilot testing of the questionnaire

Churchill (1995:356) defines pilot testing as the use of a questionnaire on a trial basis in a small study, which does not form part of the main study to measure the effectiveness and efficiency of the questionnaire being used. Van Teijlingen and Hundley (2001) suggest that although pilot studies are a vital element in a good study

design they do not guarantee successful main studies; however, they do increase the chances of success. Hair *et al.* (2008:180) add that researchers may use the findings of a pilot test to make any necessary changes to the questionnaire before it is used in the main study. Some of the necessary changes may include altering or revising the instructions of the questionnaire, providing the participants with more time to answer the questionnaire, changing the wording of certain questions to make better sense to the participants or adapting the cover letter of the questionnaire.

Before conducting the pilot test, two experienced researchers, in the relevant field, examined the questionnaire to search for any obvious mistakes or potential problems in order to ascertain the face validity of the instrument. Following this, a pre-test using the debriefing approach was applied to ensure that each item in the questionnaire was decoded in the intended manner. One staff member and three students were chosen to participate in the debriefing pre-test. The debriefing approach involves the presentation of a questionnaire to a participant, exactly as it would be done when presenting the final questionnaire. Once the participant has completed the questionnaire, that person is asked about his/her thought processes while completing the questionnaire, including any problems or errors that were experienced. This pre-test was done to ensure that the questionnaire was easy to understand by both English and non-English speaking participants. In the South African market, this is essential given the multilingual context of the country. As such, only two of the four participants used in the debriefing process of this study had English as their first language, whereas the other two participants had English as their second language.

Once all the necessary adjustments and refinements were made to the questionnaire, the questionnaire was subject to pilot testing. For this study, the questionnaire was piloted on a convenience sample of 50 black Generation Y students, who did not form part of the main sample, in order to determine the reliability and validity of the instrument. Following the pilot study, three items in Section D were re-worded. Once this was completed, the revised questionnaire (refer to Annexure A) was then prepared for the main survey of the study. The results of the pilot study are analysed and reported on in Chapter 5.

4.5 ADMINISTRATION OF THE QUESTIONNAIRE

The formal survey for this research was conducted in mid-2013 on a sample of 600 black Generation Y students. The lecturers at each of the three HEI campuses chosen in this study were contacted and asked if they would agree to allow their students to complete the questionnaire during lectures. Once permission had been obtained, the self-administered questionnaire was distributed to students during class time at each of the three campuses in 2013.

4.6 STATISTICAL ANALYSIS

The SPSS and AMOS package, Version 21.0 for Windows, was used to analyse the captured data. The following section describes the statistical methods applied on the empirical data sets.

4.6.1 Frequency distribution

Typically, the first step in a data analysis is to assess the frequency distributions of the variables in the data set (Malhotra, 2010:484). In the case of categorical variables, such as those used to describe the demographic profile of a sample, only frequencies should be used (Pallant, 2010:55). A frequency distribution is a count of the number of responses for each value of a variable. Statistical tables, graphs, pictures, maps and the like may be used to provide clarity to a research study reports (Malhotra, 2010:484,765). For the purpose of this research study, statistical tables and pie charts are used to report on the frequency distributions.

4.6.2 Exploratory factor analysis

Pallant (2010:181) indicates that factor analysis is a data reduction statistical method that may serve an exploratory or confirmatory purpose. Malhotra (2010:739) defines exploratory factor analysis (EFA) as the process of identifying the underlying dimensions or factors that explain the correlations between a set of variables. Before EFA can be undertaken, it is necessary to ensure that the sample size is suitable, where the larger the sample size, the better (Pallant, 2010:182-183). As a rule of thumb, a five to one ratio is advised, which entails five observations for each item to be factor analysed (Hair *et al.*, 2010:102). Bartlett's Test of Sphericity and the Kaiser-Meyer-Olkin (KMO) measure of sampling adequacy may be used to assess the

factorability of the data. When the KMO produces a value greater than 0.6 and the Bartlett's Test of Sphericity is significant, the sample is adequate (Pallant, 2010:183).

In factor analysis, there are two basic approaches, namely common factor analysis and principle component analysis (Malhotra, 2010:643). This study used principle component factor analysis.

4.6.2.1 Principal component analysis

When using principal component analysis, it is assumed that all communalities are initially 1.0. As such, the total variance of the variables may be accounted for by the factors or components, which indicates a no error variance. Therefore, researchers must determine the optimal number of factors that may be extracted to best depict the interrelations between sets of variables (Pallant, 2007:181). Several methods may be applied in determining the optimal factor solution. These include specifying the number of factors in accordance with prior knowledge of the expected number of factors, determining the number of factors by only retaining those with eigenvalues greater than 1.0 or using the scree plot to ascertain the number of factors to retain (Malhotra, 2010:643).

Once the factors have been extracted, there may be some difficulty in interpreting and naming the factors or components based on their factor loadings. As such, factor rotation may be used to address this problem. There are two main categories of rotation: orthogonal rotation, which includes Varimax, Quartimax and Equamax rotation techniques and oblique rotation, which includes Direct Oblimin and Promax rotation techniques (Pallant, 2010:185). Varimax rotation is the most commonly used orthogonal rotation method (Malhotra, 2010:645) and the one used in this study.

4.6.3 Reliability and Validity

In this section, the measures of reliability and validity are discussed.

4.6.3.1 Reliability

Reliability is the term used to describe the ability of a measurement instrument to produce consistent, if not identical, results over and over again when used (Schoell & Guiltinan, 1995:118). As such, reliability is the consistency of a measure (Cherry, 2013a).

When making use of multi-item summated rating scales, Cronbach's alpha may be used to measure the internal reliability. The Cronbach alpha value ranges from 0 to 1, where a value of 0.6 or less is indicative of a scale not being reliable; that is, not exhibiting satisfactory internal consistency (Kent, 2001:221; Malhotra, 2010:319). According to Nunally (1978:245), a Cronbach alpha value of 0.70 or above is preferable.

As indicated earlier in this chapter, the scales used in this study were adapted from published studies. In each of these previous studies, a Cronbach alpha above the recommended 0.70 was computed, indicating that the scales were reliable (Bracket and Carr, 2001:29-30; Ducoffe, 1996:30; Jayawardhena *et al.*, 2009:484; Li *et al.*, 2002:42-43; Merisavo *et al.*, 2007:44; Pollay & Mittal, 1993:105-106 & Xu, 2006-2007:14).

4.6.3.2 Validity

Cherry (2013b) indicates that validity is, "the extent to which a test measures what it claims to measure". Colosi (1997) and Malhotra (2010:318, 320) adds that it illustrates the degree to which differences in observed scale scores reflect true differences between objects or articles based on the characteristic being investigated and measured. McDaniel and Gates (1999:308) suggest that if the measuring instrument being used in a research study is not reliable, the results will not be valid; that is, reliability is a precondition of validity. There are several forms of validity, including content validity, criterion validity and construct validity.

Content validity is concerned with evaluating the extent to which the items in a scale reflect the scope of the theoretical construct they purport to measure. Whilst determining content validity is a systematic procedure that typically involves the input of subject experts, it is a subjective form of assessing validity (Malhotra, 2010:320). Criterion validity involves assessing how the scores computed on a scale relate to a specified and meaningful measurable criterion (Malhotra, 2010:320; Pallant, 2010:7). Assessing the construct validity involves considering convergent, discriminant and nomological validity. Convergent validity is the extent to which constructs measuring the same theoretical dimensions in a scale positively correlate with each other. In contrast, discriminant validity refers to the extent to which constructs measuring different theoretical dimensions in a scale do not correlate with each other (Malhotra,

2010:320-321). Clark and Watson (1995:316) suggest that an average inter-item correlation value of between 0.15 and 0.50 is indicative of convergent and discriminant validity. Nomological validity is “the extent to which the scale correlates in theoretically predicted ways with measures of different but related constructs” (Malhotra, 2010:321).

4.6.4 Descriptive statistics

Descriptive statistics form the foundation of almost any quantitative analysis of data (Trochim, 2006b). In this study, a combination of the three most common descriptive statistics, namely measure of location (means), measure of variability (standard deviations), and measure of shape (skewness and kurtosis) were used.

4.6.4.1 Measures of location

Malhotra (2010:486) defines measures of location, sometimes referred to as measures of central tendency, as the term used to describe the centre of the distribution. Daintith (2004) highlights the three most important measures of location to include the mean, median and mode. This study made use of one particular measure of location, namely the mean. Nel *et al.* (1988:342) identify the mean as the total of all values of a series, divided by the number of values. As such, the mean is the average value within a distribution (Hair *et al.*, 2008:246).

4.6.4.2 Measures of variability

According to Waarts *et al.* (1997:97), measures of variability are “statistical ratios”, which describe the “variability of the observations”. Lane (2003) stipulates that variability refers to the level of dispersion or scatter of observations in a data set. Malhotra (2010:487) adds that measures of variability are calculated on ratio or interval data.

In this study, the standard deviation was used to measure variability. The standard deviation is the extent of variability within a data set, which describes “the extent of dispersion around the arithmetic mean” (Waarts *et al.*, 1997:109).

4.6.4.3 Measures of shape

According to Malhotra (2010:488), measures of shape aid in understanding the nature of a distribution and involve assessing the skewness and kurtosis of the distribution.

Weisstein (2013) indicates that skewness measures a distribution's degree of asymmetry. When the left tail of the distribution is more noticeable than the right tail, the distribution is skewed negatively. In a positively skewed distribution, the right tail would be more noticeable. The degree of skewness is measured with the use of the skewness ratio. Where the distribution is skewed either positively or negatively, it indicates that the median and the mean do not converge; however, where the distribution is equal, the median is then equal to the mean (Waarts *et al.*, 1997:108).

According to Taylor (2013), kurtosis is the term given to the measurement of a distribution's peak, which illustrates the height of the distribution in relation to the mean. Brown (2012) postulates that the higher the kurtosis value is for a specific distribution the higher and sharper the peak will be and the lower the value is the lower and less distinct the peak will be. The reason for this is that higher kurtosis values indicate greater variability as a result of a small number of extreme differences from the mean, compared to a lot of modest differences from the mean.

4.6.5 Correlation analysis

According to Hair *et al.* (2008:710), constructing a matrix of construct correlations makes it possible to assess the nomological validity of a proposed measurement model. As such, the Pearson Product-Moment correlation coefficients between each pair of constructs may be calculated to assess nomological validity. Crossman (2013a) indicates that correlations may be used to depict the strength of a relationship between two variables. When correlations are weak or low, it depicts no or little relation between variables. However, when a correlation coefficient is high or strong it illustrates a strong relationship between two or more variables. Correlation coefficients may range between -1.00 and +1.00. A correlation of -1.00 indicates a perfect negative correlation, 0 indicates no relationship at all and +1.00 indicates a perfect positive correlation (Pallant, 2007:132).

4.6.6 Structural equation modelling

Structural equation modelling (SEM) is the statistical procedure used to investigate “the complex relationships between observed (measured) and unobserved (latent) variables as well as relationships between two or more latent variables” (Anglim, 2007:1).

An essential prerequisite of any SEM model is that it should be based on an underlying theory given that a SEM model cannot be estimated until all the relationships have been specified (Malhotra, 2010:726). As such, SEM includes specifying the measurement model in order to conduct a confirmatory factor analysis and then setting up the structural model for the path analysis (Zappa, 2012:2). According to Malhotra (2010:726), the measurement model illustrates how the observed or measured variables represent constructs, and the structural model represents how “constructs are related to each other, often with multiple dependence relationships”.

Goodness of fit is used to describe how well the specified model reproduces the covariance matrix among the indicator items, where the higher the values of the variables the better (Malhotra, 2010:731). In this study the chi-square, standardised root mean residual (SRMR), root mean square of approximation (RMSEA), incremental fit index (IFI), comparative fit index (CFI) and Tucker-Lewis index (TLI) indices were used to measure the model fit. According to Byrne (2010:77-80), a SRMR value of 0.05 or less, and a RMSEA value of less than 0.08, together with IFI, CFI and TLI values above 0.90, but closer to 0.95, indicate an acceptable model fit.

While a significant chi-square value is an indication of poor model fit, Hair *et al.* (2008:666-667) indicate that the chi-square statistic tends to be notoriously susceptible to the effects of large sample sizes, which is precisely why other goodness-of-fit indices were developed.

In addition to the model fit data, composite reliability (CR) and average variance extracted (AVE) are examined to measure the reliability and validity of the measurement model. Composite reliability is used to test the reliability and is calculated with the use of the following formula:

$$[(F_{l1}+F_{l2}+F_{l3}+...)^2 / (F_{l1}+F_{l2}+F_{l3}+...)^2 + (err_1+err_2+err_3+...)]$$

The measurement model is said to be reliable when all constructs exceed the critical level of 0.70 (Zen, 2007).

The AVE measures the overall variance in the indicators, accounted for by the latent construct. This may be calculated using the following formula:

$$[(F1_1^2+F1_2^2+F1_3^2+...)/(F1_1^2+F1_2^2+F1_3^2+...)+(err_1+err_2+err_3+...)]$$

Convergent validity is believed to be achieved when all constructs exceed the critical levels of 0.50 for the AVE (Paswan, 2009:36-37). Furthermore, discriminant validity is achieved when the correlation coefficients are smaller than the square root of the AVE (Malhotra, 2010:741).

Whereas the measurement model tests for the reliability and validity of the measures, the structural model is used to test the structural relationships in a model. As such, due to the structural model being based on the nature and size of the relationships between constructs, both the estimated covariance matrix as well as the fit indices will be altered, illustrating that the structural model's fit is indeed different to the measurement model's fit. Therefore, not only does the structural model need to have a good fit, but also it is recommended to show that the proposed model has the best fit in comparison to competing models that may be considered as alternatives (Rigdon, 1996; Skrandal & Rabe-Hesketh, 2005:2).

When comparing two or more models it is advisable to consider Akaike's information criterion (AIC) and Bozdogan's consistent version of the AIC (CAIC) (Byrne, 2010:82). The AIC measures the relative quality of a statistical model for a particular set of data, making it a means for selecting models. AIC offers an estimation of the information lost when a particular model is used to represent the process that generates data (Cavanaugh, 2012:3). The CAIC is also a well-known measure for model selection. Consequently, with regards to both measurements the smaller the values, the better the fit (Byrne, 2010:82).

Path analysis is seen as a unique case of SEM and gives a regression to each variable within a model as a dependant on others, which a model identifies as causes. The observed correlation matrix for the variables is compared against the regression weights estimated by a model and from there a goodness-of-fit statistic may be calculated. Moreover, path analysis calculates the strength of each relationship using only a correlation or covariance matrix as input (Malhotra, 2010:748-749). To be able to conduct path analysis, all causal relationships between variables must be clearly identifiable and time-orderly, as one variable cannot be said to cause another unless it precedes it in time (Crossman, 2013b). With the use of path analysis researchers are able to determine which hypothesised model is the best fit for the pattern of

correlations found within a data set. In addition, path analysis allows researchers to separate the various factors influencing an outcome into indirect components and direct effects (Lleras, 2005:25). Malhotra (2010:735) suggests that it is also useful to investigate the squared multiple correlations of a data set, which is the term given to the statistic measure depicting “the extent to which the variance of an observed variable is explained by the associated latent construct”.

4.7 CONCLUSION

The primary objective of this study was to propose and empirically test a model of factors that influence black Generation Y students’ attitudes towards mobile advertising.

Given the nature of the study, a descriptive research design, using a single cross-sectional sample, was followed. The sampling frame of the study was the 23 public registered HEIs in South Africa. Using judgement sampling, this initial sampling frame was narrowed down to include three HEI campuses in the Gauteng province – one from a traditional university, one from a comprehensive university and one from a university of technology. Thereafter, a non-probability sample of 600 students (200 per campus) was taken.

The required data was collected using a self-administered questionnaire that comprised scales drawn from previously published studies, and these responses were measured on a six-point Likert scale. The questionnaire also included questions designed to gather demographical information and data on mobile advertising usage.

The captured data was analysed using SPSS and AMOS, Version 21.0 for Windows. The statistical analysis included frequencies, exploratory factor analysis, reliability, validity, descriptive statistics, correlation analysis and SEM.

The next chapter, Chapter 5, presents and discusses the main findings emanating from the statistical analysis of the captured data.

CHAPTER 5

ANALYSIS AND INTERPRETATION OF EMPIRICAL FINDINGS

5.1 INTRODUCTION

This chapter reports on and interprets the empirical findings of this study. The chapter includes an overview of the results of the pilot test in Section 5.2, and a description of the data gathering process in Section 5.3. In Section 5.4, the preliminary data analysis is outlined and in Section 5.5, the demographic and mobile advertising usage analysis is discussed. Thereafter, in Section 5.6, the study outlines the exploratory factor analysis undertaken, followed by Section 5.7, which discusses the reliability and validity analysis of the main survey. Section 5.8 outlines the descriptive statistics of the study and Section 5.9, the correlation analysis. In Section 5.10, the various hypotheses for this study are formulated and tested and Section 5.11 highlights the structural equation modelling.

In order to perform the data analysis, SPSS and AMOS, Versions 21.0 for Windows was used. The data analysis was conducted in two stages. The first stage involved analysing the results of the pilot testing of the questionnaire, and the second stage involved analysing the main survey's findings. The next section will discuss the data analysis procedures involved in the pilot phase.

5.2 RESULTS OF THE PILOT TEST

Following an initial pre-testing of the questionnaire, conducted to ascertain face and content validity, the questionnaire was piloted on a convenience sample of 50 black Generation Y students enrolled at a South African HEI that did not form part of the sampling frame of the main study, in order to establish the reliability of the scale within the questionnaire.

The results obtained in the pilot study, as presented in Table 5.1, provide a satisfactory indication of reliability. The six-point Likert scale returned a Cronbach alpha of 0.674 for Section B, 0.712 for Section C, and 0.895 for Section D. The

Cronbach alpha value tends to increase with an increase in the number of scale items, and the value tends to decrease with a decrease in the number of scale items (Pallant, 2007:6, Sultan & Wong, 2011/2012). Malhotra (2010:319) indicates that the Cronbach alpha needs to range between 0.6 and one for a satisfactory reliability, and the closer the Cronbach alpha is to one, the more reliable the scale is.

Table 5.1 Summary of pilot test results

Items	Number of variables	Mean	Standard deviation	N	Cronbach alpha	Average inter-item correlation
B1 – B4	4	1.892	1.045	50	0.674	0.339
C1-C3	3	1.715	0.695	50	0.712	0.450
D1-D5	5	1.269	1.491	50	0.949	0.791
D6-D12	7	3.293	1.017	50	0.893	0.551
D13-D15	3	3.011	0.840	50	0.634	0.357
D16-D18	3	2.435	1.058	50	0.705	0.440
D19-D21	3	2.382	1.203	50	0.468	0.230
D22-D26	5	1.806	1.062	50	0.839	0.521
D27-D29	3	1.545	1.299	50	0.778	0.539
D30-D32	3	1.157	1.040	50	0.856	0.671

Even though some of the inter-item correlation means fell outside of the recommended range of 0.15 and 0.50 (Clark & Watson, 1995: 316), it was decided to proceed with the study. This was due to the scale being adapted from previous scales, which were previously proven to be robust measuring instruments in the studies of Ducoffe (1996), Brackett and Carr (2001), Li *et al.* (2002) and Merisavo *et al.* (2007).

5.3 DATA GATHERING PROCESS

The self-administered questionnaire was used to gather the required data from black Generation Y students enrolled at the three HEI campuses that constituted the final sampling frame. Lecturers at each of the campuses were contacted and asked if they would allow the questionnaire to be distributed to their students during lectures. Once permission had been given, the questionnaires were distributed to the students. The

students were informed that participation was voluntary and that all information they provided would remain confidential, including the name of the HEI where they were registered. A combination of postgraduate, first, second and third year students were used in this study.

5.4 PRELIMINARY DATA ANALYSIS

Before analysing a data set, it is recommended that a preliminary data analysis be conducted on the data set, which is done by using coding and tabulation.

5.4.1 Coding

Churchill (1995:51) defines coding as the technical process used to divide data into categories. It involves the use of assigned selection categories into which participants should place their responses, which is followed by the assignment of code numbers to the different category answers so that the responses may be computer analysed.

In the questionnaire for this study, the questions are classified into five sections, namely Section A, demographical data, Section B, attitudes toward the use of the SMS, Section C, attitudes towards advertising, Section D, opinions of mobile advertising, and Section E, the behaviour of individuals after receiving mobile advertisements on their mobile devices. The same questionnaire was administered to all the participants in the sample.

Table 5.2 presents the variable codes and assigned values.

Table 5.2 Coding information

Section A: Demographical data			
Question	Code	Construct measured	Value assigned to responses
Question 1	A1	Name of Institution	Traditional university (1), University of technology (2), Comprehensive university (3)
Question 2	A2	Year of study	1 st year (1), 2 nd year (2), 3 rd year (3), Post graduate (4)
Question 3	A3	Gender	Male (1), Female (2)
Question 4	A4	Race	Black/ African (1), Coloured (2), Indian/ Asian (3), White (4)

Table 5.2 Coding information (continued ...)

Section A: Demographical data			
Question	Code	Construct measured	Value assigned to responses
Question 6	A6	Province where you grew up	Eastern Cape (1), Free State (2), Gauteng (3), Kwa-Zulu Natal (4), Limpopo (5), Mpumalanga (6), Northern Cape (7), North West (8), Western Cape (9), Other (10)
Question 7	A7	Your mother tongue language	Afrikaans (1), English (2), IsiNdebele (3), IsiXhosa (4), IsiZulu (5), Sesotho sa Leboa (6), Sesotho (7), Setswana (8), SiSwati (9), Tshivenda (10), Xitsonga (11), Other (12)
Section B: Attitudes towards using SMSs to communicate with friends and family			
Item	Code	Construct measured	Value assigned to responses
Item 1	B1	Attitudes towards SMSs	Strongly disagree (1), Disagree (2), Slightly disagree (3), Slightly agree (4), Agree (5), Strongly agree (6)
Item 2	B2		
Item 3	B3		
Item 4	B4		
Section C: Attitudes towards advertising in general			
Item	Code	Construct measured	Value assigned to responses
Item 1	C1	Attitudes towards advertising	Strongly disagree (1), Disagree (2), Slightly disagree (3), Slightly agree (4), Agree (5), Strongly agree (6)
Item 2	C2		
Item 3	C3		
Section D: Attitudes towards mobile advertising			
Item	Code	Construct measured	Value assigned to responses
Item 1	D1	Perceived entertainment value of mobile advertisements	Strongly disagree (1), Disagree (2), Slightly disagree (3) Slightly agree (4), Agree (5), Strongly agree (6)
Item 2	D2		
Item 3	D3		
Item 4	D4		
Item 5	D5		
Item 6	D6	Perceived informativeness value of mobile advertisements	Strongly disagree (1), Disagree (2), Slightly disagree (3), Slightly agree (4), Agree (5), Strongly agree (6)
Item 7	D7		
Item 8	D8		
Item 9	D9		
Item 10	D10		
Item 11	D11		
Item 12	D12		

Table 5.2 Coding information (continued ...)

Section D: Attitudes towards mobile advertising			
Item	Code	Construct measured	Value assigned to responses
Item 13	D13	Perceived credibility of mobile advertisements	Strongly disagree (1), Disagree (2), Slightly disagree (3), Slightly agree (4), Agree (5), Strongly agree (6)
Item 14	D14		
Item 15	D15		
Item 16	D16	Perceived personalisation of mobile advertisements	Strongly disagree (1), Disagree (2), Slightly disagree (3), Slightly agree (4), Agree (5), Strongly agree (6)
Item 17	D17		
Item 18	D18		
Item 19	D19	Perceived control over mobile advertisements	Strongly disagree (1), Disagree (2), Slightly disagree (3), Slightly agree (4), Agree (5), Strongly agree (6)
Item 20	D20		
Item 21	D21		
Item 22	D22	Perceived intrusiveness of mobile advertisements	Strongly disagree (1), Disagree (2), Slightly disagree (3), Slightly agree (4), Agree (5), Strongly agree (6)
Item 23	D23		
Item 24	D24		
Item 25	D25		
Item 26	D26		
Item 27	D27	Perceived trustworthiness of mobile advertisements	Strongly disagree (1), Disagree (2), Slightly disagree (3), Slightly agree (4), Agree (5), Strongly agree (6)
Item 28	D28		
Item 29	D29		
Item 30	D30	Perceived value of mobile advertisements	Strongly disagree (1), Disagree (2), Slightly disagree (3), Slightly agree (4), Agree (5), Strongly agree (6)
Item 31	D31		
Item 32	D32		
Item 33	D33	Overall attitude towards receiving mobile advertisements	Strongly disagree (1), Disagree (2), Slightly disagree (3), Slightly agree (4), Agree (5), Strongly agree (6)
Section E: Willingness to receive and read mobile advertisements			
Question	Code	Construct measured	Value assigned to responses
Question 34		Willingness to receive mobile advertisements	Less than once a day (E1), Twice a day (E2), Three times a day (E3), More than four times a day (E4)
Question 35		Frequency at which mobile advertisements received are read	Ignore completely (E5), read occasionally (E6), Read after accumulating many of them (E7), Read when I get time (E8), Read right away (E9)
Question 36		Degree to which mobile advertisement is read	Read none of the message (E10), Read about a quarter of the message (E11), Read about a half of the message (E12), Read about three-quarters of the message (E13), Read the whole message (E14)

5.4.2 Data cleaning

During this step, questionnaires completed by individuals falling outside of the defined target population were discarded. This resulted in nine questionnaires being discarded. In addition, scaled-responses within questionnaires with missing values of less than 10 percent were estimated, based on the mode.

5.4.3 Tabulation

Once the data is coded, the next step is to tabulate the data. Tabulation involves calculating the number of responses in each of the predetermined categories in order to ensure that the data is easily understandable (Chisnall, 1992:356; Hair *et al.*, 2008:233). Table 5.3 presents the frequency table for black Generation Y students' attitudes towards mobile advertising.

Table 5.3 Frequency table of responses

Scale item	Strongly disagree	Disagree	Slightly disagree	Slightly agree	Agree	Strongly agree
	1	2	3	4	5	6
B1	35	52	55	109	127	77
B2	15	30	62	97	147	103
B3	52	47	52	71	104	128
B4	10	8	21	73	151	191
C1	10	4	5	36	175	225
C2	7	10	26	110	174	128
C3	7	5	25	115	205	98
D1	127	87	63	101	48	29
D2	124	98	64	95	46	28
D3	120	96	77	86	53	23
D4	128	106	73	78	50	20
D5	128	109	73	82	41	22
D6	3	49	53	110	119	81

Table 5.3 **Frequency table of responses (continued...)**

Scale item	Strongly disagree	Disagree	Slightly disagree	Slightly agree	Agree	Strongly agree
	1	2	3	4	5	6
D7	49	67	64	118	98	59
D8	46	53	62	121	121	52
D9	18	41	56	117	158	65
D10	19	42	51	159	125	59
D11	18	49	59	133	158	38
D12	55	83	108	128	58	23
D13	38	71	117	145	72	12
D14	82	87	117	116	41	12
D15	58	95	100	133	50	19
D16	71	87	94	107	63	33
D17	80	90	104	116	46	19
D18	59	93	123	101	67	12
D19	93	91	82	87	61	41
D20	97	117	84	76	59	22
D21	44	70	87	79	112	63
D22	34	66	64	82	97	112
D23	28	53	95	117	91	71
D24	30	59	66	76	99	125
D25	23	56	86	125	98	67
D26	31	53	87	93	100	91
D27	55	66	97	80	90	67
D28	60	65	89	117	72	52
D29	332	43	64	120	104	92
D30	31	41	63	157	119	44
D31	31	45	93	148	95	43
D32	41	56	79	152	80	48
D33	143	68	64	98	47	35

Section 5.5 provides an overview of the demographic and mobile advertising usage data collected in this study.

5.5 DEMOGRAPHIC AND MOBILE ADVERTISING USAGE ANALYSIS

In this section, a description of the sample, together with their reported mobile advertising usage, is given.

5.5.1 Sample description

Of the 600 questionnaires handed out, 464 completed ones were returned. Questionnaires that were completed by students falling outside of the defined target population in terms of age and race were discarded, leaving 455 usable questionnaires.

In terms of the HEIs where participants were registered, Figure 5.1 illustrates that 44.2 percent were from the traditional university, 21.1 percent were from the comprehensive university, and 34.7 percent were from the university of technology.

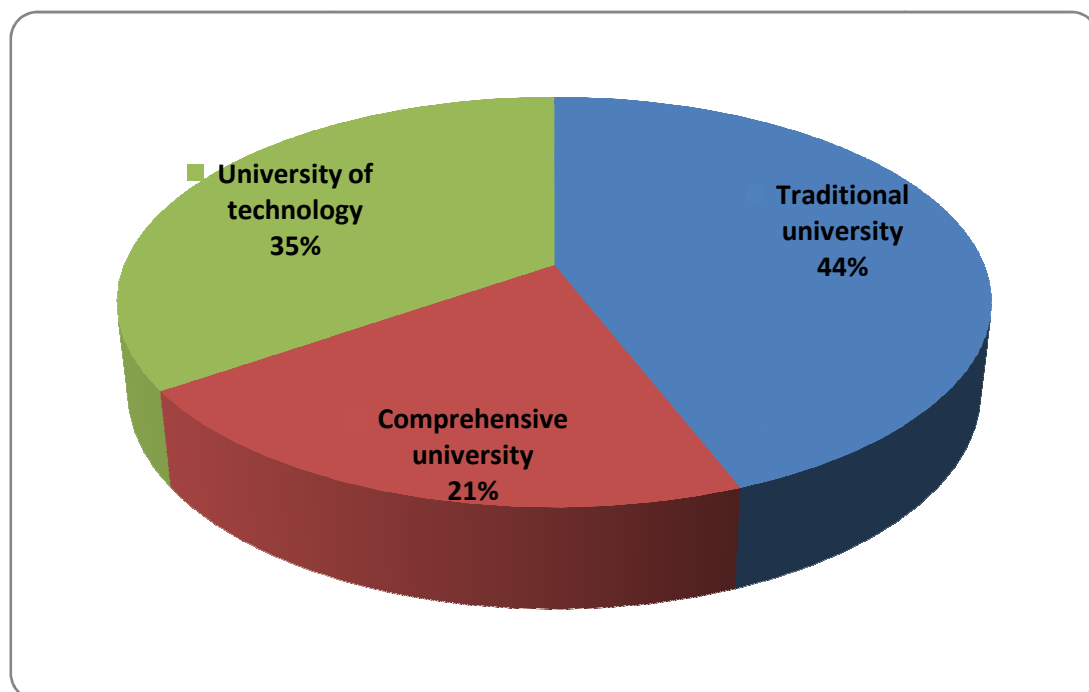


Figure 5.1: Participants' HEI

Figure 5.2 illustrates that 44 percent of the participants were first year students, 16.9 percent second-year students, 31 percent third-year students, and 7.9 percent were

postgraduate students. Of the participants, 0.2 percent failed to answer this question. This 0.2 percent is categorised as missing.

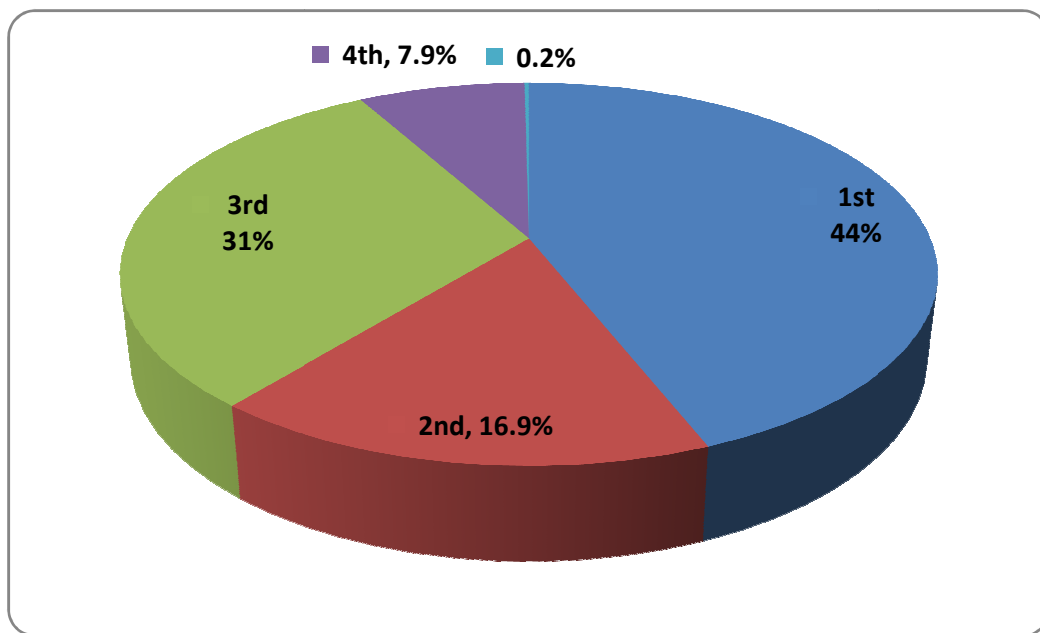


Figure 5.2 Academic year of participants

As shown in Figure 5.3, 39 percent of the participants were male and 61 percent female. (Note that these percentages have been rounded off.)

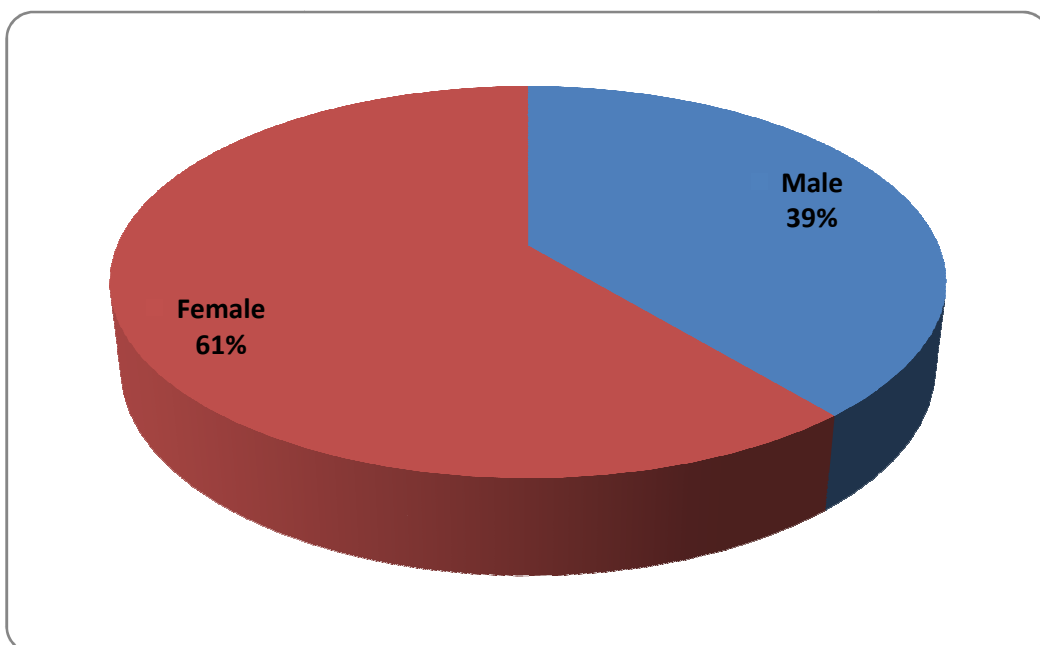


Figure 5.3 Gender of participants

Figure 5.4 depicts the age spread of the participants. Of the participants, 11 percent were 18 years old, 20 percent 19 years old, 21 percent 20 years old, 19 percent 21 years old, 16 percent 22 years old, 7 percent 23 years old and 5 percent 24 years old. (Note that these percentages have been rounded off.)

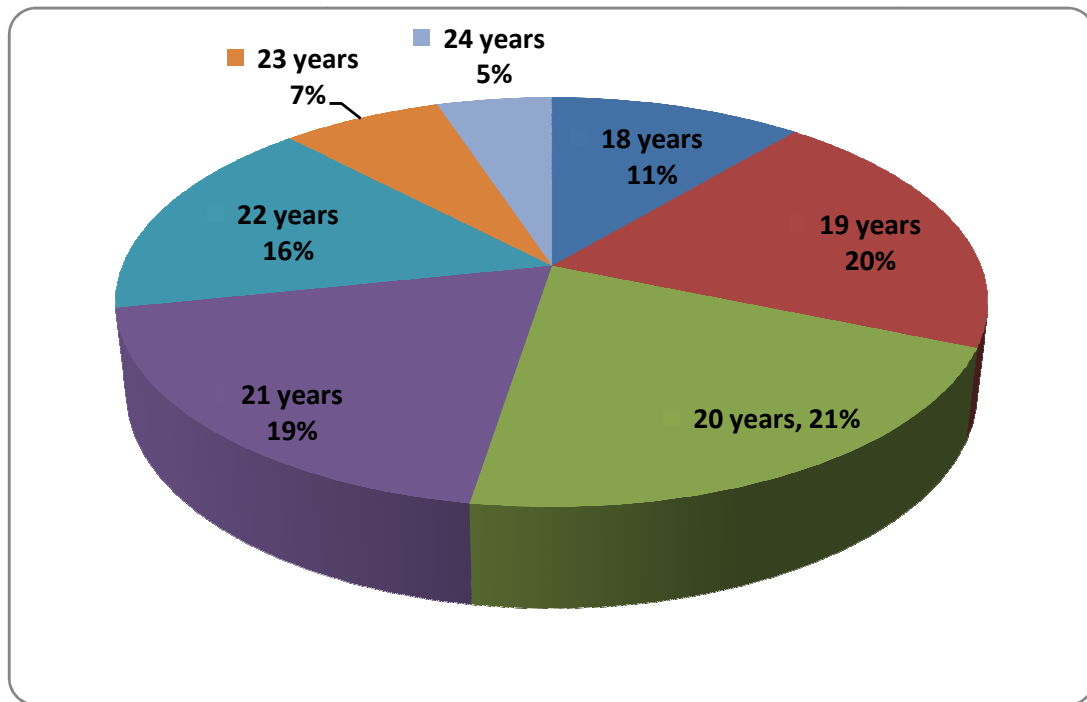


Figure 5.4 Age of participants

Figure 5.5 illustrates that 2.9 percent of the participants grew up in Eastern Cape, 10.5 percent in the Free State, 57.1 percent in Gauteng, 3.5 percent in Kwa-Zulu Natal, 10.3 percent in Limpopo, 7.5 percent in Mpumalanga, 0.4 percent in the Northern Cape, 5.9 percent in the North West, and 0.4 percent in the Western Cape.

Of the participants, 1.5 percent failed to answer this question. This 0.2 percent is categorised as missing.

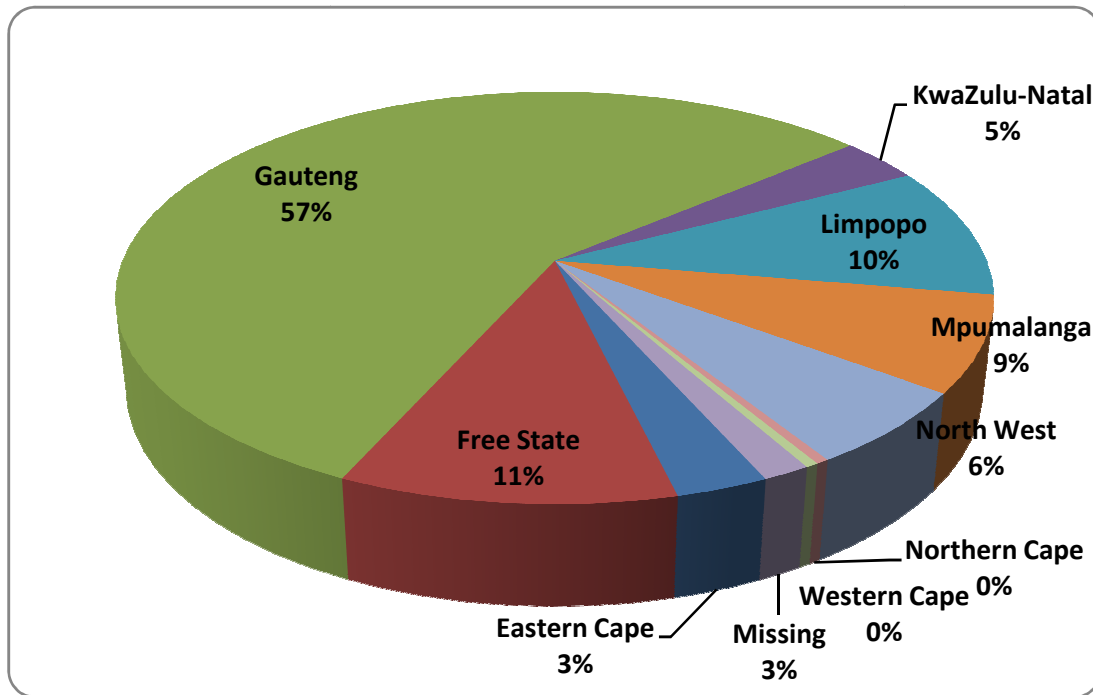


Figure 5.5 Provinces where participants grew up

The following section reports on the participants' mobile advertising usage.

5.5.2 Mobile advertising usage

In addition to demographic questions, the questionnaire included three questions designed to determine participants' mobile advertising usage. The first question concerned participants' willingness to receive mobile advertisements.

Figure 5.6 illustrates that 75.4 percent of the participants indicated being willing to receive mobile advertisements less than once a day, 16.5 percent twice a day, 4.8 percent three times a day and 2.2 percent more than four times a day. Of the participants, 1.1 percent failed to answer this question. This 1.1 percent is categorised as missing.

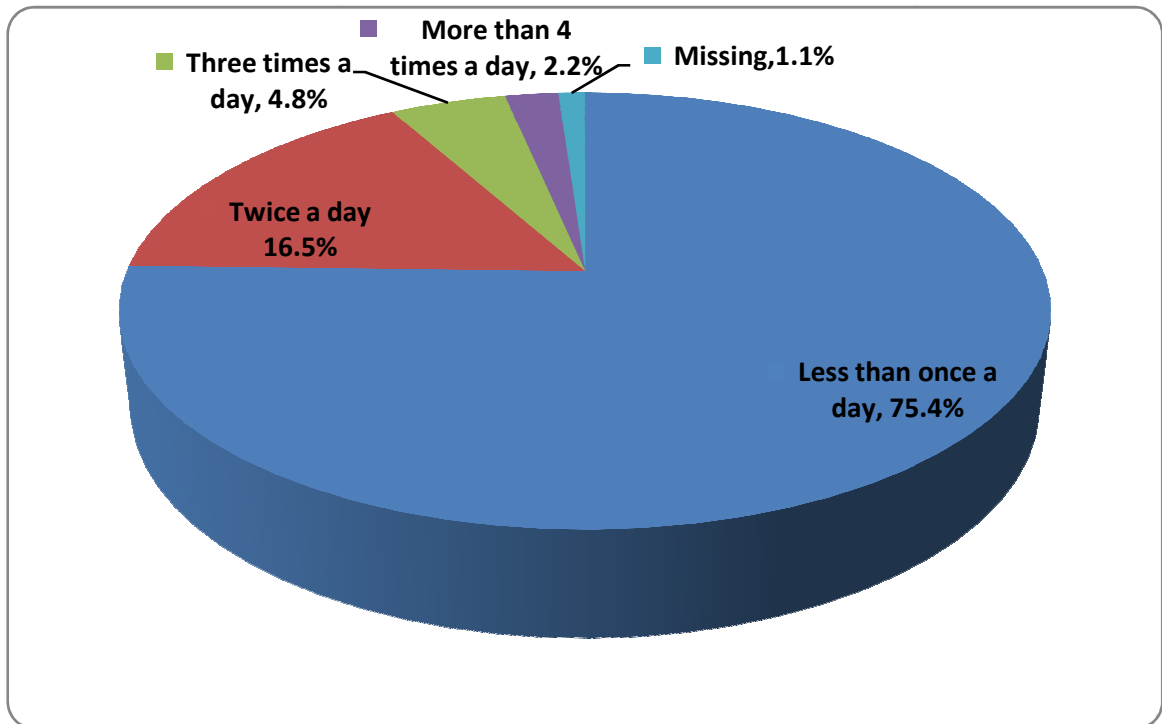


Figure 5.6 Participants' willingness to receive mobile advertisements

The second question concerned how often participants' read the mobile advertisements they receive. Figure 5.7 illustrates that 26.4 percent of the participants ignore the mobile advertisements they receive, 37.6 percent read them occasionally, 4.2 percent read them after accumulating too many, 15.8 percent read them when they get time, and 14.9 percent read them right away. Of the participants, 1.1 percent failed to answer this question. This 1.1 percent is categorised as missing.

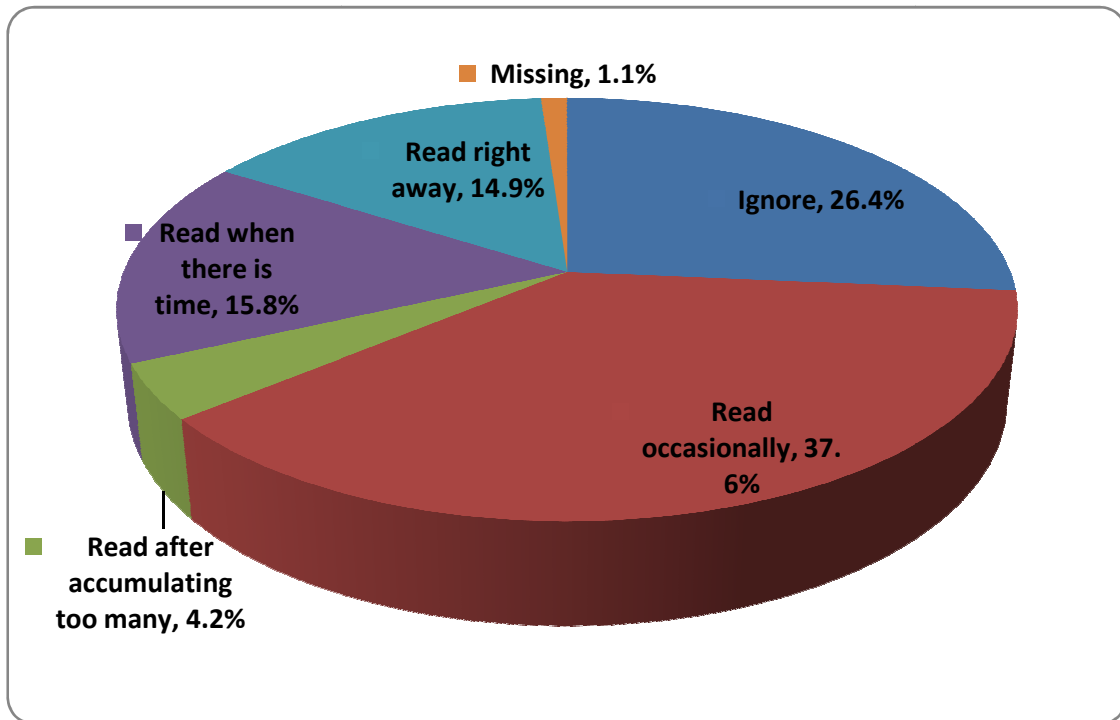


Figure 5.7 Frequency participants' read the mobile advertisements they receive

The third question concerned how much of a mobile advertisement participants' read when they receive it. Figure 5.8 illustrates that 22 percent of the participants read none of the mobile advertisement messages they receive, 35 percent read about a quarter, 13 percent read about half, 5 percent read about three-quarters, and 23 percent read the whole mobile advertisement message. Of the participants 2 percent failed to answer this question. This 2 percent is categorised as missing. (Note that these percentages have been rounded off.)

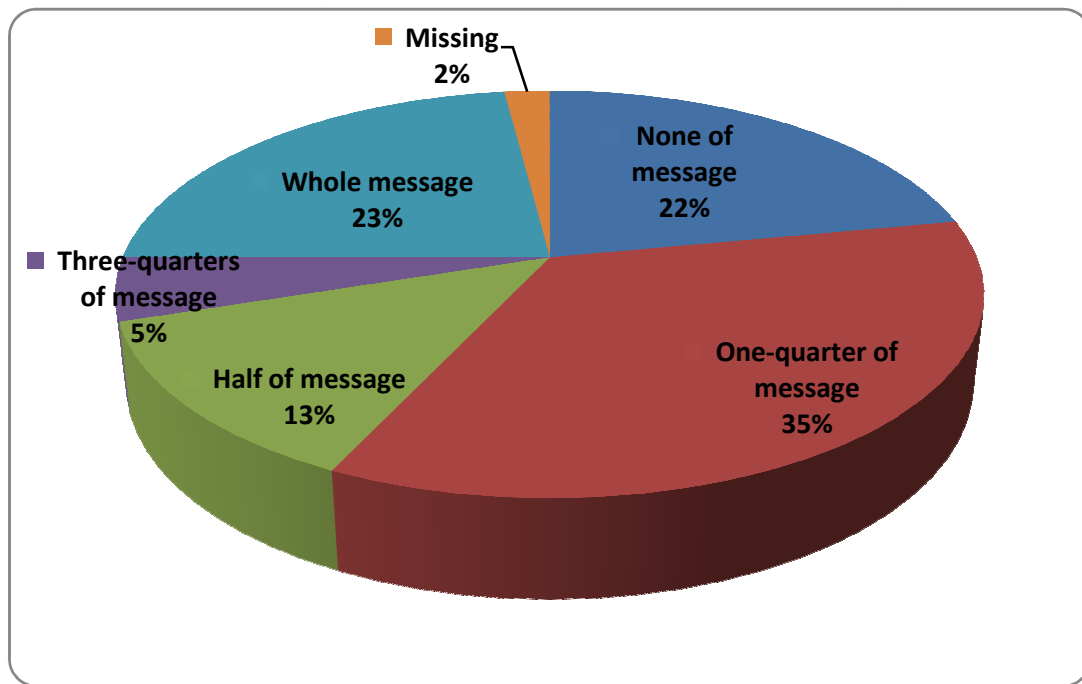


Figure 5.8 Degree to which participants read the mobile advertisements they receive

The following section describes the exploratory factor analysis.

5.6 EXPLORATORY FACTOR ANALYSIS

An exploratory factor analysis (EFA) was carried out on the construct-related items. As an initial step, the Kaiser-Meyer-Olkin (KMO) measure of sampling adequacy and the Bartlett Test of Sphericity were performed in order to ascertain the factorability of the data. Values above 0.6 for the KMO test and a significant Bartlett's Test of Sphericity value are advised (Pallant, 2010:183). The results of these two tests (KMO=0.912, chi-square Bartlett test=011028 (df=741), $p=0.000<0.05$) were satisfactory. Principal components analysis, using varimax rotation was then performed on all construct-related items. Based on the literature, 10 factors were specified for extraction, and these 10 factors with eigenvalues greater than one explained 71.48 percent of the total variance.

Each of the 10 factors aligned well with the constructs specified. Of the items, one item (D12) did not load effectively on the correct factor and was eliminated. Prior to deletion, this item was examined to ensure that its elimination would not alter the original conceptualisation of the construct. The rotated factors are presented in Table 5.4.

Table 5.4 Rotated factors

Items	Factors									
	1	2	3	4	5	6	7	8	9	10
B1									0.807	
B2									0.766	
B3									0.545	
B4									0.620	
C1								0.811		
C2								0.838		
C3								0.822		
D1	0.835									
D2	0.863									
D3	0.851									
D4	0.881									
D5	0.865									
D6		0.686								
D7		0.727								
D8		0.758								
D9		0.727								
D10		0.666								
D11		0.720								
*D12		0.419		0.565						
D13				0.680						
D14				0.808						
D15				0.687						
D16					0.764					
D17					0.764					
D18					0.700					
D19										0.454
D20										0.589
D21										0.791
D22			0.818							
D23			0.846							
D24			0.841							
D25			0.855							
D26			0.808							

Table 5.4 Rotated factors (continued...)

Items	Factors									
	1	2	3	4	5	6	7	8	9	10
D27								0.832		
D28								0.835		
D29								0.660		
D30						0.760				
D31						0.764				
D32						0.683				

*Item eliminated

The following section reports on the reliability and validity of these factors.

5.7 RELIABILITY AND VALIDITY ANALYSIS OF MAIN SURVEY

The Cronbach alpha, which is a commonly used method for testing the reliability of multiple-item scales, may take on any value between zero and one. The recommended value is that of above 0.6, which indicates sufficient internal consistency reliability (Malhotra, 2010:319).

As is evident from Table 5.5, Cronbach alpha values for each of the 10 factors exceeded the 0.6 level, thereby indicating satisfactory reliability.

In order to measure the validity, the average inter-item correlations were calculated, whereby values within the 0.15 and 0.50 range are recommended (Clark & Watson, 1995:16; Spiliotopoulou, 2011). Whilst average inter-item correlation values exceeding the 0.50 level were computed for eight of the 10 factors, Pallant (2010:100) indicates that this merely indicates a strong relationship between the items.

Table 5.5 Reliability and average inter-item correlation values

	Number of items	Cronbach alpha	Average inter-item correlation
Attitude towards SMSs	4	0.637	0.317
Attitude towards advertising	3	0.789	0.557
Entertainment	5	0.967	0.855
Informativeness	7	0.894	0.587

Table 5.5 Reliability and average inter-item correlation values (continued ...)

	Number of items	Cronbach alpha	Average inter-item correlation
Credibility	3	0.820	0.602
Personalisation	3	0.768	0.529
Control	3	0.654	0.389
Intrusiveness	5	0.903	0.653
Trust	3	0.756	0.506
Value	3	0.860	0.673

The following section outlines the descriptive statistics calculated in the study.

5.8 DESCRIPTIVE STATISTICS

Descriptive statistics provide researchers with a tool to summarise and describe the basic characteristics of large sets of data received from a sample of participants more efficiently (McDaniel & Gates, 1999:495; Hair *et al.*, 2008:235). As indicated in Chapter 4, descriptive statistics typically include measures of central tendency, dispersion and shape (Pallant, 2010:53). A six-point Likert scale was used in this study to measure the scaled responses, which ranged from 1=strongly disagree to 6=strongly agree. Therefore, higher mean values are associated with greater agreement.

The descriptive statistics of the sample of black Generation Y students for this study are set out in Table 5.6.

Table 5.6 Descriptive statistics

Construct	Valid N	Mean	Standard Deviation	Skewness	Kurtosis
Attitude towards SMSs	455	4.40	0.99	-0.52	-0.12
Attitude towards advertising	455	4.95	0.85	-1.63	4.79
Entertainment	455	2.80	1.45	0.35	-0.97
Informativeness	455	3.99	1.14	-0.46	-0.47
Credibility	455	3.18	1.12	-0.10	-0.59

Table 5.6 Descriptive statistics (continued ...)

Construct	Valid N	Mean	Standard Deviation	Skewness	Kurtosis
Personalisation	455	3.13	1.16	0.00	-0.56
Control	455	3.25	1.19	0.03	-0.60
Intrusiveness	455	4.00	1.28	-0.32	-0.59
Trust	455	3.74	1.26	-0.19	-0.55
Value	455	3.81	1.20	-0.46	-0.11
Overall attitude towards mobile advertising	455	2.88	1.65	0.33	-1.13

As evident from Table 5.6, the data for this scale may be classified as normally distributed data since none of the skewness scores fall outside of the -2 or =2 range. In terms of the peakedness of the data distribution, the kurtosis values computed indicate a relatively flat distribution.

The highest mean values were computed for attitude towards advertising (mean=4.95) and attitude towards SMSs (mean=4.40), indicating that black Generation Y students have a strong positive attitude towards advertising in general and towards communicating using the SMS function. Mean values above 3 were computed for the perceived informativeness (mean=3.99), value (mean=3.81), trust (mean=3.74), control (mean=3.25), credibility (mean=3.18) and personalisation (mean=3.13) of mobile advertisements. This suggests that black Generation Y students have a positive attitude towards the value of mobile advertising. Even so, it appears that they do find mobile advertisements to be intrusive (mean=4.00) and do not perceive mobile advertisements to have much entertainment value (mean=2.80), which may account for them not having an overall positive attitude towards mobile advertising (mean=2.88).

The lowest standard deviations were recorded on attitude towards advertising (Std. Dev. = 0.85) and attitude towards SMSs (Std. Dev. = 0.99), indicating that there was less dispersion in participants' reported attitudes towards the use of SMSs to communicate with friends and family, and their attitudes towards advertising in general. Higher standard deviations were recorded on overall attitude towards mobile

advertising (Std. Dev. = 1.65) and perceived entertainment value of mobile advertising (Std. Dev. = 1.45). This indicates that there was more dispersion in participants' reported overall attitudes towards receiving mobile advertisements and the perceived entertainment value of mobile advertising.

Prior to conducting the structural equation modelling, correlation analysis was carried out to determine if the relationship between the hypothesised antecedents of attitude towards mobile advertising were significant.

5.9 CORRELATION ANALYSIS

Hair *et al.* (2010:710) indicate that constructing a matrix of construct correlations is useful in assessing the nomological validity of a proposed measurement model. In order to assess nomological validity, the Pearson Product-Moment correlation coefficients between each pair of constructs was examined.

The correlation matrix is reported on in Table 5.7.

Table 5.7 Correlation matrix

Constructs	1	2	3	4	5	6	7	8	9	10	11
Attitude towards SMSs	1										
Attitude towards advertising	0.165**	1									
Entertainment	0.159**	0.148**	1								
Informativeness	0.185**	0.208**	0.578**	1							
Credibility	0.212**	0.083	0.473**	0.559**	1						
Personalisation	0.059	0.049	0.395**	0.438**	0.527**	1					
Control	0.060	0.043	0.469**	0.441**	0.439**	0.483**	1				
Intrusiveness	-0.030	0.053	-0.323**	-0.245**	-0.193**	-0.185**	-0.124**	1			
Trust	0.083	0.147**	0.314**	0.311**	0.301**	0.219**	0.322**	0.009	1		
Value	0.071	0.138**	0.501**	0.595**	0.481**	0.437**	0.440**	-0.188**	0.378**	1	
Attitude	0.057	0.082	0.584**	0.460**	0.481**	0.464**	0.442**	-0.288**	0.319**	0.558**	1

**Correlation is significant at the 0.01 level (2-tailed)

The attitude-towards-SMSs construct, while significantly correlated with credibility, had no significant correlation with the dependent constructs of perceived value and the overall attitude towards mobile advertising and, as such, was excluded from the measurement model. This made theoretical sense, given that it is not an advertising-related construct but rather a communication-related concept. The constructs of entertainment, informativeness, personalisation, control and intrusiveness were significantly correlated with credibility, perceived value of mobile advertising and overall attitude towards mobile advertising. Credibility was significantly correlated with both perceived value and overall attitude towards mobile advertising. Attitude towards advertising was significantly correlated with perceived value of mobile advertising but not with credibility or overall attitude towards advertising.

5.10 HYPOTHESES TESTING

Hypotheses testing was undertaken whereby the significance level was set at the conventional $\alpha=0.05$ level. In accordance with the relationships observed in the correlation analysis, the following hypotheses were formulated:

- Ho1: Attitude towards mobile advertising is a nine-factor structure composed of attitude towards advertising, entertainment value, informativeness, credibility, personalisation, perceived control, intrusiveness, trust and perceived value.
- Ha1: Attitude towards mobile advertising is not a nine-factor structure composed of attitude towards advertising, entertainment value, informativeness, credibility, personalisation, perceived control, intrusiveness, trust and perceived value.
- Ho2: Entertainment value (+), informativeness (+), personalisation (+), perceived control (+), invasiveness (-) and trust (+) do not have a significant direct influence on black Generation Y students' perceived credibility of mobile advertising.
- Ha2: Entertainment value (+), informativeness (+), personalisation (+), perceived control (+), invasiveness (-) and trust (+) have a significant direct influence on black Generation Y students' perceived credibility of mobile advertising.

- Ho3: Attitude towards advertising (+) does not have a significant direct influence on black Generation Y students' perceived value of mobile advertising.
- Ha3: Attitude towards advertising (+) has a significant direct influence on black Generation Y students' perceived value of mobile advertising.
- Ho4: Credibility (+) does not have a significant direct influence on black Generation Y students' perceived value of mobile advertising.
- Ha4: Credibility (+) has a significant direct influence on black Generation Y students' perceived value of mobile advertising.
- Ho5: Perceived value of mobile advertising (+) does not have a significant direct influence on black Generation Y students' overall attitude towards mobile advertising.
- Ha5: Perceived value of mobile advertising (+) has a significant direct influence on black Generation Y students' overall attitude towards mobile advertising.

The following section discusses the structural equation modelling and path analysis undertaken to test these hypotheses in this study.

5.11 STRUCTURAL EQUATION MODELLING

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

5.11.1 Measurement model specification

Based on the individual constructs defined in Chapter 3 (excluding attitude towards SMSs), the measurement model to be tested in the first hypothesis is a nine-factor structure.

This hypothesised model includes nine latent or unobserved factors – attitudes towards advertising (F1) (three indicators), entertainment (F2) (five indicators), informativeness (F3) (six indicators), credibility (F4) (three indicators), personalisation (F5) (three indicators), control (F6) (three indicators), intrusiveness (F7) (five indicators), trust (F8) (three indicators) and value (F9) (three indicators).

This hypothesised measurement model is specified in Figure 5.9.

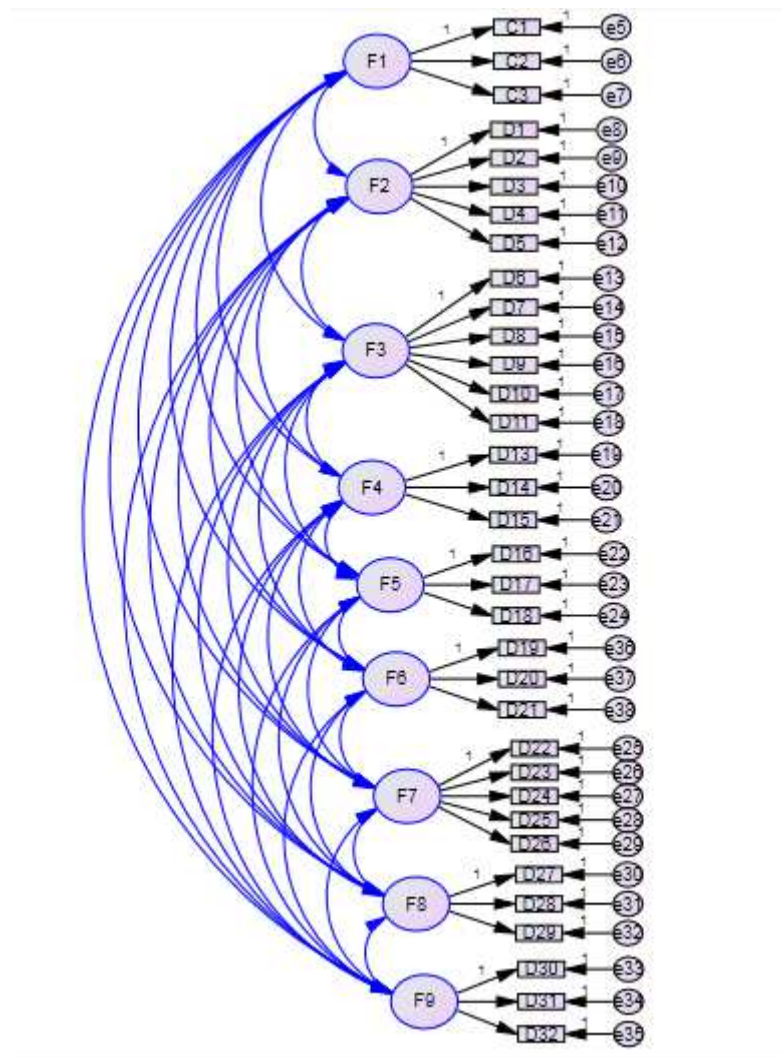


Figure 5.9 Specified measurement model

For model identification purposes, the first loading on each of the nine factors was fixed at 1.0. Therefore, there are 595 distinct sample moments, and 104 parameters to be estimated, which leave 491 degrees of freedom based on an over-identified model, and a chi-square value of 1121.08 with a probability level equal to 0.000.

The model was evaluated for any problematic estimates, such as negative error variances (known as Heywood cases) and standardised factor loadings above 1.0 or below -1.0 (Hair *et al.*, 2010:706). As indicated in Table 5.8, there are no problematic estimates in the model.

Table 5.8 Standardised coefficients of the measurement model

Latent factors	Constructs	Indicators	Factor loadings		Error variance
F1	Attitude towards advertising	C1	0.73	+	0.54
		C2	0.74	+	0.54
		C3	0.77	+	0.59
F2	Entertainment	D1	0.91	+	0.82
		D2	0.94	+	0.89
		D3	0.92	+	0.85
		D4	0.93	+	0.87
		D5	0.92	+	0.84
F3	Informativeness	D6	0.80	+	0.64
		D7	0.84	+	0.70
		D8	0.81	+	0.65
		D9	0.72	+	0.51
		D10	0.70	+	0.48
F4	Credibility	D11	0.72	+	0.52
		D13	0.73	+	0.54
		D14	0.82	+	0.67
F5	Personalisation	D15	0.78	+	0.62
		D16	0.56	+	0.31
		D17	0.85	+	0.73
F6	Control	D18	0.78	+	0.61
		D19	0.76	+	0.58
		D20	0.77	+	0.59
F7	Intrusiveness	D21	0.36	+	0.13
		D22	0.76	+	0.58
		D23	0.78	+	0.61
		D24	0.86	+	0.74
		D25	0.84	+	0.70
F8	Trust	D26	0.80	+	0.64
		D27	0.78	+	0.60
		D28	0.84	+	0.71
F9	Value	D29	0.55	+	0.30
		D30	0.79	+	0.63
		D31	0.88	+	0.78
		D32	0.79	+	0.63

In order to assess model fit, the following indices produced by AMOS were used in the study, the absolute fit indices of the chi-square, the standardised root mean residual (SRMR), the root mean square of approximation (RMSEA), the incremental fit indices of the incremental fit index (IFI), the comparative fit index (CFI), and the Tucker-Lewis index (TLI). Whilst the significant chi-square value of 1121.08 with 491 degrees of freedom suggests poor fit, it is known that this statistic is highly sensitive to sample size (Byrne, 2010:76; Malhotra, 2010:732). The other fit indices showed an acceptable degree of fit between the measurement model and the data, SRMR=0.0516, RMSEA=0.05, IFI=0.94, CFI=0.94, and TLI = 0.93.

Following this, the reliability and validity of the model were assessed.

5.11.2 Reliability and validity tests for the measurement model

The aim of the measurement model is to investigate and determine that each scale item used within a particular construct is both reliable and valid (Malhotra, 2010:744). For the purpose of this study, reliability was measured by examining the composite reliability. As discussed in Chapter 4, Section 4.7.9, the following formula was used to calculate the composite reliability for each of the nine components:

$$[(Fl_1+Fl_2+Fl_3+...)^2 / (Fl_1+Fl_2+Fl_3+...) + (err_1+err_2+err_3+...)]$$

Similarly, the average variance extracted (AVE) is the measure used to explain the overall variance in the indicators, which is accounted for by the latent construct. As discussed in Chapter 4, Section 4.7.9, the following formula was used to calculate the AVE for each of the nine components:

$$[(Fl_1^2+Fl_2^2+Fl_3^2+...) / (Fl_1^2+Fl_2^2+Fl_3^2+...) + (err_1+err_2+err_3+...)]$$

The composite reliability (CR) and average variance extracted (AVE) values for each construct are shown in Table 5.9. All constructs exceeded the recommended levels of 0.70 and 0.50 respectively. This is a clear indication that the measurement scale used in this study was reliable.

Table 5.9 Measurement model: construct reliability, average variance extracted and correlation matrix

	CR	AVE	1	2	3	4	5	6	7	8	9
Attitudes towards advertising	0.75	0.50	01								
Entertainment	0.83	0.50	0.17	1							
Informativeness	0.86	0.50	0.26	0.63	1						
Credibility	0.75	0.50	0.11	0.53	0.63	1					
Personalisation	0.74	0.50	0.04	0.47	0.51	0.65	1				
Control	0.73	0.50	0.01	0.59	0.53	0.56	0.71	1			
Intrusiveness	0.83	0.50	0.06	-0.35	-0.28	-0.23	-0.24	-0.23	1		
Trust	0.75	0.50	0.19	0.32	-0.32	0.33	0.28	0.39	0.04	1	
Value	0.75	0.50	0.17	0.54	0.66	0.55	0.54	0.56	-0.21	0.41	1

As shown in Table 5.9, all of the correlation estimates in this study were smaller than the square root of the AVE ($\sqrt{0.5}=0.71$), except for one out of the 36 cases. Given that the nine dimensions measure different aspects of attitudes towards mobile advertising, some degree of inter-correlation is expected. In addition, some violations may occur through chance, owing to the size of the correlation matrix.

When all item loadings are equal to or above the recommended cut-off levels of 0.70, convergent validity may be established. Referring to Table 5.8, the measurement model comprises 34 indicators, of which 31 had factor loadings greater than 0.7 and two had factor loadings greater 0.5, thereby suggesting convergent validity. Although D21 loaded poorly at 0.36, elimination of this item would have resulted in the perceived control construct only having two indicators, which can cause identification problems (Hair *et al.*, 2010:704) – as such, D21 was not eliminated.

Thus, the data in the research study support convergent validity of the initial hypothesised measurement model. As such, it may be concluded that overall, the measurement model is both reliable and valid, and exhibits acceptable fit, thereby making it suitable for testing the structural model.

Therefore, there is insufficient evidence to reject the null hypothesis Ho1. This infers that attitudes towards mobile advertising, is a nine-factor structure.

5.11.3 Structural model

In the initial hypothesised structural model (Structural Model A), it was hypothesised that entertainment (F2), informativeness (F3), personalisation (F5), control (F6), intrusiveness (F7) and trust (F8) directly influence credibility (F4), which in turn influences overall attitude towards mobile advertising via its influence on perceived value of mobile advertising (F9). In addition, it was hypothesised that attitudes towards advertising (F1) directly influence perceived value of advertising (F9), which in turn influence overall attitude towards mobile advertising.

Structural Model A, presented in Figure 5.10, illustrates the regression path estimates. Note that in order to improve visual comprehension, the covariance lines between the independent variables, the indicator variables of the latent variables, and the residuals of the independent variable have been omitted from the structural model figures. Refer to Annexure (C) for a detailed diagram of these models.

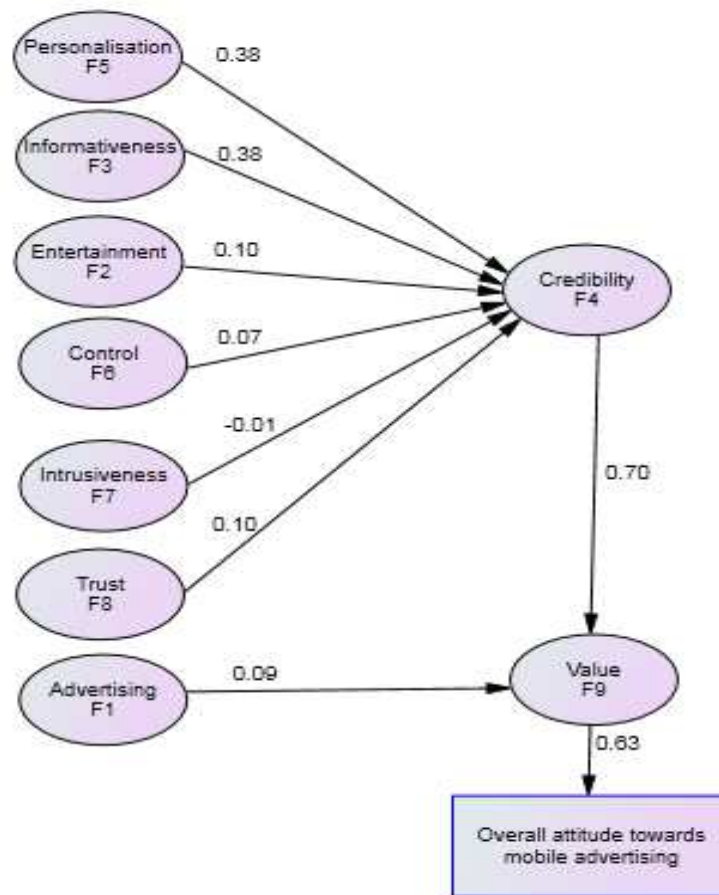


Figure 5.10 Structural Model A

Whilst the chi-square (1360.76 (df=531), $p < 0.05$) remained problematic, Structural Model A delivered acceptable fit indices of SRMR= 0.0682, RMSEA= 0.06, IFI= 0.92, CFI= 0.92 and TLI= 0.91.

Attitude towards advertising (F1) ($p = 0.04 < 0.05$) and credibility (F4) ($p = 0.000 < 0.05$) both have a significant positive influence on perceived value (F9), which infers that Ho3 and Ho4 be rejected and Ha3 and Ha4 concluded. Similarly, perceived value (F9) ($p = 0.000 < 0.05$) has a significant positive influence on overall attitude towards advertising, which infers that Ho5 be rejected and Ha5 concluded.

Although the fit indices collectively indicate that the overall fit of the hypothesised model is acceptable, the paths between entertainment (F2) ($p = 0.07 = 0.05$), control (F6) ($p = 0.39 > 0.05$), intrusiveness (F7) ($p = 0.75 > 0.05$) and credibility (F4) were not significant ($p < 0.05$) in Structural Model A. As such, there is insufficient evidence to reject Ho2.

Therefore, it was decided to test a revised model based on the original measurement model. Byrne (2010:82) indicates that when comparing two or more models, it is advisable to consider Akaike's information criterion (AIC) and Bozdogan's consistent version of the AIC (CAIC), where smaller values indicate better fit. For Structural Model A, the AIC is 1558.76 and the CAIC is 2065.67.

The hypothesised model was then revised to test whether entertainment (F2), control (F6) and intrusiveness (F7) have a direct influence on the perceived value of mobile advertising (F9), rather than an indirect influence via their influence on credibility (F4). This revised structural model (Structural Model B) is presented in Figure 5.11 .

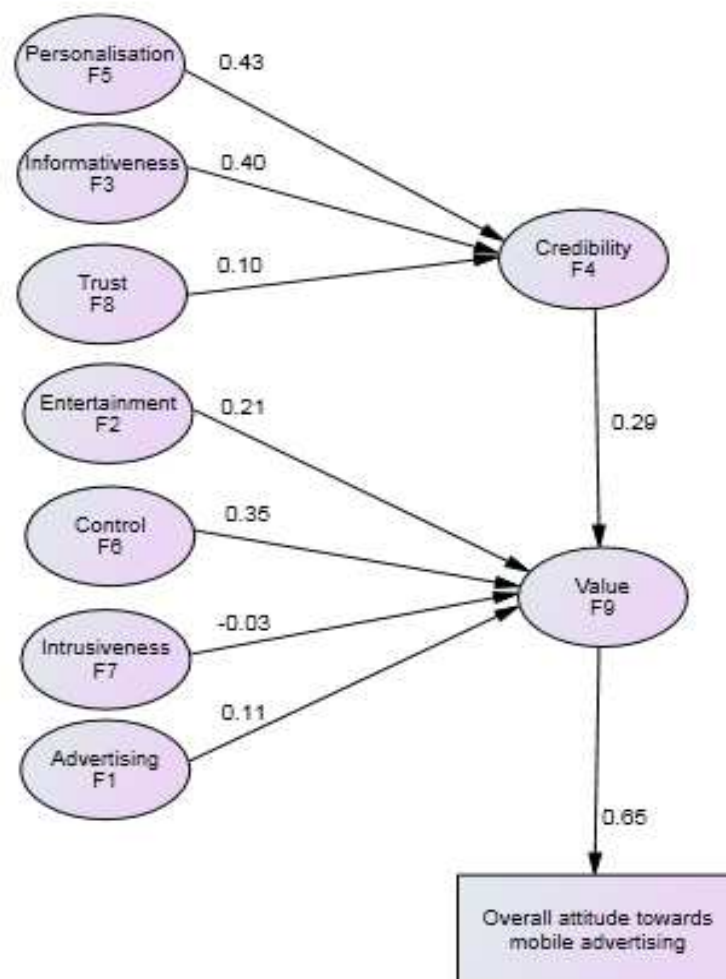


Figure 5.11 Structural Model B

Structural Model B delivered slightly improved fit indices of chi-square= 1299.38 (df=531), SRMR= 0.0595, RMSEA= 0.06, IFI= 0.93, CFI= 0.93, TLI= 0.92, AIC=1497.38 and CAIC=2004.29.

While these indices suggest that Structural Model B has a better model fit compared to Structural Model A, the path between trust (F8) and credibility (F4) is significant but weak ($p=0.04<0.05$), and the path between intrusiveness (F7) and perceived value of mobile advertising was not significant ($p=0.50>0.050$). As such, the third revised model (Structural Model C) was tested to determine whether intrusiveness (F7) and trust (F8) influence overall attitudes towards mobile advertising directly. Structural model C is presented in Figure 5.12.

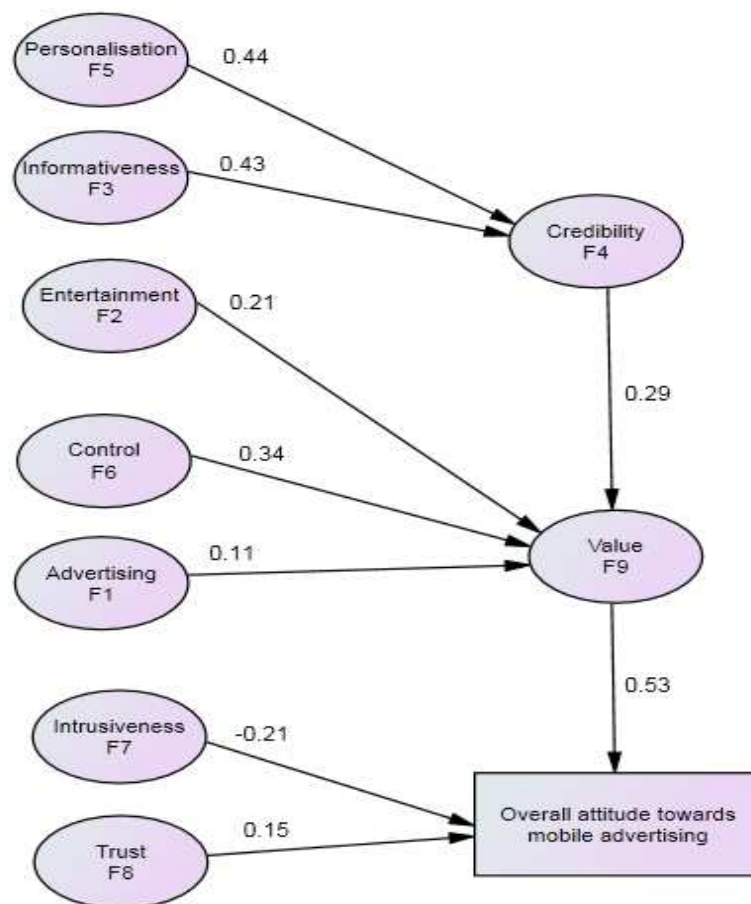


Figure 5.12 Structural Model C

Structural Model C delivered improved fit indices of chi-square= 1272.25 (df=531), SRMR= 0.0570, RMSEA= 0.06, IFI= 0.93, CFI= 0.93, TLI= 0.92, AIC=1470.25 and CAIC=1977.16.

According to Structural Model C in Figure 5.12, personalisation (F3) (path estimate=0.44, $p < 0.05$) and informativeness (F5) (path estimate=0.43, $p < 0.05$) have a significant positive influence on credibility (F4). The squared multiple

correlation (SMC) coefficient for credibility is 0.57, which indicates that these two predictors, namely personalisation and informativeness, together explain 57 percent of the variance in the perceived credibility of mobile advertising amongst black Generation Y students.

Entertainment (F2) (path estimate= 0.21, $p<0.05$), attitudes towards advertising (F1) (path estimate=0.21, $p<0.05$), control (F6) (path estimate= 0.34, $p<0.05$) and credibility (path estimate=0.29, $p<0.05$) have a significant positive influence on perceived value of mobile advertising (F9). The SMC coefficient for value is 0.53, which indicates that these predictors together explain 53 percent of the variance in black Generation Y students' perceived value of mobile advertising.

Intrusiveness (F7) (path estimate = -0.21, $p<0.05$) has a significant negative influence on overall attitudes towards mobile advertising, while trust (F8) (path estimate=0.15, $p<0.05$) and perceived value (F9) (path estimate=0.53, $p<0.05$) have a significant positive influence. The SMC coefficient for attitudes towards mobile advertising is 0.44.

5.12 CONCLUSION

This chapter reported on the empirical findings of the study and provided a discussion concerning the outcomes of the pilot study, including the reliability and validity, which indicated that the scale used was both reliable and valid. The preliminary data analysis, which involved coding, data cleaning and tabulation, was then discussed. The demographic and mobile advertising usage analysis was then undertaken. In order to assess the factorability of the data exploratory factor analysis, specifically principal component, analysis was employed. The data were then tested for reliability and validity. Descriptive statistics, including mean, standard deviation and frequency distributions were calculated to summarise the sample data description. This was done for the constructs pertaining to the antecedents of black Generation Y students' attitudes towards mobile advertising. Correlation analysis was conducted to determine if the relationships between the hypothesised antecedents of attitudes towards mobile advertising were significant. From the relationships observed in the correlation analysis, hypotheses were formulated, which were then tested with the use of structural equation modelling and path analysis.

In Chapter 6, further interpretations regarding the empirical findings will be given. Furthermore, research questions and objectives will be re-examined to determine whether they have been answered. In addition, the conclusions and final recommendations pertaining to the study will be specified and discussed.

CHAPTER 6

CONCLUSION AND RECOMMENDATIONS

6.1 INTRODUCTION

As highlighted in Chapter 1, the rapid growth in mobile communication in South Africa makes it an important new advertising medium, and that is why an understanding of attitudes towards mobile advertising is important. Given the size of the black Generation Y market segment in South Africa, and the potential earning power and influential role of black Generation Y students, a need was identified to propose and empirically test a model of possible factors that may determine attitudes towards mobile advertising amongst black Generation Y students. In the previous chapter, the factors were tested by comparing alternative models and presenting the results of the study. This chapter starts with an overview of the study. Thereafter, the chapter examines whether the objectives of this study were achieved. After which, the proposed model of the factors that influence black Generation Y students' attitudes towards mobile advertising are discussed. The chapter concludes with the limitations of the study, together with recommendations for further research and the concluding remarks of the study.

6.2 OVERVIEW OF THE STUDY

The primary objective of this study was to determine the factors that influence black Generation Y students' attitudes towards mobile advertising. In order to achieve this, a review of the literature pertaining to advertising, mobile advertising, consumer attitudes, attitudes towards advertising and factors influencing attitudes towards advertising on new media platforms, including mobile advertising platforms was conducted. In order to provide the applicable recommendations based on this study, it is essential to include the insights gained over the previous five chapters.

Chapter 1 provided a background to the research study and identified the research problem. The problem statement highlighted the importance of mobile advertising in the marketing environment, especially as an advertising media platform. In addition, this chapter highlighted that consumers' attitudes towards mobile advertisements may

be related positively to their intentions to receive mobile advertisements. The perceived entertainment, informativeness, irritation and credibility of mobile advertisements are some of the most likely factors influencing consumers' perceived value of mobile advertisements, which in turn directly influence consumers' attitudes towards mobile advertising. Personalisation is also assumed to be one of the likely factors influencing consumer attitudes towards mobile advertising. The primary, theoretical and empirical objectives were presented in Sections 1.3. The hypotheses, formulated in Chapter 5, are also set out in Chapter 1. The chapter concluded with a description of a research design and methodology that the empirical part of this study followed, as well as the ethical considerations of the study.

Chapter 2 comprises the literature review, as guided by the study's theoretical objectives. Section 2.2 consists of an overview of advertising, including traditional and new advertising media platforms, which may be implemented into any advertising strategy. Mobile advertising is discussed in Section 2.5, followed by Section 2.6 and Section 2.7, which outline the growth in mobile advertising internationally, and in South Africa, respectively.

Marketers want individuals to purchase goods, use them, dispose of them and then replace them in a cycle of continuous consumption. As such, for organisations that have products and services targeted at mass consumer markets there is a need to understand the importance of advertising as a marketing tool. Traditionally there were four types of advertising media platforms, namely print, broadcast, out-of-home and direct media (Section 2.2). However, due to the vast amounts of clutter experienced within these traditional advertising media platforms, and the development and increased use of the Internet, marketers are finding new ways to advertise their products, services or ideas. This, in turn, has led to the move to a variety of new advertising media platforms such as Web advertising, social networking site advertising, and mobile advertising (Sections 2.2.1 & 2.2.2).

Mobile advertising is a highly targeted form of advertising, as well as an interactive channel between the brand and consumer, which may assist marketers in building a personal relationship between the two (Section 2.5). In 2012, more than 45 billion advertisement banners were delivered across the network, with approximately 79 percent generated from the top 20 ranked mobile advertising countries, with India,

Indonesia, the United States, Korea and South Africa dominating the top five positions (Section 2.6). Even though mobile advertising adoption and acceptance is increasing, marketers need to obtain a clear understanding of the fundamentals influencing consumers' attitudes towards mobile advertising in order to ensure that they generate positive and effective yields from their mobile-based advertising campaigns. Consequently, the success of mobile advertising largely depends on consumers' receptiveness towards it and, at present, research indicates that in comparison to older generations, the youth are more accepting of mobile advertisements (Section 2.5).

In Chapter 3, Section 3.2 discusses the Generation Y cohort in general, including the characteristics of its members and the impact that technology has had on this generation. In addition, Section 3.2.1 discusses the Generation Y cohort in South Africa. The factors that influence attitudes towards mobile advertising are discussed in Section 3.4.

Growing up in a more media-saturated, brand-conscious world has enabled the individuals of the Generation Y cohort to stay abreast of the rapid rate of technological and social change, which has led to them being nicknamed the elusive new youth market segment. As such, organisations will need to embrace these individuals to ensure future success, highlighting the importance of connecting with this new generation of consumers on their own turf. This has created the need for marketers to rethink their advertising strategies and avenues geared towards these individuals (Section 3.2). The combined effects of the higher earning potential and higher social status substantially increase the probability of black Generation Y members with a tertiary qualification joining the prestigious ranks of South Africa's growing black middle-class – the Black Diamonds. These individuals are goal-orientated, driven individuals who are climbing the corporate ladder at a rapid pace, contributing to increased spending power and purchasing power, making these individuals important opinion leaders in South African markets (Section 3.2.1).

The characteristics of advertisements play an influential role in the formation of consumer attitudes towards mobile advertising, making it vital for marketers to ensure that their advertisement characteristics are developed carefully. Marketers cannot rely on the assumption that advertisements sent via mobile devices will be read and

remembered automatically. This highlights the need for marketers to understand the factors influencing the attitudes of consumers towards mobile advertising (Section 3.1). Consequently, attitudes towards SMS, attitudes towards advertising in general, entertainment, informativeness, credibility, personalisation, perceived control, intrusiveness, privacy trust and mobile advertisement value are believed to be the factors that influence consumer attitudes and acceptance of mobile advertising (Section 3.6).

Chapter 4 comprises a description of the research methodology followed in the study. The study used a descriptive research design (Section 4.2). The target population for the study was defined as full-time black Generation Y students, between the ages of 18 and 24 years, enrolled at South African registered public HEIs in 2013 (Section 4.3.1). The sampling frame for this study consisted of the 23 public registered HEIs in South Africa, which, using the judgement sampling method was reduced down to three institutions in the Gauteng province. This sampling frame included one traditional university campus, one university of technology campus and one comprehensive university campus (Section 4.3.2). Thereafter, a non-probability, convenience sample of 600 black Generation Y students, as defined by the target population, was taken (Sections 4.3.3 & 4.3.4). A self-administered questionnaire that included existing scales was used to gather the required data (Section 4.4.2). Section 4.6 discussed the various techniques used to interpret and report on the collected data for the statistical analysis in Chapter 5. This included the factor analysis technique (Section 4.6.2), correlation analysis technique (Section 4.6.5) and structural equation modelling (Section 4.6.6).

Chapter 5 reports on the findings of the empirical portion of the study. The results presented in this chapter are in accordance to the empirical objectives formulated for the study.

6.3 MAIN FINDINGS OF THE STUDY

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

- Determine black Generation Y students' attitudes towards using the SMS to communicate with friends and family

- Determine black Generation Y students' attitudes towards advertising in general.
- Empirically test the extent to which attitudes towards using the SMS to communicate, attitudes towards advertising in general, perceived entertainment, informativeness, credibility, personalisation, control, invasiveness, privacy trust and value of mobile advertisements influence black Generation Y students' attitudes towards mobile advertising
- Propose a model of the factors influencing black Generation Y students' attitudes towards mobile advertising.

In accordance with the literature, several factors were identified as having a potential influence on South African black Generation Y students' attitudes towards mobile advertising. Exploratory factor analysis (Section 5.6) was performed and ten factors were extracted, namely attitude towards SMSs, attitude towards advertising, entertainment, informativeness, credibility, personalisation, control, intrusiveness, trust and value. These ten factors explained 71.48 percent of the total variance in black Generation Y students' attitudes towards mobile advertising.

The attitude-towards-SMSs construct, while significantly correlated with credibility, had no significant correlation with the dependent constructs of perceived value and the overall attitude towards mobile advertising and, as such, was excluded from the measurement model. This made theoretical sense given that it is not an advertising-related construct but rather a communication-related concept. The constructs of entertainment, informativeness, personalisation, control and intrusiveness were significantly correlated with credibility, perceived value of mobile advertising, and overall attitude towards mobile advertising. Credibility was significantly correlated with both perceived value and overall attitude towards mobile advertising. Attitude towards advertising was significantly correlated with perceived value of mobile advertising but not with credibility or overall attitude towards advertising.

The last objective of this study was to test a model of the factors that influence South African black Generation Y students' attitudes towards mobile advertising empirically. In order to test this model, structural equation modelling was performed. Confirmatory factor analysis was performed and fit indices were computed to assess a

measurement model. Thereafter, a structural model was employed to evaluate causal relationships between constructs.

The measurement model consisted of nine latent variables, namely attitude towards advertising, entertainment, informativeness, credibility, personalisation, control, intrusiveness, trust and value. After computing fit indices, it was observed that the measurement model demonstrated acceptable levels of fit, as indicated in Section 5.11.1. Thereafter, a structural model was tested. The structural model (Structural Model A) was tested based on the measurement model. As indicated in Section 5.11.3, the results showed that attitude towards advertising (F1) and credibility (F4) both have a significant positive influence on perceived value (F9). Similarly, perceived value (F9) has a significant positive influence on overall attitude towards advertising.

However, the paths between entertainment (F2), control (F6), intrusiveness (F7) and credibility (F4) were not significant, as indicated in Section 5.11.3. Therefore, it was decided to test a revised model based on the original measurement model. The hypothesised model was then revised to test whether entertainment (F2), control (F6) and intrusiveness (F7) have a direct influence on the perceived value of mobile advertising (F9), rather than an indirect influence via their influence on credibility (F4). While these indices suggest that Structural Model B has a better model fit compared to Structural Model A, the path between trust (F8) and credibility (F4) is significant but weak, and the path between intrusiveness (F7) and perceived value of mobile advertising was not significant. As such, the third revised model (Structural Model C) was tested to determine whether intrusiveness (F7) and trust (F8) influence overall attitude towards mobile advertising directly. Entertainment (F2), attitudes towards advertising (F1), control (F6) and credibility (F4) have a significant positive influence on perceived value of mobile advertising (F9). Intrusiveness (F7) has a significant negative influence on overall attitudes towards mobile advertising, while trust (F8) and perceived value (F9) have a significant positive influence.

As such, the findings of this study infer that black Generation Y students' attitudes towards mobile advertising may be explained in accordance with the model presented in Figure 6.1.

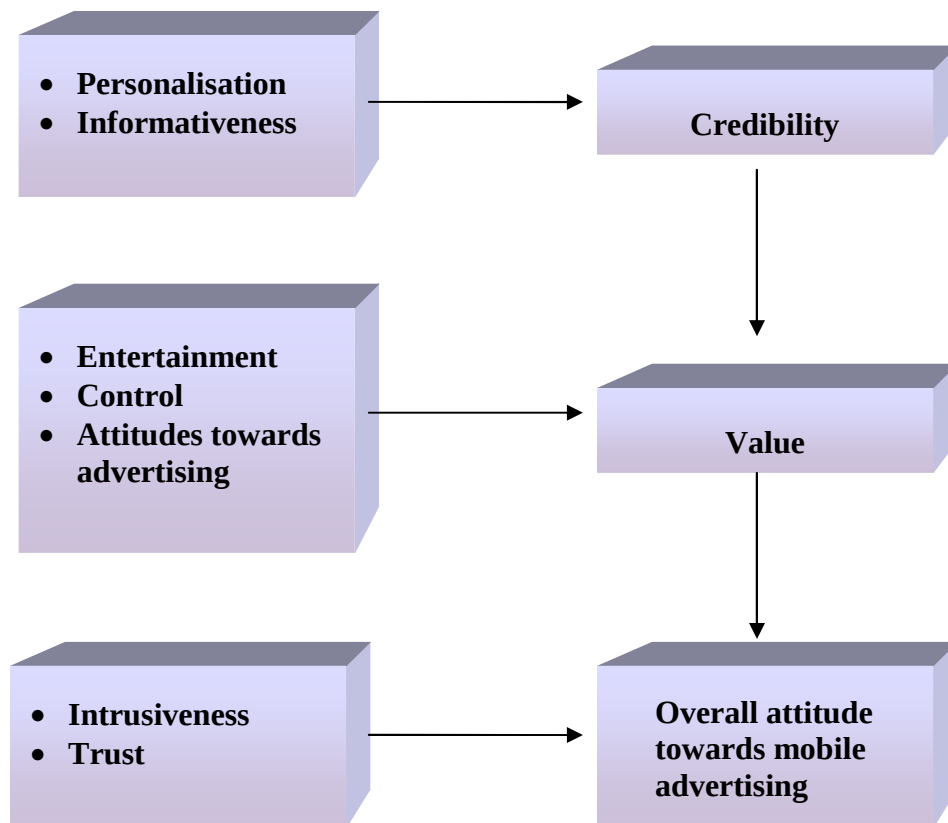


Figure 6.1: Black Generation Y students’ attitudes towards mobile advertising

The following section explains the contribution made by this study.

6.4 CONTRIBUTION OF THE STUDY

Organisations today are increasingly using mobile advertising to advertise their products, services and brands. Therefore, marketers in South Africa need to understand how consumers in general and black Generation Y in particular perceive and evaluate mobile advertising as a source of advertising. This study contributed to the body of knowledge in the area of attitudes towards advertising by empirically testing a model of factors influencing black Generation Y students’ attitudes towards mobile advertising and determining which factors act as factors to successful mobile advertising. It suggested that attitude towards mobile advertising is a nine-factor structure composed of attitudes towards advertising, entertainment, informativeness, credibility, personalisation, control, intrusiveness, trust and value. Marketers may apply this model to investigate black Generation Y students’ attitudes towards advertisement messages they receive via their mobile devices. The study also offers guidance for marketers who seek to incorporate mobile advertising in their marketing

communication mix. There is a lack of published research on this type of study, which focuses specifically on the significantly-sized black Generation Y cohort, within the South African context.

6.5 RECOMMENDATIONS

One of the major challenges contemporary marketers face is how best to utilise the array of new media platforms that have come about because of advancements in information communication technology. Marketers need to develop strategies that will ensure that their organisations survive in this contemporary marketing environment. They may achieve this by designing competitive advertising strategies. Such strategies may include the use of advertising media platforms such as mobile advertising. Owing to the different mobile advertising formats available, and the rapid rate at which these are developing, the mobile platform is emerging as an interactive media, which, if implemented correctly, will enable marketers to target specific audience groups and provide instant feedback on whether their message attracts a consumer or not. This suggests that mobile advertising is a highly targeted form of advertising, as well as a two-way dialogue between the brand and consumer, which may assist in building a personal relationship between the two. Consequently, even though mobile advertising adoption and acceptance is increasing, marketers need to obtain a clear understanding of the fundamentals influencing consumers' attitudes towards mobile advertising in order to ensure that they generate positive and effective yields from their mobile-based advertising campaigns. This study recommends the target market strategy via mobile advertising.

In accordance with the findings of this study, this section outlines several recommendations concerning the use of mobile advertising to target South Africa's black Generation Y cohort with marketing messages.

6.5.1 Incorporate entertaining features into mobile advertisements

The perceived entertainment of mobile advertisements constitutes how entertaining the advertisement is, as well as how it provides "experiential satisfaction through aesthetic pleasure, emotional stimulation or social experience" (Vatanparast, 2007:2).

In this study, the findings indicate that even though black Generation Y students do not perceive mobile advertisements as particularly entertaining, perceived

entertainment is a significant positive predictor of their perceived value of mobile advertising. This suggests that marketers targeting this target audience with mobile advertising need to incorporate entertainment features into their mobile advertising copy.

Priya *et al.* (2010:163) identify that consumers of all ages welcome the entertainment capabilities of advertisements. This suggests that the more entertaining advertisements are, the more receptive consumers will be towards them. Furthermore, the higher the level of perceived entertainment of an advertisement, the more likely consumers are to pass it on to other consumers (Yang *et al.*, 2012:61). Marketers should consider using humorous appeals or thought-provoking content in mobile advertisements. Alternatively, they may consider using games as part of their mobile advertising strategy.

6.5.2 Design informative mobile advertisements

Wang and Sun (2010:102) indicate that providing information remains the most salient function of advertising, and that advertisements perceived as being informative are more likely to be favoured. Tsang *et al.* (2004:67) found that the perceived informativeness of mobile advertising has a direct positive effect on consumers' overall attitude towards mobile advertising. Haghirian *et al.* (2005:6), whose findings confirm those of Tsang *et al.* (2004:67), indicate that as long as mobile advertisements provide information, they are perceived as valuable in that they create benefits for the target audience.

This study established that black Generation Y students perceive mobile advertisements as being informative, and that this has a significant positive influence on their perceived credibility of mobile advertisements. This suggests that marketers should focus on delivering useful, accurate and timely information in mobile advertisements targeted at South Africa's black Generation Y cohort.

6.5.3 Design credible mobile advertisements

Prendergast *et al.* (2009:321,325) opine that the perceived credibility of advertising relates to both the claims made in the message about a brand and the channel through which the message is delivered. Concerning the influence of credibility on attitudes towards mobile advertising, Tsang *et al.* (2004:71) found that it had a significant

positive influence on individuals' overall attitude towards advertising. Similarly, Haghirian *et al.* (2005:7) found a strong positive correlation between the perceived credibility of mobile advertising and the perceived value of mobile advertising.

The findings of this study support those of previous studies, with credibility having a significant positive influence on black Generation Y students' perceived value of mobile advertising. The predictors of perceived credibility of mobile advertisements included personalisation and informativeness. This suggests that marketers should ensure that the mobile advertisements that they design to target this audience are both informative and personalised.

6.5.4 Design personalised mobile advertisements

Xu (2006-2007:16) found that personalisation is a significant positive predictor of attitudes towards mobile advertising. According to Gurau and Ranchhod (2009:504), the personalisation of mobile advertisements not only provides additional value to mobile consumers, but also may significantly enhance consumers' adoption and use of mobile advertising.

This study established that black Generation Y students viewed mobile advertisements as relatively personalised, and that personalisation is a significant positive predictor of their perceived credibility of mobile advertising. This suggests that marketers need to utilise the interconnectivity of digital technologies and database marketing tools to target even more precisely defined segments with personalised and tailored mobile advertising messages.

6.5.5 Design mobile advertisements that will be perceived as valuable from the consumer perspective

Vatanparast (2007:2) states that mobile advertising provides consumers with time- and location-sensitive and personalised information regarding a marketer's goods, services or ideas, which generates value for both marketers and consumers. Gao and Ji (2008:165) illustrate that the content of mobile advertisements has the greatest impact on consumers' perceived mobile advertisement value.

The findings of this study infer that perceived credibility, attitudes towards advertising in general, entertainment and control all have a significant positive

influence on black Generation Y students' perceived value of mobile advertisements, which in turn has a significant positive influence on their overall attitude towards mobile advertising. This suggests that when targeting this audience, marketers need to ensure that their mobile advertisements are credible in terms of their informativeness and level of personalisation, as well as ensuring that they include features that entertain. Furthermore, marketers need to ensure that they abide by the rules of permission marketing.

6.5.6 Adhere to the principles of permission marketing by ensuring that consumers have control over the opt-in conditions of mobile advertisements

Consumers are more likely to agree to receive mobile advertising when they perceive mobile advertisements to be relevant, and where they have control over the opt-in conditions (Bamba & Barnes, 2007:27).

The findings of this study infer that perceived control over the receipt of mobile advertising has a significant positive influence on black Generation Y students' perceived value of mobile advertisements. As such, marketers targeting this market segment should adhere to the opt-in option, whereby individuals agree to receive mobile advertisements.

6.5.7 Avoid intrusive mobile advertising

Li *et al.* (2002:39) suggest that with mobile advertising marketers are able to target consumers with mobile advertisement messages when they are least expecting them, which may cause consumers to view it as intrusive, which, in turn influences the effectiveness of mobile advertising. Similarly, the increased use of mobile advertising has led to many consumers becoming weary of all the intrusions, resulting in them experiencing a need to increase their control over the mobile advertisements they "view and filter" (Bamba & Barnes, 2007:32).

The findings of this study indicate that black Generation Y students do perceive mobile advertisements to be intrusive and that this perceived intrusiveness does have a significant negative influence on their overall attitude towards mobile advertising. One way to decrease this perceived intrusiveness is to engage in permission-based mobile advertising.

6.5.8 Protect consumers' privacy in order to ensure the perceived trustworthiness of mobile advertising

Zhou (2011:218) suggests that mobile consumers' privacy concerns directly influence their perceived trust in mobile advertising, which will not only influence their intentions to adopt and use this medium, but also their attitudes towards this medium. Okazaki *et al.* (2009:64) postulate that when consumers provide mobile service providers with their personal information in exchange for particular services, they expect their rights to their personal information to be respected by the users of that information. Therefore, mobile service providers may not share the personal information in their databases with third parties, sell it for a profit or use it for anything other than its intended purpose, without the consumers' knowledge (Zhou, 2011:219).

This suggests that mobile service providers need to prevent any unauthorised access to the personal information in their databases by using of certifications and encryptions. In addition, organisations using mobile advertising should have privacy-enhancing technologies in place and should strictly adhere to a code of ethics when collecting and storing consumers' personal information.

6.5.9 Track black Generation Y students' attitude towards mobile advertising continuously

This study only provides a snapshot in time, and the factors found to predict black Generation Y students' overall attitude towards mobile advertising might change over time. Therefore, it is recommended that marketers continuously track black Generation Y students' overall attitude towards mobile advertising and the factors that predict it.

6.6 LIMITATIONS AND FUTURE RESEARCH OPPORTUNITIES

This study measured black Generation Y students' attitudes towards mobile advertising. This study, like most studies, has certain limitations, which may present several future research opportunities.

The first limitation is that the study made use of a non-probability convenience sampling method to conduct a survey among the study's participants (Section 4.3.3). As such, researchers should take care when interpreting the study's results. In addition, a single cross-sectional research design was used in this research study (Section 4.2). Consequently, the research study's findings lack the depth of a longitudinal study. Future research, in the form of a longitudinal study, would provide valuable information concerning any changes in the factors that determine black Generation Y students' attitude towards mobile advertising.

The sample used in this study constituted black Generation Y students registered at three HEIs located in three different regions of one province (Section 4.3.2). Although the sample was representative of individuals from all nine provinces (Section 5.5.1), there is an opportunity to perform a wider scale study on students registered at HEI campuses in each of the nine provinces in South Africa to gain a more accurate view of the black Generation Y students' attitudes towards mobile advertising.

This study focused only on students attending HEIs under the assumption that individuals who graduate from HEIs ultimately gain higher-than-average incomes and social status. This provides an opportunity for researchers to conduct studies on the non-student portion of the South African black Generation Y cohort, in order to investigate whether a gap in the market exists to appeal to these consumers.

This study only focused on black Generation Y individuals aged between 18 and 24. It would be interesting to determine younger black Generation Y members' attitudes towards mobile advertising, as well as the attitudes held by other generations alive today.

6.7 CONCLUSION

In conclusion, the significant developments in, and rapid adoption of, mobile technologies have led to the development and introduction of mobile advertising, which has altered the world of marketing in many ways. Consequently, the success of mobile advertising largely depends on consumers' receptiveness towards it and, at present, research indicates that in comparison to older generations, the youth are more accepting of mobile advertisements. The current study expands on previous research on consumer attitudes towards mobile advertising by looking at the black Generation

Y cohort within the South African context. As Generation Y consumers represent the future, it is important for marketers to understand these consumers' attitudes towards mobile advertising in order to develop appropriate mobile advertising strategies.

The study has proposed a model of the factors that influence South African black Generation Y students' attitudes towards mobile advertising. Attitudes towards advertising, entertainment, informativeness, credibility, personalisation, control, intrusiveness, trust and value emerged as factors that influence black Generation Y students' attitude towards mobile advertising. These findings are in line with previous research.